



Motivation in Learning

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Authors' contributions

This work was carried out in collaboration between both authors. Author JF designed the article, wrote the protocol and wrote the first draft of the manuscript. Authors JS, DMG and AUO supervised the work and corrected the first draft of the manuscript. Author JF managed the literature searches. All authors read and approved the final manuscript.

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ABSTRACT

Motivating the learner to learn is pertinent to curriculum implementation. This is because motivation is an influential factor in the teaching-learning situations. The success of learning depends on whether or not the learners are motivated. Motivation drives learners in reaching learning goals. It is important to recognize the fact that motivating learning is a central element of good teaching. This implies that learners' motivation is probably the single most important element of learning. Learning is inherently hard work; it is pushing the brain to its limits, and thus can only happen with motivation. Students' motivation to learn is of special importance because students' mere presence in the class is of course, not a guarantee that students want to learn. It is only a sign that students live in a society where children are required to attend school. Highly motivated learners are likely to learn readily, and make any class fun to teach, while unmotivated learners may likely learn very little and generally make teaching painful and frustrating. Since modern education is compulsory, teachers cannot take learners' motivation for granted, and they have a responsibility to ensure learners are motivated to learn. Teachers must persuade learners to want to do what they ought to do. This task— understanding and therefore influencing learners' motivations to learn—is the thrust of this article. In order to ensure that the aims and objective of the curriculum is achieved, this

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article focuses on providing the teachers and educators with insight to the concept and types of motivation, motives as a goal, factors affecting motivation, importance of motivation, and strategies for motivating the learners.

Keywords: Motivation; teachers; learners; learning.

1. INTRODUCTION

Motivation is a complex part of human psychology and behavior that influences how individuals choose to invest their time, how much energy they exert in any given task, how they think and feel about the task, and how long they persist in the task (Bakar, [1]). Bakar added that motivation reflects in students' choices of learning tasks, the time and effort they devote to them, their persistence on learning tasks, and in coping with the obstacles they encounter in the learning process. According to Luthans [2], motivation is a process which starts with physiological or psychological deficiency or need that activates a behavior or drive which is aimed at a goal or incentives. This is why motivation is referred to as "the reasons underlying behavior" (Guay et al., [3], p. 712). Learners assign various meanings and attitudes to academic activities—personal meanings and attitudes that arouse and direct their energies in different ways. These associated energizing and directing effects are referred to as motivation or sometimes motivation to learn. Motivation is the key to success in the teaching-learning process. Motivation, as the name suggests, is what 'moves' us. It is the reason we do anything at all. Paraphrasing Gredler, Broussard and Garrison [4], motivation is defined as "the attribute that moves us to do or not to do something" (p. 106). It is an internal impetus or drive to do a specific action or behavior (Ryan & Deci, [5]). Motivation is a critical component of teaching and learning. For teachers, a lack of motivation has long been one of the most frustrating obstacles to students' learning. Teachers are the key factor in motivating students to engage with learning activities within their specific educational contexts (Ryan and Deci, [6], Wood, [7]). A teacher whose behaviours reveal a positive attitude and enthusiasm for learning within a specific curricula subject is more likely to have students who develop positive affect and enthusiasm for learning and achievement within the subject (Fredricks, Blumenfeld, & Paris [8]; Tymms, Bolden, & Merrell, [9]).

Motivation is important in getting students to engage in academic activities. It is also important

in determining how much learners will learn from the activities they perform or the information to which they will be exposed to. Learners who are motivated to learn something use higher cognitive processes in learning about it. Motivation to do something can come about in many ways. It can be a personality characteristic or a stable long-lasting interest in doing something. It is pertinent to note that achieving high level of motivation in the classroom leads to higher levels of understanding (Vansteenkiste et al., [10], [11]), creativity (Koestner et al., in Gibbens, [12]), productivity (Das Carlo, Swadi, & Mpofu, [13]), and achievement (Moulaert et al., [14]; Sobral, [15]). Together these positive outcomes make motivation one of the most important elements of learning (Carl Wieman Science Education Initiative, [16]).

Motivating students to learn in school is a topic of great concern for educationist today, and motivating students so that they can succeed in school is one of the greatest challenges of education. Student motivation is an essential element that is necessary for quality education. Hadre et al. [17] argued that motivation is among the most powerful determinants of students' success or failure in school. In the learning sphere, spurring students' motivation to engage in academic activities is part of teachers' teaching-learning strategy if the teacher wants to see consistent and quality results. For a learner to make an effort there must be a motive. Motive simply means a desire, need, urge, or drive to achieve a certain goal (Makokha & Ongwae, [18]). It is that drive which makes one do what one does. The motive will also include interests, attitudes, and purposes. Seifert and Sutton [19] classified these motives and their sources as (i) motives as behavior change, (ii) motives as goals, (iii) motives as interests, (iv) motives as attributions about success, (v) motives as beliefs about self-efficacy, and (vi) motives as self-determination. Seifert and Sutton asserts that motives are affected by the kind of goals set by students—whether they are oriented to mastery, performance, failure-avoidance, or social contact. They are also affected by students' interests, both personal and situational. They are affected by students' attributions about the causes of

success and failure—whether they perceive the causes are due to ability, effort, task difficulty, or luck.

Nashar [20] explains that the motivation to learn has an internal and external impulse that causes a person (people) to act or reach his/her destination so that changes in his/her behavior occurs. Hamzah [21] argues that the nature of motivation to learn is internal and external encouragement to students who are learning to hold a change of behavior. Students' motivation in the learning process can be seen from their behavior in learning. Students who have high motivation to learn are diligently working on the task, resilient in the face of adversity, show interest in a variety of problems, prefer to work independently, and not get bored in doing the task (Bakar, [1]). More so, Baron and Donn [22] added that students with a high level of motivation have some characteristics, such as initiative, diligence and active in learning, not easy to satisfy, punctual and disciplined, always trying to learn with the best result. Additionally, motivated students achieve academically by engaging in behavior such as studying, question asking, advice seeking, and participating in classes, labs, and study groups (Schunk, Pintrich, & Meece, [23]). According to Sanfeliz and Stalzer [24], motivated students enjoy learning science, believe in their ability to learn, and take responsibility for their learning. High academic success of high ability students is their high level of motivation to continue their education (Kozochkina, [25]). Highlighting some of the qualities of motivated students, Palmer [26] stated that students, who are motivated pay attention, begin working on tasks immediately, ask questions and volunteer answers, and appear to be happy, eager and enthusiastic to learn. This proves the efficacy of motivational strategies in enhancing students' learning in and outside the classroom.

Getting students to learn and sustaining their interest in what they are learning should be the sole objective of teachers in the classroom. The instructor; an expert in the subject, is uniquely qualified to show students why the material is important, intellectually interesting, and valuable for them to learn. Conveying this message is an important goal of any effective instructor. Teachers' ability to engage students' interest and participation in their schooling in general (Christenson, Reschly & Wylie, [27]; Klem & Connell, [28]) is regarded as essential for a sustained academic achievement (Christenson et

al., [27]; Fredricks et al., [8]; Marsh & Martin, [29]; Reeve, [30], [31]). Instructors strive to motivate their students so that they will be interested and engaged during class and will continue valuing the material well into the future (Gibbens, [12]). As an instructor/teacher, you should understand your learners' needs, interests, purposes, and attitudes so that you are able to encourage them to learn. You should provide the environment that motivates the learners because if they are not motivated, they may not come back to classes after the first few lessons. It is your duty to create and sustain interest in learning. Intelligence and abilities are not necessarily preconditions of learning. Remember that having abilities does not mean that the learners will in fact learn. They have to wish to learn. They have to have some kind of interest in what they are learning. They need to also aspire to master certain skills. As a teacher, you need to work hard to sustain and build on learners' motivation. As rightly pointed out by Sanfeliz and Stalzer [24], many high school science teachers believe that one of their most important instructional responsibilities is to foster students' motivation to learn. Also, it is important that you seek to understand each individual's motive for wanting to learn so that you make the learning experience more relevant to the learner's needs. This means that motivation is not only important in encouraging students to learn, but also in helping students in achievement (Anni, [32]). The approach you use for teaching should be more in line with the learners' wishes, by so doing you can best help the learners.

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 (William & William, n.d [33]). The content must be accurate, timely, stimulating, and pertinent to the students' 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 (William & William, n.d [33]). That is, students ideally should have many sources of motivation in their learning experience in each class (Debnath, [34]; Palmer, [26]; D'Souza & Maheshwari, [35]). Teachers need to be aware of attention cycles and strive to

improve students' attention by using student-centred enhanced techniques (Bunce, Flens, & Neiles, [36]). Interactivity is important in lesson and can take many forms: pop quizzes, questioning and discussion, problems, visual aids, films, questions on the board, questions through e-mail, hand-outs, and simulations (Gillentine & Schultz, [37]).

Learners may have more than one motive for attending classes. However, the basic motive of a learner is the need for achievement and reward (Makokha & Ongwae, [18]). A learner also needs to feel good about something. No responsible learner wants to go and waste time in the class. Usually, motives vary from one individual to another, one area to another or one institution to another. There are several theories of motivation that exist. Some state that motivation is tied to the idea that behaviours that have been rewarded in the past will be more likely to be repeated in the future (operant conditioning theory). Therefore, past experiences will motivate a student to perform in future ones. Other theories prefer to think of motivation as a way to satisfy certain needs (the needs theory of motivation). Some basic needs people must satisfy are food, shelter, love, and positive self-esteem. Therefore, motivation to do something may be based on the achievement of these needs. Yet another theory (the attribution theory) seeks to understand people's explanations and excuses when it comes to their successes and failures. The expectancy theory of motivation is based on the belief that learners' efforts to achieve depend on their expectations of rewards. Learners will be motivated to do something based on whether they think that they will be successful and be rewarded. When learners feel that they have control over their success in something, then they are more motivated to achieve in it (Reeve, Hamm, & Nix, [38]). An advantage of this approach is that when students are given the freedom to determine their academic tasks, they are more likely to benefit from them (Glynn & Koballa, [39]). If learners feel that they will not have any control in their success they might not be as motivated to achieve. This is why Hamalik [40] stated that a motivated group will be more successful than those who do not have the motivation.

A pedagogical shift has led to a change in the role of the teacher from a transmitter of knowledge to that of a facilitator, guide and motivation optimizer in the learning environment (Palmer, [41]; Cavas, [42], Ongowo, & Hungi, [43]). A number of studies have been directed

towards the affective components of cognition. Within the affective components, motivation is becoming important because of the crucial role that its play in the process of cognitive engagement and conceptual change (Tuan, Chin, & Shieh, [44]; Tang & Neber, [45]). Evidence documents motivation as an important determinant predicting students' achievement (Beal & Stevens, [46]; Broussard & Garrsion, [47]; Sandra, [48]; Skaalvik & Skaalvik, [49]; Zhu & Leung, [50]). According to Steward, Bachman, and Johnson [51], motivational orientations act as a driving force that encourages a person to engage in a task. Motivation has been reported in primary, secondary and college education to influence academic performance through study effort as a mediator (Vansteenkiste, et al. [10]). According to Busato, Prins, Elshout, and Hamaker [52], intellectual ability and achievement motivation were positively associated with academic success. Kushman, Sieber, and Harold (as cited by Broussard, [53]) stated that high motivation and engagement in learning have consistently been linked to reduced dropout rates and increased levels of student success. For example, in a 2006 survey exploring why students dropped out of school, 70% of high school dropouts said they were unmotivated (Bridgeland, Dilulio, & Morison, [54]). These results demonstrate the fact that motivation could affect students' learning.

It is important to note that motivation, which is a psychological construct, is also a teaching technique that could be used to enhance learning in the classroom. As the quality of students' academic achievement continues to fluctuate year in year out, the need to develop strategies for motivating learners to enhance their learning outcomes is imperative. Without proper motivation of learners, learning may not take place, and if learning does not take place, the objective of developing the curriculum may not be achieved. Therefore, this literary contribution was primarily designed to acquaint the teachers and educators with strategies for motivating the learners to ensure that the goal of curriculum is achieved.

2. CONCEPT OF MOTIVATION

There are several definitions of motivation. Motivation has been related to the amount of intellectual energy typically used in learning activities, and this led to a belief that motivation could be seen as a stable characteristic of the individual, on a par with personality. Motivation is what causes a person wants to know, act,

understand, believe or gain particular skills. Motivation can also be defined as the drive to satisfy the individual's need e.g. a learner who wants to learn how to read and count so that he/she won't be cheated when s/he goes out shopping. Other scholars have also defined motivation in several ways. The existence of this variety of definitions shows the difficulty in describing motivation and its role in the process of learning. Consequently, the first step is to clarify some of the problematic aspects of the term "motivation" as it was described in Rodicio [55]: Motivation is not a physical feature; that is, it cannot be observed directly. Madrid [56] explained the concept of motivation as an individual state that is influenced by different factors such as beliefs, interests, goals, and wishes that demand an effort from students.

Recently, other scholars have also added their voices. Spolsky [57] described motivation as the amount of time a learner is prepared to spend on learning tasks. Ortega-Martín [58] explained that motivation is an individual's disposition to learning a task that can be modified both by him- or herself and by the surrounding circumstances. According to Bhatia, motivation is the stimulation or action towards a particular goal where previously there was little or no attraction towards that goal (Bhatia, [59]). Cole [60] defined motivation as the internal state that instigates, directs, and maintains behaviour. Hikmat [61] says motivation is the impetus or stimulus given to a person in order to have the will to act. Sardiman [62] says that motivation can be considered as the overall driving force in students that lead to learning activities. Motivation is the internal state or condition sometimes described as a need, desire or want that serves to activate or energizes behaviour and give it direction (Kleinginna & Kleinginna, [63]). Motivation has been defined as a cognitive and affective force that initiates, sustains and directs engagement behaviours; as an internalized process of formation drawn from the individual's experiences, perceptions and interpretations (Reeve, [31]). It consists of an inner psychological drive leading to action, i.e. engagement behaviours (Abrahams, [64]). According to Robbins, Judge and Campbell (as cited by Cleary, [65]), motivation is the processes that account for an individual's intensity, direction and persistence of effort towards attaining a goal. Additionally, in accordance to Yunus et al. (in Wagner, [66]), in school context, motivation refers to a student's willingness, need, desire

and compulsion to participate and be successful in the process of learning.

Motivation is seen as a mental impulse that drives and directs human behaviour, including learning behaviour. Motivation has a willingness to activate, mobilize, channel and direct the attitudes and behaviour of a learner (Dimyati & Mudjiono, [67]). Brown [68] defines motivation based on behaviouristic and cognitive point of view. In the behaviouristic perspective, Brown defines motivation as anticipation of reinforcement which is a powerful concept for the classroom. Based on cognitive perspective, Brown classified motivation definition into three categories. The first definition is hinged on the drive theory, which means that motivation stems from basic innate drives; this definition shows that motivation have been in existence within us since we are born. This shows that motivation is an internal state that activates, guides, and maintains behavior (Green, [69]). The second definition is based on hierarchy of needs, meaning that motivation is something that comes from individual's needs. Third, based on self-control theory, motivation is something that appear if there is opportunity to make someone to make own choices about what to pursue and what not to pursue (self-control). Summarily, these definitions show that motivation is one of influential stimulating factor in teaching-learning situations that drives learners to struggle to reach their goals.

The foregoing are general ideas considered in defining "motivation" in this article. That is, motivation will be understood as what encourages or drive learners to freely devote their time to a specific academic activity (Redondo & Ortega-Martín, [70]). It encourages learners not only to initiate the activity but also to continue working on it throughout their lives. These reasons are personal and different in each individual context, and they can come from the learners themselves or from external stimuli.

2.1 Types of Motivation

Based on Self-determination Theory (SDT), learners may be driven to learn by two sources—internal and external. Generally, there are two types of motivation; intrinsic and extrinsic motivation:

2.1.1 Intrinsic motivation

Here stimulus is internal to the person; it can be biological, emotional, spiritual, or social. In this

case, there are no external rewards. The activity is undertaken for self-pleasure and individual satisfaction. It may be characterized by curiosity and a desire to meet challenges. Intrinsic motivation is driven by an interest or enjoyment which a person feels in a task. It is within the individual and does not rely on external pressure. Ryan and Deci [71] explained intrinsic motivation as the choices people make for their own sake without considering any external component, such that they are intrinsically rewarded. According to Ryan and Deci [71], Deci and Ryan [72]; Niemiec and Ryan [73], learners are intrinsically motivated, and engage in activities because of their internal interests, joy, and excitement. Matt and Dale [74] stated that intrinsic motivators include fascination with the subject, a sense of its relevance to life and the world, a sense of accomplishment in mastering it, and a sense of calling to it. Harter (in Chow &Yong, [75]) explained that intrinsic motivation is the true drive in human nature, which drives individuals to search for and to face new challenges. Deci (as cited by Ayub, [76]), refers to intrinsic motivation as being in an activity for itself, and the pleasure and satisfaction derived from participation.

Intrinsic motivation is an inner force that motivates students to engage in academic activities, because they are interested in learning and they enjoy the learning process as well (Schiefele in Chow &Yong, [75]). Their (learners) abilities are put to the test and they are eager to learn even when there are no external rewards to be won (Chow &Yong, [75]). Students with learning goals of seeking understanding for mastery of science content and skills are said to be intrinsically motivated (Cavallo, et al., [77]).

The needs of students can engage them to achieve the learning goals. For example, a learner who learns the English Language because he/she needs English skill to communicate in his/her social life, and a learner who needs the knowledge of mathematics in order not to be cheated when purchasing goods from the store may demonstrate a high level of motivation in learning English and Mathematics respectively. This is to help him/her master the subject in order to survive in the social world. Seifert and Sutton [19] assert that interest (an affective and intrinsic component) also has a role in increasing the motivation level of students. If a student is interested to study Geography, the student may easily reach the learning goal. Enjoyment or satisfaction is also important in

increasing the motivation of students (Niemiec & Ryan, [73]). If the students do not enjoy learning a subject in a class, the material taught will be difficult to be assimilated, so, as stated earlier, intrinsic motivation is created by an individual's self-influenced-personal-factors that are needs, interest, and enjoyment. This shows that learners can create motivation by their self.

Intrinsic motivation is more influenced than extrinsic motivation because intrinsic motivation rises from learner self not influenced by an external factor. Gagne and Deci [78] reported that intrinsic needs derive satisfaction from performing the activity itself; from the implementation of an activity without receiving any apparent reward. This makes a learner be aware that he/she needs to learn. Brown [79] reported that intrinsically motivated activities are ones for which there is no apparent reward except the activity itself. Brown added that people seem to engage in the activities for their own sake and not because they need an extrinsic reward.

Matt and Dale [74] argued that intrinsic motivation can be long-lasting and self-sustaining. Efforts to build this kind of motivation are also typically efforts at promoting students' learning. Such efforts often focus on the subject rather than on rewards or punishments. Csikszentmihalyi and Nakamura (in Chow & Yong, [75]) stated that intrinsically motivated individuals possess the following characteristics: they engage in both mental and physical activities holistically, they remain highly focused throughout these activities with clearly defined goals, they are self-critical, they self-reflect on their own actions realistically, and they are usually relaxed and not afraid to fail during learning. Moreover, a research study done by Stipek (in Chow & Yong, [75]) concluded that intrinsically motivated students learn independently and always choose to do challenging tasks. They persevere to complete the tasks they have undertaken. They integrate their knowledge acquired in school with their experiences gained from outside school. They often ask questions to broaden their knowledge and learn regardless of any external push factors or help from teachers, and they take pride in their work and express positive emotions during the learning process. Highly intrinsically motivated students are able to learn new concepts successfully and show better understanding of the subject matter. However, efforts at fostering intrinsic motivation can be slow to affect behavior

and can require special and lengthy preparation. Students are individuals, so a variety of approaches may be needed to motivate different students. It is often helpful to know what interests one's (teacher) students in order to connect these interests with the subject matter. This requires getting to know one's students. Also, it helps if the instructor is interested in the subject, to begin with.

2.1.2 Extrinsic motivation

Here stimulus is outside the person, it can be there in the form of operant conditioning or social cognition. It refers to the performance of a task for attaining an outcome. It may be in the form of some kind of reward, social approval, or appreciation. Harmer [80] explained that extrinsic motivation is caused by any number of outside factors that might include the hope of financial reward; need to pass an exam or the possibility of the future level. In addition, Marsh [81] defines motivation as an external stimulus that follows as a result of a certain response. So, extrinsic motivation is any stimulus that comes from outside of learner, and which drives the learner in the learning process. According to Ryan and Deci [71], Deci and Ryan [72]; Niemiec and Ryan [73], learners are externally driven to perform an action with an anticipation of some outcome other than the learning itself. Chow and Yong [75] posit that extrinsic motivation drives students to engage in academic tasks for external reasons. According to Benabou and Tirole [82], extrinsic motivation promotes effort and performance with rewards serving as positive reinforcers for the desired behavior.

According to Matt and Dale [74], extrinsic motivators include parental expectations, expectations of other trusted role models, earning potential of a course of study, and good grades. Matt and Dale [74] argued that extrinsic motivators more readily produce behavior changes and typically involve relatively little effort or preparation. The author added that efforts at applying extrinsic motivators often do not require extensive knowledge of individual students. Extrinsic motivation typically produces immediate results and requires less effort in comparison to intrinsic motivation (Ryan & Deci, [5]). However, extrinsic motivators can often distract students from learning the subject at hand, or independent learning. Matt and Dale submit that it can be challenging to devise appropriate rewards and punishments for students' behaviors. Often, one needs to escalate the rewards and punishments over time to maintain a certain effect level. Also,

another problem with extrinsic motivators is that they typically do not work over the long term. Once the rewards or punishments are removed, students lose their motivation (Matt & Dale, [74]). Extrinsically motivated students tend to focus on earning higher grades and obtaining rewards. Lei [83] props this view stating that individuals who are motivated extrinsically rely solely on rewards and desirable results for their motivation. This implies that students who are motivated externally are at a greater risk of performing lower academically than intrinsically motivated students. Biehler and Snowman (in Chow & Yong, [75]) also believed that extrinsic motivational factors can diminish students' intrinsic motivation. Such observation has also been echoed by Bain [84] who concluded that extrinsic rewards have negative impacts on intrinsic motivation.

Some other types of motivation are also found in literature:-

1. Instrumental motivation: It is extrinsic in nature where students perform an activity in order to obtain tangible rewards.
2. Social motivation: Students perform a task in order to earn praise from those they respect or admire e.g. teachers, parents.
3. Amotivation: This is the situation in which the learner lacks the intention to engage in the learning activity—not feeling worthwhile to make any effort in the study—as a result of being externally controlled (Assor et al., [85]; Deci & Ryan, [72]).
4. Achievement motivation: Learners learn the hope of success. Ausubel suggested three elements in this type of motivation.
 - Cognitive drive: Students tries to satisfy his/her need 'to know'
 - Self-enhancement: Students tries to satisfy his/her self-esteem.
 - Affiliation motivation: Students wants to earn approval from others.

These different types of motivation yield different effects on students' learning. With intrinsic motivation, learners learn better (Niemiec & Ryan, [73]) and are more process-oriented (Garn & Jolly, [86]), more persistent in learning (Cho, [87]; Deci & Ryan, [72]) and more prone to self-learning and development (Deci & Ryan, [72]; Ling, [88]; Niemiec & Ryan, [73]; Taylor et al., [89]). However, some forms of extrinsic motivation may be necessary for the situation

where the educational activities are not interesting or enjoyable by nature—serving as a springboard for learning (Cho, [87]; Niemiec & Ryan, [73]). To engage learners in such tasks, the teacher can help regulate the learners' engagement by highlighting the importance of the task—pointing out how it can support the learner's own goals and interests in real life (Assor, Kaplan, & Roth, [90]). For learners with amotivation, they are more likely to quit learning as soon as possible (Noels, Pelletier, Clément, & Vallerand, [91]). Students who are extrinsically motivated have been found to be less psychologically satisfied with outcomes than those who were intrinsically motivated (Vansteenkiste, Simons, Lens, Sheldon, & Deci, [92]). According to Ryan and Deci [71], understanding students' types of extrinsic motivation is important for educators because educators may not be able to depend solely on intrinsic motivation to encourage student learning. Educators sometimes may provide tasks that may not be intrinsically motivating for students; therefore, encouraging students to pursue active and volitional types of extrinsic motivation becomes necessary for successful teaching.

Motivation to learn, according to Brophy [93], prefer the cognitive response, that is, the tendency of students to achieve meaningful and useful academic activities as well as trying to profit from these activities. Students who are motivated to learn will pay attention to lessons delivered, read the material so that they can understand, and use supportive, specific learning strategies (Bakar, [1]). Students who have the motivation to learn will depend on whether the activity has interesting content or a fun process. The achievement of academic competencies is related to the acquisition of knowledge and skills that will be productively utilized in learners who live outside the school. Hamdu and Agustina [94] found that the motivation to learn and the learning achievement of students are significantly related.

Tokan and Imakulata [95] argued that intrinsic and extrinsic motivation affects the learning achievement of the students. However, research indicates that extrinsic rewards can have a negative impact on intrinsic motivation (Ken, [96]). In one series of experiments conducted by psychologist Edward Deci (Ken, [96]), two groups of college students play with a puzzle called Soma. One group of students was paid for each puzzle they solved; the other wasn't. Deci found

that the group that was paid to solve puzzles stopped solving puzzles as soon as the experiment—and the payment—ended (Ken, [96]). However, the group that wasn't paid kept solving the puzzles even after the experiment was over. They had found the puzzles intrinsically interesting. Deci argued that the group that had been paid to solve puzzles might have found the puzzles intrinsically interesting as well, but the extrinsic, monetary reward had reduced their intrinsic interest (Ken, [96]). Therefore, the teacher should know when and how to apply rewards in order to motivate learners.

To enhance learners' motivation, previous studies have suggested that teachers' behaviors and instructional practices play an important role (Assor et al., [85]; Bernaus & Gardner, [97]; Corpus, McClintic-Gilbert, & Hayenga, [98]; Dweck, [99]; Gottfried, Fleming, & Gottfried, [100]; Jang, Kim, & Reeve, [101]; Lai & Ting, [102]; Loima & Vibulphol, [103], [104]; Niemiec & Ryan, [73]; Papi & Abdollahzadeh, [105]; Urhahne, [106]). Studies have shown that teachers can promote or suppress students' natural curiosity in learning (Niemiec & Ryan, [73]; Reeve, [107]). Jang, Reeve, and Deci [108] explained that the more space the teacher gave to students' individual learning, the more intrinsically motivated the students would be. Loima and Vibulphol [103], [104] found this to be true in classrooms in Thailand as well. This goes to show that teachers have a great role to play in motivating students to learn.

2.2 Motives as Goals

One way motives vary is by the kind of goals that students set for themselves, and by how the goals support students' academic achievement. As you might suspect, some goals encourage academic achievement more than others, but even motives that do not concern academics explicitly tend to affect learning indirectly. Seifert and Sutton [19] classified students' achievement goals into four categories viz: (i) mastery goal (ii) performance goal (iii) performance-avoidance goal or failure-avoidance goal (iii) social goals.

2.2.1 Mastery goals

Mastery goals tend to be associated with the enjoyment of learning the material at hand, and in this sense represent an outcome that teachers often seek for students. By definition therefore they are a form of intrinsic motivation. As such

mastery goals have been found to be better than performance goals at sustaining students' interest in a subject. In one review of research about learning goals, for example, students with primarily mastery orientations toward a course they were taking not only tended to express greater interest in the course, but also continued to express interest well beyond the official end of the course, and to enroll in further courses in the same subject (Harackiewicz, et al., [109]; Wolters, [110]).

2.2.2 Performance goals

Performance goals imply extrinsic motivation and tend to show the mixed effects of this orientation. A positive effect is that students with a performance orientation do tend to get higher grades than those who express primarily a mastery orientation. The advantage in grades occurs both in the short term (with individual assignments) and in the long term (with overall grade point average when graduating). But there is evidence that performance-oriented students do not actually learn the material as deeply or permanently as students who are more mastery-oriented (Midgley, Kaplan, & Middleton, [111]). A possible reason is that measures of performance—such as test scores—often reward relatively shallow memorization of information and therefore guide performance-oriented students away from processing the information thoughtfully or deeply. Another possible reason is that a performance orientation, by focusing on gaining recognition as the best among peers, encourages competition among peers. Giving and receiving help from classmates is thus not in the self-interest of a performance-oriented student, and the resulting isolation limits the student's learning.

2.2.3 Failure-avoidant goals

Failure-avoidant goals by nature undermine academic achievement. Often they are the negative by-product of the competitiveness of performance goals (Urdu, [112]). If a teacher (and sometimes also fellow students) put too much emphasis on being the best in the class, and if interest in learning the material as such therefore suffers, then some students may decide that success is beyond their reach or may not be desirable in any case. The alternative—simply avoiding failure—may seem wiser as well as more feasible. Once a student adopts this attitude, he or she may underachieve more or

less deliberately, doing only the minimum work necessary to avoid looking foolish or to avoid serious conflict with the teacher. Avoiding failure in this way is an example of self-handicapping—deliberate actions and choices that reduce the chances of success. Students may self-handicap in a number of ways; in addition to not working hard, they may procrastinate about completing assignments, for example, or set goals that are unrealistically high.

2.2.4 Social goals

Most students need and value relationships, both with classmates and with teachers, and often (though not always) they get a good deal of positive support from the relationships. But the effects of social relationships are complex and at times can work both for and against academic achievement. If a relationship with the teacher is important and reasonably positive, then the student is likely to try pleasing the teacher by working hard on assignments (Dowson & McInerney, [113]). Note, though, that this effect is closer to performance than mastery; the student is primarily concerned about looking good to someone else. If, on the other hand, a student is especially concerned about relationships with peers, the effects on achievement depend on the student's motives for the relationship as well as on peers' attitudes. The abilities and achievement motivation of peers themselves can also make a difference, but once again the effects vary depending on the context. Low achievement and motivation by peers affect an individual's academic motivation more in elementary school than in high school, more in learning mathematics than learning to read, and more if there is a wide range of abilities in a classroom than if there is a more narrow range (Burke & Sass, [114]). In spite of these complexities, social relationships are valued so highly by most students that teachers should generally facilitate them, though also keep an eye on their nature and their consequent effects on achievement.

Many assignments can be accomplished productively in groups, for example, as long as the groups are formed thoughtfully. But the majority of students' social contacts are likely always to come from students' own initiatives with each other in simply taking time to talk and interact. The teacher's job is to encourage these informal contacts, especially when they happen at times that support rather than interfere with learning.

2.3 Dimensions of Students' Motivation

Researchers generally agree on four major dimensions that contribute to students' motivation (Bandura, [115]; Dweck, [116]; Murray, [117]; Pintrich, [118]; Ryan & Deci, [5]; Seifert, [119]). At least one of these dimensions must be satisfied for a student to be motivated. The more dimensions that are met, and the more strongly they are met, the greater the motivation will be. These dimensions are:

- **Competence:** The student believes he or she has the ability to complete the task.
- **Control/autonomy:** The student feels in control by seeing a direct link between his or her actions and an outcome and retains autonomy by having some choice about whether or how to undertake the task.
- **Interest/value:** The student has some interest in the task or sees the value of completing it.
- **Relatedness:** Completing the task brings the student social rewards, such as a sense of belonging to a classroom or other desired social group or approval from a person of social importance to the student.

The interplay of these dimensions—along with other dynamics such as school climate and home environment—is quite complex and varies not only among different students but also within the same students in different situations. Still, this basic framework can be helpful in designing or analyzing the impact of various strategies to increase students' motivation.

3. FACTORS THAT INFLUENCE LEARNERS' MOTIVATION

Some of the most interesting authors and their classifications factors that influence learners' motivation will be mentioned as follows. According to Spolsky [57], the most meaningful factors that affect the teaching/learning process are the teaching method, the age, the aptitude, the attitude of learners. Among these factors, the last factor (attitude) is the one that most affects motivation because it directly relates to the education context (teachers, friends, and family) that surrounds the learner (Redondo & Ortega-Martin, [70]). Skehan [120] lists four motivating factors as the most significant:

- i. The activities in the teaching/learning process: This factor is important because a great part of the learner's interest in the subject will depend on the types of activities developed in class.
- ii. The final results: Good results are understood as a reward for the learner, whereas bad results are similar to a punishment. In this case, motivation is the consequence of these results: Students with good final results are going to be more motivated than students with bad results.
- iii. Internal motivation: This is connected to the student's inner drive about the subject as a consequence of previous experiences and the use of the subject to their daily lives.
- iv. Extrinsic motivation: The influence of external stimuli such as rewards or punishments.

Dörnyei [121] presents three main types of motivational sources:

- i. Course-specific components: the syllabus, teaching material, teaching method, and learning tasks.
- ii. Teacher-specific components: the teacher's behaviour, personality, and teaching style.
- iii. Group-specific components: the dynamics of the learner group.

Sukmadinata [122] says motivation is influenced by intrinsic and extrinsic factors. The intrinsic factors, among others, are students' attitudes, interests, intelligence; and extrinsic factors are factors beyond the students, such as the social life of students, teacher, environmental factors, family, school, or community environment. This is further explained in the ensuing paragraph.

Internal (intrinsic) factors that influence motivation include needs, interest, and enjoyment (Marsh, [81]). The needs of students can engage them to achieve the learning goals. Interest also has a role in increasing the motivation level of students. Then, enjoyment is also important in increasing the motivation of students. When a learner's needs, interest, and enjoyment is addressed in a particular subject matter, the likelihood for the learner to be highly

motivated is there. As stated earlier, the external (extrinsic) factors which influence students' motivation level may include the students' social life, the teacher, the method, and the learning environment (Sukmadinata, [122]). The view of learning a subject in a society will influence the students' attitude toward studying the subject, and the nature and the strength of this attitude will have a profound effect on the degree of motivation the student brings to the class (Harmer, [80]). Another factor of students' motivation is the teacher. High or low student's motivation is influenced by the teacher as a motivator. Previous studies have shown that teachers' behaviors and instructional practices play an important role in students' motivation to learn (Loima & Vibulphol, [103], [104]; Niemiec & Ryan, [73]; Papi & Abdollahzadeh, [105]; Urhahne, [106]). Teachers can set the learning-teaching process to create the situation to be interesting so the students can be motivated. The teaching method is also a vital factor that influences student motivation. If the teacher apply appropriate method in teaching a subject, the students can be more comfortable in the learning process. The goal of learning that subject will be easy to be reached. The last factor which influences the students' motivation level is the learning environment. Classrooms can be decorated to make students be more comfortable in the learning process. The sitting arrangement could also be structured in a way to make students comfortable in receiving the learning material.

4. IMPORTANCE OF MOTIVATION IN LEARNING

- i. Learning the motivation of students in education is important. A learner learns best when he/she recognizes the need and develops the desire to learn. This is through motivation. Motivation stimulates learners to think, concentrate, and learn effectively. Bakar [1] stated that motivation increases the performance of learning. Learning is an active process requiring a participative role. It influences the rate of learning, the retention of information, and the desire to learn.
- ii. Motivation increases the speed of work that a learner is putting to achieve a goal. In education, motivation is a factor of high or low points of the goal (Brown, [79]). When not well-motivated, a learner learns very little with difficulty as he/she sees no need to learn. Therefore, motivation provides the effort and energy that a learner needs to achieve the task. It brings the learner to the proper frame of mind for learning. It concentrates the attention and energy of a person on the activity or knowledge to be learned. Motivation determines whether a student will pursue a task (even a difficult one) with enthusiasm or a lacklustre attitude.
- iii. Motivation is a significantly important factor for academic learning and achievement across childhood through adolescence (Elliott & Dweck, [123]). Inspiring learners to learn is a major concern in any training situation. Motivation is one of the prime tasks of teaching. The instructor should ensure that it is built in every lesson presentation. Motivation should be started during the introduction of the lesson to ensure the learners' interest and to direct attention to what is to be learned. It should not stop at the introduction stage but be continued throughout the entire lesson presentation.
- iv. The motivation of learning activities helps the learner to concentrate on what he/she is doing, and thereby gain satisfaction. Continuous motivation is needed to help learners concentrate on the lessons to be learned. If an individual is motivated, he/she will exude some form of satisfaction. This helps in the self-development of the learner.
- v. Motivation directs learners' behavior toward particular goals. It determines the specific goals toward which learners strive; thus, it affects the choices students make. For example, whether to enroll in an art class or science, whether to attend a school football game during the week or complete an assignment that is due the next day.
- vi. Motivation increases the initiation and persistence of learning activities. It increases students' time on task and is also an important factor affecting their learning and achievement.
- vii. Motivation enhances cognitive processing. It actually affects what and how information is processed, because motivated students are more likely to pay attention and try to

understand the material instead of simply going through the motions of learning in a superficial manner.

- viii. Motivation determines what consequences are reinforcing and punishing. For example, students with a high level of motivation for classroom achievement and high GPAs are reinforced by receiving a grade of 'A' and they'll feel punished if they receive a grade of 'F.'

5. STRATEGIES FOR MOTIVATING THE LEARNERS

Dewandini [124] note that the final process of motivation is completing an action that can provide satisfaction, the following are techniques that the teacher can employ to motivate learners:

5.1 Set Clear Goals

According to Singh [125], the learners should be familiar with the aims and objectives of the subject and topic. In addition, Matt and Dale [74]; Nilson [126]; Ken [96] suggest that the teachers should set realistic performance goals and help students achieve them by encouraging them to set their own reasonable goals. The authors added that the teachers should design assignments that are appropriately challenging in view of the experience and aptitude of the class. The teacher should ensure that learners understand what you are teaching them, and what they have to know and do, as a result of learning. 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, [26]). If the students are not aware of the purposes of the lesson, the students may not have an interest in learning.

5.2 Show the Need for the Lesson

Do not assume that learners recognize the lessons' importance. Show the benefit of the lesson to the learners' needs. Let learners study or do what they can put into practice. The work and the knowledge should be functional and profitable to the learners. 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, [26]). Tasks that are meaningful to the students' real life motivate them (Frey & Fisher, [127]).

5.3 Arouse and Maintain Students' Interest

When the teacher is enthusiastic about a topic, then the students will be more inclined to believe that the topic has value for them (William & William, n.d [33]). That is, teacher enthusiasm can motivate students. Add some facts and figures to spice up your lesson and before your lesson starts, ask some relative questions to get learners' attention. Be interesting in your lesson presentation. Be enthusiastic, illustrative, and exemplary. Use effective teaching aids. Be humorous and reasonably entertaining. But your task is to teach, and not to entertain or chat.

5.4 Increase Chances of Early Success

According to Singh [125], when we take up the task, it is natured to be completed as soon as possible; and that knowledge gives us satisfaction and encouragement. Encourage learners at the early stages of the lesson to work on projects that they can complete successfully. Matt and Dale [74]; Nilson [126]; Ken [96] stated that the teacher should give students as much control over their own education as possible. Teachers can increase motivation by encouraging students to do their best, setting high expectations, allowing students some choice where possible, and using lessons that involve higher-order thinking, collaboration, and student participation, among other strategies (National Research Council, [128]). Let students choose paper and project topics that interest them. Success motivates learners, it encourages extra effort. Matt and Dale; Linda; and Ken added that the teacher should assess learners in a variety of ways (tests, papers, projects, and presentations) to give students more control over how they show their understanding to you. Give students options for how these assignments are weighted. Achievement brings pleasure, confidence, and stimulation to greater effort. Failure during the early stages destroys motivation, every student desire to know the result of his/her effort.

5.5 Be Free with Praise and Constructive in Criticism

The teacher must try to understand the nature of students and then appreciate and criticize them in motivating and inspiring manner (Singh, [125]). Give recognition and credit where due. Appreciate heartily where a learner does a good job. Individuals crave for social approval; give credit where it is due. Praise generously learners with correct and good responses. Positive verbal statements of encouragement and praise can strongly influence students' motivation (Williams & Williams, n.d [33]). 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, [26]). Give opportunities for learners to show what they know. Do not embarrass slow learners. Praise is a powerful reward and incentive for work well done. Encourage the efforts made by learners by word of praise. Blame is destructive. Matt and Dale [74]; Nilson [126]; Ken [96] stated that negative comments should pertain to particular performances, not the performer. Offer constructive criticism in a positive diplomatic manner. Start with the good points of a learner before mentioning suggestions for improvement. During the class, the encouragement of the students is very necessary; it can help improve confidence in the students. Use expressions that praise the learners for achievement attained e.g. "well done" "good of you" "clap for him", avoid the outright use of negative comments. Try to be positive enough to recognize efforts made by learners. The positive ending of the lesson can motivate the students very well.

5.6 Avoid Emotional Responses

Emotional reactions to learners' anger and frighten them. This distracts them from the subject being taught. Emotional outbursts interfere with learning and are demotivating.

5.7 Be a Professional or a Role Model

Set an exemplary example. Learners emulate instructors. S/he is the model. Be punctual as this will make learners want to be in class early and feel that they are valued. Deliver your presentations with energy and enthusiasm (Matt & Dale, [74]; Nilson, [126]; Ken, [96]). Set and keep a routine and be regular in the way you

conduct you are dealing with learners, e.g. start class in good time, keep learners well occupied doing their work. Students are partners in learning and not inferiors. Be motivated to teach and the learners will be motivated to learn. It is important to note that a dissatisfying style of teaching, poor training facilities, inefficient training and administration, and poor interpersonal relationships are demotivating to learners.

5.8 Provide Necessary Facilities/ Resources

Provide learners the opportunity to do what is expected of them on their own. This instills confidence and increases motivation. When the students are offered opportunities, it makes them more responsible, they can learn more about the consequences of their choices. Students should be given choices in subjects, methodologies, and learning processes in their choice of interest. Human beings are naturally curious and self-directed, that is, they want to learn, make choices, and achieve (Truby, [129]). 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 (Palmer, [26]). 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 & Assor, [130]; Simmons and Page, [131]; Garger, Thomas, & Jacques, [132]). Students should be confident to find alternative techniques for the solution of problems, and then they will be able to argue any problem with their merits and demerits.

5.9 Assign Responsibilities

As a teacher, you will be able to better tailor your instruction to the students' concerns and backgrounds, and your personal interest in them will inspire their personal loyalty to you (Matt & Dale, [74]; Nilson, [126]; Ken, [96]). Give learners the opportunity to do what is expected of them on their own. Display a strong interest in students' learning and faith in their abilities. This instills confidence and increases their level of motivation. Reeve et al. [38] observed that when students believe that they have some degree of control over their learning, overall motivation is increased. Teachers who are most effective at diagnosing and improving student motivation

tend to focus on interpersonal dealings with students, link education with things students' value, and encourage autonomy more than control in their classrooms (Hardré & Sullivan, [133]). Give learners work that is challenging and yet which they can do successfully. The work should neither be too easy that they'll lose interest nor should it be too difficult to discourage them.

5.10 Treat Learners as Special Individuals

MacGrath [134] stated that relationships are at the heart of teaching, since it is an activity based on communication. Give each learner his/her due respect as it befits him/her. Recognize individual skills and promote them. Attend to individual needs. Take interest in learners as individuals. Listen to their problems and show them they are people worthy of respect and consideration. 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. MacGrath added that empathy can help to build a trusting relationship. Lesson need to respect the learners by utilizing students' multiple intelligences (Gardner, [135]) and learning styles (Dunn & Dunn, [136]), e.g., visual, auditory, or tactile/kinaesthetic learners.

5.11 Give Correct Guidance

According to McGlynn [137], reaching out to students will help in finding a connection between how students learn and how instructors teach. Know your students and build on their strengths. Provide correct and good support when needed, especially at the time of difficulties, i.e. sickness, lack of fees, hunger, and slow learning. Let the learners know the result of that work and give guidance on what to do.

5.12 Use Teaching Methods and Aids that are Interesting and Stimulating

Variety is very relevant to students' motivation. Different forms of variety can be added into the content via dramatizations, model making, and out-of-classroom activities (Palmer, [26]). The use of audio-visual aids directly helps the teachers in motivating the students as well (Singh, [125]). Revive and maintain interest by using a selection of different methods and aids.

Explain concepts practically, experimentally, and give examples from the daily lives of learners. The teacher should create a sense of teamwork and group studies between the students. The use of a variety of student-active teaching activities directly engage students in the material and give them opportunities to achieve a level of mastery (Matt & Dale, [74]; Nilson, [126]; Ken, [96]).

5.13 Provide Incentives

Rewards play an important role in motivating the students. Special privileges make students most active in the process of knowledge. Prizes and rewards should be according to the personality of the students. Make learning itself ends up being rewarded; it should be a useful process for the students. However, it is not compulsory to give learners big and expensive rewards, small rewards like candy, pen, and pencils, should be given to encourage them. Praise is also a good reward. Rewards and punishment both affect the students either positively or negatively, because these strategies come from external factors. According to Ahmed, Loh and Zairi [138]; MacGrath [134] 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. However, the reward should not be used repeatedly. This is because research indicates that extrinsic rewards can have a negative impact on intrinsic motivation (Ken, [96]). Additionally, 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, [139]; Campbell & Niles, [140]). The work done by the students should be displayed in the class. This can make students and their teachers proud and create a sense of recognition.

5.14 Ego Involvement

The teacher should adopt those activities which raise the status of students among the class members (Singh, [125]). The ego depends on attitudes relating to the self. Every student would want to maintain his/her status and self-respect. The teacher should take cognizance of the students' ego and motivate them with positive behaviour.

5.15 Challenge the Students

Motivational techniques should encourage the students to take intellectual risks. It should give students opportunities to find out the relationship between achievement and effort, incentive, and success and try to develop better self-concept in learners. A student should be challenged, and for this purpose, the teacher should give them some tasks according to their abilities. Some students are very brilliant; therefore, giving them easy tasks will demotivate them.

5.16 Provide a Conducive Learning Environment

The learning environment should take into consideration the intrinsic and extrinsic students' motivations and the opinions of students and teachers in arranging the environment. This engagement results in students feeling that their teachers have a special interest in them. Teachers should create a conducive learning environment where the students are relaxed and participate in their learning. Many students fail because they do not know how to deal with problems that come up in a lesson. The teacher should create an atmosphere where learners are free to express themselves without fear. Students need to be encouraged to engage and to participate (Celikoz, [141]; Daniels, [139]; Adkins- Coleman, [142]) in the lesson. 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, [26]). Positive interaction with the instructor and in the classroom overall are important.

5.17 Encourage Healthy Competition among Students

Competition is a technique that enhances or reduces the motivation in students depending on how it is used. The result may be in the form of fewer winners and more losers. Students who are not motivated most of the time are truants. Therefore, the teacher should help students to struggle through their own shortcomings instead of competing with other students. Encourage students to improve the quality of their

learning outcome in a healthy competitive classroom.

5.18 Place Appropriate Emphasis on Testing and Grading

According to Matt and Dale [74]; Nilson [126]; Ken [96], tests should be a means of showing what students have mastered, not what they have not. 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 students' motivation. In general, test-taking instructions, terminology, layout, and item choices need to not be ambiguous, confusing, illogical, unclear, imprecise, or poorly designed (Trugman, [143]). Avoid grading on the curve and give everyone the opportunity to achieve the highest standard and grades.

It is also important to involve parents or guardian in encouraging and motivating their children to do well in school (McGlynn, [137]; Fulton & Turner, [144]). There are several ways in which parents could motivate their wards in school. This include: (i) Hold high expectations for your children's learning and believe in their competence. (ii) Emphasize effort over innate ability. (iii) Praise children when they've mastered new skills or knowledge instead of praising their innate intelligence. (iv) Encourage children's curiosity, exploration, persistence, and problem-solving. Expose them to new experiences. (v) Take an active interest in your children's education. Provide a stimulating learning environment at home, which does not have to involve elaborate resources. (vi) Make reading materials available and discuss new ideas or experiences with your children. Other 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, [141]).

6. HOW TO MAKE THE SUBJECT APPEAL TO STUDENTS

When encouraging learners to find the subject matter interesting, use cues to show students the appeal of the subject matter as shown in Table 1.

Table 1. How to Make the Subject Appeal to Students

S/n	Appeal	Examples of Cues
1.	Novelty	"I think that is really neat—I haven't seen anything quite the same."
2.	Utility	"This next topic is something that we'll use again and again. It contains valuable ideas that we'll use throughout the later sections of the course."
3.	Applicability	"As you work through the next section, I think that you'll be pleasantly surprised how relevant it is."
4.	Anticipation	"As you read through, ask yourself what this section of work is hinting at as the next logical step."
5.	Surprise	"We've used X in a lot of different ways. If you thought you'd seen them all, just wait for the next assignment."
6.	Challenge	"Who's up for a challenge? I think that you'll find the next piece of work very interesting."
7.	Feedback	"When you try this, you'll find out whether you really understood yesterday's lesson."
8.	Closure	"A lot of you have asked me about X. Well, finally we're going to find out why that's so."

Source: Matt and Dale [74]

7. SUMMARY

The motivation of learners is essential for their academic success in school. Motivation has been related to the amount of intellectual energy typically used in learning activities, and this led to a belief that motivation could be seen as a stable characteristic of the learner, on a par with personality. Motivation is what causes a person to want to know, act, understand, believe, or gain particular knowledge, skills, attitude, or values. There are several types of motivation as contained in the literature; however, the major types of motivation discussed in this article were the intrinsic and extrinsic motivation. Learners have different types of motives as a goal that propels them toward academic success. These achievement goals include mastery goal, performance goal, performance-avoidance goal or failure-avoidance goal, and social goals. Motivation can be influenced by some factors. These factors include needs, interest, enjoyment, the social life of students, the teacher, the teaching method used, and the learning environment. Motivation is important because it stimulates and energizes the learners to think, concentrate, and learn effectively. In improving students' motivation, the teacher must pay attention to some factors. These include setting a clear goal, showing the need for the lesson, arousing and maintaining learners' interest in the lesson, and increasing chances of success among others. Finally, if the teacher can apply all the motivational strategies discussed in this article in the teaching-learning process, it is

possible that learners will be energized and enthusiastic to reach the learning goal.

8. CONCLUSION

Students' motivation is a critical part of success in education and later life, but it has often been overlooked by educators. This article has demonstrated that, in the process of teaching and learning, the motivational variable have a potentiating effect on students' learning. Efforts geared towards improving the quality and effectiveness of teachers is unlikely to improve students' achievement if large numbers of students are unmotivated to learn. Therefore, the present article provides teachers and educators with valuable information on students' motivation to learn. Understanding of how each of the motivational goals, types, and dimensions influences learning will place teachers and educators in a better position to help and support students who have long been struggling with learning. The role of teachers in motivating learners cannot be overemphasized. It is recommended that teachers should create an active learning environment that enhances students' perceived autonomy and competence, providing students with choices and opportunities for self-directed learning, and planning learning activities that might increase their feeling of mastery. Finally, teachers are encouraged to employ all the motivation strategies earlier discussed. This will enhance students' learning and improve their academic achievement.

9. STUDY QUESTIONS

- What is motivation?
- Explain the two major types of motivation.
- Discuss the importance of motivation in teaching and learning.
- Explain the intrinsic and extrinsic factors that affect motivation.
- Discuss five techniques that the teacher can employ to motivate learners.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Bakar R. The effect of learning motivation on student's productive competencies in vocational high school, west Sumatra. *International Journal of Asian Social Science*. 2014;4(6):722-732.
2. Luthans F. *Organizational behavior* (7th Ed.). McGraw-Hill, Inc. New York, USA. 2012;141- 165.
3. Guay F, Chanal J, Ratelle CF, Marsh HW, Larose S, Boivin M. Intrinsic, identified, and controlled types of motivation for school subjects in young elementary school children. *British Journal of Educational Psychology*. 2010;80(4):711–735.
4. Gredler ME, Broussard SC, Garrison MEB. The relationship between classroom motivation and academic achievement in elementary school aged children. *Family and Consumer Science Research Journal*. 33;106-120.
5. Ryan RM, Deci EL. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*. 2000;55(1):68-78.
6. Ryan RM, Deci EL. Promoting self-determined school engagement; motivation, learning and well-being. In Wentzel KR, Wigfield A. (Eds.). *Handbook of motivation at school*. New York: Routledge. 2009;171-196
7. Wood R. Students' motivation to engage with science learning activities through the lens of self-determination theory: Results from a single-case school-based study. *Eurasia Journal of Mathematics, Science and Technology Education*. 2019;15(7):1-22.
8. Fredricks JA, Blumenfeld PC, Paris AH. School Engagement: Potential of the Concept, State of the Evidence. *Review of Educational Research*. 2004;74(1):59–109.
9. Tymms P, Bolden D, Merrell C. Science in English primary schools: Trends in attainment, attitudes and approaches. In *Perspectives on Education: Primary Science*. Issue 1, September 2008. London; Wellcome Trust; 2008.
10. Vansteenkiste M, Simons J, Lens W, Soenens B, Matos L. Examining the motivational impact of intrinsic versus extrinsic goal framing and autonomy-supportive versus internally controlling communication style on early adolescents' academic achievement. *Child Development*. 2005;76:483–501.
11. Vansteenkiste M, Zhou M, Lens W, Soenens B. Experiences of autonomy and control among Chinese learners: Vitalizing or immobilizing? *Journal of Educational Psychology*. 2005;97:468–483.
12. Gibbens B. Measuring student motivation in an introductory biology class. *The American Biology Teacher*. 2019;81(1):20–26.
13. Das Carlo M, Swadi H, Mpofu D. Medical student perceptions of factors affecting productivity of problem-based learning tutorial groups: does culture influence the outcome? *Teaching and Learning in Medicine*. 2003;15:59–64.
14. Moulart V, Verwijnen MGM, Rikers R, Scherpbier AJJA. The effects of deliberate practice in undergraduate medical education. *Medical Education*. 2004;38:1044–1052.
15. Sobral DT. What kind of motivation drives medical students' learning quests? *Medical Education*. 2004;38:950–957.
16. Carl Wieman Science Education Initiative. *Motivating learning*; 2013. Available:<http://eprints.lancs.ac.uk/3688/>.
17. Hadre P, Crowson H, Debacker T, White D. Predicting the academic motivation of rural high school students. *Journal of Experimental Education*. 2007;75:247-269.
18. Makokha A, Ongwae M. *Trainer's handbook - A 14 days teaching methodology course*. German Development Service, Kenya (Ded); 1997.
19. Seifert K, Sutton R. *Educational Psychology*. Published by the Saylor Foundation; 2009.

- Available:<https://www.saylor.org/site/wp-content/uploads/2012/06/Educational-Psychology.pdf>.
20. Nashar H. Peranan motivasi dan kemampuan awal. Jakarta: Delia Press; 2004.
 21. Hamzah A. Teori motivasi dan pengukurannya. Jakarta: Bumi Aksara; 2011.
 22. Baron RA; Donn B. Social psychology (9th Ed.). USA: Allyn & Bacon; 2000.
 23. Schunk DH, Pintrich PR, Meece JL. Motivation in education (3rd Ed.). Upper Saddle River, NJ: Pearson; 2008.
 24. Sanfeliz M, Stalzer M. Science motivation in the multicultural classroom. *The Science Teacher*. 2003;70(3):64 – 66.
 25. Kozochkina TL. Differentiation among schools as a factor of the quality of general education. *Russian Education and Society*. 2009;51(11):3-9.
 26. Palmer D. What is the best way to motivate students in science? *Teaching Science-The Journal of the Australian Science Teachers Association*. 2007;53(1):38-42.
 27. Christenson SL, Reschly AL, Wylie C. The handbook of research on student engagement. New York: Springer Science. Available:<https://doi.org/10.1007/978-1-4614-2018-7>; 2012.
 28. Klem AM, Connell JP. Relationships matter: Linking teacher support to student engagement and achievement. *Journal of School Health*. 2004;74(7):262–273.
 29. Marsh HW, Martin AJ. Academic self-concept and academic achievement: Relations and causal ordering. *British Journal of Educational Psychology*. 2011;81:59–77.
 30. Reeve J. Self-Determination theory applied to educational settings. In Deci EL, Ryan RM. (Eds.), *Handbook of self-determination research*. Rochester, NY: The University of Rochester Press. 2002;183-204
 31. Reeve J. A self-determination theory perspective on student engagement. In Christenson SL, Reschly AL, Wylie C. (Eds.). *The handbook of research on student engagement*. New York: Springer Science. 2012;149-172. Available:https://doi.org/10.1007/978-1-4614-2018-7_7.
 32. Anni CT. *Psychology of learning*. Semarang, Indonesia: Upt Unnes Press; 2006.
 33. Williams KC, Williams CC. Five key ingredients for improving student motivation. *Research in Higher Education Journal*. (n.d); 1-23.
 34. Debnath SC. College student motivation: An interdisciplinary approach to an integrated learning systems model. *Journal of Behavioral and Applied Management*. 2005;6(3):168-189.
 35. D'Souza KA, Maheshwari SK. Factors influencing student performance in the introductory management science course. *Academy of Educational Leadership Journal*. 2010;14(3):99-120.
 36. Bunce DM, Flens EA, Neiles KY. How long can students pay attention in class? A study of student attention decline using clickers. *Journal of Chemical Education*. 2010;87(12):1438-1443.
 37. Gillentine A, Schulz J. Marketing the fantasy football league: utilization of simulation to enhance sport marketing concepts. *Journal of Marketing Education*. 2001;23(3):178-187.
 38. Reeve J, Hamm D, Nix G. Testing models of the experience of self-determination in intrinsic motivation and the conundrum of choice. *Journal of Educational Psychology*. 2003;95:375-392.
 39. Glynn SM, Koballa TRJ. The contextual teaching and learning instructional approach. In Yager RE, (Ed.). *Exemplary science: Best practices in professional development*. Arlington, V. A.: NSTA Press; 2006.
 40. Hamalik O. *Proses belajar mengajar*. Jakarta: Bumi Aksara; 2002.
 41. Palmer D. A motivational view of constructivist-informed teaching. *International Journal of Science Education*. 2005;27:1853-1881.
 42. Cavas P. Factors affecting the motivation of Turkish primary students for science learning. *Science Education International*. 2011;22:31-42.
 43. Ongowo RO, Hungi SK. Motivational beliefs and self-regulation in biology learning: Influence of ethnicity, Gender and grade level in Kenya. *Creative Education*. 2014;5:218-227.
 44. Tuan HL, Chin CC, Shieh SH. The development of a questionnaire to measure students' motivation towards science learning. *International Journal of Science Education*. 2005;27:634-659.
 45. Tang M, Neber H. Motivation and self-regulated science learning in high

- achieving students: Differences related to nation, gender and grade level. *High Ability Studies*. 2008;19:103-116.
46. Beal CR, Stevens RH. Student motivation and performance in scientific problem solving simulations. In Luckin R, Koedinger KR, Greer J. (Eds.). *Artificial intelligence in education: Building technology rich learning contexts that work*. Amsterdam: IOS Press. 2007;539-541.
 47. Broussard SC, Garrison MEB. The relationship between classroom motivation and academic achievement in elementary school-aged children. *Family and Consumer Sciences Research Journal*, 2004;33(2):106–120.
 48. Sandra D. Mathematics and science achievement: Effects of motivation, interest and academic engagement. *Journal of Educational Research*. 2002;95(6):323-332.
 49. Skaalvik EM, Skaalvik S. Self-concept and self-efficacy in mathematics: Relation with mathematics motivation and achievement. Paper presented at the proceedings of The International Conference on Learning Sciences, Bloomington, Indiana; 2006.
 50. Zhu Y, Leung FKS. Motivation and achievement: Is there an East Asian model? *International Journal of Science and Mathematics Education*. 2011;9:1189-1212.
 51. Stewart C, Bachman C, Johnson R. Students' characteristics and motivation orientations for online and traditional degree programs. *Journal of Online Learning and Teaching*. 2010;6(2):367-379.
 52. Busato VV, Prins FJ, Elshout JJ, Hamaker C. Intellectual ability, learning style, personality, achievement motivation and academic success of psychology students in higher education. *Personality and Individual Differences*. 2000;29(6):1057-1068.
 53. Broussard SC. The relationship between classroom motivation and academic achievement in first and third graders; 2002.
Available:<https://pdfs.semanticscholar.org/c7df/87ec06b0a9fa13fcd4096055f97862f9f7f5.pdf>.
 54. Bridgeland JM, Dilulio JJ, Morison KB. *The silent epidemic: Perspectives of high school dropouts*. Washington, DC: Civic Enterprises; 2006.
 55. Rodicio MM. Los factores motivacionales ex-trínsecos en el aula de inglés. Extrinsic motivational factors in the English classroom. Unpublished Ph.D Thesis, Universidad de Granada, Spain; 1999.
 56. Madrid D. La investigación de los factores motivacionales en el aula de idiomas [The research in motivational factors in the language classroom. Granada, ES: Grupo Editorial Universitario; 1999.
 57. Spolsky B. Anniversary article: Language motivation revisited. *Applied Linguistics*. 2000;21(2):157-169.
 58. Ortega-Martín JL. Introducción a la motivación en el aula de idiomas [Introduction to motivation in the language classroom]. Granada, ES: Grupo Editorial Universitario; 2002.
 59. Bhatia HR. *Educational psychology and techniques of teaching (4th Ed.)*. New Delhi, Kalia Publishers; 2004.
 60. Hikmat M. *Manajemen pendidikan*. Bandung: Pustaka Setia; 2009.
 61. Cole GA. *Management theory and practice*. London, UK: Thomson Learning; 2007.
 62. Sardiman AM. *Interaksi dan motivasi belajar mengajar*. Jakarta: Rajawali Pers; 2012.
 63. Kleinginna, P Jr, Kleinginna A. Categorized list of emotion definitions, with suggestions for a consensual definition. *Motivation and Emotion*. 1981;5:345-379.
 64. Abrahams I. *Practical work in secondary science: A minds-on approach*. London: Continuum; 2011.
 65. Cleary L. Student performance and motivation: Investigating relationships, identifying potential areas for concentration of scarce resources; 2014.
Available:https://esource.dbs.ie/bitstream/handle/10788/2154/hdip_cleary_l_2014.pdf?sequence=1&isAllowed=y.
 66. Wagner E. Summary of the Ph.D thesis: Motivational factors of academic achievement in college students; 2012.
Available:<http://193.231.20.119/doctorat/teza/fisier/600>.
 67. Dimiyati D, Mudjiono A. *Belajar dan pembelajaran*. Jakarta: PT Rajagrafindo Persada; 2006.
 68. Brown HD. *Teaching by principles: An integrative approach to language pedagogy*. White Plains, NY. Longman; 2001.
 69. Green SK. Using an expectancy-value approach to examine teachers'

- motivational strategies. *Teaching and Teacher Education*. 2002;18:989-1005.
70. Redondo R, Ortega-Martín JL. Motivation: The road to successful learning. *PROFILE Issues in Teachers' Professional Development*. 2015;17(2):125-136.
71. Ryan RM, Deci EL. Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*. 2000;25(1):54-67.
72. Deci EL, Ryan RM. Self-determination theory: A macro theory of human motivation, development, and health. *Canadian Psychology*. 2008;49(3):182-185.
73. Niemiec CP, Ryan RM. Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to educational practice. *Theory and Research in Education*. 2009;7(2):133-144.
74. Matt D. Dale W. Learning to teaching and teaching to learn mathematics: resources for professional development. *Mathematical Association of America*. 2002;163.
75. Chow SJ, Yong BCS. Secondary school students' motivation and achievement in combined science. *US-China Education Review*. 2013;3(4):213-228.
76. Ayub N. Effect of intrinsic and extrinsic motivation on academic performance. Available:https://www.researchgate.net/publication/255712855_effect_of_intrinsic_and_extrinsic_motivation_on_academic_performance; 2010.
77. Cavallo AML, Rozman M, Blinkenstaff J, Walker N. Students' learning approaches, reasoning abilities, motivational goals and epistemological beliefs in differing college science courses. *Journal of College Science Teaching*, 2003;33:18-23.
78. Gagne M, Deci EL. Self-determination theory and work motivation. *Journal of Organizational Behavior*. 2005;26:331-362.
79. Brown HD. *Principles of language learning and teaching*. White Plains, NY. Longman; 2000.
80. Harmer J. *The practice of English language teaching*. Edinburgh gate Harlow, England. Longman; 1988.
81. Marsh C. *Hand book for beginning teachers*. South Melbourne, Australia: Longman; 1996.
82. Benabou R, Tirole J. Intrinsic and extrinsic motivation. *Review of Economic Studies*. 2003;70:489-520.
83. Lei SA. Intrinsic and extrinsic motivation: Evaluating benefits and drawbacks from college instructors' perspectives. *Journal of Instructional Psychology*. 2010;37(2):153-160.
84. Bain K. *What the best college teachers do*. Harvard University Press; 2004.
85. Assor A, Kaplan H, Kanat-Maymon Y, Roth G. Directly controlling teacher behaviors as predictors of poor motivation and engagement in girls and boys: The role of anger and anxiety. *Learning and Instruction*. 2005;15:397-413.
86. Garn A, Jolly JL. High ability students' voices on learning motivation. *Journal of Advanced Academics*. 2014;25(1):7-24.
87. Cho Y. The relationship between L2 learning motivation and context among Korean EFL students. *English Teaching*. 2012;67(1):79-105.
88. Ling Z. Research on learning motivation and autonomous L2 learning. *International Conference on Educational Research and Sports Education (ERSE)*; 2013. Available:<http://dx.doi.org/10.2991/erse.2013.21>.
89. Taylor G, Jungert T, Mageau GA, Schattke K, Dedic H, Rosenfield S, Koestner RA. Self-determination theory approach to predicting school achievement over time: The unique role of intrinsic motivation. *Contemporary Educational Psychology*. 2014;39:342-358.
90. Assor A, Kaplan H, Roth G. Choice is good, but relevant is excellent: Autonomy-enhancing and suppressing teacher behaviors predicting students' engagement in school work. *British Journal of Educational Psychology*. 2008;72:262-278.
91. Noels KA, Pelletier LG, Clément R, Vallerand RJ. Why are you learning a second language? Motivational orientations and self-determination theory. *Language Learning*. 2000;50:57-85.
92. Vansteenkiste M, Simons J, Lens W, Sheldon KM, Deci EL. Motivating learning, performance, and persistence: The synergistic role of intrinsic goals and autonomy-support. *Journal of Personality and Social Psychology*. 2004;87:246-260.
93. Brophy J. *Motivating students to learning*. New Jersey: Lawrence Erlbaum Associates; 2004.
94. Hamdu G, Agustina L. Pengaruh motivasi belajar siswa terhadap prestasi belajar ipa di sekolah dasar. *Journal Penelitian Pendidikan*. 2011;12(1):81-86.

95. Tokan MK, Imakulata MM. The effect of motivation and learning behaviour on student achievement. *South African Journal of Education*. 2019;39(1):1-8.
96. Ken B. What the best college teachers do. Harvard University Press. 2004;32-33.
97. Bernaus M, Wilson A, Gardner R. Teachers' motivation, classroom strategy use, students' motivation and second language achievement. *Porta Linguarum*. 2008;12:25-36.
98. Corpus JH, McClintic-Gilbert MS, Hayenga AO. Within-year changes in children's intrinsic and extrinsic motivational orientations: Contextual predictors and academic outcomes. *Contemporary Educational Psychology*. 2009;34:154-166.
99. Dweck CS. Messages that motivate: How praise molds students' beliefs, motivation, and performance (in Surprising Ways). In Joshua A. (Ed.). *Improving academic achievement: Impact of psychological factors on education*. New York, NY: Academic Press. 2002;38-58.
100. Gottfried AE, Fleming JS, Gottfried AW. Continuity of academic intrinsic motivation from childhood through late adolescence: A longitudinal study. *Journal of Educational Psychology*. 2001;93(1):3-13.
101. Jang H, Kim EJ, Reeve J. Longitudinal test of self-determination theory's motivation mediation model in a naturally occurring classroom context. *Journal of Educational Psychology*. 2012;104:1175-1188.
102. Lai HT, Ting K. English language learners' perception on motivational changes. *English Language Teaching*. 2013;6(8):10-20.
103. Loima J, Vibulphol J. Internal interest or external performing? A qualitative study on motivation and learning of 9th graders in Thailand basic education. *Journal of Education and Learning*. 2014;3(3):194-203.
104. Loima J, Vibulphol J. Learning and motivation in Thailand: A comparative regional study on basic education ninth graders. *International Education Studies*. 2016;9(1):31-43.
105. Papi M, Abdollahzadeh E. Teacher motivational practice, student motivation, and possible L2 selves: An examination in the Iranian EFL Context. *Language Learning*, 2011;62(2):571-594.
106. Urhahne D. Teacher behavior as a mediator of the relationship between teacher judgment and students' motivation and emotion. *Teaching and Teacher Education*. 2015;45:73-82.
107. Reeve J. Why teachers adopt a controlling motivating style toward students and how they can become more autonomy supportive. *Educational Psychologist*. 2009;44(3):159-175.
108. Jang H, Reeve J, Deci EL. Engaging students in learning activities: It is not autonomy support or structure but autonomy support and structure. *American Psychological Association*. 2010;102(3):588-600.
109. Harackiewicz JM, Barron KE, Tauer JM, Elliot AJ. Short-term and long-term consequences of achievement goals. *Journal of Educational Psychology*. 2002;92:316-320.
110. Wolters C. Advancing achievement goal theory: Using goal structures and goal orientations to predict students' motivation, cognition, and achievement. *Journal of Educational Psychology*. 2004;96:236-250.
111. Midgley C, Kaplan A, Middleton M. Performance-approach goals: Good for what, for whom, and under what conditions, and at what cost? *Journal of Educational Psychology*. 2001;93:77-86.
112. Urdan T. Predictors of self-handicapping and achievement: Examining achievement goals, classroom goal structures, and culture. *Journal of Educational Psychology*. 2004;96:251-254.
113. Dowson M, McInerney D. What do students say about their motivational goals? Toward a more complex and dynamic perspective on student motivation. *Contemporary Educational Psychology*. 2003;28:91-113.
114. Burke M, Sass T. Classroom peer effects and student achievement. Paper presented at the annual meeting of the American Economic Association, Boston, USA; 2006.
115. Bandura A. Social cognitive theory of human development. In Husen T, Postlethwaite TN. (Eds.). *International Encyclopaedia of Education*. Oxford: Pergamon Press. 1996;5513-5518.
116. Dweck CS. Mindsets and equitable education. *Principal Leadership*. 2010;10(5):26-29.
117. Murray A. Montessori elementary philosophy reflects current motivation theories. *Montessori Life*. 2011;23(1):22-33.

118. Pintrich PR. A motivational science perspective on the role of student motivation in learning and teaching contexts. *Journal of Educational Psychology*. 2003;95(4):667-686.
119. Seifert TL. Understanding student motivation. *Educational Research*. 2004;46(2):137-149.
120. Skehan P. Individual differences in second-language learning. London, UK: Edward Arnold; 1989.
121. Dörnyei Z. Teaching and researching motivation. Harlow, UK: Longman; 2001.
122. Sukmadinata NS. Landasan psikologi proses pendidikan. Bandung: Remaja Rosdakarya; 2003.
123. Elliott AJ, Dweck CS. Handbook of competence and motivation. New York: Guilford Press; 2005.
124. Dewandini SKR Farmer motivation in Mendong cultivation (*Fimbristylis globulosa*). In Minggir district [Unpublished essay]. Surakarta, Indonesia: Faculty of Agriculture, University of Sebelas Maret; 2010.
125. Singh YK. Teacher education. India: APH Publishing Corporation; 2005.
126. Nilson L. Teaching at its best: A research-based resource for college instructors, (2nd Ed.). Anker Publishing; 2003.
127. Frey N, Fisher D. Motivation requires a meaningful task. *English Journal*. 2010;100(1):30-36.
128. National Research Council. Engaging schools: Fostering high school students' motivation to learn. Washington, DC: The National Academies Press; 2004.
129. Truby D. What really motivates kids? *Instructor*. 2010;119(4):26-29.
130. Katz I, Assor A. When choice motivates and when it does not. *Educational Psychology Review*. 2007;19(4):429-442.
131. Simmons AM, Page M. Motivating students through power and choice. *English Journal*. 2010;100(1):65-69.
132. Garger J, Thomas M, Jacques PH. Early antecedents to students' expected performance. *International Journal of Educational Management*. 2010;24(2):129-138.
133. Hardré PL, Sullivan DW. Motivating adolescents: High school teachers' perceptions and classroom practices. *Teacher Development*. 2009;13(1):1-16.
134. MacGrath M. Beyond behaviour management: Manage or motivate? *Education Review*. 2005;19(1):57-64.
135. Gardner HA. School for all intelligences. *Educational Leadership*. 1990;47(7):33-37.
136. Dunn R, Dunn K. Teaching students through their individual learning styles: A practical approach. Reston, VA: Reston Publishing Company; 1978.
137. McGlynn AP. Millennials in College: How do we motivate them? *Education Digest*. 2008;73(6):19-22.
138. Ahmed P, Loh A, Zairi M. Cultures for continuous improvement and learning. *Total Quality Management*. 1999;10(4/5):26-434.
139. Daniels E. Creating motivating learning environment: What we can learn from researchers and students. *English Journal*. 2010;100(1):25-29.
140. Campbell SV, Niles MS. The effect of monetary incentives on accounting student motivation. *Academy of Educational Leadership Journal*. 2006;10(1):69-83.
141. Celikoz N. Basic factors that affect general academic motivation levels of candidate preschool teachers. *Education*. 2010;131(1):113-127.
142. Adkins-Coleman TA. "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*. 2010;79(1):41-53.
143. Trugman H. The role of tests in students (de)motivation. Publications by Betaiatefl; 2007.
144. Fulton E, Turner LA. Students' academic motivation: Relations with parental warmth, autonomy granting, and supervision. *Educational Psychology*. 2008;28(5):521-534.

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