ABSTRACT

This paper is designed to assist in the comprehension of learners’ being multi-faceted persons who are unique. Discovering the whole individual is incumbent upon realizing the teaching/learning environments. This is respective of academic and socio-societal factors, which establish who one is as a learner and teacher. The author proposes and explains the concept of each individual being one who thinks and feels simultaneously with reciprocity existing within and between these two skills—so strongly that it is often difficult to separate one from the other. It’s proposed that each of us experiences an interconnectedness and, in many cases, an interdependency with respect to the commonality of social and societal realities within academic and other environments. These interconnections form a world sociology, which is realized by our thinking and feelings. Cross culturally, each one of us being exposed to a mutuality of needs is based in part upon belief and value systems. As one’s education evolves, each becomes his/her experiential past with respect to thinking, feeling, actions taken or inactivity’s that result in behaviors which define one as an individual learner and teacher. The overall purpose of this paper is to empower the thinker, the learner and the teacher by presenting “Teaching and Learning: A Model for Academic and Social Cognition” (Schiering, Bogner, Buli-Holmberg, 2011). This presents a comprehensive theoretical framework of academic and social cognition, as a basis for effective learning and teaching with implications for practice, as the author maintains that the purpose of theory is to guide practice.

Keywords: Model, Reciprocity, Social and societal realities, Interconnectedness.

1. BACKGROUND

Examining teaching models was first realized by addressing what is a “model?” What leads one to wanting to be a teacher with the idea of examining what’s remembered about elementary, middle, and high school was questioned. Are those memories mostly positive or negative? Perhaps there is a mixture of feelings and emotions attached to those years. While some teachers excited us about learning, others did not. Some classes were enjoyed and some just had to be gotten through, taking in curriculum that was required by our state government’s educational standards. Something led to wanting to teach. Was it an interest in children’s success, both academically and socially? Was it a desire to facilitate students’, at whatever age, in knowing themselves—impacting their future in a positive manner?

This may have served as the impetus for going into the educational field. To be good at this craft of teaching, we understand that those recipients of information are not just thinkers, but feeling human beings. Subsequently, in order to teach the whole child, there needs to be an acknowledgment of differences and similarities of students in our charge. This learning and teaching model was created to stimulate this awareness and bring it to realization. This model presents the things that influence our lives both internally and externally. Just recognizing this presents a broad picture of what impacts learning—our own and that of our students.

The philosophies presented in this paper are based on concepts relating to the model’s theoretical constructs. The core perspective is that there’s an interrelationship between thinking and feelings that is reciprocal. Reflection on past experiences effect behaviors in the present and influence one’s future actions. Thinking and feeling are seen as major influences for behaviors and actions in academic and social settings.

The concept of holons—everything being connected to something (Koestler, 1978), or nothing being separate from anything else, with an interdependence being realized—is part of the model’s philosophy. Common social and societal realities experienced in all settings impact on an individual as well as whole groups’ belief and value systems. These philosophies serve as the underpinning and overriding components for knowing who one is as a learner and teacher. They collectively rely on awareness of academic and social thinking and feelings/emotions.

A model for academic and social cognition was developed by Schiering in 2003. However, the implementation and ever-modified practice of it began in 1965 in her fifth-grade, inner-city, culturally diverse classroom in mid-America. In the years that followed, she implemented the model in various international and national geographical locations, when teaching varied grade levels, which included college undergraduate and graduate courses, as well as during her conference presentations, and in educational journal publications. In 2008, as she worked with Bogner and Buli-Holmberg, the final model was developed and presented to various international groups of educators. These presentations and the audience’s responsive sharing resulted in the following synthesized concepts: 1. each learner and teacher knowing who he or she is when learning and teaching, 2. each learner and teacher realizing they’re individuals and acknowledging his/her learning preferences, 3. both the learner and teacher understanding the phenomena of learning so that they may...
be effectively managed, and 4. using the model to promote a holistic view of learning and teaching for realizing a classroom community that encompasses an overall sense of security and well-being.

As individuals, both the learner and teacher in the roles of students and/or educators experience phenomena through interaction with the environment, responding cognitively or emotionally. In order to be an effective teacher, one must realize who one is as a learner and teacher, thereby gaining a working comprehension of individual uniqueness and strengths, as well as being aware of what one is thinking and feeling. This is done in conjunction with realizing students’ thoughts and emotional responses, resulting from their shared and/or internalized experiences.

2. INTRODUCTION

Perhaps first it is important to define a learning model. “The noun model implies an active, personal construction of one’s own theory, as well as its inevitable change in content and function with experience” (Bretherton, 1985). Additionally, models of learning and teaching address things such as cognition and meta-cognition, and strategies used to teach. To be effective, a model must be accessible to learners and teachers with ownership, as opposed to borrowing some components while disposing of others.

A pervading attitude that this belongs to me, because I adhere to its philosophy, techniques, and instrumentation while internalizing and personalizing it, is recognized when using a model (Borkowski, Estrada, Milstead, and Hale, 1989, p. 64) “To own a model, in this sense, implies that a teacher/student must practice its major components, receive guidance in modifying related instructional techniques, adapt the model’s characteristics to the unique circumstances of the classroom, and update the model based on personal experiences” (Borkowski, 1992, p. 253). As Idol, Jones, and Mayer (1991) stated, “Students using models and guides allow for exposure to critical thinking competencies within the curriculum content and do not require the creation of a separate timetable, but allow for a natural transfer of thought” (p. 52). The most important component is that one takes ownership of the model and uses it.

Defining Learning related to a model

1. Learning is psychological. This is where learning is perceived as and described what’s going on in each individual. It happens while being characterized by a stable behavioral pattern, as a result of experiences and training.

2. Learning is the interaction processes (direction) between the individual and the surroundings, where the psychological processes are more or less involved.

3. Learning is a by-product of one’s experiential environment in accordance with how one responds to it. And it is synonymous with teaching, as imagined that the learner has learned what has been taught.

Synthesized, “Learning involves how a learner perceives, interacts with, and responds to the learning environment. It may be provided by oneself or others and is formed in the deep structure of neural organization and personality that molds and is molded by human development and the cultural experiences of home, school, and society” (Schiering, 1999). In summation, learning is a complex phenomenon that is influenced by many factors. At its foundation, it’s a reconstruction of past experience that influences individuals’ and whole groups’ behavior and dispositions. With respect to a model, learning is related by the processes that enable one to use his/her cognition to develop concepts and initiate actions that address these.

Defining teaching

Teaching is the act of passing on information for learning. This may be accomplished in a variety of ways. Most importantly, teaching is defined by the style of delivery and attention to learners’ needs that one uses on a regular basis in the classroom or other settings where learning occurs. Haugsbak and Nordkvelle (2007), referencing the new language of learning, related that “teaching is the facilitation of learning.” For teaching to be effective and affective the learner is understood to be more than a passive recipient of knowledge, but rather one who is actively engaged in the learning process. When a model is used there is the information transference from the components of the model to the practical application of its components.

3. FIVE LEARNING AND TEACHING PERSPECTIVES

The following are from “Teaching and Learning: A Model for Academic and Social Cognition” (Schiering, Bogner, Buli-Holmberg, 2011)

Experiential Learning: Dewey and Kolb

As explained by Bogner (1990), according to Dewey, “learning may be defined as a reconstruction or reorganization of experience which adds to the meaning of experience and increases ability to direct the course of subsequent experience.” Learning is a directed mental activity. The processes of learning and thinking are intricately connected, with neither being a random process, but seen as being linked to specific needs or goals. According to Dewey (1938), all knowledge, thinking, and learning grow out of experience. One must do, but in order for learning to occur, one must also reflect on the doing. The act of learning involves both a sensory or experiential component and a mental or cognitive component.

Developmental or Hierarchical Learning: Piaget

Piaget (1936/1963) focuses on how the development of language influences the process of thinking. His theory focuses on maturation and cognitive development in age-related sequential stages. The basic principle in his theory is that children construct their own understanding. Knowledge is not a copy of the reality. Therefore, learning is a process in which the child, through assimilation and accommodation, develops meaningful structures of knowledge.
Socio-cultural Learning: Vygotsky
This theoretical perspective is based on learning as a construction of knowledge between the individual and the society. As social beings, much of our learning occurs within some type of social setting, happening within groups or as a result of interactions with others. Vygotsky (1978) was concerned with the process of developing the higher levels of thinking such as memory, attention, decision-making, and concept formation. According to his theory, each of these results from culturally required development by scaffolding or building knowledge. He maintains that the individual, already from his or her birth, is a social and collective human being. The person’s development is dependent on surrounding conditions such as home conditions and the learning environment in schools.

Ecological Learning: Bronfenbrenner
The ecological components of Bronfenbrenner (1979) include various aspects that impact the human development processes, as well as learning. Special emphasis is placed on the social settings where learning occurs. His learning theory gives possibilities for analyzing complex and dynamic developmental processes. Bronfenbrenner defines the method of this ecological process as being progressive, a reciprocal adaptation between an individual’s development and the changeable environment that surrounds him or her.

Biological Brain-Based Learning: Jensen, Damasio, and Brandt
Biological theorists focus on the anatomical and physiological changes that occur within the brain as learning occurs. These theorists are concerned with describing the ways in which memories are formed and understanding the variables that impact these processes. Brain-based theorists connect holistic health issues such as exercise, emotions, stress, nutrition, and positive attitudes to healthy brain functioning.

4. CONNECTING THEORETICAL PERSPECTIVES
Each of the aforementioned learning and teaching perspectives has useful and viable components in and by themselves. However, none of them, as with most learning and teaching models, are comprehensive. Most present one or two constructs with regard to the learner and teacher interplay. However, a model for academic and social cognition incorporates something from each perspective while adding to them. This is done by providing an interconnection of a world sociology through social and academic cognition, and reciprocity of thinking and feeling. Additionally, there are external components that influence common social and societal realities and belief and value systems. Realizing these provides the knowledge about who one is as a learner and teacher. This results in the formation of an all-inclusive theoretical construct that may be implemented with practical classroom applications involving the components of thinking and feelings.

Defining thinking and feelings
The following are definitions resulting from conversations examining the concepts of thinking skills by Schiering and Bogner, 2007.

“Thoughts: Immediate conscious responses to reflection, which involve memory. Reflection is further defined by Schön (1997) as having two forms, which are reflection “in” action, or thoughts occurring now in the present, and reflection “on” action, as referencing something that happened in the past.
Example: From my experience, I have thoughts that focus on learning being multidimensional.
2. Ideas: A prediction of future responses or speculation based on one’s perspective as a result of reflection.
Example: She got the idea about good teaching practices from the book on educational theory.
3. Opinions: A combination of thoughts and ideas in that a formulated concept results. The teachers were asked their opinions of the curriculum.
4. Judgments: Concretized thoughts, ideas, and opinions which are impacted by memory, while being based on reflection concerning past experiences. Oftentimes based on one’s level of attachment to a situation. Judgments are not easily changed, but they may well change. If easily modified, then you’ve expressed a thought, idea, or opinion, as opposed to a judgment.
Example: My judgment is that many teachers are facilitators of learning. Until evidence of this is demonstrated on a continual basis not to be true for you, the judgment will remain a judgment—solidified thought.
5. Feelings: A sensory and/or emotional response to stimuli that may be descriptive or classificatory. Example: The water felt soft as it slid through my open fingers.
Feelings are also defined as being the quality that something has in that one responds in a manner that connotes feeling of an emotional or intuitive nature and/or reflects on something to establish a formed response that is grounded in thought, ideas, opinions, and judgments. Example: The music collectively evoked the audience’s strong sense of joy as the symphony began. Subsequently, feelings and emotions are one and the same and can be observed or defined as being joined. These then are trans-rational responses to stimuli in that a sensory response to situations occurs at the same juncture as deeply held thoughts, ideas, opinions, and judgments. Feelings/emotions may be seen as “root responses” to stimuli.”

Realizing what one is thinking and/or feelings assists in comprehension of presented, read, or experienced material. Comprehension is realized in three formats. These are:
1. Literal Comprehension: this pertains to fact-based understanding where learners may retrieve information from a printed or reliable source;
2. Applied Comprehension: this pertains to the learner relating information to his/her personal experience;
3. Implied Comprehension: This pertains to inference in that the learner is led to information by inferential clues and uses inductive or deductive reasoning.
5. A TEACHING AND LEARNING MODEL

The Model's Foundation

The Model rests on the foundational premise that there’s a connection between SOW—a world sociology and REAP/external factors of religion, economics, academics, and politics. These four components influence individuals’ lives inwardly and outwardly from their earliest beginnings.

The Acronym of SOW

Sociology is defined as the science of human society and of social relations that exist within and between organizations. This includes changes within those settings, which specifically addresses the needs and development of such groups. In that simplistic definition, this concept is reliant upon linked experiences—those read about, modeled, observed, or listened to, that are universal and conventional within and between varied groups of people...in a neighborhood...in schools...in classrooms...everywhere.

The Acronym of REAP

Within the context of the classroom, with regard to SOW it is helpful to identify specific factors, external to the teaching and learning instruction, that may shape or influence what happens to both the teacher and the students. There are many, but we have chosen to focus on the primary ones that are identified by the acronym REAP. These are the four, with definitions of each, for our comprehensive learning and teaching model.

1. Religion refers to the belief or non-belief in a deity, adhering to this belief, and worship of a supreme being or beings’ controlling power. It is based on a faith practice that adheres to worship and traditions imposed by either humankind, or a deity/deities’ concept that attempts to explain the unexplainable.

2. Economics refers to the science that deals with material or emotional-based welfare, in that material welfare influences perceptions of life experiences.

3. Academics refer to the scholarly activities of a school or learning setting that impact the student learner’s belief systems, self-actualization, and achievement levels.

4. Politics refers to the influence of governing agencies and the exercising of power in the government or public affairs of a state, municipality, home, or school.

These four factors of religion, economics, academics, and politics move inwardly and outwardly to influence behaviors and attitudes in the commonality of groupings, regardless of their geographical location. REAP is an understanding of a disposition of these situations that addresses what come to be recognized as habitual behaviors within cultures and non-cultural congregates, but nonetheless form a World Sociology.

The Models Interior Component: Common Social and Societal Realities

These are explained as being the broad, familiar, or ordinary things we share as persons living together as a group in that dealing with one another affects our welfare. Subsequently, these realities address interconnected, interdependent individuals and cultures. The conduct, standards, and activities of the setting form the definition for the word society. Each person is not unto himself or herself, but rather lives in an assemblage governed by mutual needs. In a society of learners we share many common social and societal realities.

Our individual and oftentimes shared viewpoints influence dispositions, character, temperaments, spirit, desires, hopes, beliefs, and values, as well as our behaviors. Some of these realities stay the same and some do not. Common social and societal realities may be seen as defining us through personal perceptions and those shared by those around us, or on a wider scale...the world. Most times in a person’s daily routines, the things we have in common are not given much thought. We just go about doing what’s expected and unless something interrupted these familiar actions, we’d say, when asked about what’s happening, “STDD—same thing, different day.” That’s a normal response and part of one’s social reality. Yet it’s these commonalities—general daily occurrences—that bind us together into a society where we discover who we are as individuals and members of units, as well as learners and teachers.

The Model's Interior Component: Belief and Value Systems

Belief systems are concepts that incorporate feelings on whether something is true or untrue, good, bad, or even exists. Values are ideas that focus on whether something is important or the magnitude of its worth. Values include beliefs regarding right and wrong, or the level of importance something has, resulting from one’s experience. The word systems refers to the grouping of one’s beliefs and values.

Through the reflective reciprocity of thinking and feelings, common social and societal realities and belief and value systems, are linked together, as part of a world sociology.
Some beliefs become strengthened over time as reflections upon experiences solidify already held assumptions. For example, religious belief in the power of prayer, or a political belief in the sanctity of a free-market economy, will become a concretizing influence subsequent to our reflections.

A value system, however, is a different matter. For example, holding fast to the concept that all female adults are kind and giving may change as future experience demonstrates this to be otherwise. What one comes to value is changeable in accordance with what one is thinking and feeling. Nonetheless, there are values that may be held by whole groups of people, such as the importance of good nutrition, providing for others, or the acts of being caring, respectful, and kind. Also, some values are being a good citizen, being responsible, being fair, doing well in school, getting along with others, being acceptable at sports, being in organizations, volunteering, and those behaviors which are socially common in the places we live.

5. THE COGNITIVE COLLECTIVE

The reciprocity of thinking and feeling form the Cognitive Collective (Schiering, 2008). Reciprocal thinking and feelings are the thoughts, ideas, opinions, judgments, and emotions everyone has. They result in a continual structuring and restructuring of our reality—beliefs and values upon which we take action. This is accomplished through personal and shared reflection, represented by the model’s umbrella term of reflection by encompassing past and present experiences. All of the model’s elements of common social and societal realities, belief and value systems, and the model’s foundation of SOW and REAP are impacted by one’s thinking and feelings.

The reason for using the term reciprocal is that there’s movement between and among what one is thinking and feeling. Each impacts the other and individuals move simultaneously through and around these:

• What one is thinking and or feeling is so closely woven together it’s oftentimes difficult to distinguish one from the other.
• Thinking impacts one’s feelings and visa versa.
• These interactions shape the dynamics of the classroom and the likelihood that students will achieve the desired learning outcome.
• What one thinks and feels results, oftentimes, in what one says and does.
• All of the model’s elements of common social and societal realities, and belief and value systems, as well as the model’s foundation of SOW and REAP, are impacted by one’s thinking and feelings, which is the cognitive collective;
• The presence of these thoughts and feelings is a representation of the reality that human beings feel as well as think. This reality happens within the classroom as well as outside of it.

6. RECIPROCAL THINKING

“The first Phase involves skill development in beginning awareness with student competence in using a targeted number of cognitive functions that relate to fact finding and ordering techniques. In the following Phase skills related to the learner relying on past awareness to construct new meaning and hypothesizing, making analogies and predictions are realized. Finally, in the third Phase the learner actually experiences what he/she wants to know with self-assessment and self-adjustment. All the Phases are reciprocal in that there is movement within and between them, simultaneously” (Schiering, 1999). I think, therefore I am.

7. RECIPROCAL FEELINGS

Who one is as a learner and teacher is incumbent upon the interrelationship of the model’s interior and exterior components. These are evidenced in one’s knowing what one is reciprocally thinking and feeling. Knowing is a byproduct of reflections about common social and societal realities, and belief and value systems—what one lives each day. Feelings we have assist us in realizing who one is as a learner. This is based upon individuals’, as well as whole-groups’, past experiences, which ultimately impact on the dispositions, demeanor, and attitudes brought to school, the workplace, home, and everywhere. I feel, therefore I am.

Feelings are divided into two categories, which are physical and emotional. The physical ones are when there’s a sensory response to some stimulus. Examples might be you feeling hot or cold, having a ringing in your ears, tasting something that’s spicy and your tongue burning, seeing a balloon fly, or smelling the fire in a fireplace. These physical or sensory responses involve one’s senses. Emotional feelings are in a category somewhat exclusive to a non-sensory response to stimuli. And yet it may be that such sensory stimuli cause you to
have an emotional response. Feelings and emotions are interchangeable. One may recognize a feeling when substituting the words “I am” for “I feel,” and having the statement make sense. An example of a properly expressed feeling would be, “I feel elated. I am elated.”

Although feelings are not categorized into Phases as thinking skills are, they are nonetheless reciprocal in nature. Feelings exist without a labeling of being right or wrong and they are interchangeable depending on one’s emotional reaction to stimuli.

8. SUMMATION

This theoretical position paper relates that the teaching and learning model presented in this paper explains a world sociology that is evidenced by linking common social and societal realities through the reciprocity of thinking and feelings. External factors of religion, economics, academics, and politics influence our lives in such a manner that, through the reciprocity of thinking and feeling, who one is as a learner is incumbent upon shared common social and societal realities, belief and value systems, the Cognitive Collective, and reflection. By comprehending the implications of the model’s learning and teaching philosophy, one may be guided to practice and realizing the similarities and differences of individual students. This is evidenced in the sense that each one has experiences that have shaped and will continue to form personalities that welcome learning when the realization of who one is as a learner may be cognitively addressed in the classroom setting.

REFERENCES


