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Bigger is not always better: Should educators aim for big transformative learning events or small transformative experiences?

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Abstract

Facilitating transformative learning is a praiseworthy goal among educators who want to make a significant impact on the lives of their students. Transformative learning is typically defined as involving a fundamental shift in students' worldviews and/or identity. While we agree that teachers should retain such important goals, we argue that facilitating transformative learning is difficult for many reasons. We then suggest that a more manageable task is to use existing instructional techniques to generate small-scale transformation in the form of transformative experience (TE). Specifically, TE can be used to create micro changes in student perspectives. Transformative experiences are more manageable in the typical classroom and an accumulation of small changes can lead to the type of transformative learning that influences student identity.

Introduction

Transformative learning is a laudable goal of educators attempting to make an impact on their students' lives. We agree with many transformative learning scholars that, in addition to content acquisition, teachers should be influencing student perspectives and worldviews (Boyd, 2009; O'Sullivan, 1999; Mezirow, 1991). However, we posit that the type of life changing events often conceptualized as transformative learning in the literature is difficult to achieve and even more arduous to maintain overtime. Teachers can become frustrated waiting for such events to occur or trying to achieve the profound transformative learning portrayed in teacher hero movies such as *Dead Poets Society*. This is not to say that transformative learning should be abandoned as a goal of education. Rather, we propose that teachers may benefit from focusing on small-scale transformative learning in addition to large-scale Transformative learning (little t and big T transformation, if you will). We use the construct of *transformative experience* (Pugh, 2011) as a framework for conceptualizing a little t transformative learning approach.

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² Kevin Pugh is a Professor at the University of Northern Colorado. He earned his Ph.D. in educational psychology from Michigan State University in 2000. He is known for his work on transformative experience theory. This theory is grounded in John Dewey's philosophy of education and aesthetic experience and draws on modern motivation, engagement, and learning transfer research. Transformative experience theory is primarily contextualized in the domain of science education and focuses on how science ideas can transform the way students see and experience the world in their everyday, out-of-school lives.

Transformative experience (TE) occurs when students apply classroom concepts to their everyday experience in a way that facilitates a change in perception of that experience and generates value for the concept and school (Pugh, 2002, 2004). TE can be thought of as a “micro” form of transformative learning that is tied to particular content and doesn’t necessarily lead to a holistic change in an individual’s worldview. A transformative experience can simply be coming to see and appreciate air pressure events (e.g., ears popping or yogurt exploding when opened at high altitude) differently after learning about air pressure in science class.

In the following we begin by defining transformative learning as compared to transformative experience. Next we make our argument for the value of focusing on smaller more localized types of change (TE) in addition to the global type of transformative learning suggested by many scholars. We then discuss research on TE, including strategies for fostering TE and research showing that transformative learning of this small-scale type can have large-scale impacts on learning and motivation. We conclude by discussing practical implications and future directions including thoughts on how TEs may contribute to more grandiose Transformative learning experiences.

Transformative learning verse transformative experience

Although most scholars operationalize transformative learning (TL) differently there is a core commonality among the multifarious definitions. The similarity among definitions is that TL involves a deep fundamental change in one’s perspective. For instance, Boyd (2008, 2009) defines TL as a fundamental shift in an individual’s personality that leads to an expanded consciousness. Boyd states that when students engage in TL their entire personality is altered and thus they are forever transformed by the learning event. Another definition is provided by O’Sullivan (1999, 2002) who conceptualizes TL as occurring when a student’s way of being in the world is irreversibly changed due to a shift in consciousness. O’Sullivan continues to describe TL as involving shifts in understanding one’s self, the natural world, relations of power, and sense of possibilities. A final definition from Mezirow (1991, 2000) posits that TL is facilitated by a disorienting dilemma that leads to a reorganization of how one interacts with the world. Each of these definitions describes a “big” shift in consciousness and personality that forever changes an individual and how they understand their surroundings.

In contrast, transformative experience (TE) focuses on smaller shifts in perspective tied to the learning of particular content ideas. The TE perspective arose out of attempts to bring a Deweyan perspective on pragmatic education (i.e., relevance of education to everyday experience) and aesthetics experience to science education (Pugh, 2011; Wong, Pugh, & the Dewey Ideas Group at Michigan State University, 2001). The basic argument is that science concepts can provide students with aesthetic experiences in the world that are transformative in the sense that students come to perceive objects, events, or issues differently and attach new meaning to these objects, events, or issues. Such experience was coined transformative experience and specifically defined in terms of three characteristics: motivated use, expansion of perception, and experiential value (Pugh, 2002; 2004; 2011). Motivated use occurs when students intentional apply classroom concepts to their daily lives without being coerced. For instance, a student who learns about physics may apply the concept of inertia when playing hockey by analyzing the events (e.g., sliding puck) in terms of this concept. Expansion of

perception occurs when students see their everyday experiences differently due to learning the course content. For example, in our hockey example, the student no longer simply sees a hockey puck, but now perceives an object (the puck) operating according to the physics principle of inertia. When the student hits the puck physics principles are in play and perception of the game is changed. Last, experiential value takes place when students come to value content for its ability to influence experience. The student playing hockey may value the idea of inertia because it has made hockey more interesting. When these three dimensions occur together a transformative experience can occur (Pugh, 2011; Heddy & Sinatra, 2013). It might seem unrealistic that an individual would choose to think about hockey in terms of physics, however we've found that, when properly inspired and prompted, students are more likely to perceive aspects of the world through the lens of the content they are learning (Heddy & Sinatra, 2013; Girod, Rau, & Schepige, 2003; Pugh, 2002). We wouldn't expect our hockey player to consciously think about hockey in terms of physics all the time (certainly not during the heat of competition), but we are hopeful he does view his hockey experience through the lens of physics, at least occasionally, after learning physics. In doing so, he does not undergo a grand Transformative Learning experience; that is, he does not change his worldview and identity. But the experience is still transformative. He has come to perceive an aspect of the world he cares about (hockey) in a new way and attach new meaning to it. It is still a challenging outcome to achieve and we would not expect all students to have TEs with all content, but it is a reasonable goal to expect most students to undergo some TEs during their engagement in a course.

TL and TE are similar in that they both include alteration of the way in which one perceives the world. However, a major difference between these two constructs is that TL is a much deeper life-changing event. When TL occurs an individual's way of being and interacting with the world is modified in such a way that their personality is shifted (Boyd & Meyers, 1988). TE does not necessarily have to be a personality altering event. Rather, the transformation that occurs when engaging in TE occurs on a much smaller scale in that the perception and meaning of particular objects, events, or issues are transformed through the learning of particular content.

Bigger may not be better

If TEs are lesser form of TL, why even bother with them? Seeing a hockey puck through the lens of inertia falls quite short of the TL events depicted in teacher hero movies. For instance, in the movie *Dead Poets Society* actor Robin Williams provided transformative learning to his students when teaching them about poetry. The students were so moved by their education that they started a poetry club and defied identities imposed by authoritarian parents. Similarly, in the movie *Freedom Writers* actress Hilary Swank facilitates transformative learning for her students when she introduces them to holocaust survivors. The students' perspectives begin to change along with their personalities because the survivors made such a big impact on their lives. The list of movies about transformative learning goes on including such films as *Dangerous Minds*, *Mona Lisa's Smile*, and *Stand and Deliver*. The aforementioned movies are exciting and inspirational stories (in some cases true stories; e.g. Freedom Writers), however, this type of transformation is difficult to accomplish and atypical in actual classrooms.

Today's teachers have so many constraints placed on them that make facilitating TL particularly difficult. In many schools, teachers have a large number of students and limited

resources to ensure quality instruction. Further, with the increase of national and state accountability testing, students are subjected to continuous examination, forcing instructors to “teach to the test” and face repercussions if students fail. Constant testing further reduces the amount of time that instructors can spend transforming their students’ lives—particularly the one-on-one out-of-class time so critical to life changing transformation. Burnout is a concern for all teachers, but can be a particular threat for teachers highly dedicated to TL who give so much of their personal time to their students. For instance, Erin Gruwell, the teacher portrayed in *Freedom Writers*, only lasted a short time in the classroom. Finally, few teacher education programs specifically teach their students how to facilitate transformative learning and therefore teachers likely do not have the skills necessary to provide such instruction.

Obviously, we do not want to discourage teachers from pursuing TL and we greatly respect the dedication of teachers who are able to give their whole selves to their students. However, we believe a single goal of large-scale transformative learning may be a difficult and often discouraging goal for many teachers.

A smaller more manageable transformation

As discussed previously transformative experience (TE) is a smaller form of transformative learning that changes a student’s perspective of individual experiences and value for school content (Pugh, 2011). Research finds that TE is susceptible to instruction and levels of TE can be substantially increased with targeted interventions (Girod et al., 2003; Heddy & Sinatra, 2013; Pugh, 2002; Pugh, Linnenbrink-Garcia, Koskey, Stewart, & Manzey, 2010a). Based on such research, Pugh and colleagues proposed the Teaching for Transformative Experiences in Science or TTES model (Pugh & Girod, 2007; Pugh, Linnenbrink-Garcia, Koskey, Stewart, & Manzey, 2010b). A full description of the model is beyond the scope of this essay, but in brief, the model encompasses three design principles: (1) framing content in terms of its experiential value, (2) scaffolding re-seeing, and (3) modeling TE. Framing involves establishing the purpose of learning as the opportunity to try out potentially powerful ideas (Pugh & Phillips, 2011). It also involves a focus on evoking anticipation; specifically, anticipation about using content ideas as lens for seeing the world differently (Wong et al., 2001). Scaffolding re-seeing refers to supports for helping students perceive everyday objects, events, and issues through the lens of particular content. Such supports include helping students identify everyday objects that could be re-seen, coaching students through re-seeing attempts, and providing opportunities for the students to share re-seeing experiences with peers (Pugh et al., 2010b). Modeling TE refers to a focus on illustrating what it means to live the content and can take the form of sharing personal experiences of re-seeing the world through the lens of the content, expressing a passion for the content, and explicitly teaching for experiential value (Heddy & Sinatra, 2013; Pugh & Girod, 2007). Another teaching method that has effectively guided student TE is called Use, Change, Value or UCV discussions (Heddy, Sinatra, & Seli, 2013; Heddy, Sinatra, Seli, & Mukhopadhyay, 2014). UCV discussions take the form of small group discussions in which students share and scaffold each other’s TE’s.

Although TE represents small-scale transformative learning, researchers have found that it has a large impact on other valued outcomes. TE has been linked to core learning outcomes such as conceptual change (Pugh et al., 2010a; Heddy & Sinatra, 2013), transfer of learning to

real-world situations (Pugh et al., 2010b), and transfer of learning strategies to other courses (Heddy, Sinatra, Seli, & Mukhopdhyay, 2014). TE has also been linked to engagement outcomes such as positive emotions (Heddy & Sinatra, 2013; Heddy, Sinatra, & Seli, 2013), development of interest (Heddy, Sinatra, Seli, & Mukhopdhyay, 2014), and academic and career choice (Pugh, Phillips, Bergstrom, Sexton & Riggs, 2014).

Yet, of most importance, we suspect TE could contribute to large-scale Transformative Learning. In proposing his theory of aesthetic experience, Dewey (1980/1934) often used simple examples and emphasized the continuity of experience. That is, he stated that characteristics of aesthetic experience, including transformations of perception and value, can be found in relatively simple experiences which are connected and lead to experiences of larger significance. In a similar vein, we contend that elements of large-scale TL can be found in TE and multiple TEs can lead to personality and worldview altering Transformative Learning. As an illustrative example, Girod and Wong (2002) provided an account of a fourth grade student, Briana, who came to re-see rocks by viewing them through the lens of geology concepts. Briana commented, “I wasn’t all that interested in rocks before, but now I am. I used to pick them up at the beach and throw them in the water. Now, I couldn’t throw all those stories away” (p. 212). Such an experience is representative of TE in that it involved an expansion of perception and value. However, the impact of this experience extended beyond a simple changed relationship with rocks. It contributed to a changed identity. Briana began to envision herself as a future geologist. She explained, “I can imagine myself being a geologist. I have this backpack on and wearing this cool safari outfit with this cool hat, and then I pick up rocks, and I have a partner named Moe” (p. 212). Briana appears to be speaking partly in jest, but it also seems that her small-scale transformative experiences of seeing rocks differently were contributing to a larger Transformative Learning event.

Mezirow would likely agree with our assumption as he theorizes about the difference between transmissional, transactional, and transformational learning (2000). Transmissional learning occurs when teachers simply transmit knowledge to their students through direct instruction. Transactional is operationalized as happening when students have valuable experiences that slightly modify their perception. Mezirow goes on to argue that multiple transactional learning experiences may indeed lead to transformative learning. Thus, we suggest facilitating more transactional learning such as TE and overtime an accumulation of TE’s could lead to an identity altering Transformative Learning outcome.

Conclusion

Transformative learning is the goal of many instructors at the K-12 and higher education levels. Many teachers want to make a lasting impact on their students and change their lives for the better. We agree about the import of Transformative Learning (TL) and believe that transformative experiences (TE) may be a way to facilitate micro changes in students that, when accumulated, lead to TL outcomes. Furthermore, TE is an attainable goal associated with established pedagogies. We suggest scholars explore the relationship between TE and TL in greater depth and that teachers aim to facilitate TE in their students.

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