Beyond Action and Cognition: The Role of Awareness and Emotion in Experiential Learning

John E. Henning
Monmouth University

The importance of experience to learning is widely accepted in education.[1] However, despite long-standing interest and attention, I will argue that experiential learning is under conceptualized. As a result, much is unknown about how learning from experience occurs and how to best facilitate it, often with the result of uninformed, unsystematic approaches to educational design. Most current designs are based on experiential learning conceived as action followed by reflection.[2] Such a view places a primary emphasis on modifying the actions of the primary actor(s) with minimal consideration of learners' level of awareness and feelings as learning is experienced.

The purpose of this paper is to argue for awareness and emotion as essential considerations when designing experiential learning. Their addition is intended to provide a more thorough account to better facilitate educational design and instruction. The character of awareness and emotion, the differences between them, and their relationship will be illuminated through Peirce's description of the three categories of semiosis: firstness, secondness, and thirdness. In addition, some suggestions regarding the potential for fostering the development of awareness and emotion within an educational curriculum will be offered. The paper concludes with brief reflection on how action, cognition, emotion, and awareness can be used both separately and collectively to foster experiential learning.

PEIRCE'S CATEGORIES

Among Charles Sanders Peirce's most notable accomplishments was his life-long work on semiotics or "semeiotic," as he called it. Central to this work is Peirce's contention that experience is interpreted through signs, which he characterized as an interaction of three categories—firstness, secondness, and thirdness. These categories distinguish the nature of experience by its relational nature, that is, firstness is characterized by monadic relationships, or relationships of a sign with itself; secondness by dyadic or dualistic relationships,

such as the immediate differentiation between self and other; and thirdness by triadic relationships of three or more that mediate dyadic relationships. These relationships are described below in more detail to enable a more principled and precise characterization of both awareness and emotion in the sections that follow.

FIRSTNESS

Semiosis originates in firstness, a monadic state that is experienced as an undifferentiated feeling, a sensation, a state of mind prior to division, distinctions, or dualisms. Firstness refers to a sign's relationship with itself and accordingly is characterized by oneness, wholeness, and unity. It is a "kind of consciousness which involves no analysis, comparison, or any process whatsoever, nor consists in any whole or in part of any act by which one stretch of consciousness is distinguished from another."[3] In the absence of distinctions or dualisms, firstness does not align well with common conceptions of dualistic thinking. Instead, Peirce often refers to firstness, as a sensation or a quality that offers the possibility or the potential for actions and thoughts that are not yet realized through lived experiences. To better visualize firstness, imagine the world around us—or some part of the world—absent interaction or thought, existing in a unidimensional, undivided whole.

SECONDNESS

As soon as action is undertaken, the potential of firstness is realized through an encounter with secondness, which is characterized by division, contrast, and duality. It occurs at the moment we become conscious of difference, of otherness; when firstness experiences resistance in the world, when it bumps "up against hard fact."[4] In secondness, the holism of firstness is divided into the individual facts of existence as they occur in lived experience, and the sign—an action, in this case—has been differentiated into a dyadic relationship with other signs. The inherent differences, contrasts and variations among those signs are vital components of both semiosis and cognition.[5] This differentiation provides the basis for thirdness, which is the mediation between firstness and secondness.

THIRDNESS

In thirdness, thought arises when the differences perceived in secondness

lead to a creative recombination of what has been divided. This new relationship reconciles the differences experienced during secondness by integrating two seemingly different entities through a new abstraction, as illustrated by Peirce's description below:

> Since there is a manifold of impressions, we have a feeling of complication or confusion, which leads us to differentiate this impression from that, and then, having been differentiated, they require to be brought to unity . . ..[6]

This new representation gives meaning to dyadic relationship which may result in new generalities, habits, or conventions. These are often used for predicting, anticipating, and governing actions and thoughts in ways that produce useful outcomes. In thirdness, thought can build upon itself through a potentially limitless, rule-governed process of semiosis that can result in sophisticated signifiers for a complex set of relationships among signs such as complex concepts or narratives. During thirdness, the intellect reaches towards "generality, infinity, continuity, diffusion, growth, and intelligence."[7]

ACTION AND COGNITION

Most contemporary models of experiential learning pay primary attention to Peirce's categories of secondness and thirdness or action and cognition. Development through experience occurs through a series of actions (secondness) that are either accompanied by or followed by reflective thinking that leads to abstract thought (thirdness).[8] For example, Kolb describes experiential learning as a lived experience that occurs in a four-stage cycle including: Concrete Experience, Reflective Observation, Abstract Conceptualization, and Active Experimentation.[9] Lewin's recursive model of action research includes four phases: Plan, Do, Observe, Reflect. The resulting abstraction is used to develop a plan for the next cycle of learning.[10] The same cyclical pattern guides the new field of Improvement Science, which follows a model of recursive learning in four phases: Plan, Do, Study, Act.[11]

The intent of this brief review is not to discount the role of action and cognition in experiential learning, both of which have been widely accepted and studied. Instead, it is to highlight the absence of awareness and emotion.

DOI: 10.47925/79.2.077

Like action and cognition, both have been recognized and reflected upon as significant features of the human experience and both are associated with a rapidly growing empirical literature. Further, both can be cultivated to enhance experiential learning.

AWARENESS

The term "awareness" is employed to explicitly emphasize the potential for learner development, a salient issue for the field of education. Often, the nearly synonymous term "consciousness" has been used to address the possibility, origin, or nature of consciousness.[12] The purpose for choosing the term "awareness" was to avoid any connotation that I am speaking about a condition that is fully present or absent, such as a person who is wholly conscious or unconscious. The use of "awareness" is intended to reflect the possibility that even intelligent, highly aware persons may grow in their awareness of themselves, others, and their world. Thus, awareness can be fostered and developed.

To further conceptualize awareness, I refer to recent work by John Quay, who employed Peirce's categories to reconceptualize experiential learning as a relationship between Heidegger's existential conception of Being (firstness) with Dewey's conception of experience as action (secondness) followed by reflection (thirdness). Critical to this endeavor was showing that Heidegger's conception of being is equivalent to firstness when "expressed in Peirce's terms."[13] Being is a unitary, indivisible part of experience that "must be seen as a whole."[14] Like firstness, being resides in potential that is ontologically prior to either doing or thinking and serves as their context or ground.[15] In fact, Peirce stated that "universal Firstness is the mode of being itself."[16]

The work of Peirce and Heidegger provides a basis for defining awareness as knowing firstness or being, as revealed in the following three distinguishing characteristics. First, awareness is knowing a unified, monadic experience, perceived as an unbroken whole, an undivided and undifferentiated state, absent the duality or dualisms found in secondness and the relationships found in thirdness. There is no division, there is no differentiation; there is simply a sense of a whole, unbroken, conscious awareness. Examples include qualities, feelings, or possibilities that are whole and undivided, existing without goals, cause, or reflection. Second, awareness does not occur within our typical

construal of time, that is, a series of events or changes that follow one upon the other.[17] Change does not exist in awareness; there is simply the whole. Because awareness (firstness) does not know sequence or linear time, it exists ontologically prior to action (secondness) or cognition (thirdness) in potential and possibility. Third, awareness is distinctly different from cognition; it is nonreflective, grasps meaning or the potential for meaning holistically, and is wholly unconcerned with generating or analyzing thoughts across a series of sequenced steps.

Characterizing development in awareness is somewhat of a challenge. Development suggests growth, difference, or change, which does not occur from within awareness. Awareness is always experienced as a totality, a completeness, an unbroken, undivided sense of wholeness—what Peirce referred to as firstness. However, it is possible for the memory, intellect, or cognition to note differences in awareness of self or others over time. These differences cannot be directly apprehended from within the totality of awareness, but inferred from an examination of its products, such as actions, feelings, words, or thoughts.[18] Thus, awareness can be fostered through observation and reflection.

Key to the development of awareness is the cultivation of attention.[19] Directing the attention through mindfulness exercises, meditation, or directly towards a particular purpose or object will increase both attention and awareness. For example, focusing attention introspectively can potentially increase both the capacity to attend and self-awareness. Similarly, directing outwardly towards the interaction between self and the social or external world can increase social awareness[20] and directing attention towards the phenomenon of awareness itself, can strengthen the process of becoming more aware.[21] Of course, we can never know where increased awareness will lead because we can never be aware of what we are unaware. However, an awareness of the possibility for increased awareness adds a quality to the present moment that motivates growth and discovery, whether it be of a personal, academic, or spiritual nature.

An indicator of growth in awareness is an individual's experience of "presence," a heightened sense of awareness in the moment that connects an individual to her/his mental, emotional, and physical workings of herself/himself and the group.[22] Presence can be observed on a continuum from being highly attentive to the needs of oneself and others to a much higher level of

DOI: 10.47925/79.2.077

awareness "occurring beyond intra/interpersonal boundaries."[23] At this level of transpersonal awareness, the presence experience could be likened to a somewhat elevated experience of firstness or being: the dimensions of physical and psychological have been transcended, and there is no external/internal or subject/object. Silsbee describes it as a heightened perceptual awareness that leads to "a state of awareness, in the moment, characterized by the felt experience of timelessness, connectedness, and a larger truth." He further adds: "When those boundaries disappear, relating to others is the same as relating to oneself."[24]

EMOTION

Peirce's categories can be further utilized to distinguish emotion from awareness. Unlike awareness, which exists in firstness, emotion originates in secondness. Secondness is characterized by dyadic relationships, such as those that occur between actions and environment. That kind of dualistic relationship cannot exist in firstness, which is characterized by a monadic, undifferentiated relationship.[25] In the following quotation, Peirce differentiates between a sensation, which occurs in firstness, and an emotion, which occurs later and is associated with action.

> …the sensation, itself is not a thought which has a very strong influence upon the current of thought except by virtue of the information it may serve to afford. An emotion, on the other hand, comes much later in the development of thought—I mean further from the first beginnings of the cognition of its object—and the thoughts which determine it already have motions corresponding to them in the brain, or the chief ganglion: consequently, it produces large movements in the body, and independently of its representative value, strongly affect the current of thought.[26]

While sensations primarily afford information, Peirce held that emotions begin with feelings that are closely associated with action, e.g., the facial and bodily expressions that are associated with an emotion. As such, emotions can either act as a felt response to the environment or as a motivation for further action, a view also shared by William James, and one that continues to this day.[27] For

example, functionalism characterizes emotions as integral to the performance of vital functions, e.g., anger to motivate action, regret to promote reflection, fear to induce avoidance, etc.[28]

Although Peirce agreed with James that emotions originate with bodily feelings, he further held that emotions are more than feelings. For a bodily feeling to become an emotion requires thought, a relationship mediating between action and feeling (thirdness) to provide meaning. Otherwise, emotions could not be distinguished from one another, e.g., frustration serves as a mediating thought that links a feeling and a facial expression. It is the concept of frustration that allows the distinction among bodily feelings and explains the import of the action (frustrated facial expression). Empirical studies have also demonstrated the important relationship of cognition to emotion by demonstrating that beliefs, perceptions, evaluations, or appraisals elicit emotional responses, e.g., a favorable appraisal of an interaction with the environment will inspire a positive emotion.[29] Although Peirce acknowledged the important role played by both thought and feeling in emotions, he was careful to distinguish emotion from cognition. Cognition moves through a series of thoughts governed and connected by valid rules of inference. With emotions, the connection between a feeling and its related thought is an arbitrary one rooted in the body's constitution; it is not based on valid rules of inference, and it does not move through a logical chain of reasoning.[30]

While the nature of emotions has not yet been fully clarified, what is known offers multiple opportunities for emotional development at both the feeling and cognitive levels.[31] At the feeling level, a primary consideration for development is to fully process emotions, meaning to become aware of the emotion, accept it, and fully experience it.[32] Although challenging, even negative emotions provide a useful dissonance, an opportunity to become more aware and feel more deeply, a cue for inspiring reflection and growth, or a motivation for change.[33] They inform us when reflection is needed; when values, goals, or dispositions may need to be changed or more deeply realized; and when growth is possible. Accepting and processing feelings builds strength and resilience; in contrast, difficulties arise when emotions are ignored, rejected, avoided, altered,

DOI: 10.47925/79.2.077

or repressed. Unprocessed emotions inhibit awareness, block a vital source of information, foster avoidance of painful emotions, and forestall the healthy expression of emotion.[34]

Cognitive processes involving beliefs, goals, appraisals, and evaluations also make an effective entry into emotional processing.[35] One approach would be to reflect upon, discover, or modify the underlying values that govern an emotional response to a situation, e.g., setting growth-oriented goals that prioritize emotional development over the achievement of specific outcomes. A second approach would be cultivating emotional dispositions to influence emotional responses, e.g., cultivating a mindset for maximizing emotional growth through fully experiencing feelings, reflecting on them, and taking appropriate action—if possible or needed.[36] A third approach would be to reflect during and after an emotional event on how well the goals for emotional development have been achieved, e.g., reflecting on the context or situation to discern cues, triggers, or a particular pattern of emotional responses; reflecting on the intensity of a particular emotional response that may suggest a larger issue requiring deeper processing; or discerning an unnecessary waste of emotional energy, such as feeling badly about an immediately perceived negative outcome that quickly evolved to a more positive resolution.

Emotional development is further enhanced through a social and emotional approach to create a positive emotional climate. Climate building involves fostering individual development through self-regulation, which provides a foundation for positive interactions among members of the community and lessens the possibility that negative emotions will be introduced into a group setting. In addition, group interaction and relationship-building skills are shared to ensure a high level of group functioning and to promote positive relationship building.[37] A positive climate affords less disruption of productive activities, less energy invested in addressing conflict, and the potential for mutual reinforcement among members of a community. When members of a community can collectively create positive learning environments, each is better able to cultivate their experiential learning, and each will grow more quickly through experience.

In summary, emotional development moves towards acceptance, both of our emotions and of the events that elicit them. Acceptance leads to an

increased emotional awareness, more effective emotional processing, and a greater commitment to emotional well-being in the present moment, regardless of external circumstances. Increased awareness and a greater sense of emotional well-being will yield higher levels of emotional energy, as evidenced by a greater inclination to act, whether due to increased motivation or less inhibition caused from adverse circumstances. Higher energy will be accompanied by an increased sense of possibility, discovery, and spirituality.

DIFFERENTIATION AND INTEGRATION

Analyzing experience into four separate features—action, cognition, emotion, and awareness—offers multiple benefits. For example, it can serve educational design by providing a more comprehensive view of experiential learning; it can enable educators to identify and target one aspect of a learner's experience to strengthen individual skills; and it can provide a vehicle for educators or learners to reflect on their self-development. For example, when designing experiences for teacher preparation programs, teacher educators should design clinical experiences to include emotional processing by cultivating positive dispositions, effective emotional self-management, and the ability to generate a positive emotional climate. Combined, these skills may help teacher candidates learn to create a positive emotional synergy between their students and themselves. They should also include experiences that develop teacher candidates' awareness of attention, introspection, listening, and empathy. Perhaps most importantly, teacher candidates could enhance their ability to process experience by cultivating an awareness of their own lack of awareness. Part of the design could include focusing attention on existing experiences by providing reflective questions for mentors, adding group discussions, or creating other processing exercises that draw the teacher candidates' attention to the importance of that portion of their experience.

However, it is also important to remember that—like Peirce's categories—action, cognition, emotion, and awareness are all experienced simultaneously in any given context and under any set of circumstances. Their highly integrated nature is best illustrated by the abundant literature characterizing their influence on one another.[38] Thus, a change in one will inevitably result in changes in the others, as described in various examples on the preceding pages. So, change

DOI: 10.47925/79.2.077

initiatives, either for individuals or in the design of programs, may begin by focusing on one of the four with the understanding that a change in one will inevitably result in changes in the other three, although to what degree would be unknown. This strategy could facilitate the development of initiatives that are intended to grow and evolve, perhaps in unexpected directions.

Similarly, however, if one of the above four features is lacking in development, the others will also be affected, or perhaps even inhibited. For example, a paucity of experience through action may limit the awareness, understanding, and productive emotional responses to real-world settings, which may inhibit thinking and decision-making, which may, in turn, affect future actions taken, and so forth. Thus, an important part of development through experience is identifying any inhibitors of growth, such as lack of real-word practice, lack of background knowledge, lack of emotional maturity, and/or lack of awareness.

CONCLUSION

The descriptions above were intended to be suggestive for expanding current conceptions of experiential learning to include awareness and emotion. The application of Peirce's categories aided in placing awareness as prior to action and linking emotion with action prior to cognition. Adding emotion and awareness to our conception of experiential learning is intended as a conservative choice. Both are linked with a philosophical literature that dates to antiquity; thus, both are well established as part of the phenomenology of being human. Their rootedness in the philosophical, and more recently, the empirical literature offers a plethora of sources to consult for insight into their development. Although much remains to be learned about awareness and emotion, it is not necessary to wait until all questions surrounding their nature are fully resolved before infusing them into the curriculum; in fact, education should never presume to present a final picture of human development, nor of the world. What is more relevant are the importance of awareness and emotion to learning. Given that every aspect of experience influences every other, it begs these questions: what limitations are imposed upon the intellect by a lack of awareness or a lack of emotional development? Conversely, what more could be accomplished? Perhaps the careful cultivation of these non-intellectual features of experience would reveal intellectual possibilities that are currently inconceivable.

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DOI: 10.47925/79.2.077