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

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Βιβλιογραφική αναφορά:

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, and school psychology Teachers' motivations mainly include their personal and professional development, their socialization, offering to other people, and improvement of their life quality. The present research, by means of 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 teachers' fields and motivations serve their daily school needs. They are related to their personal and professional development as also the critical thinking of both themselves and their students afterwards. Especially due to the Covid19 pandemic crisis, the teachers' training needs 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 to this end. The present study can contribute to the advance of knowledge and practice in the development, promotion and planning of self-directed learning interventions in open and distance education, while its contribution 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

Introduction

The COVID-19 pandemic crisis caused an immediate transformation from traditional to distance learning at all levels of education, which is called “emergency remote teaching” (Misirli & Ergulec, 2021). In normal situations, 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 novel circumstances. It should be mentioned that a well-planned online learning is a complex process concerning its instructional design and development as also the need to create an effective learning environment (Ergulec, 2019•Palloff & Pratt, 2013). The aforementioned changes had strong impact on the way of teaching and way of self-directed learning (SDL) as well. According to Cardullo, Wang, Burton and Dong, (2021) teachers not only shifted their content delivery, but also their pedagogical practices in order to support remote learning (Xanthopoulou & Stavrakakis, 2019). Theories of self-directed learning are an internationally interesting topic and especially in Greece where research is limited in this field. Theories of self-directed learning are particularly interesting in Greece, where research is limited, due to the global push for educational reform that emphasizes personal and autonomous learning. Self-directed learning in open and distance education is also crucial in adult education. 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 professionals particular, 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 teacher-centered model, with its focus on passive reception of information, often neglects to engage students actively in the learning process, hindering the development of critical thinking and adaptability. Moreover, the idea that learning is not a "transferable genre" underscores the complexity of knowledge acquisition and skill development, which cannot be easily transmitted from teacher to student in a one-size-fits-all manner. Instead, learning is deeply contextual, influenced by individual experiences, motivations, and learning styles. In today's digital age, where information is abundant and accessible, educators are increasingly embracing more learner-centric approaches that empower students to take ownership of their learning journey, fostering self-directed learning and adaptability to navigate an ever-changing world.

The purpose of the work is to investigate the motivations of teachers' self-directed learning. A literature review revealed a strong interest in self-directed learning in adult education. Through 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. Moreover, it is expected not only to develop self-directed learning programs and cultivate skills in teachers, but also to design corresponding interventions, in order to disseminate throughout the educational community about the benefits of self-directed learning. Therefore, the authors 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 findings demonstrated that the areas of interest and motivations of teachers align closely with fulfilling their own daily school requirements, while also being significantly linked to personal growth and the cultivation of critical thinking skills, benefiting both educators and their students alike.

In summary, the teacher-centered model of education is increasingly recognized as outdated, motivating educators to shift their attitudes, mindset, and practices

towards new avenues of learning. The analysis of the results revealed diverse and compelling aspects, particularly in the realms of self-directed learning such as ICT and digital education. It is evident that these areas intersect with education as well as personal, social, health, and technological domains. These findings underscore the significance of this phenomenon, capturing the intense interest of adult educators who support teachers' evolving perspectives. Notably, the research highlights a pressing need to enhance the critical thinking skills of both teachers and students, signaling an area warranting further attention and development.

2. Literature review

2.1. Self-directed, online and lifelong learning

Self-directed learning has been shown to offer considerable benefits to individuals, particularly those residing at a distance, as they experience a sense of fulfillment and satisfaction when granted the autonomy to conduct tasks and activities independently (Kapur, 2019). By approaching their tasks and activities with diligence and creativity, individuals can reap substantial rewards. Moreover, self-directed learning plays a crucial role in workplace learning processes, particularly for individuals seeking advancement in the socio-economic ladder, fostering political awareness, and advocating for social change (Ellinger, 2004; Hutasuhut, Ahmad Zaidi Adruce, & Jonathan, 2021). Consequently, self-directed learning is increasingly recognized as a pivotal aspect of the human resource development process (Vithayaporn, Yong, & Chai, 2021). While various definitions of self-directed learning exist, the most widely accepted definition, attributed to Knowles (1989), characterizes it as a study process in which individuals take initiative, either with or without external assistance, to identify their learning needs, establish goals, employ appropriate strategies, and evaluate learning outcomes (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. Self-directed learning (SDL) has been shown to enhance opportunities for livelihood improvement (Din, Haron, & Rashid, 2016; Roberson &

Merriam, 2005) and equip individuals for lifelong learning. Murad et al. (2010) noted that SDL is linked not only to knowledge enhancement but also to the effective development of affective and 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 approaching an issue, but also an 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 come to recognize that they hold agency over their thoughts and emotions, gaining insight into their experiences and acknowledging their life values. Such learning fosters shifts in attitude and mindset (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). Compared to traditional learning methods, online learning has gained popularity among individuals seeking self-directed education. An important consideration regarding traditional learning is the associated cost; without the growth of online learning, learners would face significant expenses to access the courses they desire. This circumstance could pose challenges for learners, potentially hindering their ability to access education due to financial constraints. Additionally, in traditional learning settings, individuals lack the flexibility to choose their preferred learning schedule, as the learning process is contingent upon instructors, physical locations, and class sizes. 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 conlusion, 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 creativity (Verma et al., 2020).

2.2 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 is expected to be notably stronger compared to other factors influencing one's willingness to engage in 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. Consider a scenario where someone is

interested in improving their diet and nutrition. In self-directed learning, they take the initiative to gather information from various sources to deepen their understanding of this topic. They might start by researching reputable websites, reading books or articles, watching educational videos, or even consulting with nutritionists or health professionals. This proactive approach allows them to explore different perspectives, compare information, and tailor their learning experience to suit their specific needs and preferences. By actively seeking out and synthesizing information from various sources, they can enhance their knowledge and make more informed decisions about their dietary habits. This illustrates how self-directed learning empowers individuals to take ownership of their learning journey and pursue knowledge autonomously. Motivation drives individuals to invest their time and resources in self-directed learning, facilitating the organized execution of tasks and activities necessary to achieve their desired goals and objectives. 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 increasingly tasked with assuming individual-level responsibilities and are expected to take charge of their own professional development. This ongoing process of transformation extends throughout their careers and is integral to lifelong learning (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 among 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 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).

Overall, the motivations behind self-directed learning (SDL) are deemed crucial, encompassing factors such as individuals' eagerness to acquire new knowledge, their sense of autonomy in learning, and the perceived excitement of engaging with a website or activity. 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).

3. Research Methodology

3.1 Purpose, research questions and 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?

This study is both original and of significant interest, particularly because it has not been previously explored in Greece. For this research, the qualitative method,

specifically the case study approach, was deemed the most appropriate methodology. 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 enough, so that in-depth investigation was possible. Out of the twelve teachers involved in the study, there were two men and ten women. The age range of the participants varied from 27 to 58 years.

3.2 Process of collecting research data

An original interview protocol, also known as an interview guide, was developed initially but underwent modifications and adaptations during the research process. 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. Additional clarifications were given to the participants in order to ensure a climate of trust. The survey was not completed as originally planned. Research takes place inside the real world and not outside it (Robson, 2010). Robson's statement suggests that research occurs within the context of the real world, rather than in isolation from it. In other words, research is conducted within the complexities and dynamics of real-life situations, where various factors interact and influence the outcomes of the study. The pandemic crisis of Covid-19 in our country did not allow face-to-face contact for an interview thus the interviews were conducted using online platforms. 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; Altricher, 2005) as it helps researchers to organize their thoughts and make them conceivable. 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. Using a diary served as a tool to corroborate and validate the collected data rather than potentially leading to inaccurate conclusions. By referencing the diary entries alongside other data sources, researchers aimed to construct a more comprehensive understanding of the phenomenon under investigation. This approach allowed for a richer and more nuanced perspective, as it provided additional insights and context that might have been missed through other methods alone. Essentially, the diary entries complemented and enhanced the data analysis process, contributing to a more robust interpretation of the research findings and reducing the risk of drawing flawed or incomplete conclusions.

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.

3.3 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. Topics were defined and given names. 6. Original pieces (interviews and diaries) were selected and all findings were presented. 7. Interpretations were given and the writing of all the findings took place. The six-step process for data analysis delineates a structured framework aimed at deriving comprehensive insights from the collected data. It commences with the processing of recorded interviews, ensuring accessibility and organization. Subsequently, coding is employed to systematically categorize data segments based on recurring themes. These coded segments then form the basis for generating issues or topics, followed by an evaluation and synthesis of these topics into a conceptual map. Each topic is defined

and named to provide clarity, and original data pieces are selected to support findings presentation. Finally, interpretations are offered, and findings are synthesized into a cohesive narrative, culminating in a thorough understanding and interpretation of the data.

4. 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).

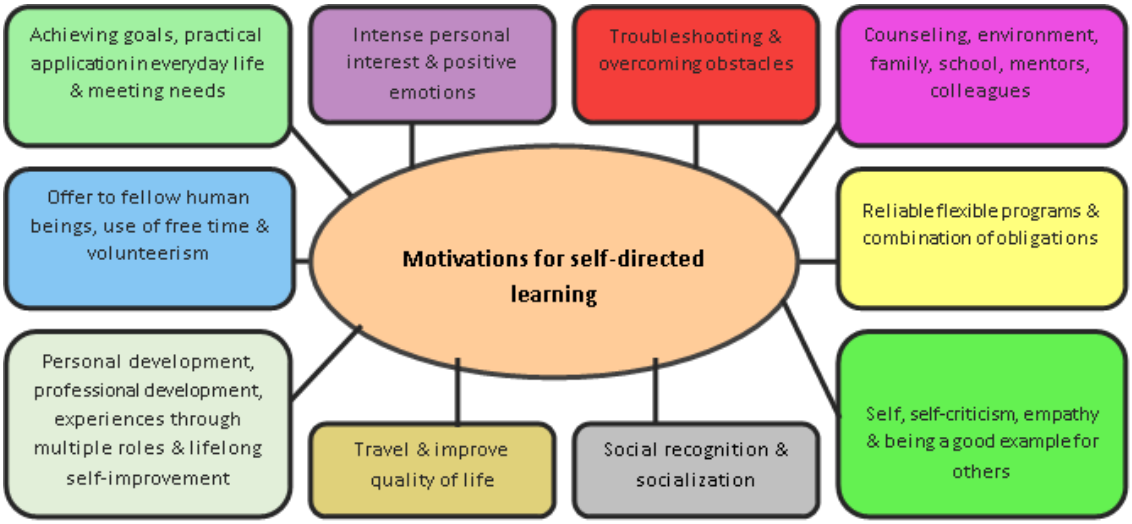

Figure 1: Thematic map of teachers' self-directed learning motivations

Overall, about 75% of teachers report that personal growth and lifelong self-improvement are primary motivations for engaging in self-directed learning. Approximately 60% of teachers indicate that achieving professional recognition and career advancement are significant motivators. Additionally, around 70% of teachers are driven by intrinsic interest and positive emotional connections to their subjects of learning.

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*

Regarding the second research question, following the coronavirus pandemic, 80% of teachers have engaged in self-directed learning specifically in digital and e-learning platforms. Additionally, 50% of teachers have shown interest in specialized fields such as special education, learning disabilities, and school psychology. Approximately 40% of teachers pursue learning in the arts and practical skills to enhance both personal satisfaction and their teaching methodologies.

5. Discussion and Suggestions

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. The authors discovered that engaging in exploratory learning, activation, and active participation in the knowledge acquisition process form a heuristic path to knowledge. This approach fosters interaction among participants and cultivates critical thinking skills (Kokkos & Lionarakis, 1998).

Particularly a collaborative environment, and 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). They wish 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.

Key areas of self-directed learning are 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), as well as the environment, health, diet and exercise. Experiences themselves, but also

experiences due to teachers' multiple roles, introspection and self-observation, management of the emotions and t research are their main fields of self-education. Adult distance education, education administration, communication, and counseling are areas of significant interest, collectively indicating a broad spectrum of fields. This suggests a comprehensive approach that encompasses education as well as personal, social, health, and technological aspects, among others. Notably, the research highlights a critical need for the enhancement of critical thinking skills among both teachers and students. Considering the insights gained, it is deemed beneficial to conduct similar research in other regions of Greece. Employing quantitative surveys could yield valuable results for solidifying perspectives. Given the emphasis on critical reflection in open and distance education within the current study, its integration into future research endeavors is highly recommended. The findings of this study are not only encouraging but also serve as a catalyst for further exploration and advancement of self-directed learning in open and distance education contexts.

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