

A Cognitive Emotional Methodology for Critical Thinking

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This essay provides a theoretical foundation for a cognitive emotional methodology for critical thinking that is currently being utilized by the author in undergraduate and graduate social work advanced seminar classes. Through a review of the literature, the paper suggests that most approaches to teaching critical thinking do not integrate cognitive emotional criteria in the teaching method, and this is problematic for social work education. Citing recent literature about teaching empathy and values, and merging that work with clinical theory and practice, a theoretical foundation is established for a methodology that is in its formative stages. The methodology and its constructs are described. Although the methodology is presented through the vehicle of social work education, it is asserted that the methodology has broader utility.

Keywords: Critical Thinking; Decision Making; Social Work; Social Work Education

Introduction

Both the prevailing literature and the experience of teaching social work seminars reflect that critical thinking involves, but is greatly larger than, an intellectual process. Awareness of self, and confrontation of beliefs and emotions, converge on the learning moment. Students are brought face to face with human need, and the processes of integrating ethical principles, values, and skill sets that require introspective maturity, which enable the accomplishment of professional purpose through professional action. While there are methodologies and hierarchies for teaching critical thinking, the availability of models that integrate a cognitive emotional approach are sparse. It cannot be assumed that merely teaching critical thinking skills, in and of itself, will generate emotional maturity. Actually, most methodologies assume that the capacity for critical thinking already exists and all that is missing is the “how to do it”. This paper proposes a cognitive emotional methodology for critical thinking. This method is being utilized in advanced field B.S.W. and M.S.W. seminar classes at Kutztown University of Pennsylvania by the author. The students’ use and experience of the model has shown that its methodology has heuristic value. While research regarding the methodological constructs of the model is now being conducted, this paper is intended to provide a scholarly rationale for, and a description of, the model and its implementation. Although it is presented through the lens of social work education, it is suggested that the methodology provides a generic model for critical thinking and decision making applicable to all academic and professional disciplines.

Background

A summary observation of the competencies of the Council on Social Work Education’s Educational Policies and Accreditation Standards suggests that a major challenge of social work education is to assist students to achieve the capacity to engage, assess and act in a professionally purposeful way that integrates and reflects skill, ethical principles and standards (CSWE, 2008). Carey and McCardle (2011) suggest that field education,

as social work’s “signature pedagogy”, is where this challenge is achieved as it provides “the opportunity to apply theory, to experience the wide array of client groups and neighborhood issues, to concretely identify presenting problems, to assess and intervene effectively, and to grow into a professional self” (p. 357). Presenting a study of student’s emotional reactions in field placements, Litvack, Bogo and Mishna (2010), further state “In field education students are able to integrate theory and practice, gain mastery of intervention skills, and learn to deal with ethically challenging situations” (p. 228).

Field seminars can be viewed as the laboratory where the integration of practice and theory can occur. Generally, as reflected both by CSWE standards (Core Competency 2.1.3, 2008) and educational tradition, the capacity for critical thinking is utilized as the enabling method and vehicle for students to process this integration. It can be observed that this learning is both an intellectual and emotional process that is influenced also by student’s age, life experience and developmental maturity. However, many (but not all) descriptions and definitions of critical thinking emphasize it as an intellectual process. In academics, this tone has been advanced more broadly by Benjamin Bloom’s taxonomy of educational objectives (1956, 1964). Delineating six categories of learning, he established a hierarchy that emphasizes a cognitive/objective approach that readily lends itself to an intellectual academic purpose, and the hierarchy has been widely utilized across educational disciplines. Its influence on critical thinking in academics, for example, is reflected by Bissell and Lemons (2006) who present a method for assessing critical thinking in a biology class. They observe that Bloom’s first two categories of learning, “knowledge and comprehension,” do not involve critical thinking skills. However, the remaining categories, “application, analysis, synthesis, and evaluation, all require the higher-order thinking that characterizes critical thought” (p. 68). They add that “these categories provide a smooth transition from educational theory to practice by suggesting specific assessment designs that researchers and instructors can use to evaluate student skills in any given category” (p. 68).

Kurfiss (1989) views critical thinking as requiring procedural knowledge and discipline-specific knowledge. Knight (1992) posits critical thinking as involving necessary skills including “development of cogent arguments, clear definitions, problem solving strategies, information organization, and creativity” (as cited in Mumm & Kersting, 1997: p. 3). In developing the California Critical Thinking Skills Test, 2000; Facione et al. (2002) reference the American Philosophical Association’s definition of critical thinking as “the process of purposeful, self-regulatory judgment” (p. 2). Again, Kurfiss (1989) sees critical thinking as “the process of figuring out what to believe or not about a social situation, phenomenon, problem or controversy for which no single definitive solution exists. The term implies a diligent, open-minded search for understanding, rather than for discovery of a necessary conclusion” (p. 42). Drawing upon Gambrell & Gibbs (2009), Kirst-Ashman and Hull (2012) agree that critical thinking is a reasoning process that requires the “careful scrutiny of what is stated as true or what appears to be true” and “focuses on the questioning of beliefs, statements, assumptions, lines of reasoning, actions, and experiences” (p. 29). But, Kirst-Ashman and Hull differ from Kurfiss in stating that, for social work practice, a second dimension of action is required that necessitates “the creative formulation of an opinion or conclusion when presented with a question, problem or issue” (p. 29).

Kirst-Ashman and Hull’s approach to critical thinking reflects an active conceptual model that lends itself to a practice method which they refer to as a “Triple A” approach: “Ask questions, assess the established facts and issues involved, and assert a concluding opinion” (p. 29). Implicit in this definition and method is the understanding that critical thinking, as the link between theory and practice, is an active, not passive process. While they may be modified and corrected through the planned change process, conclusions are reached so to enable decisions about assessment of need and implementation of service. In the classroom, as they draw upon their field experiences, students utilize critical thinking abilities questioning how they know what they think they know or why they believe what they believe that leads them to the conclusions and consequent actions they have formulated. The intent and hope of this process is to create the capacity for well thought and objectively purposeful engagement with client systems.

Teaching critical thinking is related to, but not the same process as, teaching students how to think critically, or more accurately, how to integrate the capacity for critical thought and action. Drawing on cognitive science, van Gelder (2005) emphasizes the importance of practice and the use of “argument maps” in classroom discourse, but also recognizes the powerful influence of beliefs over evidence or “belief preservation”. He reflects that belief preservation “is the tendency to make evidence subservient to belief, rather than the other way around” (p. 46). And drawing from Douglas’s (2000) review of research in the field of Social Psychology, van Gelder goes on to observe that “put another way, it (belief preservation) is the tendency to use evidence to preserve our opinions rather than guide them” (p. 46).

In social work field education, Cary & McCardle (2011) have also observed that “practicing self-awareness, tolerating ambiguity when faced with ethical dilemmas, and applying knowledge gained from multiple sources are all key components of critical thinking” (p. 358). Complicating the multidimensional interactive relationship between self-awareness and

beliefs is the concomitant and recursive emotional experience of existential learning. Litvak, Bogo and Mishna (2011) argue that “it is the (social work) practicum where students experience and explore how professional aspects of self come together (and) learning new concepts and values can challenge core personal and familial worldviews and beliefs, leading to a sense of confusion and even disorientation.” (p. 228). Ron Ritchhart (2011), writing for Harvard Project Zero, elaborates more directly:

The role emotions play in shaping thinking may account for a large part of why we see failure of good thinking in our students. When our consistent expectations for higher-order thinking still don’t translate into our students consistently using the critical and creative-thinking skills we so conscientiously taught them, it may be because their initial emotional reactions carry the day. In reality, it is not enough to teach thinking skills, we must also pay attention to the affective side of cognition (p. 1).

Two Models

It appears then that the actual “doing” of critical thinking employs necessary attention to an integrated cognitive emotional process. In Social Work, at least, it involves an active experiential process where values, beliefs and feelings are challenged when applied to the often times stark reality of human living. While not formally connected to critical thinking *per se*, there are two methodologies in recent literature that approach an attempt for such an integration in social work education.

Teaching Values

First, Allen and Friedman (2010) developed a taxonomy for teaching social work values through affective learning. They state that affective learning consists of two components: “The first involves the learner’s attitude, motivation, and feelings about the learning environment, the material, and the instructor” (p. 2). In their view, this component focuses on a student’s motivation to learn. The second and more important component, and the one they utilize in their taxonomy, is the process of learning: “Actual affective learning relates to feelings, attitudes, and values that are identified, explored, and modified in some way because of the learning experience” (p. 2).

The authors point out that a Bloom’s taxonomy of educational objectives had been adapted to affective learning by Krathwohl (Krathwohl, Bloom, & Masia, 1964). One of the authors, Friedman, co-presented a paper with Neuman (Neuman & Friedman, 2008) in which Neuman presented a revised version of Krathwohl’s taxonomy. This revision was made so to less focus on a student’s motivation and attitude about learning and to more attend to the actual learning process itself. Neuman’s Taxonomy of Affective Learning, like the taxonomies of Bloom and Krathwohl, is hierarchal. It consists of five levels, including “Identification”, “Clarification”, “Exploration”, “Modification”, and “Characterization” (Allen & Friedman, 2010).

Students begin to identify their “beliefs, values and attitudes” at the first level and then move towards clarifying their values at the second level. Although the authors make no connection of this learning process to “critical thinking”, they indicate that the third level, “exploration”, is where students “explore the implications and limitations of their viewpoints and compare and contrast them with others” (p. 6). Modification, the fourth level, is where “assimilation and accommodation” occur. This

involves students either altering their beliefs, values and attitudes, or modifying an alternative position in a way which they find acceptable. The fifth level, characterization, is where students display their internalization of their learning as demonstrated by behavioral consistency in their decided actions.

This hierarchal approach allows for evaluation, and the authors provide a grading rubric that includes four domains: 1) Quality of cognitive component; 2) Course of action, behaviors identified; 3) Articulation of feelings, values, ethics and/or moral obligations; 4) Congruency with professional ethics and values. The grading is observational/subjective at three levels, either minimally meeting, meeting, or exceeding expectations. It is interesting to note that the domains themselves are not presented as hierarchal, nor are they weighted in any way to be seen as developing out of the other. Nevertheless, the first three domains of the hierarchy underscore the importance of recognizing and attending to cognitive and emotional characteristics of social work students and structuring a learning process where they can be developed for purposeful behavior (skills) consonant with social work values and ethics.

Although the authors offer examples of how this approach can be used to teach values, the methodology more focuses on how students came to believe what they believe and how strongly they feel about it. While this may be a good opening statement to begin the exploration, the methodology elaborated below in this paper provides a more specific cognitive emotional approach that challenges students to first confront and accept their feelings at a very basic level prior to moving towards an understanding of what and why they believe what they believe.

Teaching Empathy

Gerdes et al. (2011) present a model for teaching empathy that incorporates principles of neuroscience and developmental psychology. While they are specifically concerned with providing a coherent conceptualization of empathy, the framework they utilize can be viewed as a developmental model for critical thinking. This framework consists of three components.

The first component is *affective response* which they present as an involuntary physiological reaction. The second component is *cognitive processing*, which is a voluntary mental process used to discern one's emotional response. The third component is *conscious decision making*, which reflects a voluntary process of making choices for deliberate action based on one's cognitive processing.

The authors present an approach to teaching that involves "promoting healthy neurological pathways" (p. 117) to develop one's affective response. Cognitive processing is developed through setting boundaries, practicing mindfulness, and using role plays. Activities involving helping, advocacy, and organizing social action are used to develop conscious decision making. The teaching strategies include gestalt techniques, role playing, imitative play, mirroring, and psychodrama, all of which provide conceptual bridges for integrated movement from one component to the next.

The authors view the three components as representing the definition of the capacity for empathy, and thus they focus on teaching methods that can result in a student's capacity to be empathic. Yet, from a broader perspective, it is possible to observe their three components as operationally adaptive to Neuman's Affective Learning Hierarchy (Neuman & Friedman,

2008) described earlier. This would then present the affective, cognitive, and conscious decision making components as developmental (and hierarchal) processes involving exploration of feelings, beliefs, values, and consequent actions. These processes can be readily identified as they manifest at every level of the affective learning taxonomy.

Again, neither the "teaching values" model, nor the "teaching empathy" model, mention critical thinking. Nevertheless, their methodologies directly reflect what can be seen to be important components of critical thinking processes, and as presented in this paper, provide support for a cognitive emotional methodology for teaching students how to think critically.

Clinical Indicators

Along with learning and teaching models, there is a considerable amount of clinical theory and practice methods that can be instructive when integrated as a normative understanding of how we actually learn. In her essay, "Critical Thinking and Emotional Intelligence", Elder (1996) speaks of three mental functions of the mind: The cognitive component, the emotional component and the formation of volition (action). "These three basic mental functions, albeit theoretically distinct, operate in a dynamic relationship to each other, ever influencing one another in mutual and reciprocal ways"... "They are concomitant" (p. 1). She goes on to point out that the more important function is cognition because, if we want to understand or alter a feeling or behavior (volition), we first need to identify the thinking that underlies that feeling or behavior.

These observations are almost isomorphic with Rational Emotive Behavior Therapy, or "REBT" (Ellis, 2003; Ellis & Dryden, 2007). Ellis is primarily concerned with helping clients understand how their emotional disturbances are directly related to their dysfunctional/irrational thoughts and beliefs. Although this is a clinical construct designed to deal with "pathology", the mechanics of understanding and methods of intervention (teaching) of REBT can discipline an approach to critical thinking. Ellis states, "Much of what we call emotion is nothing more or less than a certain kind-a biased, prejudiced, or strongly evaluative kind-of thought. But emotions and behaviors significantly influence and affect thinking, just as thinking influences emotions and behaviors" (2003: p. 220). REBT parses mental functions as they relate to how our beliefs shape our emotional and behavioral reactions to our environment, and utilizes a multiplicity of methods to help clients identify and change irrational constructs and consequential behaviors. It can be observed that his approach can be useful, for one example, in addressing the phenomenon of "belief preservation" cited earlier as an obstacle to critical thinking.

Acceptance and Commitment Therapy, or "ACT", (Hayes & Strosahl, 2004; Hayes et al., 2004, 2007) provides a three step approach to managing one's thoughts and feelings so that one may observe them with a sense of distance, choose a new valued path, and then take committed action to accomplish new goals responsibly. The first step in "ACT" is to "Accept" ones reactions and be present, as opposed to being fused with one's thoughts and feelings. To "Choose" a valued path that allows one to clarify and be consonant with their values, is the second step. The third step is to "Take" action according to identified values. The present-mindedness required relies on the commitment to mindfulness and awareness of self, reflective of higher level thinking. One recognizes and accepts one's emotional,

cognitive and experiential reactivity so that she/he can move away from being fused with them. While ACT is generally applied to clinical settings, it has also been adapted to non-therapeutic organizational settings as a training method (Hayes et al., 2007).

It is interesting to note how the operations of ACT appear to converge with Kirst-Ashman's "Triple A" approach to critical thinking (cited earlier). Further, and while they have their differences, both ACT and REBT can both be seen to be consonant with the steps presented in Neuman's Taxonomy of Affective Learning. The salient features of learning and change involve recognition, awareness, and acceptance of feelings thoughts and behaviors so that new behaviors can be purposeful. These can also be viewed as the salient features of critical thinking.

Kadushin (1997) notes: "Saying that a person has acted like a professional social worker is acknowledgement that professional behavior is consciously managed behavior" (p. 130). One might determine that "consciously managed behavior" involves critical thinking skills and the maturity of experience. Nevertheless, the path to successfully achieving higher level thinking requires the capacity to be responsive, rather than reactive, to one's context. In his development of Family Systems Theory, Murray Bowen (Bowen, 1978; Titelman, 1998) presents the concept of "differentiation of self" which involves one's ability to separate from (but still relate to) and not be fused with, the emotional system of one's family. Bowen would therefore see one's capacity for "consciously managed behavior" to require differentiation from emotional fusion. Bowen's work also emphasizes that emotional fusion is influenced by one's multi-generational emotional system, and that differentiation requires recognition of that system at a conscious level. Thus, differentiation involves moving away from the emotional-reactive position towards the reflective-responsive position. This would also appear to be a necessary dimension of critical thinking for professional behavior.

The Methodology

The methodology presented below was constructed through the process of teaching senior field seminar B.S.W. students and M.S.W. foundation and advanced year field seminar students. The challenge in these classes, as noted above, is to develop the students' capacity to demonstrate professionally managed decision making through the utilization of critical thinking. The emerging model is, in itself, hierarchal and systemically developmental. In other words, each step needs to be attended to in order, and the efficacy of the process develops cumulatively.

The method consists of four questionable cognitive positions:

- 1) What I feel?
- 2) What I believe?
- 3) What I know?
- 4) What I do?

In seminar, students descriptively present cases in which they are involved in their field placements. These cases are discussed amongst the students in the seminar and processed through a planned change model of social work practice. This is where, traditionally, critical thinking skills are (supposed to be) utilized. It is at this point that the author introduces the hierarchal cognitive positions in the order presented above. It should be noted that the construct of each position is designed to effect

exploration and cognitive elucidation of the students' own self position, and the definitions presented below are by no means exhaustive. Students are challenged to identify their personal narratives and the content of their own "self-talk".

Structurally, the act of parsing cognitive functions, in and of its own, instigates a conscious processing of the differences between the positions where they might otherwise be fused. In the end, this creates the opportunity for "mindful" or "thoughtful" behavior that is reflective rather than reactive. That is, "What I do?" can be objectively purposeful and representative of a process of intentional discernment of objective criteria less burdened by reactive emotions and beliefs. This can be viewed as one way of operationalizing "consciously managed behavior" that has professional purpose.

"What I Feel?"

Existentially, a developmental hierarchy of cognitive functions should not be mistaken as a negative or weighted judgment of any one part. "What I feel?" is representative of our emotional selves and clearly a central feature of our humanity, qualitatively and functionally. The key here is to recognize and acknowledge our emotional self, so to nurture and care for it, and so that we may be able to understand and express it in a manner that is supportive and healthy for ourselves and others. This is a process related to "promoting healthy neurological pathways" cited earlier by Gerdes et al. (2011: p. 117).

Further, as noted earlier, the clinical view is that reactive emotional behavior is seldom healthy or accurate and, as an expression of unreasoned anxiety, can lead to many problems. Nevertheless, emotional responses can be reasoned and reasonable, such as empathy, acts of kindness, and love. Even emotions that might be viewed as negative, such as sadness, anger, grief and panic, have their place in everyday life experiences. But, we try to understand and accept all of our feelings so that we may tend to them and not be controlled by them. In fact, denial of our emotions is an emotionally reactive activity, and doing so actually intensifies emotional fusion along with its unfortunate consequences.

"What I feel?" can be viewed as encompassing the Identification, Clarification, and Exploration stages of Neuman's Affective Learning Taxonomy (Allen & Friedman, 2010) cited earlier. It is also reflective of the "Ask questions" stage of Kirst-Ashman's "Triple A" approach to critical thinking (Kirst-Ashman & Hull, 2010). Yet, because of the focus on emotional content and process, "What I feel?" is more integrative of the first stage of Acceptance and Commitment Therapy (ACT) in that it emphasizes one's acceptance of one's emotions.

"What I feel?" is experienced as a reactive/reflexive response emotionally, physically, and psychologically.

The emotional expression can include being angry, sad depressed, happy, elated, abandoned, worried, frustrated, irritated, enraged, abused, afraid, vengeful, and more.

Physically, it is experienced as feeling tired or energized, agile or weighted and weak, sick, strong, and more.

Psychologically reactive thoughts take the form of immediate judgmental assessments, including good, bad, terrible or wonderful and any cognitive flashes that occur along this spectrum.

Students are encouraged to explore these dimensions of their selves as they relate to a case presented. This is where the internal voice is expressed out loud and the language reflects the position. For example: "I feel the client is unmotivated", "The

father is frustrating”, or “I don’t feel I have the energy to help this client”. It is important to note that these feelings might go unattended without such an exercise. Even if a student recognizes these reactions in themselves, they might more tend to try to bury them out of embarrassment or the fear of the judgment of political correctness. Whatever the reason, left unattended, they potentially can influence “What I do?” and remain as a burden in the student’s emotional repertoire.

“What I Believe?”

“What I believe?” is also an integral function of human cognitive process. Beliefs constitute the existential fabric of our normative social and cultural development and reflect our spiritual and emotional need for answers and guidelines for dealing with the unknown. This is where values are created, developed and reified. Values, and the beliefs they reflect and perpetuate, are the developmental markers of family, social and institutional existence. The complication of acting on one’s beliefs is that they are not universal. Typically, they are egocentric and ethnocentric, and their variability can lead to conflict with other beliefs and values, both in our own selves and in others.

Beliefs can be seen as primary process thinking that approach or mimic secondary process thinking in that personal experience and what one has “learned”, through socialization of norms and values, totems and taboos, are integrated as issues of faith that guide one’s attitudes and structure one’s faith about what is and is not “good” and “true”. Often, because this represents an operational level above, and is experienced to be a higher level of integration of “what I feel?”, it is viewed as “fact” and is acted on as such. However, beliefs represent only somewhat “higher” levels of thinking than feelings. Generally, beliefs are constructed as justifications for both feelings and actions but, as such, are only marginally more thought through pieces of reflectivity when acted on. A common error is, if I modify or adjust “what I feel?” with “what I believe?”, I determine that I have fulfilled the effort to reach some “truth” which validates actions or a specific behavior. From a post-modern social constructionist perspective, “truth” is illusive and relative at best: Beliefs are typically not facts, even if we “believe” they are. In addition, “what I believe?” is mediated by and is structured to be congruent with “what I feel?”, which involves the process of “belief preservation” described earlier. Unraveling the systemic relationship between feelings and beliefs serves to confront a major obstacle to critical thinking.

In seminar, students are challenged to move from “what I feel?” to “what I believe?” and parse them as they relate to the case presented. They are explicitly instructed that this is a critical thinking process and are directed to explore contradictions and resistances, as well as opportunities that might (and often do) lead to alternative choices for understanding the case. As this evolves, students continue to articulate their “self-talk” out loud, and it is generally reflective of this level in the hierarchy by the language used. For example: “Do you believe Freud was right?”, “I don’t believe the wife wants counseling”, and, “I feel like you did the right thing because I believe your hypothesis”. As students move through this position they are more clearly able to see how their cognitive positions limit their span of awareness and scope of possible alternative steps for purposeful intervention.

Inquiry at the “what I believe?” level operates within the Cla-

rification, Exploration, and Modification stages of Neuman’s Affective Learning Taxonomy (Allen & Friedman, 2008), as well as the affective and cognitive response recognition levels presented by Gerdes et al. in their method of teaching empathy (2010). Kurst-Ashman and Hull’s critical thinking model jumps directly from “Ask questions” to “Assess the established facts” (2010). This transition underscores a key procedural problem with critical thinking models as they generally tend to rely on rational approaches to the processing of information: It is assumed that how students make decisions is purely a rational process. A cognitive emotional methodology works to bridge a necessary step between asking questions (and, what questions) to assessing established facts by parsing feelings, beliefs and how “facts” are established.

“What I Know?”

As hierarchal and developmental constructs, “what I feel?” and “what I believe?” represent major systemically related processes of formal learning. “What I know?” represents a developmentally higher cognitive position that attempts to move from the reactive/subjective to the reflective/objective state of awareness. However, “what I know?” should by no means be construed as, or mistaken for, “truth”. Again, what is understood to be a “fact” or “true” can be existentially ambiguous. “What I know?” is indicated by the pursuit of knowledge and academic/practical understanding of information that has substantial objective evidence to be factual. This pursuit reaches outside of any spectrum of “what I feel?” and “what I believe” and is an activity that challenges those behaviors and encourages objective competency. Research, practice experience, scientific investigation, and reality testing, are markers of this level as it involves the search for information from objective sources that is necessary and sufficient to elucidate and/or explain phenomena.

Generally, efforts and models that are used to teach critical thinking skills focus on “what I know?” as emerging from a rational/objective process, apparently assuming that students will “get it” sooner or later. Again, it is asserted here that a developmental model is more conducive to the learning process and further, that it can be used for evaluating/assessing that process through curriculum development and course assignments. “What I know?” encompasses both the “Assess the established facts” and “Assert a concluding opinion” stages of Kurst-Ashman and Hull’s “Triple A” approach (2010). In addition, as a systemic methodology, it also integrates the conscious decision making stage (Gerdes et al., 2010) and the “Choose a path” stage of Acceptance and Commitment Therapy (Hayes & Strosahl, 2004). Because it involves accommodation and internalization, “what I know?” fits into the Modification and Characterization stages of Neuman’s Affective Learning Taxonomy (Allen & Friedman, 2008). The student’s self-talk of this cognitive position is reflective of objective and nonpersonal language: “It can be observed that...”, “Evidence suggests that...”, or, “The research reflects that...”, are three example verbalized by students in seminars at this level.

“What I Do?”

“What I do?” refers to any behavior or activity that is the result of any combination of processes involving operationalizing the first three steps of the cognitive emotional methodology

described above. In social work, “what I do?” is consciously managed behavior. It reflects the Characterization stage of Neuman’s Affective Learning Taxonomy (Allen & Friedman, 2008) as it demonstrates internalization of learning through behavioral consistency in decision making. It also reflects the “Take action” stage of Acceptance and Commitment Therapy (Hayes & Strosahl, 2004) where commitment to the decision making process is actualized through following a course of relevant action.

It is at this level of operation that students formulate and act on a plan of action that results in some form of intervening helping activity. It is the salient action that connects critical thinking to practice. Retrospectively, students experience this as having been the result of a journey, which, in fact, if the methodology is used correctly, it has been. Students will reflect on how their feelings and beliefs have changed in coming to what they think and do. Ultimately, “what I do?” becomes the result of “what I know?”, but “what I know?” is achieved only by processing the “what I feel?” and “what I believe?” cognitive positions. This is the cognitive emotional process of critical thinking and the methodology presented appears to enable its operation.

Conclusion

This brief essay has intended to provide an elucidation of a cognitive emotional methodology for critical thinking. The methodology is in its formative stages, and refinement of the constructs and their application to teaching is currently being researched. Although this methodology can be applied to other settings, this presentation is unfolded in the context of professional social work education, where the methodology was first conceptualized and implemented. The issue is germane to social work education because students are challenged to approach and intervene in complex human problems reflectively, with mindful understanding of the meaning and consequences of purposeful interaction of self and other in a holistic context. The real welfare of real people is at stake, and the capacity for effective critical thinking is a necessary professional requirement.

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