

Transformational Learning in Teacher Context

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Abstract

In today's context, teachers not only teach, but also help to develop students to become useful citizens. The principles of transformational learning require teachers to change their beliefs, behaviours and emotions. At the end, teachers should be able to reflect on their experiences to help students holistically and thus this article will help to provide comprehensive overview of transformational learning among teachers. The scope of this review paper covers articles written between 2015 and 2020. Among them are peer coaching, implementation of adaptive change models (ACM), conflict, training, service learning pedagogy and approaches relating to culture. Previous studies have shown that transformational learning theory can enhance teacher effectiveness and bring about dissemination of changes. Therefore, there is a need to explore the relationship and the inconsistencies between Mezirow's transformational learning theory and that of teaching theories practised by teachers. It is noted that most studies show significant relationships between the two theories but some studies claim that they are not significant. It is hoped that this study will be of benefit to practicing teachers to develop balanced and harmonious people.

Keywords: Transformational Learning, Teacher, Context, Experiences, Theory

Introduction

The Malaysian National Philosophy of Education states that, "Education in Malaysia is an ongoing effort towards further developing the potential of the individual in a holistic and integrated manner so as to produce individuals who are intellectually, spiritually, emotionally and physically balanced and harmonious based on a firm belief in and devotion to God. Such an effort is designed to produce Malaysian citizens who are knowledgeable and competent, who possess high moral standards, and who are responsible and capable of achieving a high level of personal well-being as well as being able to contribute to the betterment of the family, the society and the nation at large." (Education Act, 1996). It is very clear from the above Philosophy of Education that education per se is a pertinent national issue. Thus, in order to develop "*the potential of an individual in a holistic and integrated manner*", it is important to

take into consideration the varying abilities among student population which include overcoming learning difficulties. Schools are important places to develop students holistically and thereafter they are accepted by the community. One of the ways to help students is through proactive teachers who practice, apply and integrate transformational learning principles.

Problem Statement

The concept of transformational learning was introduced by Jack Mezirow, professor of Adult Education at the College of Teachers, Columbia University, New York in 1978 (Mezirow, 2005). Mezirow (1981) had developed transformational learning that changes people's beliefs, attitudes and emotions. Transformation can occur only through the perspective of others with more critical consciousness (Mezirow, 1977). Transformative learning (Mezirow, 1996; Cranton, 1994) is a process of implementing change within a referral framework. Among them are the experiences, concepts, values, feelings and impressions that bring about changes in human life. Mezirow (1985) states that, educators have continuous but different goals. Among them are intellectual, cognitive, and social developments. All dimensions of human development are important for exploring experiences and realizing their potentials. This is because individuals can only be aware of their perceptions, meanings, behaviours and habits of seeing, thinking or acting (Mezirow, 1981). This situation is an act of reflection. According to Mezirow (1981), affective reflection is an individual's awareness of how he thinks, sees and acts. On the contrary, discriminative reflection refers to individuals assessing the effectiveness of perceptions, thoughts, actions and identifying causes. Once individuals have experienced the process of affective and discriminatory reflection, they will reflect on their tendencies to take appropriate action. Reflection of tendencies involves positive or negative perceptions, thoughts and actions.

Mezirow (1992) states that all transformational learning involves individuals who try to achieve life goals through critical reflection. He further states that, social behaviour is an integral part of the transformational learning process. Social actions may involve changes in production, organization, economy or culture. Schools are places for transformational learning for teachers. Therefore, teachers need to understand the process of transformational learning among students.

Significance

Mezirow (1978) argues that transformation in the perspective of meaning is triggered by a difficult life dilemma and henceforth the dilemma is solved by acquiring information and improving skills. Teachers who teach autistic students with experience life dilemmas before, during and after they involved in special education. This statement is supported by Amran et al (2019) which asserted that there are still many special education teachers who lack of knowledge and skills in teaching autistic students. Teachers who have experienced a dilemma need to transform themselves into meaningful perspectives by recognizing the reality, reviving, shaping and maintaining a way of seeing themselves and others.

Purpose

This study aims to explore how transformational learning influences teachers to change in a positive way to produce balanced and harmonious people.

Literature Review

In this section, the definition of transformative learning and past studies will be explained.

What is Transformative Learning?

Transformative learning is essential to transform the problematic individual into a better one. According to Mezirow (2003), transformative learning is learning that transforms problematic reference frames into fixed expectations (mindset, meaningful perspective) to be more inclusive, differentiated, open, flexible and emotionally adaptable.

“Transformative learning is learning that transforms problematic frames of reference - sets of fixed assumptions and expectations (habits of mind, meaning perspectives, mindsets) - to make them more inclusive, discriminating, open, reflective and emotionally able to change.”

Therefore, individuals need to believe in themselves before acting. The frame of reference is important for generating more accurate beliefs and opinions about actions (Mezirow, 1991). These include fixed interpersonal relationships, cultural tendencies, ideologies, schemes, stereotypes, work habits, ethics and values.

According to Mezirow (1981), women who pursue education create the following perspective changes: (1) unintentional dilemmas; (2) self-examination; (3) critical assessment of the responsibilities of internal roles and feelings of isolation from traditional social expectations; (4) related to self-examination (in relation to a person's dissatisfaction); (5) exploring other people's experiences or issues — recognizing one's shared concerns rather than personal matters; (6) building new roles and competencies; (7) planning the course of action; (8) acquire new knowledge and skills for new ways of acting; (9) temporary efforts to try new roles and evaluate feedback; and (10) reintegration into society based on the conditions set by the new perspective.

Dilemmas are one of the factors that determine individual transformation. Among these are the deaths and divorces experienced by individuals. Mezirow (1977) states that dilemma occurs in one's life. For example: loss of spouse or job, change of abode, graduation and behavioural changes. Subsequently, critical analysis has profound implications on the individual.

Compare and Contrast

In general, transformative learning is part and parcel of everyday life. However, transformative learning among teachers is questionable. Past studies suggest the need for implementing transformative learning such as peer coaching (Ghosh et al., 2019), implementation of adaptive change models (ACM) (Bowles and Scull, 2018), conflict (Konopasky and Reybold, 2015), training (Beltramo et al., 2020), service learning pedagogy (Young and Karme, 2015) and approaches to culture (DeCapua et al., 2018). However, researchers also find that transformative learning is limited or does not arise. This is because transformative learning depends on students' aspirations and identities (Atkinson, 2018). Studies by Spear and da Costa's (2018), show that there is no possibility of transformational change around gender norms in schooling.

Some researchers say that the Mezirow's transformative learning theory has a positive impact on individuals. The application of Transformative Learning Theory has been proven to be effective in increasing teacher effectiveness and changes spreading beyond the classroom and in others (Machin et al., 2020). This is supported by (Ningrum and Yani 2016), environmentally-based learning which influences good values and behaviours. Therefore, this study will focus on transformational and teacher learning relationships and how transformational learning helps teachers to become better at teaching and thus produce balanced and harmonious people.

Methodology

In this paper, the discussion on transformative learning and teacher learning have been reviewed and compared during the writing process. This paper aims to determine the different relationships between transformational and teacher learning based on different respondents' backgrounds. Therefore, the researcher has studied empirical research papers between 2015 and 2020. The articles are searched through the databases of Scopus, Elsevier and Google Scholar. In addition, the researcher has identified four exceptions to collect the appropriate papers for this study. Firstly, non-empirical papers such as theoretical papers have been excluded. Therefore, the researcher has included only empirical papers such as case studies, surveys and field studies that provide the results of the study. Secondly, the researcher has excluded papers that do not contain valid instrument information. This is because valid instrument information is important for the validity of the findings. Thirdly, the researcher has excluded parents as samples because the sample of parents differed widely in the research. Fourthly, the researcher has excluded irrelevant variables and has focused only on transformative and teacher learning.

Discussion

After reviewing the previous studies between 2015 and 2020, it has been found that there were several studies that examined the relationship between transformative learning and teachers.

Mezirow's Transformative Learning Theory

In the context of teaching and learning, teachers need to think critically before solving problems. Individual experiences, critical reflections and dialogue are elements of a transformational approach to individual learning (Mezirow, 1981). This is because individual changes are based on reflections and thus influence values, attitudes and behaviours. Table 1 shows the issues of Mezirow's transformation learning theory.

Issues in Articles on Mezirow's Transformative Learning Theory

Topic : Musings and Reflections on the Meaning, Context, and Process of Transformative Learning: A Dialogue Between John M. Dirkx and Jack Mezirow (Dirkx et al., 2006)

Description
This article is about a dialogue between John M. Dirkx and Jack Mezirow. According to Jack Mezirow, the experiences that individuals have had are meaningful. Experiences such as existing ways of thinking, beliefs or feelings provide a problematic structure of meaning. This is because what is known in the past is not appropriate to be true today. This experience drives change through emotional awareness and strong emotions. Among them, fear, sadness, loss of reaction and anger, joy, wonder and awe. These experiences

may encourage individuals to respond. In the long run, those experiences have created a feeling that the individual cannot return to his original state.
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This article helps teachers understand the transformative experience that is so important in everyday life. In reality, teachers can self-reflect to determine what they have implemented in the past, is correct or incorrect. Teacher-experience in teaching students has influenced change through self-awareness. This is because teachers often face challenges and thus some teachers may feel scared, sad, angry, stressed and not know how to react when dealing with students with learning disabilities in the classroom. These experiences motivate teachers to move on to find the right solution. As such, teacher-experience has helped teachers find new ways.

Topic : Transformative Education and Learning Management: Integrating Awareness in MBA Courses (Kuechler and Stedham, 2018)

Description

According to Kuechler and Stedham (2018), transformative learning theory focuses on individuals who have undergone learning to produce true change. Mezirow (2000) proposes that the transformative learning process involves four activities namely: (1) see deficiencies in one's perspective, (2) perspectives on issues and origins, (3) experiment with a new perspective, (4) integrating new perspectives into one's life and behaviour. This article presents teaching innovations, which are transformational learning created through the practice of awareness in MBA courses at a US university. Kuechler and Stedham (2018) suggest that students' awareness of their own and others' perspectives need to be enhanced to teach transformational learning in MBA courses. About 30% of the listed students show some exposure to awareness before taking the course.

The above description helps teachers to make the right changes through the four activities suggested by (Mezirow, 2000). In the beginning, teachers need to see their own shortcomings. Among these, teachers may lack knowledge, skills and ability to teach students with learning disabilities. Then, teachers need to look at their own backgrounds, thinking critically about what they have done in the past and what is not relevant to the current changes to adapt to the new perspective. For example, teachers need to try new pedagogy, conduct actions to be taken and discuss with experienced teachers in dealing with students with learning disabilities. Finally, teachers need to integrate new perspectives into their lives and maintain new behaviours. It is noted that teacher awareness is very important. Teacher awareness helps teachers evaluate themselves through a comparison between their past experiences and their current lives. Further, teachers need to learn to seek knowledge to change and adapt to new lives. Therefore, effective thinking practices will encourage the learning of teacher transformation.

Topic

Transformational Learning in the Ministry (Education) (Young, 2013)

Description

This article is about transformational learning in the ministry. According to Young (2013), the theory of transformative learning has drawn considerable attention. Mezirow (1991) has argued that individual cognitive experiences help transform perspectives and thus shape lasting change in an individual's life. He stressed the following 10 phases: (1) dilemma, (2) self-examination with fear, guilt, anger or shame, (3) critical evaluation of assumptions, (4) dissatisfaction and the transformation process are shared, (5) exploration
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of options for new roles, relationships and actions, (6) formulate action, (7) acquire the knowledge and skills to carry out the plan, (8) try a new role, (9) develop competencies and self-confidence in new roles and relationships; (10) reintegration into life based on a new set of perspectives.

This article can help teachers learn to accept challenges in teaching students with learning disabilities. Teachers need to be constantly searching for new information to solve problems. Among them, pedagogy, that is suitable for the student's level of mastery. Further, teachers who acquire knowledge and skills become experts for reference by other teachers.

Topic : Transformative Learning in First Year Australian Teacher Training Course (Lummis et al., 2019)

Description
This article reports on the experiences of teachers who began their education in a university located in Australia. A mixed method approach, namely online surveys and semi structured interviews, was used to collect data. The data indicated that the respondents experienced several phases of Mezirow’s transformative learning theory (TLT). The results show that teachers are passionate about their future careers but all teachers show a sense of burden in their studies. As a result, teachers have experienced a dilemma in the early stages. This study focuses on how teachers adapt and how their experiences relate to TLT. A total of 72 respondents were involved in the survey and 11 respondents participated in face-to-face interviews. The majority of respondents were women comprising 86%. Those aged 21 years and over made up 47.4%.

Lummis et al (2019) maps the interview questions to the TLT phase as follows:

Interview Questions	TLT phase
1. What is your motive for studying at a university?	Phase 5: Exploring of options for new roles, relationships, and actions
2. What is your opinion about your family members attending a university?	Phase 3: Critical assessment of psychological and social culture
3. How do their views shape you?	Phase 3: Critical assessment of psychological and social culture
4. What kind of vocation do you believe will be good for you?	Phase 3: Critical assessment of psychological and social culture
5. Where would you see yourself in 5 years time?	Phase 6: Plan the action
6. How confident are you in getting there?	Phase 3: Critical assessment of psychological and social culture
7. Are you open to alternative views?	Phase 5: Exploring options for new roles, relationships, and actions
8. Do you have any problems studying at university?	Phase 1: Depression/ dilemma
9. Can you tell me the problems?	Phase 1: Depression/ dilemma
10. Are you aware that other students are experiencing similar problems as you?	Phase 4: Recognition that one's dissatisfaction and the transformation process are shared

11. Do you have an action plan to solve this problem?	Phase 6: Plan the action
12. Do you have the skills to work out your solutions to your problems?	Phase 6: Plan the action

According to Lummis et al (2019), qualitative data shows that respondents provided reliable data about their experiences as they adapt to and their motives for studying at the University. In the early stages, respondents were very motivated but they felt dissatisfied and worried about the burden of academic work. This article is expected to help teachers who teach students with learning disabilities to experience workloads that are part of the transformational process. For example, teachers who are new to the field of education may be very motivated at the beginning. However, fear and dissatisfaction may arise when dealing with students with learning disabilities. The nature of the dilemma requires teachers to accept their existing beliefs about what they were doing in the past which could be incorrect. Therefore, teachers need to know how to change and adapt to new ways.

Behavioural Perspective or Thinking Perspective

According to Mezirow (2005), the thinking perspective about how individuals categorize experiences, beliefs, people, events and oneself. This behaviour involves rules, structures, codes, schemes, standards, values, character and personality thus stimulating thoughts, feelings and actions. Mezirow (2005) states that meaningful perspectives or thinking perspectives include social linguistics, ethics, moral values, ways of learning, religion, psychology, health and aesthetics. The five elements of the transformative learning process include: (1) critical reflection on resources, properties and consequences relevant to the assumption, (2) instrumental learning, determining what is true by using empirical research methods, (3) communicative learning, (4) taking action on new perspectives (making decisions, seeking new evidence and re-evaluating) and (5) disposal (to be more critical of assumptions).

Self-awareness

According to Dirkx et al (2006), Mezirow sees transformational learning as a rational process involving awareness, which is, (1) an alternative way of understanding that can provide new perspectives, (2) awareness of the source, nature and consequences of strong belief, (3) reflection critical of epistemic assumptions, (4) confirming new beliefs by empirical testing, can be accomplished by continuous assessment, (5) overcoming anxiety by taking action and (6) take reflective action on validated beliefs. The process improves the thinking and understanding of the individual. Transformative learning has an impact on teachers. These include critical thinking, decision making, communicating ideas and sharing knowledge among teachers. The teaching of innovation is disseminated to other teachers to improve the quality of teaching. Transformative learning leads to increased teacher-effectiveness and changes spreading outside the classroom and into others (Machin et al. 2020). Therefore, mass media such as Whatsapp, Telegram, Facebook and Youtube have become the fastest, most useful and effective channels for sharing teaching innovations with other teachers. Teachers can create awareness to make changes in their beliefs and behaviour patterns. For example, a teacher experiencing a dilemma needs to have the self-awareness to form a new approach to one's vocation.

According to Dirx et al (2006), learning is important beyond awareness by bringing it to consciousness. Further, transformational actions may be understood to continue the rational processes involved in critical reflection in changing the reference framework. The process they recommend enhances the individual's understanding of making the right decision. However, critical assessment leads to transformational learning. Transformative learning can create more meaningful learning and build development among teachers through self-awareness. According to Beltramo et al (2020), training and other practices are effective pedagogies for teachers to emulate useful practices. This is because training can facilitate transformational learning through critical pedagogy by visualizing a reaction to the dilemma. However, a study by Spear and da Costa (2018) found that training opportunities for critical pedagogy were lost. Researchers have stated that there is no possibility of transformational change around gender norms in schooling.

Furthermore, Burns (2015) states that teachers should use sustainable pedagogy in educating students. This is because sustainable pedagogy can bring about continuous transformational learning among teachers. Sustainable pedagogy is a tool for creating thematic, critical learning transformations that incorporate multiple perspectives (Burns, 2015). Clearly, critical and sustainable pedagogy can assist teachers in continuous transformative learning. As a consequence, proper sustainability can help teachers to solve student problems.

In line with this, teachers need to adopt a suitable approach based on culture, beliefs and social justice to create good transformational learning. Teachers need to be inspired to implement alternative pedagogy based on culture, educational beliefs and social justice. Understanding of culture assists teachers in transformational learning (DeCapua et al., 2018). Therefore, teachers need to implement alternative pedagogy that is critical and culturally based to achieve transformative learning.

Critical Reflections

Mezirow (1992), states that individuals can alter the structure of meaning through critical reflection. Cognitive development is fundamental to transformational learning (Mezirow, 2004). This is because critical reflection is fostered based on what has been learnt by applying perspective to individual life (Mezirow, 1981). Learning the concepts needs to be integrated with the emotional and aesthetic together with intellectual experiences.

Reflections from community and teacher relationships serve as tools for testing students' values and morals and shaping community culture (Young and Karme, 2015). The study of Young et al (2015), shows that service learning pedagogy improves ability of graduates in problem solving, value development, community engagement and thinking skills. However, Atkinson's (2018) study shows that transformation is limited and depends on students' aspirations and their identities. When he compared the experience of transforming unemployed migrants in Melbourne, Australia, he found that students faced cultural, social and functional challenges that hinder transformative learning.

From the above research, it can be concluded that critical reflection plays an important role for individuals to make correct decisions. This critical reflection requires the support of the community and teachers to be strong. However, individual aspirations are

more important. In fact, time, energy and a healthy environment are needed in the process of transformational learning. Reflections from community relationships especially parents and educators are more important because parents are the closest to students. Parents need to give teachers ideas to help develop personality of students and further develop their school organization.

Environment

According to Ningrum and Yani (2016), everyone lives in a natural environment and thus environmental ethics should be one of the teacher's competencies. For example, teachers instil values needed, shaping students' attitudes and behaviours. An empirical environment facilitates transformational learning (Ningrum and Yani, 2016).

Based on the results of this study, environment-based learning influences the values and behaviours of students. Therefore, teachers need to have the motivation and the perseverance to change student behaviour. For example, teachers use motivation to instill positive student behaviour. When a student engages in the positive behaviour that the teacher desires, the teacher should then use perseverance to maintain that positive behaviour. In addition, teachers need to be patient with their use of force and perseverance. Studies by Ningrum and Yani (2016) focused solely on fostering positive student behaviour. In fact, teachers also need to master how to reduce students' negative behaviour.

Transformational Learning Models

According to Lummis et al. (2019), the TLT process may take a long time. TLT has 10 phases namely, (1) dilemma that is upsetting; (2) self-examination with fear, anger, guilt or shame; (3) critical assessment of assumptions; (4) dissatisfaction with shared transformational processes; (5) exploring options for new roles, relationships and actions; (6) planning the action; (7) acquire the knowledge and skills to carry out individual plans; (8) try new roles; (9) building competency and self-confidence in new roles and relationships; (10) reintegration into individual life. However, in this review paper, only nine phases out of a total of 10 phases were investigated. In addition, it shows that some students are actively moving from the dilemma phase to a positive behavioural change.

However, Bowles and Scull (2018) state that transformative learning refers to the concept of change in order to achieve dynamic teaching and learning processes. The adaptive change model (ACM) developed by Bowles and Scull (2018) assist teachers in providing ways to control and monitor individual student progress. According to them, models determine ways to influence change, response, processes that facilitate change and learning. The results of the research by Bowles et al (2018) show that how adaptive change models assist teachers to bring about change more easily. Therefore, teachers can develop holistic students and effective models of change. In the final stages, teachers play an important role in helping students with learning disabilities.

Dialogue / Discourse Terms

According to Mezirow (2005), individuals need to have accurate information, free from coercion, open to alternative points of view, to think and feel, to understand, to realize the context of ideas, given same opportunities and then test the validity of the

discourse. Discourse refers to a dialogue that involves the assessment of beliefs, feelings and values. The discourse involves topics referred from the point of view as set in the framework. Skills, sensitivities and perspectives are relevant in critical discourse. Among them are having an open mind, learning to listen and finding common grounds. Emotional balance such as self-awareness, control, encouragement, perseverance, passion, self-motivation, empathy and social tendency are important assets for developing adults' ability to evaluate alternative beliefs and engage independently in critical discourse.

Mezirow (2005) states that critical reflection and self-critical reflection are focused in communicative learning, for example, evaluation of what has been provided to make credible work considerations. Individuals who experience hunger, desperation, homelessness, sickness and poverty cannot participate in the discourse. On the other hand, economic, social, psychological conditions and social justice are essential for effective critical discourse. Critical discourse is the synthesis of existing views and evidences. For example, critical discourse is implemented on the basis of information or current knowledge and a number of considerations which have a higher validity than others and then make a credible conclusion. Individuals act on new perspectives, evidences or validated arguments through critical discourse. Transformative learning involves a critical reflection of assumptions. Critical discourse is needed to test the validity of the planned framework for communicative learning. Critical reflection requires an understanding of properties and come out with methods, logic and justification. Transformative learning is a metacognitive introduction that involves the same understanding but, in addition, emphasizes the understanding of the source, structure, and history of the reference framework and its evaluation, relevance, suitability and consequences.

Studies by Konopasky and Reybold (2015) show that all participants use space and boundary metaphors to provide educational "access" to their students. Improvement to existing metaphors, create new metaphors, or old metaphors can be used in new situations. These studies have an impact on teachers by reviewing the experiences they have had to lead a new life. In the opinion of the researcher, space and boundaries are important to foster friendly communication between teachers and students. Therefore, the school needs to provide a special space for the school, the school administrators, teachers and students to meet and discuss in the school.

Peer - Age

The findings of Ghosh et al (2019) reveal that peers are transformational learning tools to support teachers when dealing with students who bully. According to Ghosh et al (2019) Peer training helps teachers formulate action plans to address bullying through teacher knowledge and perceptions. Based on this study, it can be concluded that peers can influence transformative learning of teachers. However, teachers need to be good at selecting peers who share similar traits to share ideas and solve student problems. In addition to peers, teachers need to constantly reflect, motivate themselves and find new sources of reference to address and overcome student problems. In this modern era, teachers need to use various methods such as acquiring the latest knowledge from the Internet, rather than focusing solely on peer support. In addition, the school authorities need to form a team that engages the school community to address issues of student discipline. This is because disciplinary issues are the responsibility of all in the school. In short, most researchers have come to the

same conclusion that transformational and teacher learning are important. However, some researchers have stated that there is no relationship or limited relationship between transformational learning and teachers. Table 1 shows a summary of the findings.

Table 1

Summary of Findings

No	Author	Objectives	Data	Findings
1	Ghosh et al (2019)	To explore how peer coaching motivates teachers for transformational learning	phenomenology	important
2	Bowles and Scull (2018)	(a) To identify placement of adaptive change model (ACM) (b) To explore how eight ACM factors provide templates for school intervention	Case studies	important
3	Konopasky and Reybold (2015)	To explore conflict and transformational learning	case studies, interviews with five female adult educators and women.	important
4	Burns (2015)	To explore how the whole self can be intentionally included for transformational learning	Case studies	important
5	DeCapua et al (2018)	To explore Nan's transformational journey during her undergraduate studies	Case studies	important
6	Spear and daCosta (2018)	To promote gender equality among the school community	document analysis, assessing teacher training components	Not important. No transformational learning exists
7	Machin et al (2020)	(a) To explore ways in which the teacher- education program has changed the teaching of 14 teacher participants (b) to investigate whether the change that took place was disseminated	Interview participants and manage information collected	important
8	Ningrum and Yani (2016)	To identify the potential of the environment to propose an environment-based learning design	Records are documented	important
9	Young and Karne (2015)	To provide insight into how teaching services help	Reflective case study and	important

		students and organizational learning	ethnographic approach	
10	Beltramo et al (2020)	To explore the potential of Boalian Theater and Freirean theater to facilitate learning among non-discriminative teacher educators	ethnography	important
11	Atkinson (2018)	To identify factors that enhance transformational learning among adults	interviews, observations and reflections.	Not important. Transformational learning is limited

Source: author

Conclusion

This review paper reveals the relationship trends among studies conducted between 2015 and 2020. It clearly shows that, the relationship between transformational learning and teacher alignment is important. However, some researchers say such relationship trend does not arise or is limited. Future studies are recommended to examine the dimensions of transformational learning specifically to improve findings. Apart from that, it is recommended to conduct future studies in different institutions to confirm the relationship between variables. From the findings, most of the studies have been carried out in the design of the case studies. Future studies may focus on other formats such as longitudinal design. Future researchers should conduct studies based on Mezirow's theory to confirm the importance of this theory in human resource development.

The findings show that transformative learning depends on the “Behavioural Perspective or Thinking Perspective, Self-awareness, Critical Reflections, Environment, Transformational Learning Models, Dialogue / Discourse Terms and Peer – age”. Transformative learning needs to include the elements that have been mentioned. Special education teachers need to use this transformative learning model as a guide for managing and teaching autistic students. Transformative learning is beneficial for teachers and autistic students. Teachers with special competency in their careers will be able to help autistic students in their later life as useful human resource.

Therefore, it is suggested that programmes that encourage transformational learning among teachers should be organized. Through such programmes teachers need to analyse, carry out self-reflection to explore knowledge, find learning resources, compare learning resources with existing knowledge, develop knowledge and evaluate their own thinking through dialogue. In the final stages, teachers are able to adjust themselves to the new life as they understand the up-to-date changes in depth.

It is hoped that the findings of this study will contribute to transformational learning that can be used by all parties.

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