

Considering the Learning Theory Enactivism to Explore the Development of Socially Conscious Leaders

Susan R. Seymour, PhD

Director, Office of Institutional Effectiveness

Abstract

We live in challenging times and are faced with economic, ecological, political, and social strife that threatens to overwhelm individuals and turn them toward apathy or selfish individualism. Since resolution of social problems relies on strong leadership grounded in social awareness, educators who teach future leaders must ask themselves if their curriculum and the focus of their pedagogy fosters growth of social consciousness in their students. This research explores learning related to the development of leaders' social consciousness and interrogates how they come to care about social justice causes and why they commit to certain causes but not others. This learning is considered through the lens of enactivism, a biologically based learning theory; pedagogical implications and strategies for the development of social consciousness are considered.

Description

A disposition toward social justice is often a strong focus in educator training programs (Spalding, Klecka, Lin, Odell, & Wang, 2010). Mills and Ballantyne (2010) determined the critical factors necessary for teachers to embrace a social justice orientation, while others investigated ways in which educators can be taught to enact a social justice disposition in their teaching practices (Agarwal, Epstein, Oppenheim, Oyler, & Sonu, 2010; Chubbuck, 2010). While this literature is helpful in considering how to promote social justice dispositions in educators, it does little to inform an understanding of how social justice orientations grow “organically” or whether social justice orientations “stick” when faced with real-world difficulties and applications. In other words, we do not know enough about social consciousness to know how it is learned, if it can be

taught, if it is stable over a lifetime, and what factors and life events shape its unique expression.

While social consciousness can have many definitions (Ammenthorp, 2007; Berman, 1997; Giddings, 2005; Schlitz, Vieten, and Miller, 2010), for this research it was defined as an evolving understanding of others' perspectives and realities, an awareness of how personal actions may affect others, and an increasing sense of agency toward promoting equity and responsibility. This definition roots social consciousness in both knowledge and action. It implies that it is not enough to know that inequity exists—one must act on this knowledge. The participants in this research were female nonprofit leaders who have committed their lives to social action; life history methodologies were used to explore learning related to the development of their social consciousness.

The Learning Theory Enactivism

Learning theories such as behaviorism, constructivism, and social constructionism represent learning through psychological or sociological constructs that explain human responses related to the acquisition, application, or reproduction of knowledge (Ernest, 2010). This consideration of learning says nothing about how our lived experience, the embodied nature of knowing, shapes what we know or how we can come to know. Thus, when Varela and his colleagues introduced enactivism to the field in 1991, the biologically based theory provided an alternative view into how learners make sense of their world and are shaped by their interactions within it. In the purist sense, enactivism is a theory of human interaction and evolution.

Enactivism is a theory of learning in which embodiment is seen as the fundamental axis of knowledge, cognition, and experience. This means that the learner is not a blank slate capable of learning, interpreting, and representing objective realities. Rather, the learner is shaped by the multitude of lived experiences from her history—she does not see the world as it is, she sees the world as she is, or rather as she has become. Consequently, this embodied understanding has the potential to shape, enable, or limit her learning.

Enactivism offers unique learning insight because it considers the internal structures, or worldview, of an individual and how these structures interact and evolve within the learner's environment. Worldviews are each individual's understanding of the nature of reality through her genetic tendencies, culture, geography, experiences, attitudes, values, and relationship to her environment. By considering how these internal structures (worldviews) interact and evolve within an environment, we move beyond mere psychological understandings of learning to contextualized psychological understandings. Adaptive systems, such as human beings, can change their structures in response to internal or external pressures or stimulus, and because adaptive systems embody their history in their structure, they are seen as evolving (Davis, 2004).

"Structure in this sense is both caused and accidental, both familiar and unique, both complete and in process" (Davis & Sumara, 2006, p. 13). However, it is *not* the environmental stimulus that creates changes to the structure. Rather, it is the nature of the structure that determines the changes that happen, or if change happens at all. As Proulx (2004) stated, "You get triggered by what you CAN get triggered by" (p. 115). In other words, the environment is not the place where decisions arise, but it is through an individual's interaction with an environment that her "internal dynamics can recognize potential triggers in it and get triggered by them. Learning is not determined by the environment, but it depends on it" (Proulx, 2004, p. 117).

Within an enactivist framework, cognition depends on experiences that come from having a body with various sensorimotor capacities that are embedded in biological, psychological, and cultural environments. This embedment is multidirectional in that learners adapt and learn from their environment as their environment "learns" from them. This phenomenon is called "coemergence" (Varela, Thompson, & Rosch, 1991) and represents a "structural coupling" between the learner and the environment, which enacts change in both. Structural coupling is defined as the engagement of two or more systems, such as a human being, a culture, or a specific environment that provides certain levels of mutual cohesion and development potential (Maturana & Varela, 1987). As long as the interaction between a system and the environmental medium

remain viable (nonthreatening to system's identity), they are said to be structurally coupled and they coemerge. It is important to understand that coemergence does not mean that the system (individual) and the environmental medium (for example, classroom) are becoming more fully adapted to each other. All that is asserted is that their structures allow them to interact and *affect* each other.

Structural coupling represents a domain of possible interactions in which a learner can enter into, but this domain is "specified, and potentially limited, by its own organization, identity, understanding and history" (Baerveldt & Verheggen, 1999, p. 196).

Furthermore, it is important to recognize that while the structural coupling between learner and environment is mutual, the learner specifies the structural changes and signifies which elements from the environment constitute acts of cognition. As Proulx (2008) noted, "the environment acts 'as a trigger' for the species to evolve—as much as species act as 'triggers' for the environment to evolve" (p. 16). Davis and Sumara (1997) describe coemergence through the analogy of a conversation. Although individuals may enter a conversation with a set viewpoint about what will be discussed, those involved respond to the conversation while simultaneously shaping it. We shape the conversation and the conversation shapes us, just as learners are shaped by the learning environment and, in turn, the learning environment is shaped by the learners.

Enactivism claims that the internal organization of a structure precludes understanding. Therefore, the ability or inability of a system to respond to, or be triggered by, an environment is shaped by the system's organization (identity) and represents the limits of what action an entity can take in its environment and what it can come to know (Maturana & Varela, 1987). *Thus, it is not the environment that determines learning, but the internal structure of the individual.* Learning happens when there is *structural coupling* between the biological and experiential structures because something from the environment "triggered" something in the individual, and her structural organization "allowed" this trigger (Davis et al., 2008; Maturana & Varela, 1987).

This interactivity with environment, or coemergence, is unique because it moves beyond a consideration of present-day interactions with one's environment, to a

consideration of how evolution within multiple environments (i.e., history) shapes the present. In other words, the evolution of the human species is grounded in its historical interaction with its environment, just as each learner's evolution is grounded in a history of interactions with her lived environments. Proulx (2008) asserted that one's history either enables or limits interactions with environment, and articulates this dynamic when he writes, "I—my structure—allow the physical world to be brought forth. If these attributes of the physical world are outside my structure, outside of my capacity to make sense of them, I cannot distinguish them and cannot perceive them. In other words, they cannot 'trigger' anything in me" (p. 21). This quote offers some insight into the learning process and why some individuals commit to social action and others do not. Because individuals coemerge within their environment, they are both shaped by this environment and shape and direct it in return.

Significant Life Events and Circumstances

This research studied the lives of socially conscious leaders in order to gain a deeper understanding of how their learning processes influenced the development of their social consciousness. In other words, how do people come to enact caring about social justice causes and why do they enact caring about certain causes but not others?

The life history narratives of leaders interviewed indicated major life events in childhood created structural organization (identity) that influenced the way they enacted their social consciousness (Maturana & Varela, 1987; Varela et al., 1991). For one leader, these structures were hard work, frugality, and altruistic suffering. For another, the structures were based on mental illness, abandonment, and a desire for authentic self-expression. Additional structures included social mobility, responsibility to others, and the desire for personal connections.

What is interesting about all of the organizing structures is the degree to which they emerged in early childhood, had little or nothing to do with social justice per se, remained constant throughout life, and shaped the participant's interaction to social justice causes. In other words, it doesn't seem to matter what an individual's internal

organizing structure is, as long as it provides a viable opportunity to structurally couple to social justice impulses. Thus, structures unrelated to social consciousness, such as frugality, a need for attention, responsibility, or a desire for socialization, can all provide viable structures that might couple with social justice endeavors, but do not represent typical perceptions of social justice motivation. Structures act as enabling factors through which motivations can be enacted.

A theme affecting the development of identity structures related to social consciousness was family or subconscious influences occurring in childhood but subverted during adolescence and early adulthood. For example, two leaders referenced dramatic pictures they saw in childhood that influenced them:

From my earliest memory as a child, I wanted to go to Africa and plant corn. I think maybe I saw Save the Children or something on TV—kids starving, Ethiopia . . . drought, whatever. I don't know and that's just always stayed with me.

I think that image in *Life* magazine—the news story when they were spitting on little [black] girls—that just really got in my mind.

Another leader recognized a social consciousness that was introduced in her family of origin, but had remained “dormant for many, many years.” Finally, a fourth leader acknowledged the influence of her mother who was “very socially conscious” and “carried the guilt of the Southern whites.” From these statements and from the structures created in childhood, it appears the forces that influence social consciousness are both deliberate and random, and that the leaders in this study were shaped by media images and by their parents' politics. However, they seemed to be most powerfully and permanently shaped by the lived experiences and personal identities that required them to structurally couple to environments that enabled them to enact their social consciousness in uniquely personal ways.

All the leaders interviewed for this study felt they should make a difference in the world, but this compulsion went beyond mere wishful thinking to action. For each woman, the opportunities that enabled this action were specific to the structural organization of her

social consciousness that was shaped in childhood but enacted in adulthood through opportunities presented in viable environments. When an environment “triggered” (Proulx, 2004, 2008) an opportunity for one of the participants to express her social consciousness, then both the leader and the environment coemerged in a dynamic whole (Davis & Sumara, 1997; Sumara & Davis, 1997). The enactment of social consciousness is not only specific to the social causes with which a leader identifies but also the specific skills and knowledge she brings to the environment, as well as the opportunities the environment provides. Put differently and in enactivist terms, the boundary of a system is specified by its operations (Baerveldt & Verheggen, 1999).

Value

How is social consciousness learned? This question and its answer extend far beyond this chapter, but it appears the foundations of social consciousness are laid in childhood through the everyday interactions of media, family politics, relationships, trauma, and opportunity. By coupling unique internal structures (worldviews) to environmental opportunities, social consciousness is learned through embodied experiences and coemerged explorations of interests, needs, talents, fears, curiosities, beliefs, and other personal expressions. This coupling advances an individual’s ability to explore her or his own identity within a complex environment of self, other, and opportunity. Even though structural dynamics related to social consciousness emerged in childhood and remained relatively stable over time, social consciousness becomes enacted in increasingly complex ways as the underlying structural dynamics that shape its enaction coemerge with opportunity in environments. In this way, learning related to social consciousness is “occasioned” (Davis et al., 1996) rather than caused.

If learning is occasioned rather than caused, how should we envision educational environments designed to promote social justice orientations? The first step requires an understanding of complex systems, where complex systems have three characteristics (Sumara & Davis, 1997). First of all, complex systems are adaptive and have the capacity to evolve within changing environments. Secondly, they have the capacity to self-

organize and in the process of self-organization, become more than themselves. In other words, a complex system is more than the sum of its parts. Thirdly, complex systems cannot be understood by analyzing the component parts the way in which a complicated system can be understood. A computer is complicated and can be understood by analyzing its individual pieces and parts and their relationships to each other. A plant is complex and can only be understood by considering its relationship to its environment.

Increasingly educational environments are viewed as complicated, which results in efforts to break teaching and learning down to component parts in order to teach and measure learning associated with each part. Once educational environments are conceptualized as complex rather than merely complicated (Davis & Sumara, 1997; Davis et al., 2000; Sumara & Davis, 1997), an understanding of how or if challenging concepts (such as social consciousness) can be taught begins to emerge. Davis and Sumara questioned the belief that learning can be predetermined and caused by linear practices such as teaching to a concept and offer instead “an interpretation of human activity as relational, codetermined, and existing in a complex web of events” (p. 112). For them, learning should not be based on a linear dynamic of cause and effect, objective and outcome, but rather should be understood to occur in nonlinear relationships between collectives and individuals, truths and emergent possibilities. As they state, “Trying to establish a causal relationship between one event and another, or between a teaching action and a learning outcome confuses essential participation with monologic authority” (Sumara & Davis, 1997, p. 412). Similarly, enactivists conceptualize learning in three states:

First that knowledge unfolds in systems, whereby cognition coemerges with environment, individuals and activity. Second, that understanding is embedded in the conduct and relationships among systems and subsystems, rather than the minds of individual actors. Third, that learning is continuous invention and explorations linked to disequilibrium in systems and amplified with feedback loops. (Fenwick, 2001, p. 251)

These states recognize learners as more than *situated* within particular contexts and render problematic educational theories and practices that are inattentive to the evolving relationships between learner and environment. In complex systems, the learner and environment are intertwined in a mutually specifying relationship where one affects the other. As the learner learns, the context changes, simply because one of its components has changed and as the context changes, so does the learner. Thus, learning and teaching cannot be understood monologically, “there is no direct causal, linear, fixable relationship among various components of any community of practice” (Sumara & Davis, 1997, p. 414).

If complexity theory and enactivist frameworks render causal teaching relationships problematic, what are educators who are committed to fairness and social justice supposed to do? First and foremost, educators must be reflective of their own social justice orientations and motivations to educate for the development of social consciousness. Fenwick (2000) critiqued “impositional educators who presume to determine what comprises false consciousness and then undertake to replace it.” She claims this primarily occurs due to a lack of self-reflexivity as shown in an unwillingness to explore “their own intrusions and repressions and [acknowledge] their own inscription by dominant discourses and their own will to power” (p. 260). Buttressed by this postmodern critique and armed with her own strong commitments to social justice causes, Tara Fenwick proposed a model for teaching social justice that is informed by her research in complexity thinking and enactivist frameworks. This model rejects a “hero-rescuer motif . . . [and] grand utopias of social responsibility for adult education” (2003, p. 134) in favor of teaching environments based on three conditions necessary for complex, coadaptive systems to flourish. These conditions are the induction of coemergence, listening, and playing the role of disturber.

Fenwick indicates an effective role for educators is to induce coemergence by influencing classroom conditions that may make it possible for students to acknowledge or exercise their social consciousness. Specific practices aimed at influencing coemergence are occasioning social justice interactions, decentralizing control and

liberating constraints. As Fenwick explains, inducing coemergence “involves open-ended design but not control: making spaces, removing barriers, introducing and amplifying disturbances” (2003, p. 136).

Listening is the mechanism by which educators decentralize power, gain awareness of their students’ social justice orientations, and recognize when coemergence between student and environment is occurring. When coemergence occurs, educators need to create “space” for the experience to emerge without the need to reshape, redefine, or emancipate it. As Fenwick notes, “Too often, educators might be suspected of approaching others with an anthropologist’s gaze—with external ‘expert’ knowledge attempting to penetrate and represent the internal knowledge of a community to which they do not belong” (2003, p. 136). Instead, educators are encouraged to bear witness to enfolding stories, dynamics and relationships, and help interpret diverse individuals’ experiences to one another, enabling each participant’s stories and understandings to mutually specify awareness, action, and shifts in identity.

Finally, Fenwick suggested that systems must be subject to disturbances if they are to evolve. Educators committed to promoting systems that are more just and equitable are well positioned to construct “deviances that generate a system’s disequilibrium” (2003, p. 137). In this context it is understood that the development of social consciousness cannot happen without challenging the status quo, and it is the educator’s responsibility to do so. In making such a statement, Fenwick cautions against anarchy, but rather encourages a view of social justice education that can “help reclaim and re-embody the signifier of experiential learning, to restore its poetry and its complex entanglement in expanding spaces that resist fragmentation and control” (2003, p. 137).

This model for promoting social justice education in the classroom is worth considering, but it is important to recognize that this is not a cause-and-effect teaching/learning model. As such, it is worth noting that social consciousness is probably something educators cannot teach but can influence through exposure to social issues and questions of justice. Thus, an enactivist view of social justice education recognizes social consciousness is not caused by, but may be occasioned in, learning material that triggers

reactions within students and enables their identities to couple and coemerge within the learning environment.

Summary

For educational programs aimed at developing socially conscious leaders, this approach holds several implications. Leadership programs should develop flexible curriculum and assessments that enable students to enact their social consciousness in a way that is most meaningful to them. One student may react and connect to the fair and ethical treatment of immigrants, whereas another student may feel ethical business practices hold the most hope for creating social change. There cannot be a one-size-fits-all approach to the expression of social consciousness and leadership educators should create space for a plurality of student engagement options. Engagement options can include, but should not be limited to, case studies, service learning, research papers, and the design and development of capstone projects aimed at solving social problems.

In addition to curriculum and assessments that enable diverse leadership learning projects, learning environments can and should contain mechanisms that help enact social consciousness. These mechanisms include modeling fair and just behaviors in classrooms and creating space for coemergent explorations of what it means to be socially just. These educational practices are in alignment with Fenwick's (2003) model for social justice education, which suggests listening, playing the role of disturber, and inducing coemergent opportunities for learning. Aside from utilizing these pedagogical practices, educators must divorce themselves from the expectation of actually creating socially conscious learners, or at the very least opening their minds to what social consciousness looks like in a variety of learners. As this research suggests, each human being enacts her social consciousness in a way she is structurally able to at any given time. Therefore, educators must provide a wide variety of opportunities for learners to couple their identity structures to social justice causes, but beyond that they must trust that future leaders will enact and develop their social consciousness through their own lived experiences.

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