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Open, distance education and self-directed learning of teachers during Covid19 pandemic crisis

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Abstract

The fields and motivations of self-directed learning are for adult educators a matter of their lifelong learning. Teachers openly and remotely train themselves in various fields and develop knowledge, skills and attitudes. These fields include education, computer science, arts, environment, special education, school psychology, etc. The teachers' motivations mainly include their personal and professional development, their socialization, an offering to other people, the improvement of their life quality etc. The present research, with a qualitative approach, attempted to study the fields and motivations of primary school teachers in terms of their self-directed learning. The semi-structured interview technique was chosen for data collection. The results showed that the fields and motivations of the teachers serve their daily school needs. They are related to their personal and professional development and the critical thinking of both themselves and their students afterwards. Especially due to the Covid19 pandemic crisis the training needs of teachers are carried out openly and remotely. Their participation in various programs, but also their future intention to participate, enhance the need to develop self-directed learning skills, as well as e-learning programs in this direction. The present study can contribute to the increase of knowledge and practice in the development, promotion and planning of self-directed learning interventions in open and distance education, while its originality lies in the fact that no similar research has been implemented in the field of self-directed learning and its connection to lifelong teacher education.

Keywords: *Self-directed learning, distance education, open education, lifelong learning, fields, motivations*

Περίληψη

Τα πεδία και τα κίνητρα της αυτο-κατευθυνόμενης μάθησης είναι για τους εκπαιδευτές ενηλίκων θέμα της δια βίου μάθησής τους. Οι εκπαιδευτικοί εκπαιδεύονται ανοιχτά και από απόσταση σε διάφορους τομείς και αναπτύσσουν γνώσεις, δεξιότητες και στάσεις. Αυτά τα πεδία περιλαμβάνουν την εκπαίδευση, την επιστήμη των υπολογιστών, τις τέχνες, το περιβάλλον, την ειδική αγωγή, τη σχολική ψυχολογία κ.λπ. Η παρούσα έρευνα, με μια ποιοτική προσέγγιση, προσπάθησε να μελετήσει τα πεδία και τα κίνητρα των εκπαιδευτικών της πρωτοβάθμιας εκπαίδευσης όσον αφορά την αυτοκατευθυνόμενη μάθησή τους. Η τεχνική ημιδομημένης συνέντευξης επιλέχθηκε για τη συλλογή δεδομένων. Τα αποτελέσματα έδειξαν ότι τα πεδία και τα κίνητρα των εκπαιδευτικών εξυπηρετούν τις καθημερινές σχολικές τους ανάγκες. Συνδέονται με την προσωπική και επαγγελματική τους

ανάπτυξη και την κριτική σκέψη τόσο των ίδιων όσο και των μαθητών τους στη συνέχεια. Ειδικά λόγω της πανδημικής κρίσης Covid19, οι ανάγκες κατάρτισης των εκπαιδευτικών πραγματοποιούνται ανοιχτά και από απόσταση. Η συμμετοχή τους σε διάφορα προγράμματα, αλλά και η μελλοντική τους πρόθεση να συμμετάσχουν, ενισχύουν την ανάγκη ανάπτυξης αυτόματης μάθησης, καθώς και προγραμμάτων ηλεκτρονικής μάθησης προς αυτή την κατεύθυνση. Η παρούσα μελέτη μπορεί να συμβάλει στην αύξηση της γνώσης και της πρακτικής στην ανάπτυξη, προώθηση και σχεδιασμό αυτο-κατευθυνόμενων μαθησιακών παρεμβάσεων στην ανοιχτή και εξ αποστάσεως εκπαίδευση, ενώ η πρωτοτυπία της έγκειται στο ότι δεν έχει εφαρμοστεί παρόμοια έρευνα στον τομέα του εαυτού -κατευθυνόμενη μάθηση και η σύνδεσή της με τη δια βίου εκπαίδευση των εκπαιδευτικών.

Λέξεις-κλειδιά: *Αυτο-κατευθυνόμενη μάθηση, εξ αποστάσεως εκπαίδευση, ανοιχτή εκπαίδευση, δια βίου μάθηση, πεδία, κίνητρα*

Introduction

The COVID-19 pandemic crisis caused an immediate transform from traditional to distance learning at all levels of education, which is called emergency remote teaching (Misirli & Ergulec, 2021). In a normal situation, online education creates flexibility for learning and teaching from anytime and anywhere. However, the COVID-19 caused an urgent transition from traditional to distance learning (Hodges et al., 2020) and thus teachers, students, and parents had to adapt to extremely new circumstances. It should be mentioned that a well-planned online learning is a complex process concerning its instructional design and development and the need to create an effective learning environment (Ergulec, 2019•Palloff & Pratt, 2013). The changes had also a strong impact on teachers way of teaching and way of self-directed learning (SDL). According to Cardullo, Wang, Burton and Dong, (2021) teachers shifted not only their content delivery, but also their pedagogical practices in order to support remote learning (Xanthopoulou & Stavrakakis, 2019). Theories of self-directed learning is an internationally interesting topic and especially in Greece where research is limited in this field. Self-directed learning in open and distance education is crucial in adult education. A number of scholars (i.e., Boyd, 1966• Knowles, 1970) have described autonomous learning as especially characteristic of learning in adulthood. It is found that the majority of learning (76 % according to Hiemstra and Penland (1981) comes from home, hobbies, crafts, sports, and recreation. There is considerable learning connected with work, among professional people especially, and also in topics about interpersonal relations. Only some 7 % is academic learning, and only 1% is learning for certification (Brockett, & Hiemstra, 2018). The teacher-centered learning model has failed and learning is not a "transferable genre". Teachers, mainly through self-directed learning, openly and remotely try to meet their training needs. The aim of this study is to explore the areas and motivations through which teachers self-guide their learning.

The purpose of the work is to investigate the ways and motivations of teachers' self-directed learning. A review of the literature revealed a strong interest in self-directed learning in adult education. The fields and motivations of teachers' self-directed learning are a topic that has not been explored so far. In Greece, unfortunately, research in this field is limited. It is therefore considered particularly important to pay special attention to exploring the fields and motivations of teachers in terms of their self-directed learning. By researching and recording the views of the participants, this

research will provide valuable information to developers of educational programs in order to enhance teachers' self-directed learning. Also, it is expected to develop self-directed learning programs and to cultivate skills in teachers, but also to design corresponding interventions, in order to inform the educational community about the benefits of self-directed learning. The present study is original and of great interest, as it has not been studied in Greece. Therefore, we hope to give impetus for further research activity in terms of self - directed learning of teachers, to develop programs and to cultivate skills in this area. The results proved that the fields and motives of the teachers serve the daily school needs of themselves and they are strongly related to personal development and the critical thinking of both themselves and their students. In conclusion, we would say that the teacher-centered model of teaching and learning is an outdated model, which often gives teachers extra motivation to change attitudes, mentality and behavior and pushes them to new learning paths. The processing of the results offered various and interesting elements in terms of the fields. Specifically, areas of self-directed learning are ICT (Information & Communication Technologies) and digital learning (e-learning programs). As a general conclusion of what was mentioned, it appears that the fields are related to education, but also personal, social, health, technology and various other issues. These findings reinforce the view that this is a central phenomenon of intense interest and adult educators reinforce teachers' views on the subject. An interesting issue that emerged from the research is that the critical thinking of teachers and students is an area that needs strengthening.

Literature review

Self-directed, online and lifelong learning

Self- directed learning has proven to be beneficial to the individuals, particularly when they are living at a distance as they feel contented pleasurable, when they are able to possess the authority to carry out tasks and activities on their own (Kapur, 2019). When implementing their tasks and activities with diligence and ingenuity, people are able to benefit on a large scale. SDL is also an important component related to workplace learning process, especially for individuals who want to get higher in the socio-economic scale, raise political awareness and promote social action (Ellinger, 2004). Thus, SDL is now considered an important function of the human resource development process. Although there are many definitions of SDL, the most commonly used definition comes from Knowles (1989) who viewed SDL as a process of study which “the students take initiate with or without the help of others, assess their learning needs, formulate goals with implementation of appropriate strategies and evaluate learning outcome” (Malison & Thammakoranonta, 2018• Boyer, Artis & Fleming, 2014).

Knowles (1989) argues that individuals can become more self-directed with additional support and motivation to sustain more self-autonomy and improve the quality of their everyday life. SDL brings improvements in one's livelihoods opportunities (Din, Haron, & Rashid, 2016; Roberson & Merriam, 2005) and prepares them for lifelong learning. Murad et al. (2010) pointed that self-directed learning is also associated with knowledge improvement and suggested that it could effectively develop the affective psychomotor domains. In addition, the learners are able to increase their interpersonal skills and critical thinking abilities, to formulate measures to overcome problems and challenges and thus become more confident in implementing various tasks and functions (Taylor, 2001• Kapur, 2019). Self-directed learning comes from the adult himself and is a dynamic strategy of how to approach an issue, but also evaluation of this choice. It governs the one who is characterized as a restless spirit,

who is troubled, activated and wants to learn. In addition, self-directed learning is also a transformative learning. It is a contemplative process related to individual assumptions. Through self-direction, "the emancipation of the participants" takes place and the autonomy of their thinking is enhanced. One of the challenges of the 21st century on an individual and social level is lifelong learning. Self-directed learning is a learning strategy and technique for enhancing lifelong learning. The main goal of adult education is to make learners independent, autonomous and self-directed (Knowles, 1975). Self-directed learning helps people to control their learning, to identify learning resources, to set learning goals, to choose learning methods, but also to evaluate their achievements. Through self-directed learning the individual acquires educational opportunities and participates in the life of society. It is constantly evolving, improving, developing and acquiring the mentality of a learner, who is constantly learning. Adults realize that they are creators of their thoughts and feelings, understand their experiences and realize their values in life. This learning leads to a change of attitude and mentality (Rogers, 2006). A learning process can take place, a transformative learning through critical thinking, dialogue, awareness of the mind for action and change (Mezirow, 2018). The critical reflection of self-directed learning takes place at work, but also in life as a whole as it has a very social character (Illeris, 2015• O'Donnell, 1999). Learning can also be done remotely for business, family or health reasons. Sometimes learning is oriented towards a problem (Illeris, 2015). When adults participate in learning processes for the purpose of learning per se, then elements of self-directed learning are recognized, which are motivated internally and learning takes place for reasons of personal development and evolution.

In this era, online learning has come to be a popular way for people especially for working ones (Badusah et al., 2016). In comparison with traditional learning, online learning has become popular among people who want to learn by themselves. One issue that has to be mentioned concerning the traditional learning is the cost and if online learning has not grown, learners would pay much money for the courses they want to attend. This fact could make learners more difficult to learn because they possibly had problem with the fees. Furthermore, in traditional learning, individuals are not able to choose their available time to learn, while learning process depends on instructors, places, and number of attendants. On the other hand, online learning helps learners to save money and choose their preferable time by themselves (Norman, 2016). It brought considerable changes and opened valuable opportunities for everyone who wants to learn something new, so it is clear to say that online learning is a sign showing that technology is possibly important for learning (Carson, 2012).

In conclusion, SDL has proven to be beneficial to the individuals, particularly when they are living at a distance as they usually feel contented pleasurable, when they get engaged in this type of learning, and they are able to carry out tasks and activities on their own with diligence and resourcefulness (Verma, Verma, Garg & Godara, 2020).

Motivations of self-directed learning

Self-directed learning as stated above is related with adult learning theory which can be found on both theoretical and practical fields (Malison & Thammakoranonta, 2018). In self-directed learning, motivation should be stronger as compared to the other aspects of willingness to make use of self-directed learning (Boyer, Edmondson, Artis, & Fleming, 2014). Usually, in SDL individuals develop motivation when they have a desire or goal to achieve. For example when they need to collect information about diet and nutrition, they may search of various sources to augment their

understanding. Motivation enables the individuals to spend time and resources towards self-directed learning and only then they will carry out their tasks and activities in a well-organized manner and be enabled to achieve the desired goals and objectives (Kapur, 2019). Another motivator is the workplace. For adult learners, the workplace offers opportunities for creative learning and enhances critical thinking (Choy, 2009). In addition, they make changes in their educational practice and adopt more appropriate approaches on a case-by-case basis. Teachers are called upon to constantly improve their skills, in order to be able to face the new roles they take on as working professional teachers, but also as citizens. Teachers are given additional responsibilities at the individual level and are called upon to take responsibility for their own learning. Transformation takes place continuously and for life (Mezirow & Dirkx, 2006).

Teachers formulate a self-directed learning strategy when they exchange ideas with their colleagues and share their concerns about educational issues. Through dialogue, research and collaboration, a learning culture is created in teachers (Altrichter et.al, 2005). Sometimes in the educational practice they look for a person of trust and ask for guidance, in order to be able to evolve and improve. Such people of trust are the mentors, who practice counseling on their teaching practice. Feedback from this process enhances the effectiveness of the learning process. Teachers who self-directed their learning and recognize their emotions also teach their students to do the same, as they aim at self-directed learning (Bolhuis, 2003). The development of self-direction and critical thinking is realized by the various means of entertainment, by various art forms, but also by the dimensions of human life (parental role, social environment, work, experiences, etc.). Self-directed learning and self-transformation is a personal journey of knowledge and practice. Creating fruitful social relationships and deep contemplation enhance this process. Lifelong learning is the focus of interest in a society that is constantly evolving and changing. To think "correctly" is a key issue of our time and is a dynamic act. The interaction with the new technological data ICT (Information & Communication Technologies) and the open & distance education, contribute to the autonomy of learning in various ways (Mouratidou, et al, 2020). Similarly, higher self-efficacy for educational technology standards has a significant impact on the life long learning competencies (Kan & Murat 2020•Ma, Chutiyami, Zhang, & Nicoll, 2021).

In general, it is found that regarding the motivations of the SDL, the topic seems to be vital while other motivational factors include people's willingness to learn something new, the feelings of personal control over one's own learning, and the feeling that a website or activity looks exciting. Bonk and Lee (2017) in their primary qualitative research found five key motivators or goals for the respondents regarding SDL namely, they wanted: (1) to improve their job prospects; (2) to pursue personal interests or hobbies; (3) to obtain certification of some type; (4) to access particular information or resources; and (5) to find ways to expand upon their formal learning. Despite their differences, each motivator relates to finding a way to improve one's competencies or life situation (Bonk & Lee, 2017 •Kapur, 2019• Towle & Cottrell, 1996).

Research Methodology

The purpose, the research questions and the sample of the research

The purpose of the research is to explore the ways and motivations through which teachers self-guide their learning. The research questions are:

1) *What are the motivations of teachers for self-directed learning?*

2) How do teachers self-direct their learning and in what fields?

The present study is original and of great interest, as it has not been studied in Greece. For the present study it was judged that the most appropriate method is the qualitative method and in particular the case study. The case study is a very appropriate method to investigate complex phenomena of educational research in adult education (Coimbra & Martins, 2013). According to Creswell (2016), a case study is an in-depth investigation of a delimited system. The primary school that took part in the research is located in the region of Attica (Athens). Sampling is intentional and homogeneous. The teachers work in Primary education and serve in the same area. The total number of participants was twelve (12) primary school teachers. This sample was focused and small, so that in-depth investigation was possible. Of the twelve (12) teachers in total, two (2) were men and ten (10) women. The age of the participants was between 27 and 58 years.

The process of collecting research data

An original interview protocol (interview guide) was created, which was changed and adapted. Initially, a pilot study was conducted and the interview tool was tested. All interview questions were open-ended. In our case, a semi-structured interview was designed, which contained some predefined open-ended questions. A letter was given to the Principal of the school. The participating teachers were also given a cover letter with all the useful information for the research. The questions were asked in a clear way, additional clarifications were given to the participants and a climate of trust was created. The survey was not completed as originally planned. Research takes place inside the real world and not outside it (Robson, 2010). The pandemic crisis of Covid-19 in our country did not allow face-to-face contact for an interview. The entire interviews were conducted remotely. The present survey took place from March to mid-May 2020. Each interview is recorded and then transcribed. Diaries are also a valuable source of rich information in quality research (Bolger, Davis, & Rafaeli, 2003) as it helps researchers to organize their thoughts and make them apprehensible. During the interviews teachers were asked to write a diary page. The diary was used to cross-reference the data and not to lead to erroneous conclusions. A more complete view of the phenomenon was thus built.

Data analysis method

The six steps developed for implementing the data analysis are the following: 1. All recorded interviews were processed. 2. Coding followed. 3. Issues were created from the set of coded data. 4. All topics were evaluated and a conceptual map was created. 5. The topics were defined and names were given. 6. Original pieces (interviews and diaries) were selected and all findings were presented. Interpretations were given and the writing of all the findings took place.

Research limitations

It is necessary to point out the limitations that arose during the conduct of the present research. The qualitative research carried out aimed at in-depth investigation of a small number of teachers. This sample was deliberately selected and does not represent the teacher population. The results clearly cannot be generalized to the respective teacher population. The research focused on teachers in Attica, which does not allow generalization for all teachers. In addition, most of the teachers who participated were women, so the views of the men were not adequately reflected. We are not given the opportunity to have a clear and complete picture of the fields and

motivations of male self-directed learning. Also a particularly important limitation was the coronavirus pandemic crisis during the conduct of the present study. The interviews were not conducted live and in addition the teachers as a whole had unprecedented experiences (with schools closed, fear, distance learning, etc.) It was not easy in a particular global health phenomenon due to the coronavirus, to approach teachers, as everyone was experiencing difficult psychological situations. Overall, the teachers were locked in their homes for several consecutive days. Their young children, husband and other family members were also at home and there was no unlimited time for the interview nor in some cases the use of a camera for communication. There was no additional possibility of a larger sample, beyond the twelve (12) teachers and the two (2) adult educators and no additional quantitative data were collected to be combined with these qualitative ones. We were satisfied with the twelve (12) interviews of the teachers, the twelve (12) pages of their diaries and the two (2) interviews of the adult educators. Multiple data sources gave the material diversity, enriched it and revealed the complexity of human existence. Thus the data was triangulated.

Results

1st research question: *What are the motivations of teachers for self-directed learning?*

The most important motivations of self-directed learning that result from the 1st research question were recorded in the following thematic map (Figure 1).

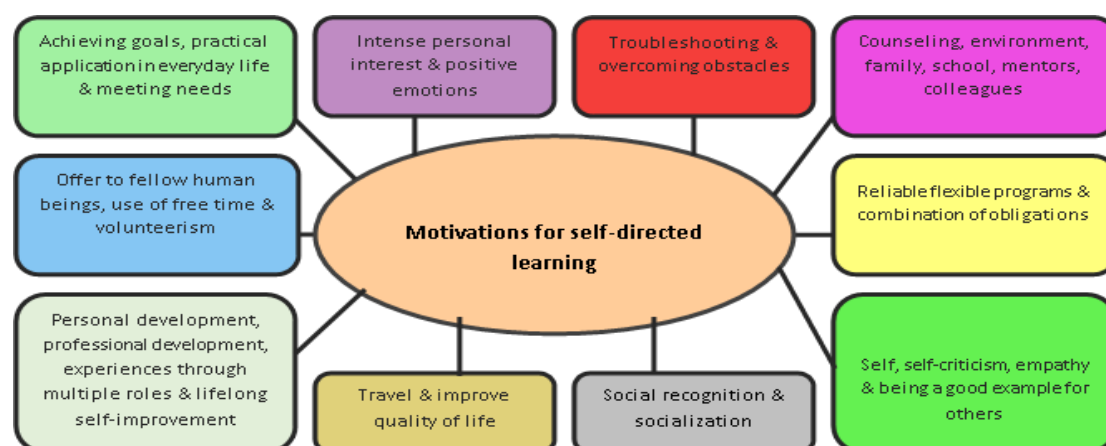


Figure 1: Thematic map of teachers' self-directed learning motivations

2nd research question: *How do teachers self-direct their learning and in what fields?*

The most important fields of self-directed learning that result from the 2nd research question are presented in the following thematic map (Figure 2).



Figure 2: Thematic map of teachers' self-directed learning fields

Discussion and Suggestions

It is worth mentioning that the participating teachers as a whole had a high level of self-directed learning, a high level of education and the majority of them participated in postgraduate distance learning programs and lifelong counseling programs. Learning is "addictive" for teachers. The more involved they are in learning self-education processes, the more they want to learn. Teachers' motivations for self-directed learning are varied, both internally and externally. Teachers' motivations cover needs and goals (Kapur, 2019•Choy, 2009• Mezirow & Dirkx, 2006• Rogers, 2006). Many say that the very personality of each teacher, interest and positive emotions activate the motivation for self-education. According to Rogers (2006), the factors that stimulate learning are found in individuals themselves, but also in the learning process. We found that the "heuristic path to knowledge", exploratory learning, activation and participation in the experience of knowledge, develop interaction between members and critical thinking (Kokkos & Lionarakis, 1998).

Particularly a collaborative environment, but also interpersonal relationships, create mutual understanding and increase learning outcomes. The school environment, colleagues, mentors and counseling multiply teachers' motivation for self-education. Also an important finding of the present research is that personal development and lifelong self-improvement is a strong motivation for teachers (Altrichter et.al, 2001• Mezirow & Dirkx, 2006•Bolhuis, 2003), such as their professional development and social recognition (Bonk and Lee, 2017). We must mention that teachers want self-education for themselves, but also for their students. They want to develop critical thinking, imagination and active participation.

Teachers make good use of their free time, travel, solve problems and face learning barriers. They are interested in practical issues and not in theories. They improve their quality of life and offer voluntarily to fellow human beings and to society in general. They set a good example for their students, but also for their children. They choose flexible distance programs that can be combined with the obligations of adult life. In conclusion, we would say that the teacher-centered model of teaching and learning is an outdated model, which often gives teachers extra incentives to change attitudes, mentality and behavior.

Last but not least, online learners need to become motivated to overcome the procrastination challenge associated with online learning (Elvers, Polzella, & Graetz, 2003•Song & Hill, 2007), and to take advantage of online communication affordances to create meaningful interaction (King, 2002).

Key areas of self-directed learning are ICT (Information & Communication Technologies) and digital learning (e-learning programs). Open and distance learning programs, educational software, robotics and e-classrooms are fields of self-education for teachers (Xanthopoulou & Kefis, 2019). It is understood that this field has developed particularly due to the coronavirus pandemic, as all teachers had to adapt to the new educational data of distance education.

Some teachers are even interested in special education, learning disabilities, school psychology and intercultural education. Still others are interested in foreign languages. They also show interest in the arts (Kokkos, 2010), but also the environment, health, diet and exercise. The experiences themselves, but also the experiences due to the multiple roles of the teachers, the introspection and the self-observation, the management of the emotions and the research are their fields of self-education.

Adult distance education, education administration, communication and counseling are areas of intense interest. These as a whole prove that they refer to various fields as a whole. As a general conclusion of what was mentioned, it appears that the fields are related to education, but also personal, social, health, technology and various other issues. An interesting issue that emerged from the research is that the critical thinking of teachers and students is an area that needs strengthening.

It is considered appropriate to carry out similar research for life in other areas of Greece. The implementation of quantitative surveys could bring significant results for the consolidation of positions. Taking as an important element of the present research the necessary critical reflection in open and distance education, it is considered particularly useful to be used in many ways in further research efforts. The findings of the present study are encouraging and at the same time give impetus to further deepening in favor of self-directed learning in open and distance education.

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