

CRITICAL THINKING AND TRANSFORMATIVE LEARNING

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Abstract

The traditional theories behaviorism, cognitivism, constructivism and connectivism are regarded as essential theories of learning. However, transformational learning theory works with critical thinking in adult learning. This process is based on their experience and it is followed by the steps of thinking and transformation process in perspective in ten phases. In addition, for critical thinking, developing profound understandings regarding knowledge and skills in a certain domain is of high importance. Critical thinking, like transformative learning, requires continuous use or internalization of them rather than rote learning and retention of information. However, critical thinking is the mandatory skill for this transformative learning and change. This study aims to present critical thinking and transformative learning in a comparative way to analyse the relationship between them.

Key words: adult learning, critical thinking, transformative learning

1. Introduction

As far as learning is concerned, people generally associate it with formal education at schools, colleges and universities. These are the formal learning settings where people should get a good education. They agree that education may maximise the existing potential and capacity to find better and more satisfying jobs, earning more with the chosen career. However, lifelong learning covers all life learning from cradle to death. In fact, schooling is only one of many diverse learning ways as there are many other opportunities to improve knowledge and acquire the necessary skills to be used throughout life. In fact, lifelong learners are motivated to learn and develop because they want to learn and develop. It means it is a deliberate and voluntary

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act of individuals. People voluntarily develop and learn because lifelong learning can enhance their understanding of the world around them, provide them with more and better opportunities to improve their quality standards of life. Finally, it serves to personal and professional development. Adults learn best when learning is focused on adult students, which is called andragogy, the process of helping adults learn. Malcolm Shepherd Knowles (1913–1997), an American educator, is well-known for the term Andragogy, which means adult education. Knowles states that andragogy is the art and science of adult learning. Therefore, andragogy does not refer to any certain specific form of learning or education. It refers to any form of adult learning (Kearsley, 2010). Andragogy and pedagogy are different in that adults learn best when they understand why something is important and meaningful for them. They have to feel relaxed and free to learn in their own way. Furthermore, learning by doing or experiential learning is preferred by adults. Learning time and place is determined by themselves. These factors and the processes in adult learning are motivating and encouraging for them.

A learning theory generally defines and explains how an individual acquires, retains, and recalls knowledge when needed with the help of some general principles. The learning theories are classified into two main categories: traditional theories and the theory of the digital age. Traditional theories consist of behaviourist, cognitivist and constructivist theories. According to behaviourist theories, new behaviours are learnt or changes in behaviours occur by associating stimuli and responses in the form of habit formation. According to the cognitive approach, information that is processed in the mind or cognition helps to understand and remember what is learnt. For the constructivists, an individual constructs his or her own knowledge about the world around her or him depending on his or her own experiences or foreknowledge. However, connectivism, promoted by Stephen Downes (1959-) and George Siemens (1970-), is claimed to be a learning theory for the 21st century as the digital age. The theory explains complex learning processes in the rapidly changing social digital world where we now live. In theory, learning is explained as the connections within networks in our brains.

The document entitled Council Conclusions by EUR-Lex (30 May 2016) stresses on developing media literacy and critical thinking by making use of educational settings and training. The document also calls the EU member states to pay much attention to creating and developing media literacy and critical thinking or reflection in education and training at all levels. The same document mentions The Paris Declaration (17 March 2015) which emphasises that improving and enhancing critical thinking and judgement skills of individuals is of high importance. The challenge is whether the education settings in the member country envisage

focusing on the critical thinking skills or not. Since critical thinking and transformational learning are not independent theories and they are interrelated, transformative learning is mentioned in relation with critical thinking. This is the main objective of education systems, that is, transforming individuals through education. This requires transforming existing approaches, disciplines and settings of education so that they can encourage and promote the individuals to have autonomy of identity with the help of critical thinking and transformation in their own perspectives. Recently, the role of critical thinking or reflection and transformative learning is gaining more attention in educational settings by educators and policy makers in terms of educational reforms and new curriculum development process. The current debates are related to the importance of educating more competent human resources and professionals, and how to equip them with better skills in critical thinking and independent judgements.

2. Transformative Learning Theory

The classification of the learning theories as behaviourist, cognitivist and constructivist theories does not cover the transformational learning theory as it is generally regarded as the learning theory for adult learners. Mezirow focused on sociology and adult education. He formed his transformative learning theory in the 1970's. The theory has later evolved into a detailed explanation about understanding, validating and reforming the meaning of what they experience (Cranton, 1994, p. 22). His main interest was in adults and he formed his theory of transformative learning by applying it to some adult women who were in their postsecondary studies. It was a qualitative approach to adult education and he tried to form his theory based on grounded theory. He wanted to analyse the factors that have impact on the progress of adults. In this way, he wanted to evaluate and improve the quality of his own study program. His findings showed that the adults in the study group experienced remarkable transformations in their perspectives.

Mezirow (2006) founded the steps of thinking and model of perspective transformation process in ten phases:

- a disorienting dilemma;
- a self-examination with feelings of guilt or shame;
- a critical assessment of epistemic, sociocultural, or psychic assumptions;
- recognition that one's discontent and the process of transformation are shared and that

others have negotiated a similar change;

- exploration of options for new roles, relationships, and actions;
- planning a course of action;
- acquisition of knowledge and skills for implementing one's plan;
- provision trying of new roles;
- building of competence and self-confidence in new roles and relationships;
- a reintegration into one's life on the basis of conditions dictated by one's perspective.

In fact, Mezirow's theory of transformative learning drew on the ideas and approaches put forward by Freire, Kuhn, and Habermas. These thinkers had already developed some issues and concepts that served Mezirow to ground his theory (Kitchenham, 2008). These contributions and concepts borrowed from previous thinkers were related to disorienting dilemmas, frames of reference, meaning perspectives and schemes, perspective transformation, habits of mind and critical self-reflection, which were used by Mezirow as reference terms. In essence, the transformative learning theory refers to a learning way based on a fundamental change in the reference frames of fixed assumptions and expectations in the minds of adults. This change in the reference frames leads to a fundamental transformation in the ideas and knowledge in the mind and practices in action. Thus, this change calls for more critical reflection and thinking in such a way as to form new frames of meaning (Mezirow, 1978; 1991; 2000; 2006). In this transformation process, meaning structures can change only with the help of critical thinking and reflection on the context, content, process or propositions. The critical thinking is to be directed to change the frames of reference so that there can be a change in ideas, attitudes, ethical beliefs and values, cultural meanings and understandings in addition to abstract and aesthetic values (Mezirow, 2006).

Transformative learning is closely related with constructivism too. Constructivism or constructivist approach is the learning and teaching approach adopted recently within the context of individualism and existentialism. In the constructivist approach, learners interpret and reinterpret their sense experience and they make their own meaning and learning (Mezirow, 1991). In fact, transformative learning can be regarded as a developmental and transformational process of individuals where the individuals' prior knowledge or schemes are used to interpret and construct a new meaning and understanding of a word or action. The process can also be directed to a future action too (Mezirow, 1996:162). Learning involves

change to meaning structures, which are perspectives and schemes formed on the basis of our prior knowledge. One of the main concepts of transformative learning is based on the meaning structures and schemes which cover more specific knowledge about beliefs and values of individuals depending on what they experience. In this context, learning can require refining or changing existing meaning schemes and forming new ones. This change or transformation in the existing schemes can lead to new perspectives.

Clark (1993) deals with transformative learning as a model to be used for transforming problematic frames of meaning or reference in such a way as to form new and more independent frames. In other words, the transformation or change in the perspective of the individual can have impact on the learners' future experiences. This perspective transformation is analysed and explained within adult education. Thus, the transformative learning can change the way of understanding adult learning and pedagogy for adults referred to as andragogy by Knowles (1998). For Mezirow (1991), meaning perspectives are related with existing tendencies in the areas of sociolinguistics, psychology and epistemology. Another contribution of transformative learning theory for Mezirow is the fact that it can serve us to produce and develop adults who are more autonomous and can think critically (1997). Being adults or citizens who can think or reflect autonomously is also a fundamental and inevitable element for having citizens who can act democratically (Mezirow, 2006). In this way, the adults make effort to design their own plans and implement them so that they can define their own perspectives as a part of being autonomous. In addition, this transformation determines their position and interaction with their physical and social environment.

Although transformational learning theory is accepted as an important theory for adult learning, it is not exempt from criticism. The critics of transformative learning theory generally state that transformative learning dwells solely on personal or individual transformation disregarding social interaction and transformation. In addition, they claim that transformative learning is too narrow and it is cognition centred. It makes use of only rational and critical thinking but neglects the role of feelings and emotions (Boyd & Myers, 1988; Cranton, 1994; Taylor, 1998). In addition, Boyd and Myers (1998) state that transformative learning fails to notice the transformation with the help of developing thoughts and actions as an unconscious process. According to these critics, Mezirow does not mention affective, learning domain where emotions, beliefs and bias play an important role. In fact, for them, reflecting or thinking alone does not function and cannot lead to transformative learning. For some other critics, while transformative learning theory stresses rationality too much, it neglects and never mentions the

role of emotional factors (Brooks, 1989), affective domain of learning (Scott, 1991; Clark, 1991; Sveinunggaard, 1993), the power of feelings (Hunter, 1980; Taylor, 1994), and aesthetic experience (Kokkos, 2010; Raikou, 2016). Another critical argument is that the ten phases founded in the transformational learning theory do not explain long-term learning or learning that reoccurs in cycles. According to Newman (2012), transformational learning cannot be taken as a holistic theory for all people (2012, p. 49). Although formal and institutional settings have attempted to introduce elements of transformational learning, transformative learning is mainly regarded as learning theory used in non-formal settings.

It is implicitly or explicitly expressed that the primary objective of education is to transform children and turn them into the references and frames of work desired by the political system. It is a fact that the formal and institutional settings starting from primary schools to universities develop curriculum in a way as to realize the transformation of students and societies. From another perspective, transformation can also be regarded as a motivating factor of innovation and inventions. One of the main challenges of Turkish higher education is the expectation of innovation through projects meant to lead to inventions and internationally visible patents. These expectations seem to be far from the principles of transformative learning. In fact, higher education is to be the main learning setting for the transformation in terms of ideas, attitudes, ethical beliefs and cultural and aesthetic values. In fact, higher education settings cannot be the only guilty institutions. Starting from families or parents, Turkish primary, secondary and high school education lacks the curricula that may help students to develop autonomy of individual identity, which will trigger critical thinking skills of the students for transformation and innovation throughout their development both physically and intellectually.

3. Critical Thinking

Although critical thinking has many different definitions, the broad definitions focus on purposeful thinking or reflective judgement. Critical thinking is regarded as high level of thinking or higher order thinking skills. These skills are required to analyse and manipulate information. Benjamin Bloom identifies a set of thinking skills under a thinking triangle (Bloom, 1956). However, while dealing with the transformational learning theory, it is necessary to mention the significant role of critical reflection or thinking in the transformative learning process. According to Ennis, critical thinking as a type of thinking became particularly noticeable in the years between 1970-1980 (2015, p. 32). Since then, it has been employed in both educational and everyday life while referring to reasonable and reflective thinking. Ennis

states that critical thinking has two essential parts. One of them is the ability to create skills in order to process information and form a system beliefs and values. The second ability is acquired in order to change and guide behaviour.

Critical thinking mainly stresses the important role of developing profound understanding and meaning related to knowledge and skills. In order to develop profound understanding and meaning, critical thinking or reflection requires using it continuously, incorporating and internalizing knowledge and skills instead of memorizing and remembering information. Critical thinking or reflection is regarded as a process of rational interpretation and evaluation of existing assumptions. Critical thinking serves to being aware of being wrong or improper as a result of thinking. Critical thinking also helps to test the validity and reliability of our beliefs in order to contribute to well informed and accurate judgment (Mezirow, 1995, p. 46). In education, students are supposed to have skills of self-discipline in thinking, drawing logical, objective and fair-minded conclusions. To this end, teachers also are supposed to have critical thinking skills. Thus, students or individuals can live and think logically. It is not proper to handle critical thinking and transformational learning as independent theories. Both critical thinking and transformational learning aim to transform the individuals' perspectives by changing their way of thinking instead of acquiring knowledge and store and keep it for retrieval when needed. In fact, both theories are consistent and they assert that learning can be encouraged when learners can reflect critically on a certain given problem.

4. The Place of Transformational Theory in Turkish Higher Education System

Although there have been diverse and disputable views on critical thinking and transformative learning theories, many studies demonstrate that critical reflection or thinking is essential for transformative learning. The studies indicate the fundamental significance of encouragement and motivation in order to develop critical reflection or thinking (Mezirow, 1991; Sokol & Cranton, 1998). Mezirow stresses that transformative learning should encourage adults to become independent learners who can think independently. Adults make independent meaning of their world without paying attention to what they intend to do, what they value, judge, believe and feel. These factors are imposed by their religious, cultural values in addition to their family beliefs, personalities and experiences of adults. This independent thinking process helps adults to have autonomous thinking skill, which is essential and crucial to take place and live in a democratic civil society and for making moral sound decisions (Mezirow, 1997, p. 7). In this context, we should also accept that the important objective of mainly higher education should be

to teach students how to be independent thinkers. In addition, transformative learning can help the teachers or educators who can develop a real relationship with their students. In this way, they can help them to make and feel themselves distinguished and unique in their own lives (Cranton, 2006, p. 8). Therefore, it is expected from the higher education systems that students must be encouraged to think critically in accord with their autonomous identity and change their established ways of thinking, making decisions or acting.

A transformative approach to learning necessitates critical reflection on the context, content, process and proposition in the educational curriculum. Critical reflection as a skill naturally has roots in the educational steps before the university. Even from the very beginning, children must be ready for critical reflection having an autonomous identity. The students should have disorienting experience or unsettled situation. In this case, they will be able to appraise again or evaluate their ways of knowing, thinking and understanding critically. Cranton (1994) states that differences in knowing and learning ways and being different and distinguished learners and diverse teachers will certainly have remarkable positive impact on transformative learning process. It is clear that in a learning environment where the teacher is the sole authority, students will not have the proper atmosphere or willingness to think critically and they will not have a chance to think on the traditional values and beliefs they already have. The primary aim of the educational institutions like universities must be to integrate students, as individuals and citizens, into the society and existing social and moral values. Thus, the educational system and the curriculum designed and developed should consider the learning theories above mentioned and encourage the citizens to have critical reflection to be critical citizens. For this, whether the citizens will have enough encouragement and flexible atmosphere for transformation is of high importance.

5. Conclusions

This approach encourages critical thinking for the transformation of individuals from both physical and intellectual perspectives. To this end, the education systems should adopt the approaches and theories so that they can contribute to their students with their analytical, critical and context-related skills. This way of learning should certainly develop at students the skills and capabilities of being transformative, innovative and creative. In addition, the education systems should help students to be more aware of their feelings and emotions. They are supposed to understand and evaluate themselves and the world where they live. For this purpose, the rules and norms applied in the learning environments and educational settings

should be determined and set in such a way as to encourage and motivate students to adopt and accept order, justice, democracy and civility. They should also collaborate in learning and help each other (Mezirow, 1997, p. 11). In this way, transformative learning can provide a route and encourage developing critical thinking skills, and thus, the ideal societies can have critical citizens if the process is well planned and desired.

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