Transformative Adult Learning Theory: Methods, Practices and Applications

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Abstract. Adult learners are in the center of the transformative learning paradigm. Transformative learning is considered as the process of transforming the mentality and emotions of learners into new approaches in the learning process. Assessment of the learners' experiences is at the core of transformative learning. In the context of adult learning, understanding of the real situation is an important factor of transformative learning attitudes. Transformative learning begins by creating a dilemma that is crating by self-scrutiny and assumption of learners'. Participants in this activity must understand that the transformation process begins with a dilemma in which they experience a new state. This article used a literature review method to discuss the following topics: the stages of transformative learning; the importance of transformative learning for academia; applying transformative learning theory to practice; education and transformative learning; activities and transformative learning.

Key words: transformative learning, adult learners, adult learning context, self-scrutiny and assumption.

Introduction

Transformational, or transformative, learning is an adult learning theory purported by Mezirow in the late 1970s and revised over 30 years. Central to the theory is the argument that adults experience a catalyst that causes them to question their worldview, the disorienting dilemma, which leads to a fundamental change in the way that they view the world. This frame of reference, or schema, is an important part of transformative learning theory as it is the main unit of change. Additionally, the learner engages in critical reflection or critical self-reflection, which entails examining the influences around oneself that contribute to a worldview change or examining those influences as they apply to oneself and one's worldview, respectively (Kitchenham, 2012).

The Transformational Learning Theory originally developed by Jack Mezirow is described as being "constructivist, an orientation which holds that the way learners interpret and reinterpret their sense experience is, central to making meaning and hence learning" (Mezirow, 1997). The theory has two basic kinds of learning: instrumental and communicative learning. Instrumental learning focuses on learning through task-oriented problem solving and determination of cause and effect relationships. Communicative learning involves how individuals communicate their feelings, needs and desires (Transformative Learning, 2021)

Meaning structures (perspectives and schemes) are a major component of the theory. Meaning perspectives are defined as "broad sets of predispositions resulting from psychocultural assumptions which determine the horizons of our expectations" (Mezirow, 1991). They are divided into 3 sets of codes: sociolinguistic codes, psychological codes, and epistemic codes. A meaning scheme is "the constellation of concept, belief, judgment, and feelings, which shapes a particular interpretation" (Mezirow, 2021). In order to give an overview of the transformative learning theory the following discussion was cited exactly from transformative learning (Transformative Learning, 2021). The Transformative Learning Theory was first articulated by Jack Mezirow of Columbia University after researching factors related to the success, or lack of, of womens' reentry

to community college programs in the 1970's, with the resulting conclusion that a key factor was perspective transformation. He went on to describe a 10-phase transformation process, which emerged as common to many of the women who successfully re-entered community college.

Phases of transformative learning

Mezirow (2021) argued that transformations often follow some variation of the following phases of meaning becoming clarified:

- (1) A disorienting dilemma
- (2) A self-examination with feelings of guilt or shame
- (3) A critical assessment of epistemic, sociocultural, or psychic assumptions
- (4) Recognition that one's discontent and the process of transformation are shared and that others have negotiated a similar change
 - (5) Exploration of options for new roles, relationships, and actions
 - (6) Planning a course of action
 - (7) Acquisition of knowledge and skills for implementing one's plan
 - (8) Provision trying of new roles
 - (9) Building of competence and self-confidence in new roles and relationships
- (10) A reintegration into one's life on the basis of conditions dictated by one's perspective.

The first phase was a disorienting dilemma. This dilemma represents the first of three key themes of Mezirow's TLT, experience – Doug had an experience, which did not fit with his pre-existing meaning structure, causing a disorienting dilemma. As long as our experiences fit, or can be fit, into our existing meaning structures we tend to not engage in transformative learning. These dilemmas can be epochal (all at once) such as Doug's "Ah-ha, or lights-on experience", or incremental, that is, a gradual recognition over time of a disconnect between our meaning structure and our environment.

The next two phases are important aspects of the second of the theory's themes – critical reflection. After experiencing a disorienting dilemma:

- (1) A self-examination with feelings of guilt or shame;
- (2) A critical assessment of epistemic, sociocultural, or psychic assumptions;
- (3) Doug experienced this discomfort with his epistemology and reviewed it's validity given his experience on the hike.

The next phase represents the third of the theory's themes, rational discourse. Exploring with others the newly discovered "misfit" between your premises and your environment. Specifically:

- (1) Recognition that one's discontent and the process of transformation are shared and that others have negotiated a similar change;
 - (2) Exploration of options for new roles, relationships, and actions;
- (3) Doug's discussions with his group allowed him to explore the "misfit" how competition was not always the best approach to performance situations and explored other potential roles or approaches.

Planning a course of action, acquisition of knowledge and skills for implementing one's plan, provision trying of new roles, building of competence self-confidence in new roles and relationships, a reintegration into one's life on the basis of conditions dictated by one's perspective – these phases of the TLT process were evident in Doug's learning. As he clearly developed a plan for implementing a course of action by staying with the slower members of the group. He acquired knowledge and skills for his plan through the on-going discussions with his group on how to respectfully ascertain other group

members needs, and he would try out these new roles in different ways beside just walking with slower group members. He began offering help on how to pack tents, load backpacks for better weight distribution, etc. He gradually gained confidence in his ability to respectfully assist others and include them. He had his wrist slapped a few times for being overbearing and not letting people do things on their own, but he gradually, both over the course of the hike and throughout his final university year, began to find a balance between competitiveness and patronizing others (Transformative Learning, 2021).

Santalucia and Johnson (2010) provided point of views of other scholar of transformative learning ,they started by how the theory began they said Jack Mezirow introduced the concept of transformative learning in a study based on 83 women returning to college in 12 different reentry programs (Mezirow, 1997). He initially described a process of personal perspective transformation that included 10 phases. Since that time, the concept of transformative learning has been a topic of continued theory development and research within the area of adult learning and education. Over the past 2 decades, transformative learning theory has developed "into a comprehensive and complex description of how learners construe, validate, and reformulate the meaning of their experience" (Cranton, 1994, p. 22). Although Mezirow is considered to be the "father" of transformative learning theory, other theorists with thoughts regarding transformative learning have emerged as well. Transformative learning is considered to be a theory in progress and a subset of adult learning (Cranton, 1994). There are many theories, patterns, and classification systems found in the literature for adult learning. Adult learners are frequently described as self-directed and voluntary learners (Cranton, 1994). Following his exploration of the literature related to self-direction Candy (1991) developed a framework that includes four facets of self-direction: learner control (organizing and managing learning in formal education settings), autonomy (personal characteristics of self-directed learners), self-management (willingness and ability to conduct one's own education), and autodidaxy (pursuit of learning in the natural setting). Many have asserted that adult learning should be practical or experiential in nature, based on the assumption that adult learners have practical problems to solve, such as applying their learning to jobs or new career tracks. Knowles (1980) emphasized the importance of adult learners' life experiences and knowledge in learning. Humanistic learning theories view adult education as collaborative and participatory. According to constructivist learning theories, learners share their experiences and resources with each other to create new knowledge. Transformative learning theory is largely based on constructivist assumptions that meaning is seen to exist within one's self and not in external forms (Cranton, 1994). Constructivism asserts that learning is contextual; that we do not learn isolated facts and theories in an abstract, ethereal land of the mind separate from the rest of our lives. Rather, we learn in relationship to what else we know, what we believe, our prejudices, and our fears. On reflection, it becomes clear that this point is actually a corollary of the idea that learning is active and social. We cannot divorce our learning from our lives (Hein, 1991). We develop or construct personal meaning from our experiences and validate it through interaction and communication with others (Cranton, 1994). All of these tenets of adult learning may be viewed as inherent in the transformative learning experience. Learning is voluntary in that the student must be willing to engage in critical self-reflection. Students must also be self-directed in order to take the steps to examine their own beliefs, assumptions, and perspectives, as well as to actively participate in discussion related to self-examination. Transformative learning may also incorporate sharing experiences with others via discourse, which Mezirow (2021) saw as a necessary component of

transformative learning. Over the past decade, interest in the practice of transformative learning has been growing in the fields of adult and higher education. According to Mezirow, the goal of adult education and transformative learning is "to help adult learners become more critically reflective, participate more fully and freely in rational discourse and action, and advance developmentally by moving toward meaning perspectives that are more inclusive, discriminating, permeable, and integrative of experience" (1997: 5-12). Transformative learning has become the dominant teaching paradigm discussed within the field of adult education and has become a standard of practice in a variety of disciplines and educational settings, including higher education, professional education, organizational development, international education, and community education (Taylor, 2009) in (Santalucia and Johnson, 2010: 1-8).

The importance of Mezirow's theory to academia

Christie et al. (2015) discussed the importance of mezirow's theory to academia they stated that the importance of this theory can be gauged by the number of masters and doctoral students who used it as a basis for their dissertations in the two decades. At least thirty-nine dissertations were written in North America alone. In 1997 Edward Taylor analysed Putting transformative learning theory into practice 13 these dissertations in a critical review submitted to the Adult Education Quarterly (hereafter AEQ). His article was called 'Building upon the theoretical debate: A critical review of the empirical studies of Mezirow's transformative learning theory' (Taylor, 1997). He concluded that the studies showed that the influence of context in transformative learning has to be better understood and accounted for, that critical reflection is important but that other ways of knowing must also be included, and that diversity in terms of class, ethnicity, gender, and sexual orientation has to be addressed. His reference to a debate refers to a series of articles in the AEQ in which Mezirow was challenged and responded to criticisms of his theory. As early as 1989, in the Forum section of AEQ, Collard and Law argued that he failed to emphasize the importance of collective social action as a goal (Collard & Law, 1989). Christie, et all, 2015 added that Mezirow responded, in the same year, by pointing out that 'There are significant mediating factors which impede taking collective social action because of a transformed viewpoint' (Mezirow, 1997). He explained the factors and defended the theory by arguing that both learning transformations and social action can take several forms and categorizing them is difficult. A few years later Clark and Wilson also submitted an article to AEQ entitled 'Context and rationality in Mezirow's theory of transformational learning' (Clark & Wilson, 1991). They argued that a major flaw in Mezirow's theory was that it fails to account for context. They saw the need for 'a contextualized view of rationality which maintains the essential link between meaning and experience' (Christie et al., 2015: 9-30).

Material and Methods

Western Governors University (WGU, 2020) provided some guaidance as to how to put transformative theory in use they suggested that as an educator it is important to help students learn using different kinds of learning strategies. The transformative learning theory can be especially important for older students to be able to grasp new ideas and concepts. There are many ways that educators can introduce this kind of learning into their classroom, including:

(1) Give students chances to learn about new perspectives. Teachers can provide an action even or disorienting dilemma inside their classroom. A picture, story, demonstration, or guest that does not quite meet what they have understood can help do

this. For example, students can learn about different political parties by actually meeting political candidates. They may have certain beliefs about government, but meeting a candidate who is kind and passionate about different viewpoints could be an action event for them. Similarly, teachers can introduce diverse authors and literature into the classroom, helping students see things from a perspective that is not like their own.

- (2) Help students identify and question their assumptions. In the classroom, it's important for students to critically analyze their assumptions. Teachers can model this behavior by sharing stories of how their own understanding and perspectives have shifted, how they have been able to analyze their own beliefs, and more. Teachers can give journal questions that help students by giving questions that they can ask about their own assumptions, give opportunities for students to share, and provide writing and reflective time for students to analyze.
- (3) Create opportunities for critical discourse. In a classroom that is focused on transformative learning, there must be opportunity for critical discussions. Teachers can help students have these critical discussions by providing space for conversation, helping students create pro and con lists of literature or articles, giving students opportunity for debate, or requiring students to prepare both sides of a debate to understand how there are multiple perspectives always at play. Additionally, small group discussions and activities can help students with this critical understanding. This kind of classroom work can help students really embrace other thoughts and experiences different from their own (WGU, 2020).

Transformative learning and education

Mezirow discussed the idea of Education for Transformative Learning he argued that adult educators need to understand that transformative learning can take several forms involving either objective or subjective reframing. Transformative learning is rooted in the way human beings communicate and is a common learning experience not exclusively concerned with significant personal transformations (Mezirow, 1997: 5-12). Cho and Gohnson (2020: 832-833), in their qualitative study investigates the transformative learning of preservice teachers vis-à-vis reflective practice in field experience with emergent bilingual (EB) students. Teacher candidates in an elementary education program in the Midwestern United States worked with EB students and their teachers in a Spanish-English dual language school as a part of a TESOL methods course requirement. Using qualitative research data, such as reflections, language autobiographies, and focus group interviews, the study explores whether and in what ways preservice teachers experienced transformative learning in an unfamiliar educational environment. The findings reveal how teacher candidates underwent transformative learning in a dual language setting that caused them to initially experience discomfort and anxiety while working with EB students and their teachers. The importance of context as well as relationships with others in transformative learning is reaffirmed in the study. The researchers alert teacher education programs to provide preservice teachers with field experience in an unfamiliar context where they can experience transformative learning (Cho and Gohnson, 2020: 819). Mezirow thought that to facilitate transformative learning, educators must help learners become aware and critical of their own and others' assumptions. Learners need practice in recognizing frames of reference and using their imaginations to redefine problems from a different perspective. Finally, learners need to be assisted to participate effectively in discourse. Discourse is necessary to validate what and how one understands, or to arrive at a best judgment regarding a belief. In this sense, learning is a social process, and discourse becomes central to making meaning (Mezirow, 1997: 5-12). Keeling (2006) suggested

that both the process and the fact of transformative learning can, and should sometimes be unsettling, confusing, and disorienting. Challenges to points of view and personal beliefs or attitudes have not just intellectual, but also emotional, registers (Keeling, 2009). Mezirow further explained Effective discourse depends on how well the educator can create a situation in which those participating have full information; are free from coercion; have equal opportunity to assume the various roles of discourse (to advance beliefs, challenge, defend, explain, assess evidence, and judge arguments); become critically reflective of assumptions; are empathic and open to other perspectives; are willing to listen and to search for common ground or a synthesis of different points of view; and can make a tentative best judgment to guide action. These ideal conditions of discourse are also ideal conditions of adult learning and of education (Mezirow, 1997).

Results

Schnitzler (2020) work elaborates on a number of key success factors of transformative learning (TL) theory as well as provides arguments that validate them. The paper at hands lines out how transformative learning can improve teams in start-ups and NGOs to the direction of education for sustainable development (ESD). Moreover, social structures and belief systems can influence learning in a way that learners make transformation of their experiences in various means. It exemplifies how Mezirow's theory can be put into practice and includes results from collaborative and social learning, personal transformation, team spirit as well as learning environments. The case studies make use of new skills and values via guided interviews. Data from 42 qualitative interviews are analysed and used to argument that transformative learning can be practiced, with success factors, in start-ups and NGOs (Schnitzler, 2020).

Anand et al. (2020) provides a description of recent transformative learning applications in four broad areas – health care study abroad, community, and the workplace. The applications were selected from a literature review of English language articles published in peer-reviewed journals from 2010 to 2020. To describe the applications in each of the four broad areas, the paper focuses on the rationale for the studies, their settings, their context, the reported transformation or outcome as well as the impediments and facilitating factors for the transformation. The paper also includes an overview of research designs and instruments that can be generally used to study applications of transformative learning (Anand et al., 2020).

According to Eschenbacher (2020) transformative learning is 'an approach to teaching based on promoting change, where educators challenge learners to critically question and assess the integrity of their deeply held assumptions about how they relate to the world around them'. While it seems to be clear what is subject to change (assumptions), apparently it is less obvious how we can (critically) reflect on assumptions, especially since most of them operate outside of our awareness. The question that follows is: How can we bring these hidden assumptions into our awareness, so that it can be subject to change and transformation.

Therefore, the purpose of this paper is threefold:

- (1) have a more nuanced understanding of how we can help adult learners in practice to explore their 'assumptive clusters';
- (2) better understand what helps or prevents learners from transforming their existing assumptions and therefore fosters or inhibits processes of transformation;
- (3) provide some concrete tools, that practitioners can use to enhance their (reflective) practice, teaching transformatively (Eschenbacher, 2020).

Pertel et al. (2020) reported in their study that Transformative learning harnesses reflection to create deep change in adult learners. These changes can be embodied in our neurobiological and cardiovascular systems. These physiological embodiments of transformative learning require health of body and mind. Contemplative practices including embodied reflective practices are technologies that can support the reintegration of body, brain, and mind, therefore supporting transformative learning and deep sustainable change (Pertel et al., 2020).

In their exploratory study Pardes (2018) aimed to describe the impact of the 'Science in Family project', as a transformative learning model for science teachers trying to improve student's attitudes toward STEM subjects. This study took place in a public elementary school in Monterrey, Mexico, which has been developing this project for more than thirteen years with students from 4th, 5th and 6th grade. We used participant observation and interviews with four families whose children are students of this elementary school, and with one family whose sons were students of this school some years ago. Results showed that there is a relationship between positive attitudes towards science in students who were exposed to transformative learning models of teaching. Two of the participants took steps to follow science related careers. This study helps to illuminate the extent to which teacher education models influence students' attitudes and how positive attitudes to science are influenced by the use of learning by doing projects (Pardes, 2018).

Hoggan (2016) depicts the literature on transformative learning theory in two ways. First, it conveys an historical evolution of the theory that has taken place over the past four decades. Second, it reviews the research literature on transformative learning within the field of adult education over the past 12 years in terms of its portrayal and description of learning outcomes. Based on these depictions, this article offers a reconceptualisation of transformative learning as a metatheory under which specific theories aggregate. It provides a new definition of transformative learning that is capable of encompassing the wide variety of learning outcomes conveyed in the research literature, as well as concepts to serve as criteria for learning outcomes to be considered transformative. Lastly, this article offers a typology for future scholars to use in articulating outcomes of transformative learning (Hoggan, 2016).

The above studies showed that the transformation process helps teachers understand their cultural position and analyze the reason of why they might find students' behavior within the curriculum implementation stages. Accordingly, teachers should change to meet progressive change with their students' needs and societal requirements. The teachers' transformation leads to more democratic classrooms' environments and communal engagement, as well. With a better understanding of themselves, teachers begin better understanding their students' needs and curriculum goals for more community improvement (Zaky and Szameitat, 2019).

Activities and transformative learning

In their study Zaky and Szameitat (2019), mentioned that Brookfield (1995) proposed that transformation is the progressive evolution of learners' understanding to meet the curriculum goals. It is a process of creating a significant change with one's belief set (Valenzuela, 2002). Transformation is a process in which teachers ought to think critically and challenge the ideas of how power and control are constructed within the curriculum implementation (Brookfield, 1995). Educators could successfully provide their students with the tools to evaluate their premises and formulate ways for more academic improvements. Consequently, educators and students could experience learning transformation. To this end, educators could enhance their students' growth mindsets for

more learning progression (Zaky and Szameitat, 2019). Traditionally, it has been supposed that transfer of knowledge from one situation to another is enhanced when knowledge is decontextualised. If knowledge is abstract and general (and stored appropriately within particular cognitive structures or schemata), it becomes readily applicable across many situations (James, 1997).

Mezirow (2000) proposed four main stages for the process of transformation: First, experiencing; learners critically self- examine the assumptions and beliefs that have structured how experiences have been interpreted. Second, Critical Reflection; it is based on the following question: Where do our meaning schemes and perspectives come from? Also, how did I come up with my belief system? Third, Reflective Discourse; it is a conscious effort to find an agreement to construct a new understanding of the actual life and learning context. Fourth, action; it is the delayed, immediate, or reaffirmation of an existing pattern of knowledge (Zaky and Szameitat, 2019).

James (1997) believed that transfer is acknowledged to be a particularly hazardous process. Lave (1988) argues that cognitive theories of transfer, based on laboratory experiments and divorcing cognition from the social world, fail to account for the well-known experiences of teachers at many levels of education that what is apparently understood by students in one context seems to be unavailable for problem-solving in other circumstances (James,1997).

Transformative Learning involves a profound shift with the personal premises that could be occurred during the field experience. Infield Learning experience could lead students to have a shift with their consciousness that dramatically and irreversibly alter their way of perceiving the world around (Mezirow, 2021). Through the various field activities, learners attempt to understand themselves and their relationship with their community, through which their desire could be constructed towards a more societal engagement. Thence, learners increase their sense of community (Zaky and Szameitat, 2019).

James ,1997, elaborated that brown et al (1989), drawing on Lave's work, describe the importance of 'cognitive apprenticeship' in school learning, that is, the use of embedded, clearly contextualised activities and collaborative learning to facilitate the formation of generalisations and the processes of recall and transfer. Similarly, Billett 1994, argues the case for a sociocultural perspective on 'authentic learning experiences' that "drive the learner into activities that are socioculturally meaningful, generative of proceduralisation, and indexed richly to secure recall and application". Such learning experiences also need to engage 'higher order cognitive procedures' if 'adaptability' is to be realised (James, 1997).

Spannring and Grusovnik,2019 found that a central concept in Mezirow later work are the habits of mind, that is, webs of assumptions, evaluations and expectations, which filter the way we see the world. Learning takes place when a habit of mind is challenged through a dramatic event or an incremental process. It involves 'becoming critically aware of one's own tacit assumptions and expectations and those of others and assessing their relevance for making an interpretation. Transformative learning is fostered by dialogue and aims 'to gain greater control over our lives as socially responsible, clear-thinking decision makers' and democratic citizens (Spannring and Grusovnik, 2019: 1190).

When referring to transformation, Mezirow (1997, 2021) primarily meant adult learners' adoption of a new frame of reference, 'a perspective on a certain disorienting event' that transformed something in their life. Mezirow (1997, 2021) later complemented his theory by including emotions and social relationships in transformative processes. Taylor (2009) stated that it is important to process feelings when fostering transformative

learning because doing so increases the power of critical reflection. For instance, for teacher educators willing to foster transformative learning, this would require an active dialogue with their students about their feelings (Maijala, 2021). Gravett (2004) cited that Apps (1994) contends that transformation cannot be mandated as it involves much more than mere change. Transforming existing ways of thinking and doing requires people to be convinced that there is, indeed, a need for the transformation. Transformation further involves some unlearning, which implies that old knowledge must be examined in the light of the present situation or demands, and that this examination should involve both analytical reasoning and emotion (Gravett, 2004).

Conclusion

The theory of transformative learning was initially used mainly to analyze holistic adult learning processes. Transformative Learning involves a structural shift in the basic facts, ideas, emotions, and actions. It is a shift that alters the way learners can receive the world around them. Within the Transformative Learning, learners reflect on their prior knowledge to determine what they already have justified with their current situations and conditions. The process of using the prior interpretation to construct a new interpretation of one's experience to guide future action is the transition of a new vision. Learning from experience is the impetus of the transformational learning process. Learners bring their cultural and historical selves to all learning experiences, which directs the learning process based on the pillar of Self-Directed Learning. Infield Learning experiences could provide learners with the tools to discover themselves and their communities in a way that enhances their Self-Directed Learning.

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