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Transformative Learning Theory through the Incorporation of Edublogs: The Experiences of Prospective Teachers

Edublogların Katılımıyla Dönüştürücü Öğrenme Kuramı: Öğretmen Adaylarının Deneyimleri

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Abstract

This article investigates the effects of teacher education, conducted through transformative learning theory, on prospective teachers' professional beliefs. This study is also aimed at identifying the transformations in their perspectives regarding the teaching profession. The participant prospective teachers took part in various projects using transformative pedagogy supported by Edublogs. The courses were implemented in both face-to-face activities in classroom settings and the Edublogs environment as a form of blended learning. A blended method was preferred, in which 38 prospective teachers participated. The findings obtained after the 12-week application indicated that transformative activities had a positive effect on the prospective teachers' professional beliefs. Consequently, a positive transformation in their professional perspectives was observed.

Keywords: *Blog; content management systems (CMS); professional belief; teacher education*

Öz

Bu makale, dönüştürücü öğrenme kuramı ile yürütülen öğretmen eğitiminin öğretmen adaylarının mesleki inançları üzerindeki etkilerini incelemektedir. Bu çalışma aynı zamanda öğretmenlik mesleğine yönelik bakış açılarındaki dönüşümleri belirlemeyi de amaçlamaktadır. Katılımcı öğretmen adayları, Edublogs tarafından

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desteklenen dönüştürücü pedagojiyi kullanarak çeşitli projelerde yer aldı. Kurslar, hem sınıf ortamında yüz yüze etkinliklerde hem de Edublogs ortamında harmanlanmış bir öğrenme şekli olarak uygulanmıştır. 38 öğretmen adayının katıldığı karma bir yöntem tercih edilmiştir. 12 haftalık başvuru sonrasında elde edilen bulgular dönüştürücü faaliyetlerin öğretmen adaylarının mesleki inançları üzerinde olumlu bir etkisi olduğunu göstermiştir. Sonuç olarak, mesleki bakış açılarında olumlu bir dönüşüm gözlemlenmiştir.

Anahtar sözcükler: Blog; içerik yönetim sistemleri (CMS); profesyonel inanç; öğretmen eğitimi

Introduction

As observed in every field in well-informed societies, there are various needs in education and researchers are involved in new studies with the aim of responding to such needs. Today, as the traditional teaching approaches are insufficient, it is strongly emphasized that learners should be responsible for their own leaning processes and the teachers should guide them (Baeten, Struyven & Dochy, 2013). Hammond (2006), in this respect, draws attention to the teachers' abilities. Özçınar (2015), on the other hand, refers to raising the quality of teacher education in order to improve teacher development. The ongoing developments in education technology and shifts in higher education have witnessed respectable changes over the decade. Prospective teachers are expected to be equipped with applicable as well as practical teaching methods which are believed to be more influential than systematic classroom learning. Today, it is broadly known that the number of educational institutions that attach importance to student-centered teaching instead of teacher-based teaching is rapidly growing. Thus, the implementation of approaches such as student-centered teaching has moved the focus to students and enabled them maintain more control over their learning. As a result, as it is also said above learners are developing greater awareness in the fact that responsibility of the learning processes is on their shoulders not teachers.

In research related to teacher education, nevertheless, it has been argued that there are gaps between theory and application and it is suggested that learner centred activities should be expanded to improve knowledge, abilities, and attitudes (Seidel, Blomberg & Renkl, 2013). In fact, the gap between theory and application is a longstanding issue teacher education. The first step to be taken in order to remedy this situation is basically to narrow the gap between theory and application and apparently removing traditional approaches from teaching settings would work positively in the sense that learners or more specifically prospective teachers become more knowledgeable about the nature of what transformative learning is. Therefore, in the literature, contemporary approaches are emphasized and highly recommended to be integrated into the classrooms. Additionally, online support in education has been widely discussed (Beach, 2017; Hilton, 2013). As it is almost

impossible to discuss any aspect of today's society disregarding the Internet. Therefore, talking about the Internet along with education simply refers to contemporary education. In developed countries, the Internet is integrated in education and visa versa cannot even be thought. As Bush and Dawson (2013) argued the Internet is not just a powerful tool for communication. Therefore, in this research, the effect of transformative learning theory on teacher education supported by technology was investigated.

Theoretical framework

Transformative learning

Mezirow proposed the theory of transformative learning in the mid-1970s and it been continuously developed since that time (Emslie, 2016). Transformative learning, focusing on individuals' creating meaning through their own experiences, became more expressive as a result of a qualitative study on women by Mezirow in 1978 (Fleischer, 2006). Mezirow, in reference to Freire (1970), Habermas (1968/1971), and Gould (1978), defined transformative learning theory as a way of learning, which includes qualitative variables such as "meaning perspectives", "frames of reference" and "habits of mind" (Illeris, 2014). Transformative learning focuses on an individual's meaning formation process and can be explained as a process to make changes through a reference (Mezirow, 1995). "Critical dialogue" and "Critical self-reflection" are expressed as the tools that are necessary to implement changes (Mezirow, 2000). The question of transformative learning during adult education and how adults learn (Dirkx, 1998) is defined as the guidance of past experiences for future events based on human communication (Merzirow, 1996). In this theory, in which the importance of experiences is emphasized, it is noted that learners' individual experience and mental development can be achieved through dilemmas (Meyers, 2008). Cranton (1994) draws attention to critical thinking skills in transformative learning and stresses that learners should be critical thinkers to change their behaviours. In this respect, critical thinking is the key factor in transformative learning. Similarly, in Merzirow's, Brookfield's and Freire's studies, four steps are emphasised during transformative learning (Henderson, 2002):

1. Disruptive events that challenge the learner's view
2. Critical reflections by learners on their beliefs and values that presently shape their perspectives

3. The development of a new perspective which addresses the discrepancies of the original experience
4. Integration of the new perspectives into learners' life

Mezirow states that transformative learning, which is the process of forming new perspectives through self-experiences and interpretations, can be achieved in ten steps.

1. A disorienting dilemma
2. Self-evaluation with feelings of guilt or shame
3. A critical assessment of epistemic, socio-cultural, or psychic assumptions
4. Recognition and 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. Knowledge acquisition and skills for implementing one's plans
8. Provisional try of new roles
9. Building competence and self-confidence in new roles and relationships
10. A reintegration into an individual's life on the basis of conditions dictated by one's perspective

The literature suggests that the transformative learning process is conducted in the online environment as a form of collective learning (Henderson, 2010; Cranton, 1994). Taylor (2008) discusses the need for online environments as tools to encourage transformative learning. Meyers (2008) supports this view, stating that face-to-face education is consolidated by online education. Online teaching presents numerous means to facilitate communication and collaboration. In particular, transformative pedagogy, crucial dialogues and discussion groups are supported by online education. It helps learners to examine their hypothesis by criticizing, finding supplementary perspectives, dealing with communal problems, and creating varieties (Meyers, 2008). Hamlin (2015) explains the necessity of technological tools to support transformative learning environments with blogs, wikis, online discussions, and videos and strongly emphasizes that blogs in particular are essential tools in fulfilling "critical discourse" and "self-critical reflection", which are assumed to be the fundamental components of transformative learning theory environments. Besides blogs, the motivation factor is considered to be important, and is assumed to be the triggering power. In the literature, attention is drawn to the harmony between transformative learning and motivation in adult education (Hamlin, 2015; Glas & Cardenas-Carlos, 2013; Schwarzs, 2013; Abela, 2009).

Mezirow (1996) presents a different approach to transformative learning theory and argues that people's perceptions and their associated feelings, thoughts, beliefs, and knowledge transform into new approaches during the process of learning. Mezirow (1996) explains belief elements as habits leading behaviours and, in this respect, postulates that teachers possess pedagogical beliefs in various factors. Cranton and King (2003) support Mezirow and add that the teaching environment, the school structure, and experiences are influential factors in teachers' beliefs related to teaching. In the light of these explanations, this study aims to define the effect of teacher education based on transformative learning theory supported by Edublogs on prospective teachers' professional beliefs. In this respect, the following questions were asked:

1. Has there been a change in the prospective teachers' professional beliefs during the training process, based on transformative learning theory?
2. What are the prospective teachers' views regarding the profession of teaching before and after application?

Method

In this research, a mixed method with both qualitative and quantitative techniques was applied. Researchers generally prefer to use a combination of qualitative and quantitative techniques since using the two techniques increases the validity of the research (Tunalı, Gözü & Özen, 2016). In this regard, a mixed method was used in this research in order to obtain more accurate results. As in mixed method research, qualitative data is always supported by quantitative data or vice versa particularly in places where While the quantitative data was collected through "professional beliefs scale", qualitative data was collected through "interview forms", "e-journals", and "activity forms".

Research participants

This study was conducted on prospective teachers from the Faculty of Education at Near East University. The group was composed of 38 volunteer participants registered in the first year. Prospective teachers have the opportunity to take employment at secondary education schools after a four-year study period in the department of teacher education. The demographic features of the study group are shown in Table 1.

Table 1. Frequency distribution of demographic features of the prospective teachers

Demographic features (%)	Frequency (f)	Valid Percent
<i>Gender</i>		
Male	18	47.4
Female	20	52.6
<i>Age</i>		
18-20 years	21	55.3
21-23 years	17	44.7
Total	38	100

Research plan and design

The design of the research is revealed in Table 2. The participants were assessed based on a “professional belief scale”, and an “interview form”, both before and after the study. The face-to-face interviews lasted approximately 10-15 minutes with each participant. While the “activity form”, which is a qualitative tool for data collection, was given to each participant at the end of every course, the “e-journal” was implemented at certain intervals. The courses were performed through transformative learning theory, supported by the Edublogs environment. The effects of transformative learning theory on prospective teachers’ professional beliefs was also assessed in this study. Particular attention was also applied to ensuring that participants with no teaching experience or who had not taken teaching courses before were included. At the beginning of their university studies, the prospective teachers did not possess the necessary information and skills related to pedagogical formation, although this is provided in a mandatory course for prospective teachers in the first year. This study was therefore conducted with an “introduction to the teaching profession”, which is one of the pedagogical formation courses.

Table 2. Research design

	Pre-test	Application	Post-test
	Professional belief scale	Teacher education based on	Professional belief scale
Study	Semi-structured interviews	transformative learning model	E-journal

Data collection and procedure

Prior to the application, the researcher scanned the literature related to teacher education to identify the prevailing problems. Following this process, meetings were held with experts (n=5) in the field and themes on the problems were subsequently formed. The activities related to teacher education were planned according to transformative learning theory. In the preparation of the activities, Mezirow's ten transformative steps formed the basis.

The study lasted 12-weeks during the fall semester. The courses were designed to be implemented one day a week for three hours. The courses were conducted both in the classroom environment and in a blended learning environment formed through Edublogs. Edublogs were preferred by the researchers because there are no costs involved and they are completely focused on the field of education. Prospective teachers conducted online dialogues through Edublogs, which can be formed and updated provided there is an Internet connection. The researcher asked questions that were designed to trigger the reflections of the prospective teachers in the Edublog environment. The prospective teachers provided written answers reflecting their feelings and thoughts on the Edublog environment, which was designed using multi-environment tools such as pictures, videos, and texts. The researcher shared all the announcements, materials, and related sources, questions and answers related to the courses, commented on activities, and shared and evaluated projects on the Edublogs environment. Thus, the prospective teachers had the opportunity to obtain information on different issues and express their thoughts and ideas. Through Edublogs, a social learning environment was formed, which strengthened the prospective teachers' critical thinking skills.

In the classroom environment, the prospective teachers conducted group work on previously specified issues. The prospective teachers were free to form their own groups. In group work, the aim was to support prospective teachers' collaborative learning skills. They presented the projects they shared in the Edublogs environment in class and opened them to discussion. Furthermore, they performed role playing and drama with the aim of explaining the teaching profession. Activities based on transformative learning theory, supported by Edublogs, are shown in Table 3. The data collection tools used based on the aims of the research are explained below.

Table 3. Teacher education based on transformative learning theory

Transformative learning model	Activities
10 transformation step	
1. Disorienting dilemma	Sharing videos and pictures, articles about teacher education (in the Edublogs environment)
2. Self-examination with feelings of fear, anger, guilt or shame	Sample case investigation (face-to-face in a classroom setting)
3. A critical assessment of assumptions	Prospective teachers' self-evaluation, questioning and e-journals writing (in the Edublogs environment)
4. Recognition that one's discontent and the process of transformation are shared	Arranging interviews regarding the problems teachers encounter in their professional lives by visiting actual schools Searching for different data bases regarding teacher education Performing online discussions, e- journal writing
5. Exploration of options for new roles, relationships and actions	Brain-gymnastics and problem based activities (face-to-face in a classroom setting) E-journal (in the Edublogs environment)
6. Planning a course of action	Writing and sharing course plans in the Edublogs environment
7. Acquiring knowledge and skills for presentations implementing one's plan	Preparing theory maps and performing (face-to-face in a classroom setting)
8. Provisional trying of new roles	Role-making and drama activities in class

9. Building competence and self-confidence in new roles and relationships	Doing collaborative activities in class Doing and sharing projects through the Edublogs environment Having peer evaluation with regard to projects.
10. A reintegration into one's life on the basis of conditions dictated by one's new perspectives	Presenting projects (face-to-face in a classroom setting)

As noted in Table 3, the transformative learning process started with shared videos and pictures related to the teaching profession. The researcher's aim in sharing videos was to make the prospective teachers experience an inner complexity. In later stages, prospective teachers revealed their suppositions related to the teaching profession through e-journals. Moreover, they participated in online discussions while observing and sharing each other's suppositions. Brainstorming and problem-based activities facilitated the adoption of different views about the teaching profession. Those who became knowledgeable on the subject prepared projects and concept maps. The presentation of these projects was indicative of the transformation that occurred in the prospective teachers.

Professional Belief Scale (PBS):

In this study, the effect of transformative learning activities on prospective teachers' professional belief levels were investigated through a mono-dimensional "Professional Belief Scale" (PBS), which incorporated 16 statements prepared by the researcher (2015). All the statements were positive. In this five-Likert scale, 5 represents a "strongly agree" and 1 represents a "strongly disagree" statement. For the content validity of the scale, the opinions of Curriculum and Instruction experts were consulted. The Cronbach's Alpha reliability value was calculated as 0.94. The scale was administered to all the prospective teachers as a pre-test and post-test.

E-Journal (E-J):

E-journals that were designed to support reflective thinking skills were in fact effective in transformative learning theory. Besides developing prospective teachers' writing and reflective thinking skills, e-journals were used to support the data collected through PBS, AMS, AF, and IF. The researcher shared the questions in the Edublogs environment, which reflected the prospective teachers' feelings and thoughts related to the activities. The prospective teachers, on the other hand, in the light of these questions, reflected their feelings, thoughts, and criticisms in relation to the activities.

Interview Forms (IF):

Before and after the experimental process, 11 prospective teachers from the study group were given face-to-face interviews. Prior to the application, interviews were given to the prospective teachers to define their feelings and thoughts related to the teaching profession. At the end of the study, the researchers attempted to define any changes in their views related to their profession. The interview forms (IF) were designed by the researcher based on experts' opinions (n=6). The interview forms were composed of semi-structured questions and were only applied to volunteer (n=11) prospective teachers.

Activity Form (AF):

The activity forms were used to specify any transformations in the prospective teachers' behaviours during the 12-week activities. Experts' views (n=5) were referenced during the preparation process for the activity forms. On the forms, which were separately prepared for each activity, the aim was to identify whether the 10 previously specified transformation steps had been achieved.

Data analysis

In the quantitative data analysis, percentage, mean, standard deviation, and paired samples statistics analysis techniques were used. The values obtained from the analysis were interpreted by 0.05 significance. In the analysis of the qualitative data, the researcher transferred the records as text onto computer, in order to prevent any loss or error in the data. The qualitative data obtained through e-journals, activity forms, and interviews was analysed through the content analysis technique. While the text analysis was conducted by the researcher, an expert in this field verified the data. At the end of this process, the "Reliability=Agreement/Agreement+Disagreement" formula was applied to the codes. The correlation between the two coders was calculated as 86%. The categories formed after coding were tabled as frequencies. The qualitative data was supported

by direct quotations from the prospective teachers' views. While doing so, the prospective teachers' identities were stated as "P" (Participant).

Setting edublogs learning environment

Edublogs was utilised to increase the efficiency of the transformative learning applications performed with the prospective teachers. Hong (2008) states that blogs have significant potential as tools for strengthening communication, encouraging critical thinking and collaborative learning. Lee and Allen (2016) refer to Edublogs as a rapid developing source that is crucial in teaching and learning. Therefore, the transformative learning activities in this study were supported by Edublogs. At the beginning of this study, the researcher created a "free" account on www.edublogs.com. Once the blog with the title "teacher training" was prepared, the prospective teachers were given a 2-hour introduction to the functionality. Subsequently, they were required to login within the specified period of three days. Meanwhile, the researcher entered the "add the user" button and sent an e-mail to their addresses in order to seek approval and to invite them to the group. The prospective teachers joined the group with "student" roles through the invitation sent to their e-mail addresses. During the 12-week application, tools such as "post", "media", "links", and "comments" were used within the Edublogs.

Results

In this part of the study, the obtained findings related to the aims of the research are presented.

The Effects of Activities Based on Transformative Learning Theory on the Prospective Teachers' Levels of Professional Beliefs

Paired Samples Statistics analysis was conducted to determine the effect of the activities based on transformative learning theory on the prospective teachers' professional beliefs. The effect of the activities fulfilled in the Mezirow's 10 stages of transformation on the teachers' professional belief levels is shown in Table 4.

Table 4. A comparison of the average points related to the levels of professional beliefs

Group	Mean	SD	df
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	N	t	p
Level of professional belief	Pre-test	38	2.79
			1.09
			37
			-
			7.121
			.000
	Post-test	38	3.92
			.598

*Significant at the .05 level of confidence

As can be seen in the table, teacher education based on transformative learning theory led to a significant difference in the level of their professional beliefs. While the prospective teachers' professional belief level (M=2.79, SD=.1.09) was mostly "*I'm undecided*" before the application, the level rose to (M=3.92, SD=.598) after the application to be "*I agree*". This finding shows that there was a significant difference in the prospective teachers' professional belief level in favour of the post-test (t=-7.121, p<0.05). The statements with the highest average scores in the professional belief scale are: "The teaching profession leads the community to a bright future" with pre-test score (M=2.69) and post-test score (M=3.85). The statement "teachers with high professional beliefs encourage learners' success" has (M=3.31) pre-test score and (M=4.10) post-test score. Finally, the statement "teachers who like their job, care for their learners" is stated to have (M=2.03) pre-test score and (M=3.75) post-test score. These findings indicate that the activities had a positive effect on the prospective teachers' professional belief levels (see figure 1).

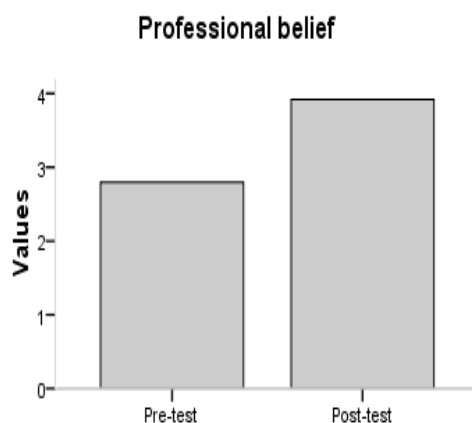


Figure 1. Pre-test and post-test professional belief levels

Prospective Teachers' Views about the Teaching Profession before and after the Experimental Procedure

Face-to-face interviews were conducted prior to the experimental procedure in order to specify the prospective teachers' feelings and thoughts about the teaching profession. The findings from the interview forms are shown in Table 5 below.

Table 5. Prospective teachers' views about the teaching profession before experimental procedure

		Codes	
Frequency (f)			
	Difficulty of the profession	10	
	Fear regarding teaching profession	9	
	Enjoying the profession	8	
Before the experimental procedure	Professional anxiety	7	
	Respect for the profession	3	
	Life-long learning		2

Prior to the experimental process, face-to-face interviews were conducted with the volunteer prospective teachers (n=11) and their feelings and thoughts related to the teaching profession were classified under six different categories. Most of the participants (n=10) believe that they are performing a difficult job and they think they will not be successful and are consequently anxious (n=9). However, it is assumed that this pessimism is due to inexperience in their new profession, even though the majority of the prospective teachers, regardless of their fear of failure in fulfilling their tasks, expressed that they have chosen the teaching profession willingly and with enthusiasm (n=8). Some are concerned that after graduation they will not be able to perform their jobs effectively (n=7). This sentiment is thought to originate from the teacher education programs. There is a gap between theory and practice in teacher education and learner-centred activities are needed to eliminate this gap. Five prospective teachers expressed concern that they have chosen to be teachers because of their parents' insistence. Another finding in this study is that the teaching profession is highly respected by the public (n=3). Furthermore, two of the participants argued that those who decide to become teachers are required to make many sacrifices.

The prospective teachers' transformation indicators related to activities performed during the experimental process were obtained through activity forms and e-journals, as shown in Table 6.

Table 6. Prospective teachers' transformation indicators related to teaching profession

Mezirow's 10 transformation step	Codes	Frequency (f)
1. Disorienting dilemma	Facing problems of the teaching profession	28
	Questioning how a teacher should behave	20
2. Self-examination with feelings of fear, anger, guilt or shame	Worries for fulfilling teaching profession	32
	Professional anxiety	15
	Feeling of insufficiency	9
3. A critical assessment of assumptions	Questioning assumptions	26
4. Recognition that one's discontent and the process of transformation are shared	Becoming aware of the importance of the teaching profession	27
	Being aware of their peers' questioning of teaching profession	13
5. Exploration of options for new roles, relationships and actions	Discovering options regarding the solutions to the problems	29
6. Planning a course of action	Doing course planning	26
7. Acquiring knowledge and skills for	Discovering new activities	15

implementing one's plan 29	Gaining professional knowledge and skills
8. Provisional trying of new roles	Trying new roles 27
9. Building competence and 24 self-confidence in new roles 36 and relationships	Having the feeling of professional competence Self-confidence
10.A reintegration into one's life on teaching 34 the basis of conditions dictated by one's new perspectives	Displaying behaviour reflecting the requirements of of teaching profession

As can be observed in the table, the majority of the prospective teachers experienced a positive transformation related to the profession. The findings reflecting the changes through interviews at the end of the experimental process are displayed in Table 7.

Table 7. Changes in prospective teachers' views related to teaching profession

	Codes	Frequency (f)
Interviews at the end of 9 the experimental process	Enjoying the teaching profession	10
	Awareness of the importance of the profession	9
	Establishing effective communication	9
	Courage in doing the profession	
	Awareness of collaboration	4
	Fear of failure	2
	Boredom	1

The findings obtained after the interviews with the participants are placed into seven different categories. The results indicate that the majority of the prospective teachers are satisfied with the teacher education they have received. Moreover, they exhibited positive views related to the profession after the transformative learning activities supported by Edublogs. For example:

(P3): “I believe I will do my job without boredom, but enjoyment”

(P1): “For me, being with children is the most enjoyable part of the profession”

(P7): “I participated in effective and enjoyable projects during this course. I took great pleasure in actively participating in every activity. I witnessed that I was a teacher while being taught. I believe that teaching is the only profession I can enjoy doing”.

These findings reveal that the 10 step transformation was effective in making the prospective teachers more enthusiastic about their profession. Similarly, the category about the awareness of the importance of the teaching profession, in the light of the prospective teachers’ views, supports the findings.

(P5): “We need a comprehensive education system to develop our country and this is only possible with successful teaching staff”.

The transformative learning activities, supported by Edublogs, positively improved the prospective teachers’ skills in communication:

(P4): “We used a technological tool in “Introduction to the Teaching Profession”, which I had never used before. I received immediate feedback online that covered everything that I had missed. I had the opportunity to contact both my group and my instructor at any time I needed. I realised how important communication is during the learning process”.

As can be noted from P4’s statements, the Edublogs environment eradicates the limits imposed by time and location and facilitates ongoing communication among group members. One other finding is that the prospective teachers have increased professional confidence. They admitted that they had the opportunity to apply what they learned through in-class presentations and this increased their self-confidence in the profession:

(P6): “I felt myself more than a prospective teacher during in-class applications. I proved that I was able to transfer everything I learned to my colleagues”.

(P11): “I had always been suspicious about transferring what I had learned to my students, but the activities we did in this course eradicated all my worries. All the in and out of class homework, projects, and professional discussions added to my experience”.

At the end of the applications, some participants acknowledged the importance of collaborative work in the teaching-learning process.

(P1): “The group-work activities helped consolidate what I have learned”

(P8): “We produced good projects with my friends. We worked in unity and had significant responsibilities. Working with the group made me feel talented and proud”.

Besides obtaining positive findings in this research, negative findings were found as well. A number of the prospective teachers (n=2) expressed fear of failure related to the activities. The prospective teachers admitted they had negative experiences and expressed their concern with performing activities both in and outside the traditional classroom setting. They admitted that they were not familiar with the Edublogs environment and added that they were anxious about the technology supported courses. One of the participants complained, stating that the activities were boring. The prospective teacher continued to say that the activities required too many responsibilities and this caused uneasiness. In spite of this, the majority of the prospective teachers asserted that they experienced positive changes in their professional perspectives.

Discussion and conclusion

This research was aimed at investigating the effects of transformative learning theory, supported by Edublogs, on prospective teachers’ professional beliefs as well as their transformation related to the teaching profession. The post-test results indicate an increase in their professional belief levels after the application. This result is assumed to be connected to the technological support in the transformative learning activities. Similarly, after the application of the activities, a positive transformation in the prospective teachers’ perspectives related to the teaching profession has been observed. When the literature is reviewed, it is found that there is a need for studies that combine transformative learning and technology. In the literature, the research that is based on transformative learning theory supported by technological tools, frequent transformations have been experienced (Henderson, 2010; King, 2002). It is significant to point out that a body of research on transformative learning and technology has been carried out by King (1999, 2000, 2001, 2002a, 2002b, 2002d, 2003a). In one of her studies, King (2000) reached very similar results. She found that teachers’ perspective transformations gained strength and they also changed the way they looked at the things. Additionally, in one of her books, King (2002d) made an emphasis on how

schools and teachers, in general, can integrate educational technology into a transformative learning framework. Similarly, Doering (2006) conducted research on transformative learning in an online environment. In this study, the learners were provided with learning opportunities based on real world experiences in a collective learning environment. The results of this research state that, in an environment where collective learning, reflecting, and problem solving activities occur, the learners experience transformation. In a study by Ross and Rosenbloom (2011) in which Mezirow's transformative learning framework was used, traditional classes were supported by online components. The findings in this research also indicate that online environments provide learners with freedom, which facilitates their transformative process. Similarly, Keegan (2011) investigated transformative learning in a blended learning environment. According to the results of this research, transformative learning is an effective alternative method. In this respect, it can be said that transformative learning activities supported by technology lead to a positive effect on learners' perspectives.

Another finding in this research is that there has been a significant increase in the prospective teachers' professional beliefs and this indicates that transformative learning supported by technological tools affects belief factors positively. A number of studies have stated that transformative learning increases learners' motivation and beliefs (Beauchamp, Barling & Morton, 2011; Morton, Keith & Beauchamp, 2010; Hilton, 2013; Meyers, 2008). In their study in 2013, Glas and Cardenas-Carlos found that blogs increased learners' motivation. Palloff and Pratt (2007) emphasised that online environments increased the transformation process significantly, compared to traditional classes. This research provided the participants with a secure and comfortable environment, which provided the prospective teachers with the opportunity to participate, to form a collaborative norm, and facilitated peer communication. It is considered that, in such an environment, the prospective teachers had high levels of motivation and their belief levels rose.

In the semi-structured interviews, the prospective teachers expressed their satisfaction with the transformative learning activities supported by Edublogs. This application also created a positive transformation in their professional perspectives. The support of transformative learning activities by technological tools made the application more effective. Moreover, compared to a single data collection procedure, the combined use of qualitative and quantitative data facilitated the understanding of the research question. It is recommended that, in future studies related to teacher education, transformative learning activities should be supported by different tools. Finally,

technologically supported transformative learning theory should also be applied in different subjects of the teacher training programme.

References

158–172.

Abela, J. (2009). Adult learning theories and medical education: a review. *Malta Medical Journal*, 21(1), 11-18.

Baeten, M., Struyven, K., & Dochy, F. (2013). Student-centred teaching methods: Can they optimise students' approaches to learning in professional higher education?. *Studies in Educational Evaluation*, 39, 14-22.

Beach, P. (2017). Self-directed online learning: A theoretical model for understanding elementary teachers' online learning experiences. *Teaching and Teacher Education*, 61, 60-72.

Beauchamp, M.R., Barling, J., & Morton, K.L. (2011). Transformational teaching and adolescent self-determined motivation, self-efficacy, and intentions to engage in leisure time physical activity: a randomised controlled pilot trial. *Applied psychology: health and well-being*, 3, 127–150.

Bush, J & Dawson, R. (2013). Internet Brings Historic Shift in Learning. Retrieved from: <http://www.miamiherald.com/2013/06/25/3470108/internet-brings-historic-shift.html#storylink=cpy>

Cranton, P. (1994). *Understanding and promoting transformative learning: A guide for educators of adults*. San Francisco: Jossey- Bass.

Cranton, P., & King, K.P. (2003). Transformative learning as a professional development goal. New perspectives on designing and implementing. *Professional Development of Teachers of Adults*, 98, 31-37.

Dirkx, J. M. (1998). Transformative learning theory in the practice of adult education: An overview. *PAACE Journal of Lifelong Learning*, 7, 1-14.

- Doering, A. (2006). Adventure learning: Transformative hybrid online education. *Distance Education*, 27(2), 197-215.
- Emslie, N. (2016). Transformative learning and ministry formation. *Journal of Adult Theological Education*, 13(1), 48-63.
- Fleischer, B. (2006) Mezirow's Theory of Transformative Learning and Lonergan's Method in Theology: Resources for Adult Theological Education. *Journal of Adult Theological Education*, 3(2), 147-162.
- Glas, K., & Cárdenas-Claros, M.S. (2013). New English cultures and learner autonomy for intrinsic motivation and democratic empowerment in the Chilean context. *English Teaching: Practice and Critique*, 12(3), 23-40.
- Hamlin, M. (2015). *Technology in transformative learning environments*. In C. Halupa (Ed.), *Transformative curriculum design in health sciences education* (pp. 126-140). Hershey, PA: IGI Global.
- Hammond, L.D. (2006). Constructing 21st-century teacher education. *Journal of Teacher Education*, 57(10), 1-15.
- Hegarty, N. (2010). Application of the academic motivation scale to graduate school students. *The Journal of Human Resource and Adult Learning*, 6(2).
- Henderson, G. (2002). Transformative Learning as a Condition for Transformational Change in Organizations. *Human Resource Development Review*, 1(2), 186–214.
- Henderson, J. (2010). An exploration of transformative learning in the online environment. 26th Annual Conference on Distance Teaching & Learning. Retrieved from: <http://www.uwex.edu/disted/conference>
- Hilton, J.T. (2013). Digital critical dialogue: A process for implementing transformative discussion practices within online courses in higher education. *MERLOT Journal of Online Learning and Teaching*, 9(4), 602-614.

Hong, W. (2008). Exploring educational use of blogs in U.S. education. *US-China Education Review*, 5(10), 34-37.

Illeris, K. (2014). Transformative Learning re-defined: as changes in elements of the identity. *INT. J. of Lifelong Education*, 33(5), 573–586.

Keegan, P. (2011). Transformative e-learning and teaching in mandatory tertiary education. *Asian Social Science*, 7(11), 66-74.

King, K. P. (2002). Educational technology professional development as transformative learning opportunities. *Computers & Education*, 39, 283–297.

King, K. P. (1999). Unleashing technology in the classroom: What adult basic education teachers and organizations need to know. *Adult Basic Education*, 9(3), 162-175.

King, K. P. (2000). Educational technology that transforms: Educators' transformational learning experiences in professional development. In T. Stork, V. Chapman, & R. St. Clair (Eds.), *Proceedings of the 41st annual Adult Education Research Conference* (p. 211-215). Vancouver, Canada: University of British Columbia Press.

King, K. P. (2001). Professors' transforming perspectives of teaching and learning while learning technology. *Journal of Faculty Development* 18(1), 25-32.

King, K. P. (2002a). Creating their futures: The transformative possibilities for women using technology in their professions. *Teach Trends*, 46(6), 37-41.

King, K. P. (2002b). A journey of transformation: A model of educators' learning experiences in educational technology. In J. M. Pettitt & R. P. Francis (Eds.), *Proceedings of the 43rd annual Adult Education Research Conference* (pp. 195-200). Raleigh: North Carolina State University Press.

King, K. P. (2002c). Identifying success in online teacher education and professional development. *Internet and Higher Education*, 5(3), 231-246.

- King, K. P. (2002d). *Keeping pace with technology: Educational technology that transforms, Vol. 1: The challenge and promise for K-12 educators*. Cresskill, NJ: Hampton.
- King, K. P. (2002e). Technology catalyzing changing perspectives and practices of teaching and learning. *Journal of Continuing Higher Education, 50*(2), 26-37.
- King, K. P. (2003a). *Keeping pace with technology: Educational technology that transforms, Vol. 2: The challenge and promise for educators in higher education*. Cresskill, NJ: Hampton.
- Lee, J., & Allen, K. (2006). Edublogs as an online assessment tool. *Current Developments in Technology-Assisted Education, 391-395*.
- Meyers, S.A. (2008). Using transformative pedagogy when teaching online. *College Teaching, 56*(4), 219-224.
- Mezirow, J. (1995). Transformative theory of adult learning. In M. Welton (ed), *In Defense of the Lifeworld*. Albany: State University of New York Press.
- Mezirow, J. (1996). Contemporary paradigms of learning. *Adult Education Quarterly, 46*(3), 158-172
- Mezirow, J. (2000). *Learning as transformation: Critical perspectives on a theory in process*. San Francisco, CA: Jossey-Bass.
- Mezirow, J. "Contemporary Paradigms of Learning." *Adult Education Quarterly, 1996, 46* (3),
- Mezirow, J. "Transformative Theory of Adult Learning." In M. Welton (ed.), *In Defense of*
- Mezirow, J. "Transformative Theory of Adult Learning." In M. Welton (ed.), *In Defense of*
- Mezirow, J. "Transformative Theory of Adult Learning." In M. Welton (ed.), *In Defense of*
- Morton, K.L., Keith, S.E., & Beauchamp, M.R. (2010). Transformational teaching and physical activity: a new paradigm for adolescent health promotion? *Journal of health psychology, 15*, 248–257.
- Özçınar, H. (2015). Mapping teacher education domain: A document co-citation analysis from 1992 to 2012. *Teaching and Teacher Education, 47*, 42-61.

Rena, M.P., & Pratt, K. (2007). *Building Online Learning Communities*. Second edition of building learning communities in cyberspace. San Francisco, CA: Jossey-Bass.

Ross, D., & Rosenbloom, A. (2011). Management course in a blended format reflections on building and teaching an undergraduate strategic. *Journal of Management Education*, 35(3), 351-376.

Schwartz, T. (2013). *Examination of factors that promote transformative learning experiences of college-level adult learners of foreign languages*. A dissertation submitted to the Graduate Faculty of Auburn University, Degree of Doctor of Philosophy. Alabama.

Seidel, T., Blomberg, G., & Renkl, A. (2013). Instructional strategies for using video in teacher education. *Teaching and Teacher Education*, 34, 56-65.

Taylor, E. (2008). Transformative learning theory. *New Directions for Adult & Continuing Education*, 119, 5-15.

the Lifeworld. Albany: State University of New York Press, 1995.

the Lifeworld. Albany: State University of New York Press, 1995.

the Lifeworld. Albany: State University of New York Press, 1995.

Tunalı, S.B., Gözü, Ö., & Özen, G. (2016). Using a combination of qualitative and quantitative methods “mixed research method”. *Online Journal of the Faculty of Communication Sciences*, 24(2).

Utvær, B.K.S., & Haugan, G. (2016). The Academic Motivation Scale: Dimensionality, reliability, and construct validity among vocational students. *Nordic Journal of Vocational Education and Training*, 6(2), 17–45.

King, K. P. (2003b). Learning the new technologies: Strategies for success. *New Perspectives on*

