Using Learning Theory to Promote Desired Attributes for Living in the Twenty-first Century

Maura Lewis

PSYC 7010: Learning & Assessment

Valdosta State University

Abstract

As the information/conceptual age emerges, a new approach to teaching students is becoming

necessary. This paper identifies how appropriate self-regulation of emotions and the ability to

set goals and develop action plans are desired attributes for living and being productive agents of

society in the twenty-first century. Social cognitive theory will be used to address these desired

attributes and how this theory can be used by educators to make better decisions regarding

classroom instruction and assessment.

Using Learning Theory to Promote Desired Attributes for Living in the twenty-first Century

Brad Paisley, a pop culture icon and country music singer, recently released a single

from his new album, *American Saturday Night*, titled "Welcome to the Future." In the video,

Paisley, now 37, poetically evaluates the changes that have occurred in his lifetime, let alone the

lifetimes of his grandparents. He sings about wishing he had his personal Pac-Man game at his

house when he was younger so he would not have to go to the arcade, and now he has it on his

phone. He follows this with how his grandpa was in World War II and had to write his

grandmother letters from a base in the Philippines, when it is now possible to be on a video chat

with a company in Tokyo. He ends the song by remembering the running back from his high

school football team having a cross burned in his yard for asking out the homecoming queen,

and praising the efforts of Martin Luther King and Rosa Parks: "And everybody who seen what

he seen, from a woman on a bus, To a man with a dream." Paisley speaks of the changes he has

seen in his 37 years, let alone the changes the world has seen in the last century; even country

music singers are signing about the information/conceptual age and the increasingly rapid pace

at which change is occurring. What is especially unique about the video is Paisley's

illustrations of the vast ability and desire that children of the world have for the future. Young

children of every nationality and race declare what they are going to be when they grow up;

from a firefighter to a systems analyst, designer to a paleobotanist, and etymologist to a

cardiothoracic surgeon. However, are the children of the world prepared for this

information/conceptual age that Paisley outlines in his video?

A large focus of discussion today in education and educational psychology is centered on

how to best prepare students for the information/ conceptual age. Should educators still

subscribe to theories created over a half-century ago? How do students learn best? Are our

students going to be able to survive in a working environment that is vastly different than the one their parents have known? Are we as educators appropriately preparing our students to survive in an age where creative thought and problem solving skills overpower the need to produce something? These questions are compounded by the complex life that the twenty-first century offers our youth. School shootings, rising numbers of teenage pregnancy, racial and ethnic tensions, loss of the family unit, violence, drugs, and numerous other obstacles facing our youth create a difficult and confusing world for children to transition into high functioning adults of the twenty-first century (Brett, Smith, Price, & Huitt, 2003)

This paper will discuss how appropriate self-regulation of emotions and the ability to set goals and develop action plans are desired attributes for living and being productive agents of society in the twenty-first century. Social cognition theory will be used to address these desired attributes and how this theory can be used by educators to make better decisions regarding classroom instruction and assessment.

Desired Attributes

Students today have a much more difficult road ahead of them than students in the past did. Today, students must not only have the ability to learn, achieve, and create; they must also be empathetic, self-starters, critical and creative thinkers and well-rounded (Huitt, 2007). They have to be able to think while understanding how they think in order to become problem solvers, as well as be aware of their surroundings and use interpersonal skills to make connections with people from all around the world. Students must have a number of these desired attributes in order to become successful adults in the twenty-first century.

The Brilliant Star framework proposed by Huitt (2006) outlines a holistic approach to individual development. Within this framework, the interpersonal category of human

competence has five domains, which include physical/psychomotor, awareness/perceiving, cognition/thinking, affective/ emotion, and conative/volition. For this paper, I will focus on the affective domain, specifically emotional stability and the ability to appropriately self-regulate one's emotions, and the conative domain, specifically the ability to set goals and develop action plans so the goals may be seen to fruition.

Even though I will only be highlighting two desired attributes necessary for becoming a successful adult in the twenty-first century, it is necessary to understand that all the domains and three core elements of the Brilliant Star framework work best when considered holistically: "An important principle regarding the functioning of these domains and core elements is that the whole is more than the sum of its parts" (Huitt, 2006, p. 12). Even though the conative and affective domains are vital to success in the future, they have no value if they are not considered within the remaining parts of the Brilliant Star framework.

Appropriate Self-regulation of Emotions

Brett et al. (2003) state that "one's emotional awareness and ability to manage emotions may be even more important than IQ in determining success and contentment throughout all areas of life" (p. 3). With that understanding and the knowledge that careers in the twenty-first century will be focused around one's ability to cope with taxing situations where critical thought is necessary, appropriate self-regulation of emotions becomes a necessary attribute for students to obtain.

Brett et al. explain the affective domain specifically refers to emotions and their outward appearance. Emotion involves three subcomponents: feeling, behavior, and cognition. Thus, the affective domain "encompasses our awareness or discernment of our and others emotions, the ability to connect our emotions to those of others, the display of emotion, and the ability to

manage or regulate one's emotions" (p. 4). All of these components of the affective domain become integral parts to maintaining a healthy level of emotional awareness, as well as creating empathy and self-regulation of one's own emotions, which become vital skills for surviving in the information age.

People continually appraise situations to know if a particular harm or good can come of it. Lazarus (as cited in Bret et al., 2003) wrote that "appraisal involves an appreciation of a particular harm or benefit in the relationship with the environment and carries with it implications for well-being, action, and coping" (p. 7). The ability for a person to appraise a situation and react accordingly, whether towards herself or others, shows the person can appropriately monitor her emotions. This also allows the person to interact in social situations appropriately, keeping in mind her emotions as well as others.

Fredericks (as cited in Bret et al., 2003) defines social-emotion learning (SEL) skills as "the process through which people learn to recognize and manage emotions, care about others, and make good decisions, behave ethically and responsibly, develop positive relationships, and avoid negative behavior" (p. 11). SEL skills are important because they can help guide social situations through the awareness of one's own emotional knowledge and expression.

People with appropriate self-regulation of emotions show emotion through visible outward expressions. They are continually appraising situations to measure the harm or benefit of the situation, and have developed high-functioning SEL skills. Through a deep understanding of their own emotional states, as well as being able to assess others' emotional states, people can better work in group environments while being a positive influence on that environment. Since jobs in the twenty-first century are going to be less individualistic and more focused on group

interactions, awareness of one's emotions, as well as the ability to regulate his! her emotions

becomes a valuable attribute for success.

Ability to Set Goals and Develop Action Plan

The ability to set goals and develop action plans derives from the conative domain. Huitt

and Cain (2005) define conation as "the mental process that activates and! or directs behavior and

action" (p. 1). Conation connects knowledge and affect to behavior and answers "why" we do

things. Common terms associated with conation include intrinsic motivation, volition, agency,

self-direction, and self-regulation. Conation involves issues surrounding someone's life purpose,

his! her aspirations, intentions, and goals and if he! she is fulfilling those goals, and how he! she

is doing that. Volition, the freedom to make choices about goals or what one is doing, is a vital

aspect of conation and must be considered when discussing setting goals. Work in the twenty-

first century will be more self-directed; thus, volition and conation become very important

concepts to teach our students along with the ability to set goals and develop a plan of action.

Bandura (2001) discusses human agency and the idea that people can intentionally make

things happens through their own actions. People are "agents of experiences rather than simply

undergoers of experiences" (p. 4). Through intentionality (an intention for a future course of

action), forethought (people motivate and guide themselves in anticipation of future events), self-

reactiveness (the ability to make goals happen), and self-reflectiveness (the ability to reflect upon

one's goals), people can form, change, and see goals through to their completion. Bandura's

discussion of agency involves the idea of self-efficacy, or the belief that one has the power to

produce certain outcomes through their actions. A solid grasp of agency and self-efficacy will

allow a person to set goals for herself, change the goals based on factors that arise, assess and

reflect on the goals, and have a positive outlook on her ability to complete the goal. These are all

imperative when discussing life in the twenty-first century.

Bandura (2001) suggests the advances we have seen in technology recently transformed

"the nature, reach, and loci of human influence. These new social realities provide vast

opportunities for people to bring their influence to bear on their personal development and to

shape their social future" (p. 17). Thus, the advancing information age and the continuous

changes in the workforce and technology have enabled people to have more agency over their

lives and futures, as well as afforded them the opportunity to develop these futures however they

want. A thorough understanding of agency and strong self-efficacy beliefs enables a person to

set appropriate goals and create action plans they can control in order to accomplish these goals.

Age-Appropriate Level of Development

I primarily teach eighth-grade English Language Arts. Piaget states a student in the

eighth grade should be working towards the formal operational stage (Lutz & Huitt, 2004).

The formal operational stage is detailed through the person being able to make a sense of

abstract concepts and to construct hypothetical situations. Siegler (as cited in Lutz & Huitt)

believes people who reach this stage can think abstractly about issues like truth and morality.

If students have reached the formal operational stage of development, then teachers should

give students opportunities to explore hypothetical questions, encourage students to explain

how they solve problems, and teach broad concepts using materials and ideas relevant to the

student (Huitt, 1997).

However, it should be noted many high school students have not achieved the formal

operational stage of development by the time they leave high school, so assuming eighth grade

students have done so would be a mistake. Thus, many middle grades students are still in the

concrete operational stage of development, usually at an advanced stage. This stage is

characterized by the ability of the person to think logically using all three types of knowledge:

physical, logical-mathematical, and social (Lutz & Huitt, 2004). Development "is still limited to

the application of knowledge to concrete objects and stimuli" (p. 4). Students in the concrete

operational stage should be given a chance to manipulate objects and test their ideas, be given no

more than three to four variables at a time, be given familiar examples to explain more complex

ideas, be given opportunities to classify and group objects and ideas on increasingly complex

levels, and be presented problems which require analytical thinking (Huitt, 1997).

Erikson (as cited in Huitt, 2008) created a developmental theory that covers the

emotional development throughout a person's lifetime. Children in adolescence are in the

identity vs. role confusion stage. In this stage, a person develops a sense of self in relation to

others and to their own internal thoughts and desires. Thus, middle grade students should be

nurtured to discover their abilities, goals, and possibilities, as well as given a safe environment

where they can explore their identity in relation to other students. Also, they should be

empowered and encouraged to develop appropriate SEL skills that they can use in future

classes and careers.

Maslow (as cited in Huitt, 2001) developed a hierarchy of needs based on two groupings:

deficiency needs and growth needs. Each deficiency need must be met before moving to the next

higher level. When these needs have all been met, if a future deficiency is detected, the person

will work to remove the deficiency. The first four levels of the hierarchy are physiological,

safety/security, belonginess and love, and esteem. These levels should all be met by the time

students reach my classroom. However, I teach in a low socioeconomic area where parents are

sometimes not a large part of the students' lives. Therefore, I must satisfy these basic needs

within my classroom in order to allow the students to move to higher elements of the hierarchy, like aesthetic needs and need to know and understand.

Ultimately, the age-appropriate level of development that students I teach should acquire by the time they leave my class involves the ability to start processing abstract thoughts while exploring and developing their sense of self in relation to others, as well as their own internal thoughts and desires. Students should also start setting goals for themselves that are attainable as well as practical.

Social Cognitive Theory

I have discussed two desired attributes that students should obtain to become successful adults in the twenty-first century: the ability to self-regulate emotions and the ability to set goals and develop action plans. As an educator, it is my job to ensure that my students attain these attributes in order to achieve success. There are numerous learning theories that detail specific ways students learn, behave, and think. All of these theories need to be considered when creating lesson plans and classroom environments. Behaviorism allows a teacher to provide extrinsic motivation to students, cognitivism allows teachers to understand how their students think, humanism reaches the student through emotions, and constructivism allows the student to learn through construction of meaning by the individual learner. Good teachers employ all theories at various times. However, if I am going to focus on self-regulation of emotions and goal setting as desired attributes of my learners, then the social cognitive theory would be best utilized to prepare lesson plans that would address the desired attributes that I have selected.

Basic Assumptions

I chose this theory because it outlines my basic human beliefs; agency is a vital aspect of human life and can be used to create greatness. Bandura (2001) states that many previous theoretical outlooks in education have not allowed human agency into the equation, but agency is a necessary attribute when creating goals and one's future. Behaviorism is based on a stimulus-response model that leaves no room for influencing one's own behavior. Cognitivism outlines the mind as a linear functioning organism with limited capability for agentic processing. These theories are left wanting because they "omit prime features of humanness such as subjectivity, deliberative self-guidance, and reflective self-reactiveness" (p. 3). Social cognitive theory, along with humanism (Huitt, 2009), are unique because they hypothesize a framework of interactive agency. That is, the viewpoint of influence is not going just one way like it does in other learning theories. In social cognition, the influence goes both ways (reciprocal determinism). For instance, the environment can influence behavior and behavior can influence the environment. The mind is not just reactive and thoughts are not separate of neural events; thoughts do not just happen and events do not just take place, but rather can be conceived, rethought, evaluated, and executed in many different ways depending on the person and situation. Social cognitive theory intertwines a person's emotional capacities with cognitive capabilities.

A key feature of social cognition is the focus on the development of individual goals and standards that are influenced by a social setting (Bandura, 2001). A second focus is that individuals have the potential to be engaged in self-monitoring. As stated previously, the core features of agency are intentionality, forethought, self-reactiveness, and self-reflectiveness. A

person can intentionally create a goal, examine its possible outcomes and effects on the future,

motivate herself to complete the goal, and reflect on the ability of the goal to be completed.

Bandura (2001) outlines self-efficacy as a major component of the social cognitive

theory. Self-efficacy is the belief in one's self to accomplish a goal. Efficacy can shape a

person's outlook on life and shape his or her environment. An agentic perspective emphasizes

that people can have a say in what happens with their lives: "The rapid pace of informational,

social, and technological change is placing a premium on personal efficacy for self-

development and self-renewal throughout the life course" (p. 11). Social cognitive theory

enables a relationship between a person's behavior, environment, and personal qualities, which

will be much needed attributes for success in the twenty-first century. This theory allows a

person to understand his/ her emotions and desires and use those to create goals that they can

change and reflect on until the goal is achieved.

Vygotsky (as cited in Lutz & Huitt, 2004) also subscribes to this train of thought.

Vygotsky believed that society and culture were major factors in cognitive development. He

used "social interaction as the framework for all learning and development" (p. 5). The basic

assumptions of Vygotsky's theory of cognitive development are students are greatly influenced

by social factors and these factors should be involved as part of the learning process; culture, the

culture's language, and the student's development within the cultural/ social world all become

important aspects of Vygotsky's theory. Also, Vygotsky did not believe children construct their

own ideas of the world like Piaget did; rather, Vygotsky's theory advocates social interactions

between students and their peers and students and their teachers as quite important to the creation

of new ideas and ways of thinking. Vygotsky's theory could be considered social cognitive

theory because it too believes that goals and development are directly related to and influenced

by social setting.

Concepts and Principles of Learning

In order for social cognitive theory to work, self-efficacy must be harvested and based on

mastery experiences accumulated over time in many subjects so a student has a high academic

self-efficacy. To create self-efficacy in a subject, mastery experiences must first be provided.

Multiple tasks must be given within a subject the student can accomplish. When the student has

had numerous mastery experiences in a subject, she will have high self-efficacy in that subject.

However, to create high academic self-efficacy, a student must experience multiple mastery

experiences in all subject areas. The mastery experiences must be coupled with persuasion form

the teacher, modeling by someone the student identifies with, and positive mental and physical

reinforcement (Bandura, 2001).

Social cognitive theory not only incorporates the use of human agency but collective

agency as well. Collective agency is detailed by a group's belief in its ability to obtain a goal:

"Group attainments are the product not only of the shared intentions, knowledge, and skills of

its members, but also of the interactive, coordinated, and synergistic dynamics of their

transactions" (Bandura, 2001, p. 14). Like Vygotsky, this theory states social interaction leads

to a dynamic system of learning within a social setting. In his theory, learning will take place

best in social situations where students can learn from their peers and teachers. The possibility

for new ideas in a social setting, where the teacher is facilitator rather than the center of

knowledge, is far greater than in situations where personal cognitive development is based

solely on the learner.

Examples of Classroom Instruction and Assessment

Implications for educators include the need to make sure learning is student-centered and not teacher-centered. Group work and interactive discussions between the students are a key component to using this theory in the classroom. When giving tasks, they need to be created to be mastery experiences for the students so they can build their self-efficacy. Also, students need to be given a choice of which tasks they want to perform so they have some agency in their work and can develop the attributes of agency. For example, when giving an end of unit project over a novel, offer the students a choice on what they will prepare for their project. Make sure there is a project for every different type of learner and that everyone in the classroom will identify with at least one option in some way. Also, give the students the opportunity to complete the project in groups.

Multiple opportunities for assessment need to be present throughout units so teachers can be sure all students are learning, as well as give the students the opportunity to self-reflect on what they are accomplishing and react if they are not pursuing their goal the way they had planned. The teacher needs to scaffold learning for students to make sure they understand the major ideas, as well as furthering their knowledge into application and synthesis.

Also, many classrooms are extremely diversified today; students from various cultures and backgrounds all commence in one classroom. Teachers need to be aware of the various cultures being represented in their community and schools and make sure they have a strong understanding of those cultures. Thus, the information students are learning can be connected to factors that are important to them, as well as the teacher will have a better understanding of why a student may learn or think the way they do.

Summary

There are many desired attributes that students need to attain in order to be productive and successful in the twenty-first century. Appropriate self-regulation of emotions and the ability to set goals and develop plans of action are only two of these necessary attributes. The affective and conative domains are only two aspects of a needed holistic approach to ensure that students acquire these desired attributes. The social cognitive theory is the most effective theory when discussing how to properly develop these attributes in our students today. Social cognitive theory provides students with agency, as well as self-efficacy, and allows students to learn based on their social environment and behaviors. This theory is unique in it has multiple influences working together to create a learning environment for the student. Through social interaction and mastery experiences, a student can develop their own self-efficacy, which will be invaluable for the future. Many behavioral scientists have spent tireless hours developing theories that will help teachers understand how students learn best in order to create lessons that maximize learning opportunities for the students so they can be successful in the twenty-first century and the future. Perhaps Brad Paisley says it best when he sings, "Wherever we were going, well we're here."

References

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of*

Psychology, 52, 1-26.

Brett, A., Smith, M., Price, E., & Huitt, W. (2003). Overview of the affective domain.

Educational Psychology Interactive. Valdosta, GA: Valdosta State University. Retrieved

October 2009, from http://www.edpsycinteractive.org/papers/affectdev.pdf

Huitt, W. (1997). Cognitive development: Applications. *Educational Psychology Interactive*.

Valdosta, GA: Valdosta State University. Retrieved October 2009, from

http://www.edpsycinteractive.org/topics/cogsys/piagtuse.html

Huitt, W. (2001). Motivation to learn: An overview. *Educational Psychology Interactive*.

Valdosta, GA: Valdosta State University. Retrieved October 2009, from

http://www.edpsycinteractive.org/topics/motivation/motivate.html

Huitt, W. (2006). *Becoming a Brilliant Star: An introduction*. Paper presented at the

International Networking for Educational Transformation (iNet) conference, Augusta, GA,

April 23-27. Retrieved September 2009, from

http://www.edpsycinteractive.org/papers/BrilStarintro-s.pdf

Huitt, W. (2007). *Success in the Conceptual Age: Another paradigm shift*. Paper delivered at the

32nd Annual Meeting of the Georgia Educational Research Association, Savannah, GA,

October 26. Retrieved October 2009, from

http://www.edpsycinteractive.org/papers/conceptual¬age.pdf

Huitt, W. (2008). Socioemotional development. *Educational Psychology Interactive*. Valdosta,

GA: Valdosta State University. Retrieved October 2009, from

http://www.edpsycinteractive.org/affsys/erikson.html

Huitt, W. (2009). Humanism and open education. *Educational Psychology Interactive*. Valdosta,

GA: Valdosta State University. Retrieved October 2009, from

http://www.edpsycinteractive.org/topics/affsys/humed.html

Huitt, W., & Cain, S. (2005). An overview of the conative domain. *Educational Psychology

Interactive*. Valdosta, GA: Valdosta State University. Retrieved October 2009, from

http://www.edpsycinteractive.org/papers/conative.pdf

Lutz, S. & Huitt, W. (2004). Connecting cognitive development and constructivism: Implications

from theory for instruction and assessment. *Constructivism in the Human Sciences, 9*(1),

67- 90. Retrieved October 2009, from http://www.edpsycinteractive.org/cogdev.pdf