The main theories of motivation are reviewed in an effort to help teachers discern various tactics and techniques that they can use with gifted, talented, and creative students. Among the theories examined are Ivan Pavlov's respondent conditioning; Albert Ellis's rational-emotive approach; Abraham Maslow's triangular approach to growth and motivation; B. F. Skinner's reinforcement theory; Piaget's equilibration and challenge; B. S. Bloom's taxonomy of educational objectives; Carl Rogers's writings as further developed by Glover, Bruning, and Filbeck; Victor Frankl's humanistic approach; and Rollo May's existential approach. The meta-analysis of these motivation theories is briefly discussed in order to facilitate their implementation within an educational and humanistic framework. (VW)
Motivating the Gifted; Talented; Creative

A Meta-Analysis

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Abstract

Although many students appear to have an exceptional amount of potential, they often do not actualize their talents. This article reviews theories of motivation in light of the gifted/talented/creative, and attempts to explore the facets of the creative process.
The process of motivating any learner is an exceptionally arduous one. Although both the teacher and the learner are often aware of the learner's IQ, potential, and past creative products, failure, ennui and lethargy are often the end product. Frustration on the part of parents, teachers and counselors may take its toll on all. "How can we 'motivate' this child?" "What are the ways to help him reach his 'potential'?" and "How can we get him/her going?" are questions often heard by parents, teachers, and counselors.

And what are the answers? Textbooks offer many and varied theories of motivation. This paper will attempt to review the main theories of motivation in an effort to help teachers discern various tactics and techniques of motivation they can use with gifted, talented and creative students. In addition, a meta-analysis of said theories will be conducted in order to facilitate the implementation of said theories with an educational and humanistic framework.

The Main Theories of Motivation

Ivan Pavlov, and of course "man's best friend" have been responsible for one of the early theories of motivation, i.e., Respondent Conditioning. Working at the University of Moscow, Pavlov ascertained that his dogs could be conditioned to respond in a certain fashion, depending upon the situation. Teachers certainly do not want their students to salivate, but do wish to provide a positive attitude for creative activities. Teachers want to classically condition their students into producing memorable work and a creative product. Thus, the environment should provide that stimulation that may condition a motivating response. Here, teachers must determine those conditions most facilitative and amenable to creative work. Brainstorming, relaxation, dealing with improbabilities and fluencies may all be antecedent
conditions. Role playing and small group work may further assist in the creative process.

Enhancing Motivation: The Rational Emotive Approach

Many students are apprehensive about engaging in creative endeavors. They have unrealistic ideas, irrational constructs and erroneous attitudes and beliefs about their subject (creative writing, painting) or about their abilities. Feelings of fear, apprehension and fright must be dealt with prior to the child's engagement in creative work. Typical irrational beliefs shared by gifted, creative children include

A. I think it's too hard.
B. I shouldn't have to do this.
C. Things ought to be easier.
D. I must never make an error.
E. It won't be "good enough."

Albert Ellis (1962) the "creator" of Rational-Emotive therapy has theorized that emotional disturbance stems from irrational beliefs—the "shoulds", "oughts" and "musts" that we express to ourselves internally. In order to overcome our apprehension we must confront and dispute our irrational beliefs. Teachers, in order to help their students, must also examine their students' attitudes, expectations and beliefs relative to their abilities and their tasks. Preconceived notions may have to be dealt with in the classroom. A "bull session" may be helpful in "clearing the air" and in coping with student's anxieties.

Helping students begin their assignments is also therapeutic. As Ellis says, "You rarely get gain without pain" (1977). Knaus (1974) has written an entire handbook to help students deal with their ideas about school and life.
Helping Students Self-Actualize

Abraham Maslow has offered a triangular approach to the process of growth and motivation. Hypothesizing that lesser needs must be met before higher needs are actualized, Maslow (1970) has indicated the basic needs to be physiological in nature (hunger, thirst, air), followed by safety needs (security, absence of danger), then love needs such as affiliation, acceptance and belonging, followed by esteem needs such as achievement, approval, recognition and competence. Finally, self-actualization needs are the realization of one's own individual potentialities, and self-fulfillment of one's goals.

Herein the teacher must know his/her students and be able to determine their present level of functioning. A new child in the class may feel unsafe, insecure in his/her new environment. Provisions must be made so that this child can feel safe and secure. A "loner" may need to feel part of the group. She/he may want to belong and be accepted by his/her peers. Time may be necessary to heal his/her wounds. Finally another child may need to be recognized for his/her achievements. The approval of the teacher may be necessary. Reflecting on this child's competence in his/her area may be necessary.

Some confident, creative, talented students may not need extensive motivation to actualize their talents. However, the instructor's interest, support and care may be facilitative props in their endeavors.

B. F. Skinner: Reinforcement Theory

The most generally known theory of motivation is that of B. F. Skinner of Harvard. He has indicated that in order to increase certain behavior, one must reinforce it—either primarily or secondarily, as soon after the response is emitted as possible. Furthermore, prompting and shaping (reinforcing
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successive approximations of the desired behavior) are further tools. However, reinforcement must be unchosen with care. Astute gifted students may have very high standards and may reject what they discern to be empty praise. Often "honesty is the best policy" with many gifted students. For others, a five minute break to "stop and smell the roses" is more reinforcing than M&M's.

Often the "natural consequences" of an event are highly reinforcing—the completion of a task—the final touches on a painting, the final re-write of a creative story are all intrinsically reinforcing to the gifted/creative child.

**Piaget, Equilibration and Challenge**

Piaget has taken a stance toward development and motivation which posits that children will attempt to accommodate and assimilate new material to their existing schemata. Thus, teachers can provide new information on a continual basis in order to involve students in the learning process. However, teachers should be aware as to "where the child is" in terms of his/her level of functioning, i.e., pre-operational, concrete or formal stage of development.

Thus, motivation may be seen as a challenge in a Piagetian framework by creating a disequilibration. The teacher may prompt the student to seek equilibration. Granted, the above model over-simplifies Piaget's work, and teachers of the gifted, talented are encouraged to read the work of Piaget.

Regarding the gifted, most are probably at the level of formal operations. They are typically able to prove or disprove a hypothesis and deal with problems in a logical, rational fashion. This author, (Shaughnessy, 1983) has compiled a number of intellectual exercises designed to challenge gifted/talented thinkers.
Bloom's Taxonomy of Educational Objectives

The Taxonomy of Educational Objectives: Cognitive Domain (Bloom, Englehart, Furst, Hill & Krathwohl, 1956) has advanced the idea that knowledge and learning occur at several different levels. The knowledge level is considered to be the lowest and most simplistic. This is the factual domain and information is processed with minimal understanding. As we progress upward, comprehension and understanding becomes salient. Utilization of factual knowledge is now important. Then, application becomes predominant. There is an effort to use and apply learned material. Later, analysis becomes important and then even later the student moves to the level of synthesis—he/she is able to synthesize not only earlier learned material, but perhaps information from other domains. Finally the highest level, Evaluation is reached. At this stage the student is able to evaluate his/her work and his/her thinking processes.

Although not seen as a motivational theory, its applicability to education is obvious. Clearly a teacher who is attempting to force a child to synthesize will not succeed if the student is at a lower level.

The Rogerian Approach:

Carl Rogers (1969) has written extensively on education, counseling and marriage. Glover, Bruning and Filbeck (1983) have drawn several guidelines from Rogers (1969) that they feel will help facilitate the development of a positive self-concept and self-esteem in youth and, thus, enhance motivation.

First, students should be given ample opportunities to participate in class discussions. This, of course, is consistent with John Dewey's maxim that we "learn by doing."

Secondly, teachers should allow for the expression of feelings. There should be an opportunity for students to learn about themselves and how to
accept their feelings. Glasser (1969) in his book "Schools Without Failure" has also recommended this as an integral part of education.

Third, a classroom environment of acceptance should be maintained. There should be discipline, but behavior should be separated from the person. An intervention such as "I dislike it when you talk so loudly in class, Tom," is better than "I hate you when you scream and yell in class." The first intervention is behavioral and specific, the second, emotionally charged and vindictive.

Fourth, specific, clean rules for classroom behavior should be established. Often, as noted by Rogers (1969), the absence of motivation is simply the result of poor communication of expectations to students.

Finally, the teacher can emphasize activities leading to success. As the old chestnut goes, "success breeds success." This is a further point reiterated by Glasser in his "Schools Without Failure" program.

Creativity: The Humanistic Approach

Viktor Frankl, founder of Logotherapy focuses heavily on creativity as one way in which one can find meaning in life. Frankl (1978) indicates that "if everything is stored in the past forever, it is important to decide what we wish to eternalize by making it part of the past. This is the secret of creativity: that we are moving something from the nothingness of the future into the 'being past'" (p. 15). In terms of prompting creativity I would quote this excerpt from Frankl (1969) who is counseling a patient:

"Imagine there are about a dozen great things, works which wait to be created ... and there is no one who could achieve and accomplish it but Anna. No one can replace her in this endeavor. They will be your creations, and if you don't create them, they will remain uncreated forever."
If you create them, however, even the devil will be powerless to annihilate them. Then you have rescued them by bringing them to reality. And even if your works were smashed to pieces in the museum of the past, as I should like to call it, they will remain forever. From this museum, nothing can be stolen since nothing we have done in the past can be undone." (p. 128).

By creating, one is able to transcend oneself—to become immortal as it were, by placing one's documents human into the museum of the past. By calling upon the "defiant power of the human spirit" the teacher is able to tap the "core of creativity" (Shaughnessy, 1983) and counselors also, in encountering their clients, can use creativity (Shaughnessy, 1981).

By calling upon the "defiant power of the human spirit," people cannot only create, but also give to others. Frankl (1979) relates the story of a garbage collector, who by repairing thrown away toys and giving them to poor children was able to transcend his daily chore.

What then, may a student be able to give? Frankl (1978) has indicated that:

"writers who themselves have gone through the hell of despair over the apparent meaninglessness of life can offer their suffering as a sacrifice on the altar of humankind. Their self-disclosure can help the reader who is plagued by the same condition, help him in overcoming it." (p. 90).

An Existential Analysis

Rollo May, well known psychologist and author of "The Courage to Create" has indicated that:
"It is the geniuses, the persons of abundant talents, who have the greatest difficulty in seeking out their destiny because their gifts continually present them with so many different possibilities" (May, 1981, p. 130).

Thus, the talented are constantly torn, ever striving. They experience their emotions and life more fully than others. Can a teacher force a student to create? Is there a "teachable moment"? May (1981) further indicates that "The creative person stands in a state of openness, heightened sensitivity incubating the creative idea, with a sharpened readiness to grasp the creative impulse when it is born." The creative individual appears to be alive--intellectually and emotionally.

Hemingway, writing to F. Scott Fitzgerald, says:

"Forget your personal tragedy. We are all bitched from the start and you especially have to hurt like hell before you can write seriously. But when you get the damned hurt use it--don't cheat with it. Be as faithful to it as a scientist."

How many writers, poets and musicians have been "hurt like hell" only to rise above their pain and despair. Along these very same lines, Jerome Kagan writes:

"Such freedom of the artist is not born. It is made in the pain of adolescent loneliness, the isolation of physical handicap, or perhaps, the smug superiority of inherited title. The freedom that permits "generation of possibilities"...is the beginning of a creative product" (Kagan, 1967, p. 27).

How much emotional pain does the artist suffer? How much is hidden behind the words and scenes and characters that are the artist's creations. And how can the mentor channel that pain, emotion, and despair.
May (1977) indicates that "The creative person, who ventures into many situations which expose him to shock is more often threatened by anxiety, but assuming the creativity is genuine, he is more able to overcome these threats constructively" (p. 66). That is, he is able to channel those feelings into creative work; perform a self catharsis of sorts and divert those feelings of anxiety to help the artist/poet/writer to function better, if those feelings are used constructively.

Ephemeral as this perspective may be, it is this author's contention that this is real—the process is real. The emotions are real and the outcome, genuine.

A Medley of Motivational Theories

In addition to the aforementioned theorists, many others have contributed to our knowledge of motivation. Several of these will be covered here.

David Ausubel (1963) in his work on "advance organizers" has indicated that if students have an awareness of the material to be learned, then learning is facilitated. In essence, we have a type of "ideational scaffold" in our brains which helps us deal with new incoming information. Ausubel's "advance organizer" helps us cope with to-be-learned material more readily.

Julian Rotter's work on locus of control (1966) posited that we all have either an internal or external locus of control, i.e., we see ourselves as controlled by others, fate, luck, chance, or the "stars." Recent research by Terry Gutkin (1978) suggests that teachers may be able to influence a balance by prompting and encouraging appropriate attribution statements.

David McClelland (1965) has indicated that teachers should stress the benefits of achievement motivation and the ways in which it can enhance students' self-images. Further, teachers can assist students in establishing concrete goals and keep a record of progress toward meeting those goals.
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Craig, Mehrews, and Clarizio (1975) in examining the work of McClelland (1965) indicate that "an appropriate program for the development of achievement-motivation, should have these characteristics:

1. It must teach participants about the concept of achievement motivation and its importance in becoming successful.
2. It must create strong positive expectations that the student can, will, and should become more achievement oriented.
3. It must demonstrate that the change sought is consistent with the demands of reality, the individual's own makeup, and cultural values.
4. It must get the student to commit himself to accomplish realistic, practical and specific goals as a consequence of his new motive to achieve.
5. It must have the student record his progress toward the goals to which he/she is committed.
6. It must provide an atmosphere in which the individual feels honestly accepted and respected as a person capable of directing his future.

Meta-Evaluation:

In order to perform an evaluation, one must have a conception of man and of humanity. Is man the rat of the Skinner box or the thinking/evaluating man of Rational Emotive Therapy? Is the student the humanistic caring being or the ever growing internal mechanisms of Piaget?

Moshman (1979) has indicated that there are several germane components to theory analysis and meta-theoretical formulation. A theory must be evaluated in terms of nine developmental trends. These are:

1. Isolation of variables
2. Hypothetic deduction
3. The distinction between testing and using a hypothesis
4. Differentiation between hypotheses and data
5. Asymmetry of truth and falsity
6. Falsification
7. Parsimony
8. Idealization
9. Epistemic humility (Moshman, 1979, p. 60-62)

He very rarely analyze the motivational theories that we utilize in our classrooms. However, as our knowledge of theorizing has increased and our knowledge of the gifted/talented/creative increases, it would appear necessary to empirically examine the use of our motivational theories with these exceptional individuals.

As our knowledge about our knowledge increases and our theoretical concepts of how we theorize expand, we may be better able to meet the needs of those students who meta-analyze, and possibly meta-create in the future.
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References


