

Affective Assessment

By J. Vincent Nix, Lamar University and Misty Song, Abilene Christian University

Abstract: Meaning-centered education (Kovbasyuk and Blessinger, 2013) is necessary in a world focused on standardization and suggests that student-learning might be enhanced by incorporating affective learning domain outcomes. Piaget observed, “at no level, at no state, even in the adult, can we find a behaviour or a state which is purely cognitive without affect nor a purely affective state without a cognitive element involved” (as cited in Clark & Fiske, 1982, p.130). Holistic learning should grant agency to students so that their professional identities are built on foundations that incorporate meaningful principles. Meaning-centered learning should enhance personal identities of students as they reinforce their existing knowledge-bases through continuous, conscious acquisition of knowledge across all learning domains. Social justice requires agency and agency requires voice. Creating, implementing, and assessing affective learning domain outcomes is an effective way to hear the voices of students as they learn. Infusing an online curriculum with affective learning domain outcomes and weekly formative assessment activities allowed instructors to monitor and reduce negative emotional responses associated with fear and anxiety—two of the most powerful emotions for catalyzing negative consequences on individuals’ learning and productivity. Extended analysis promoted a deeper understanding of the roles that emotions play in online environments. Learning and behavior was positively influenced as these additional weekly exercises promoted meaning-centered collaboration with students while decreasing power distance between learners and instructors. Incorporating affective learning outcomes into student development outcomes was also explored.

Keywords: *Affective Domain; Affective Learning Domain; Emotions; Formative Assessment; Meaning-Centered Learning; Online Learning.*

Nomenclature

- **Affect:** Conceived based on context and the extent of experiences. If a person subjectively experiences positive moods, that is said to be a positive affect. Affect has been classified by researchers into three categories, as either constructive, positive, or contrary (Arora & Sharma, 2018). *An example of an affective disorder is depression.*
- **Assessment:** the act of judging or deciding the amount, value, quality, or importance of student learning.
- **Attitudes:** reflections of a state of mind, or a disposition, or an affect.
- **Emotions:** Baumeister and Bushman (2007) conceptualized the experience of an emotion as “a subjective state, often accompanied by a bodily reaction (e.g., increased heart rate) and an evaluative response, to some event” (p. 61). Emotions include reactions and judgments as interactive core elements.

- Evaluations: judging the worth of a program or other entity (such as an academic course), or a person, based on a series of assessments. This research also utilized the construct of evaluation as understood by human resources development (HRD) professionals.
- Phenomenology: a type of inquiry based on the premise that reality is constructed by individuals and is *not collectively understood nor is it objectively agreed-upon*.
- Values: belief in constructs that motivate a person, or an organization to act accordingly. We generally see that values are reflected through individual or organizational behavior. For example, a budget would be an organizational *values document-or direct-evidence of organizational values*.

Introduction

Learning outcomes have been touted as the most critical aspect of educational effectiveness (NCHEMS, 2000). In August 2000 the *Competency standards project: Another approach to accreditation review* was published on the Council for Higher Education Accreditation's (CHEA) website. That paper described a project set up by the National Center for Higher Education Management systems (NCHEMS); they designed and tested an alternative approach to accreditation standards and review that placed a significant emphasis on student outcomes in an online (distance-delivery—was the terminology then) education setting. That project recommended various types of assessments, but stressed that “at the best practice level, assessments ought to go beyond simple, single-person judgments” and should involve multiple raters. The recommendations were for cognitive learning outcomes, based on “examination scores, performance assessments, and similar types of direct demonstrations.” (NCHEMS, p. 10). Since then, learning outcomes have been critical components of accreditation. Accrediting agencies, and as a result, universities and colleges, have since adopted cognitive learning outcomes wholesale in their academic endeavors.

Advances in educational assessment and evaluation techniques have made it possible to measure everything that might be counted. Cognitive achievements are categorized and converted into countable groups. Assessment is a rapid-growth profession; writing learning outcomes has become a science. However, education (and educators) may have become obsessed with teaching explicitly for assessment of cognitive outcomes. An Internet search will yield numerous rubrics for measuring cognitive outcomes; relatively few (if any) are available for measuring affective learning outcomes. The National Institute of Learning Outcomes Assessment (NILOA) maintains a resource website of student-learning-statement-outcome resources which has several external links. Among functional links on 5/27/2019, 100% referenced Bloom's Taxonomy and cognitive learning objectives. There were zero explicit statements advocating for implementing affective learning domain outcomes.

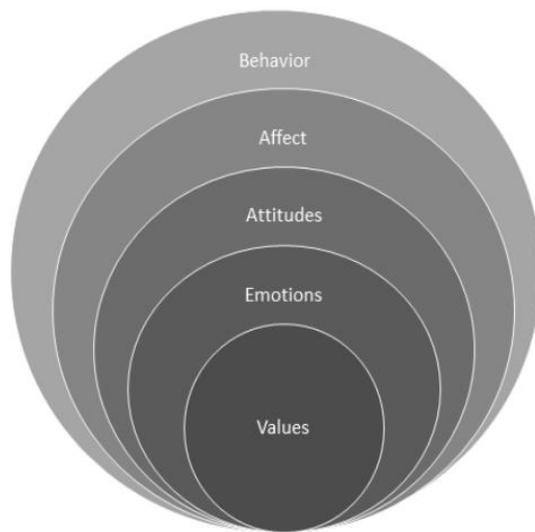
Spady (1994) claimed that cognitive learning outcomes were not appropriate gauges of values, beliefs, attitudes, or psychological states of mind. And even earlier than that, Piaget had observed that at no level and in no state, even in the adult, can we find a behavior or a state which is purely cognitive without affect, nor a purely affective state without a cognitive element. However, we have relied on cognitive learning outcomes primarily to assess learning despite numerous calls to action for including

all learning domains. Over decades of research, education remains laser focused on cognitive learning outcomes.

The researchers developed a mental model to illustrate the relationship between variables of interest. Figure 1 demonstrates the relationships between elements that are critical to understand affective learning.

Figure 1

Mental model of the relationships between values, emotions, attitudes, affect, and behavior.



The researchers developed this mental model based on research and practical experience in management, leadership, and training. As managers of teams, we wanted better performance. As leaders, we were often responsible for influencing change. Many times, our students approach us having already established sets of cultural or familial values. Discrepancies in behavior expected oftentimes are due to values-conflicts. Emotions-research, attitudes-research, and behavior-research may help us better achieve both organizational goals and learning outcomes for training sessions, and then eventually, course learning outcomes. We share this mental model in the hope that our audience begins to understand the lenses through which we view the world.

Evolution of Learning Theories

Beginning with classical conditioning—think of the Pavlovian response and Thorndyke’s connectionism—learning theories have incorporated more humanistic elements over time. In the early years, affective learning was not considered important, and even as late as 1987 Dr. Skinner said in an interview (Goleman, 1987) with the New York Times:

If I had it all to do again, I would still call the mind a black box; I would not use any of the new techniques for measuring information processing and the like. My point has always been that psychology should not look at the nervous system or so-called mind - just at behavior.

Briefly, we present an overview of this evolution with salient points for each learning paradigm:

- Behaviorism is a worldview that assumes a learner is essentially passive, responding to environmental stimuli. The learner starts off as a blank slate and behavior is shaped through positive reinforcement or negative reinforcement.
- Cognitive psychology is generally credited to Piaget for his theory of cognitive development. Cognitive learning allows for learning to occur as a result of thoughts. We think about what we saw, and process that into building blocks. Complex learning is in essence, stacking the blocks.
- In the 1950s, Skinner's operant conditioning theory became popular among researchers. Operant conditioning claimed that we learn due to consequences of behavior (rewards/punishment).
- Bandura's social-cognitive theory influenced many from the 70s onward. He helped usher in a new era of cognitive psychology by introducing a theory of learning that focused more on social context than on rewards and punishment. His famous study, the "bobo doll", illustrated that behavior was learned through social interaction and that rewards or consequences didn't matter.

An evident trend demonstrates more focus on the intersectionality of personal, social, and cultural factors. Constructivism then, claims that each person has a different interpretation and construction of knowledge process. The learner is not a blank slate but brings past experiences and cultural factors to a situation. Learning is a complex phenomenon. There are different learning domains. Human learning is observed differently from animals learning in laboratories. A relatively new direction taken for learning theories known as critical constructivism (Kincheloe, 2004) contrasted with objectivist philosophies (think Aristotle or Locke) that claimed knowledge and reality are independent from human minds. In critical constructivism, dialogue is necessary to achieve mutual understanding. This framework attempts to destroy the asymmetric power relationships that reproduce the status quo.

- Critical constructivism encourages greater personal and social consciousness, helping to develop freedom of thought that recognizes authoritarian tendencies and connects knowledge to power.
- Critical constructivism motivates people to take constructive action, or to do repair work (or to de-construct).
- Critical constructivism theorizes that a connection between power and knowledge maintains a status quo wherein only certain groups and institutions can gain prominence and become sanctioned as proprietors of knowledge.
- Powerful groups and influential people maintain their knowledge construction legitimacy by continuously undermining alternative knowledge.

Meaning-centered education and meaning-centered learning taken together as a framework illustrate where we should strive to be operating at the evolutionary stages of a critical constructivist paradigm. In essence, we should take apart knowledge and see if it fits back together the same way. When we do that, are we seeing that it is benefiting only specific groups of people or only a few organizations? If we see that as the case, then further deconstruction and reconstruction work is necessary. Gredler (2009) claimed that in a justice-minded framework, learning theories should consider the intersection of personal, social, and cultural factors. Micro-and macro-level examinations are necessary to achieve holistic learning—discrepancies exist within, and tensions subsist between, the classic theoretical foundations.

In their book, *Meaning-centered education: International perspectives and explorations in higher education* Kovbasyuk and Blessinger (2013) defined meaning-centered education (MCE) as philosophy or “an educational approach that facilitates the conscious integration of new learning with prior learning across all domains based on personal meanings about oneself in relation to the world” (p. 20). In the same volume they defined meaning-centered learning (MCL) as “a human centered approach that facilitates the holistic integration of all learning domains (affective, cognitive, social-cultural) through diverse life contexts, which motivates learners to apply meaning-based principles into their own life world” (p. 18). The authors stressed that MCL develops self-determined personalities, promotes self-evolution, enhances authors lives, and consists of multiple dimensions of meaning-making including phenomenological, philosophical, psychological, and sociological. Nix, et al. (2015) combined the MCE-MCL framework with self-authorship (Pizzolato, 2003) and self-development transformation (Baxter Magolda, 2004) to develop a mentoring program for high school dropouts transitioning into college which incorporated affective learning domain outcomes in order to alter participants’ states of minds as tactics to navigate barriers. Operating in a critical constructivist paradigm, the researchers gave the students agency to reconstruct (as much as was possible) their own realities. Each person was her or his own phenomenon.

Affective Learning

In the original Bloom, et al. (1956) framework the cognitive domain was described. Krathwohl, et al. (1964) later published the affective domain taxonomy. However, when affective learning is mentioned in the literature, researchers generally have lumped all five of the taxonomy levels together or only evaluated the second and third levels of the affective learning domain taxonomy. Additionally, when affective domain measures are utilized, those are generally masked as cognitive self-report measures that represent an affect for the course (or training session) or an affect for the instructor (or trainer). Rather than reflecting how much students enjoy the subject matter or enjoy the instructors; affective learning goals should represent internalized values that mediate behavior over extended periods of time. Figure 2 illustrates the affective learning domain and its objectives.

Figure 2

The Affective Learning Domain.

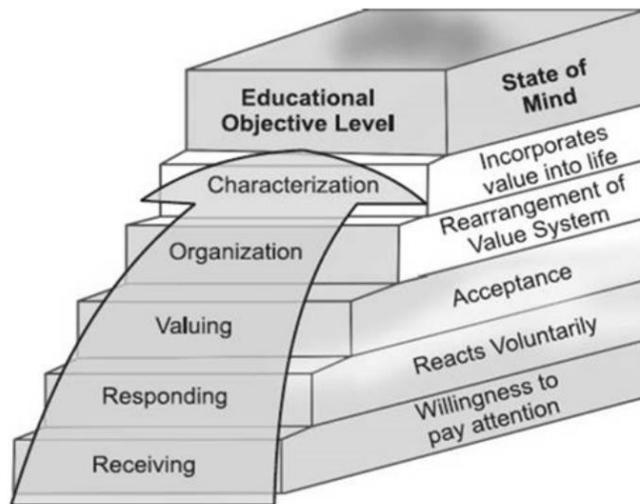


Image from open-source textbook at https://cbrary.net/2967/management/basic_levels_learning_domains_learning

Additionally, affect was often viewed as a hindrance to learning, and was researched and described in literature for years as something that should be controlled for or eliminated. Edward DeBono’s “Six Thinking Hat” model (DeBono, 1985) illustrates that remarkably well. In that model, he used different colors of hats to represent different modes of thinking. He used red hats for affective thinking. The model portrayed red hats as emotional folks, unbridled by reason. We also see other ‘thinking theories’ embedding affective learning into cognitive verbiage. For example, one that many student affairs veteran folk will remember is Perry’s (1970) theory about college students’ intellectual and ethical development; that framework begs for some affective learning love, but it isn’t to be found. Dembo and Seli (2013) stated that from a cognitive standpoint, motivation was “how an individual’s internal state (i.e., his or her goals, beliefs, perceptions, and emotions) influences behavior” (p. 2). In annual reviews as faculty members, many of us are forced to decide whether affective responses have undue influence on course ratings, or that the outcomes were of little value because they were due to affective factors *rather than* cognitive learning.

Primarily our focus is on beginning to imagine what it means to incorporate affective learning outcomes (ALOs) alongside cognitive learning outcomes (CLOs) into our classrooms, extracurricular student development programs, and our assessment efforts. At the base affective learning objective level, learners must be willing (and able—so we must consider accessibility here too) to pay attention, and once that is occurring, then learners are able to receive the information that we (as instructors/managers/leaders/trainers) are attempting to transmit. At the pinnacle learning objective level, there is a vastly different goal for learners. In the familiar cognitive learning taxonomy, the top levels represent mental tasks; contrast that to the affective learning taxonomy where the goal is a state of mind, or an affect. The researchers advocate for cognitive learning domain outcomes for training and development sessions of students. For example, if we desire tutors to become certified, we may have training sessions focused on becoming active listeners and working with adult learners. Our cognitive learning outcomes might be:

- Apply active listening skills during the tutoring sessions, or
- Understand and apply adult learning theories.

However, when structuring diversity and inclusivity development sessions we may encounter problematic issues. Traditional cognitive learning outcomes might read

- Trainees understand the definitions of diversity and inclusivity, and
- Students recognize the significance of inclusivity and diversity.

The researchers have received feedback from students after such training sessions as “I still have no idea how to work with students who are so different from me” or “I don’t know how to start the conversation, but I totally understand that diversity is so important”. In essence, there was mental and cognitive recognition and understanding, but there was no change in students’ states of mind.

As an online instructor one hopes that that a majority of students incorporate the new material into their professional practices. In doctoral courses the researcher added an affective learning outcome to accompany four cognitive learning outcomes. The researchers wanted to know over a series of courses how students might be incorporating new constructs and frameworks into their professional practices—generating evidence to indicate that students are meeting the affective course learning outcomes. There is no instrument. Qualitative (textual) analysis of the students’ data is the methodology necessary for this work. The researchers hope to make the case that the benefit of doing this outweighs the costs (additional time/labor) incurred.

Now briefly, to reiterate before we go further, current practice for assessing cognitive learning outcomes does not account for Krathwohl, et al.’s (1964) dimension of affective learning called *characterization of internal values or value sets*. In order to do this, we must shift assessment efforts to include a series of events after the initial learning event occurred. Here we are contrasting mental ability, with an affect.

Emotions

Baumeister and Bushman (2007) conceptualized the experience of an emotion as “a subjective state, often accompanied by a bodily reaction (e.g., increased heart rate) and an evaluative response, to some event” (p. 61). Emotions include reactions and judgments as interactive core elements. Emotions research recognized that behavior stems from attitudes, which are formed from values (Izard, 2010). Research focusing on what happens between values-adoption and attitude-formation has settled on the most powerful emotions, in terms of the consequences that each emotion may have on an individual’s productivity (Ortony & Turner, 1990) or propensity to learn. Fredrickson (2000) identified three positive emotions that promote survival. While the strongest five emotions may (and do) change positions dependent on the research field, over decades of research there is nearly consensus that no more than 13 emotions are powerful enough at dictating attitude formation (and resulting behavior) for extended periods of time; facial response recognition research corroborates the understanding (Jack, Garrod, & Schyns, 2014) that any one of up to 11 emotions may have positive or negative effects on learning and behavior. A clear dichotomy of positive and negative emotions has emerged. Over longer periods of time, repeated exposure to conditions that elicit these emotions have lasting and

significant effects on attitude formation and may dictate behavior. Among the positive emotions, joy, satisfaction, and contentment have the greatest impact on behavior. Emotions which are the most detrimental to behavior are anxiety, fear, and confusion. Immordino-Yang and Damasio (2007) suggested that emotions are attached to learning in the classroom and become part of how the acquired information is retrieved thereafter.

Research Setting

The newest course in an educational leadership doctoral (Ed. D.) curriculum *Strategic Planning for Resource Allocation* was designed for change agents in organizations or students that might want to engage in consulting work. The course was constructed according to Quality Matters standards and approved by Quality Matters certified raters. The one affective learning outcome for the course was stated as:

- characterize organizations through analyses of strategic plans.

For evidence of this affective learning outcome researchers wanted students to characterize themselves or their organizations based on the constructs with which they are becoming familiar in the course. In order to assess this affective learning outcome, we implemented weekly formative assessments vis-a-vis Kirkpatrick's (1994) level-one and level-two evaluations. This evaluation framework was recommended by Simonson, et al. (2015) for use in distance education. The researchers have experience working in human resource development and are intimately familiar with the four levels of evaluation. In short, we evaluated training programs based on this framework, for well over 20 years. Level-one evaluations measure reaction to the learning event, course materials, and the perceived likeability or effectiveness of the trainer. It is an indirect measure. Level-two evaluations explore deeper and offer direct evidence of learning. Listed below are the levels:

1. Did they like it? (reaction)
2. Did they learn it? (learning)
3. Will they use it? (transfer)
4. Will it matter? (results)
5. Return on investment (ROI) is sometimes considered a "5th level".

Likert-type prompts with a scale of 1 (strongly disagree) to 4 (strongly agree) were used to collect self-reported student satisfaction data. Five prompts were labeled as follows:

- The learning activities were effective.
- Instructions were clear and easy to follow.
- I learned something I hadn't known before this week.
- The learning activities were engaging.
- I struggled with comprehension for this week's learning activities.

The primary rationale for including weekly formative assessments in the course was so that instructors could improve the course after a summative evaluation of weekly ratings. This was the first time the course had been introduced into the curriculum. Researchers developed the course based on experience and research. The course was designed with the idea that students would want to become change agents, either as executives or consultants. Schneider and Preckel (2017) conducted a systematic review of previous meta-analyses investigating 105 correlates of achievement that were associated with student success in higher education. They concluded that three variables, social interaction, meaningful learning, and assessment were significant predictors of learner achievement. Assessment practices are crucial for any significant shifts in university teaching structure but in particular when educational practices may be shifting; during such times an assessment system should be robust, and include all elements of the course. “Teachers with high-achieving students invest time and effort in designing the microstructure of their courses, establishing clear learning goals, and employing feedback practices” (Schneider and Preckel, 2017, p. 565). Gatignon, et al. (2002) demonstrated that regarding the need to assess reactions to change, instructors should implement formative assessment as a practice. Data from these items were analyzed using the Minitab statistical analysis program.

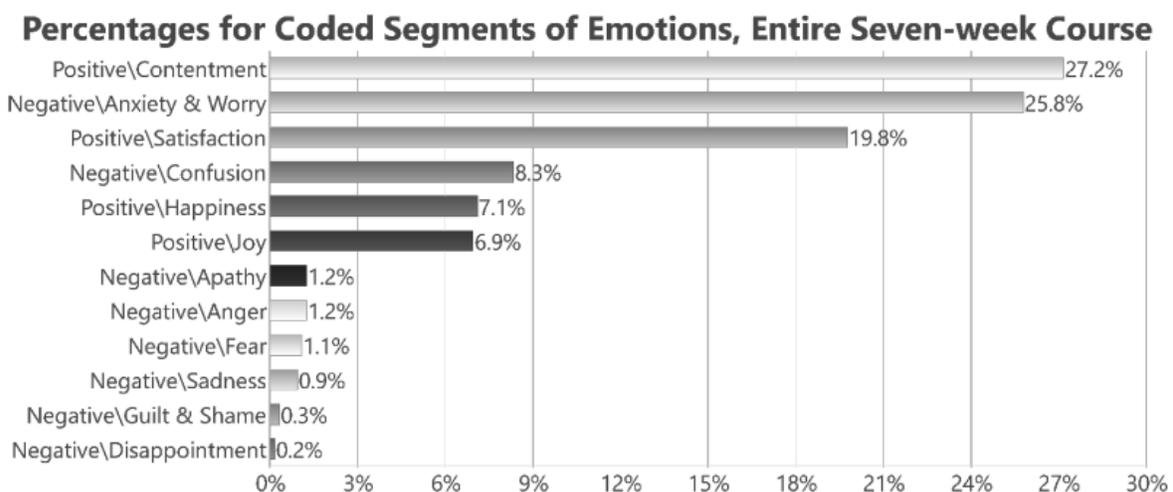
The purpose for level-two evaluations was so that instructors would be able to reinforce specific learning topics if students self-reported they hadn’t mastered the topics. Each weekly online face-to-face meeting that followed, was based on the students’ “muddiest points” solicited from the level-two prompts. Salmon (2013) posited that students can become directors of their own learning as well as facilitating learning for others in the group at the fifth (and highest stage—development) of learning following her model. The purposes for learning activities should be “centered on participants gaining self-insight through reflecting and making judgments about their newly acquired knowledge” (p. 34). The level-two evaluation prompt asked students to reflect on the most interesting or most useful constructs from the course learning activities, if there were no muddy points. The level-two evaluation prompt asked students to write a minimum of one sentence and a maximum of one paragraph. The text was coded and analyzed by the two researchers using RQDA and MAXQDA.

Results

Twelve emotions were recognized and coded within textual responses during the seven-week course. Eight primary emotions were evident after data was coded: Anger (AN), Apathy (AP), Anxiety-worry (AW), Confusion (CF), Contentment (CN), Happiness (H), Joy (J), and Satisfaction (S). While there may have been more than one emotion coded in each student response, the primary (in terms of frequency) emotion was chosen from each response. For example, one student's comment may have been coded with different segments of text for confusion, satisfaction, and contentment. In that case, the first emotion coded was chosen. In other cases, there may have been several segments in one response coded for the same emotion. In those cases, the most frequent emotion was chosen as the primary emotion to code for that student's response. Secondary and tertiary emotions were coded but after reviewing the data, researchers decided to only utilize the primary emotion in the final analysis of data. Figure 3 illustrates the frequencies of each emotion and the number of text segments that indicated the affective learning outcome had been achieved. These coded segments include all emotions that were coded.

Figure 3

Percentages of all emotions coded over the entire seven-week course.

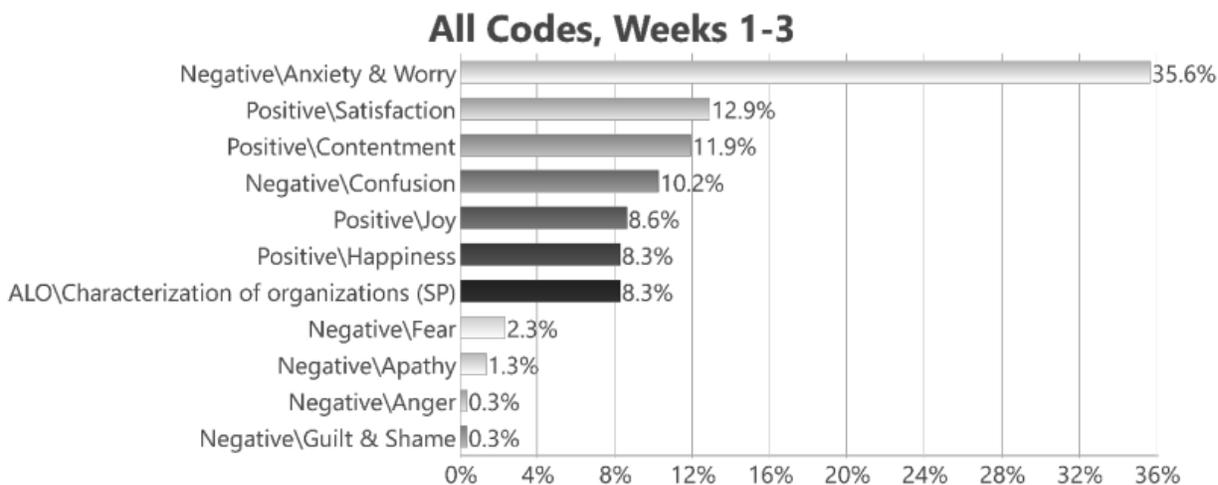


In week one, the evidence for the ALO was illustrated in less than 10% of the students' coded comments. Surveying the emotions expressed in those student-responses, we saw that while there were some positive emotions that would contribute to and serve as catalysts for learning, the salient emotion was anxiety/worry. That meant roughly 23% of the students' coded responses indicated that students were potentially having their learning stunted. Instructors were monitoring this new course through weekly formative assessments; Schneider and Preckel (2017) found that formative assessment is particularly helpful when educational practices are changing. We wondered how students would accept and adapt to this sort of content. Some of the other instructors had said that this course—the level of rigor in this course—was perhaps higher than many of these students would expect. The course was one of the final three or four courses that students would take before writing their dissertations. They had already been through a year and a half of coursework, and suddenly the curriculum was changed—we added a new course, and perhaps it may have had a somewhat higher

level of rigor. Undeniably the new course introduced constructs with which students weren't familiar; 70% had claimed during a poll taken at the first virtual-course meeting that they had never had opportunities to “do” strategic planning in their careers. Only 15% said they were confident enough to develop or lead development of a strategic plan in the initial meeting. Analysis of week two data was much the same. We were coding negative emotions that we knew were likely barriers to learning. The two course leaders decided to be sure that we would keep a close watch on next week’s data. In week three we saw evidence for the course affective learning outcome, but also, researchers coded for fear. Also, in week three, 60% of the text segments coded evidenced anxiety and worry. Figure 4 summarizes the coded data for weeks one to three.

Figure 4

Coded textual data from reflective posts, weeks one through three.



Instructors held a meeting with other faculty members who were teaching in our principal certification (master’s) program. We had a meeting with K12 Texas leaders (87% of the students in this cohort were K12 practitioners). The K12 “experts” said, “The course is good, the students need to know this material”. However, as instructors, we were concerned that they (the students) would not know it, based on the formative assessment data. Over a third of the text codes indicated that students were anxious or worried. Overall, the survey results were indicative of learning, however, since the anxiety-worry numbers were so high, instructors were concerned. The two course leaders decided to be sure that we would keep close watch on next week’s data.

At that point course instructors met again. The burning question was, are we able to be flexible here? There was recognition that what the course was designed to achieve might not be what was best for the audience. As one instructor said (paraphrased), maybe what we wanted is not what we can achieve. Collectively, instructors acted quickly. Waiting until the end of the term would be too costly for student learning. There was strong evidence that perhaps one-third of the students were not learning. There were 17 students that provided the week-to-week comments that were most concerning. Pragmatically, that meant over 2/3 of the students were learning. Deeper analysis revealed negative comments could be coded into three themes of complaints.

- Distaste for anything math-related
- Distaste for anything business related
- Irrelevant for careers

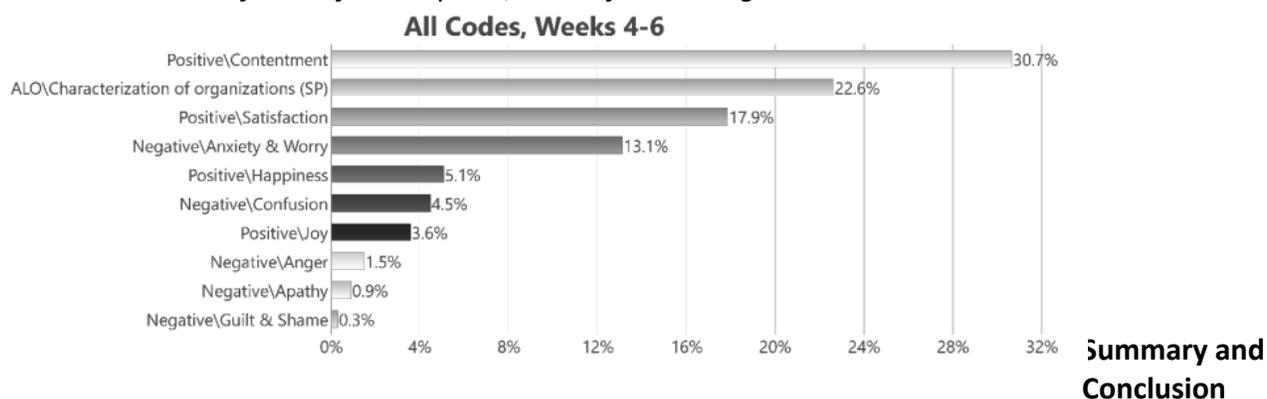
K12 Administrators in TX are generally not in charge of strategic planning; those plans are developed centrally in all but the largest urban school districts. Local leaders are faced with implementation plans, or campus improvement plans. The course instructors looked for ways to integrate the course material and embed linkage to those responsibilities. Instructors learned this from reading the formative assessment feedback.

In week four, almost a quarter of the students gave evidence of the affective learning outcome being met. They were characterizing their organizations and themselves in terms of the strategic planning constructs we had covered for the first three weeks. Also, contentment was the number one emotion that we saw. As reviewed in earlier research, contentment is a powerful positive emotion; it may be the most powerful emotion to enrich learning. Contentment, as opposed to satisfaction, is long-lasting and heartfelt. Contentment reflects self-efficacy and self-esteem; satisfaction is fleeting, and temporary.

Contentment is deep, long lasting and involves self-efficacy and self-esteem. So, contentment is the absolute best emotion that we want to see. In week five, 23% of the coded comments evidenced affective learning outcomes. Over one-third of the comments evidenced contentment. Students believed (phenomenological aspect of inquiry) that they understood it; they believed that they could do it, so anxiety and worry dropped down to under 15% of the codes for the first time. In week six, contentment was the strongest emotion demonstrated. Figure 5 illustrates the complete shift in coded data. We eliminated week seven’s data from this report (and the presentation) due to the codes being focused on comments and emotions regarding the course culminating project.

Figure 5

Coded textual data from reflective posts, weeks four through six.



Summary and Conclusion

Incorporating affective learning outcomes along with cognitive learning outcomes recognizes that higher education instructors and student development professionals are not just concerned with the development of skills. Collectively, higher education should strive to change students’ behavior. Developing states of mind that will catapult students forward in their careers should be of primary

concern. Developing states of mind that places humanity at the forefront of society's values is also critical now. States of mind are not solely cognitive constructs. Duckworth, et al. (2007) found that grit, a non-cognitive trait, accounted for up to 4% of the variance in success outcomes. Non-cognitive constructs have been sorely ignored in most higher education institutions for at least the past 20 years.

By incorporating MCE-MCL we can be more flexible. But we must be willing to give up the power that instructors, managers, and leaders typically wield over students. Reframing our methodologies as instructors requires a commitment to change. The MCE-MCL framework

...minimizes unnecessary and arbitrary power distance between students and instructors because it rests on validity and merit claims, not on unquestioned power and privilege claims" (p 19, Kovbasyuk and Blessinger, 2013).

Operating within the MCE-MCL framework agrees with the National Institute of Learning Outcomes Assessment (Montenegro and Jankowski, 2020) *Principles of Equity-Minded Assessment* also as it incorporates meaningful student involvement with context specific approaches and responses. Coding for affective learning outcomes and other elements with an affect such as emotions and attitudes provides assessment data based on multiple sources of evidence as recommended by Hutchings, et al. (2015). Contentment is the emotion that is most associated with higher-level affective learning. The literature to which the report refers has recognized that contentment is a deeper, secure understanding within oneself that learning has occurred, that one is competent to handle the issues at hand. Subsequently, characterization is possible. Several students demonstrated the contentment enough through learning from the course to characterize their respective organizations. This comment is representative of the evidence in favor of affective learning outcome achievement:

Fortunately, I did not have any muddy points this week. However, based on my readings and online research concerning dashboards and balanced scorecards, I came to the conclusion the (sic) my district's strategic plan heat map does not fully meet the description of a dashboard or scorecard. While the key objectives, proposed time frame for accomplishment, and primary contacts for each objective are noted, the evaluation process lacks fidelity. For example, the heat map was last updated in February 2019 with little discussion being held amongst (sic) campus and district leaders, other personnel, or the School Board members about the accomplished objectives or the posted information.

(student-response, week_five_sp, Column: 36 | Row: 22)

While this research has focused on assessment of learning in an online classroom, affective learning is beneficial for student development outcomes. An additional ongoing effort as yet formally assessed is occurring in a tutoring setting. During the sudden reaction by universities and colleges to COVID-19 many student services that were traditionally offered face-to-face were moved online, in some instances nearly overnight. These are excellent times to incorporate affective learning outcomes into our assessment practices.

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About the Authors:

Dr. J. Vincent Nix is an Assistant Professor of Educational Leadership at Lamar University. He can be reached at jnix2@lamar.edu.

Lan Misty Song is a full-time student in the Organizational Leadership in Higher education program at Abilene Christine University. She can be reached at lms15a@acu.edu