

# CREATING LEARNING CONDITIONS THROUGH SOCIAL NETWORKS

## ΔΗΜΙΟΥΡΓΩΝΤΑΣ ΣΥΝΘΗΚΕΣ ΜΑΘΗΣΗΣ ΜΕΣΩ ΤΩΝ ΚΟΙΝΩΝΙΚΩΝ ΔΙΚΤΥΩΝ

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### Abstract

Social Networks is a special way of communicating between people, which is significantly different from the traditional interpersonal communication. The differentiation mainly lies within the certain characteristics that they have. Some of these features are the timelessness of the information, the playback and search capabilities they offer, and the accessibility of the available material. It is noted that, although the development of technology brings to the fore new ways of communication which aim to expand the possibilities of human nature, it is not able to ensure the full integrity of this purpose. It is therefore to be expected that the existence of Social Media has certainly had a positive and negative impact on our daily lives for many different reasons. The purpose of this work is to study the use of social networks in the learning process. The results show that social networks enhance social interaction between students and results in their cognitive development.

**Keywords:** *social networks, learning, efficiency, teachers*

### Abstract

Τα κοινωνικά δίκτυα είναι τεχνολογίες που διευκολύνουν την κοινωνική αλληλεπίδραση, καθιστούν δυνατή τη συνεργασία και επιτρέπουν τη συζήτηση μεταξύ των ενδιαφερόμενων. Με άλλα λόγια, τα μέσα κοινωνικής δικτύωσης (ΜΚΔ) αποτελούν την κοινωνική διάδραση μεταξύ ανθρώπων που δημιουργούν, μοιράζονται ή ανταλλάσσουν πληροφορίες και ιδέες μέσα σε εικονικές κοινότητες και δίκτυα. Ο σκοπός της παρούσας έρευνας είναι να μελετήσει τη χρήση των ΜΚΔ στην εκπαιδευτική διαδικασία. Ως αποτέλεσμα φαίνεται ότι η χρήση των κοινωνικών δικτύων επιφέρει πολλά πλεονεκτήματα στο εκπαιδευτικό έργο ενώ ταυτόχρονα συμβάλλει στην εμπάθυνση της μάθησης την επικοινωνία των εκπαιδευτικών με τους μαθητές τους αλλά και των μαθητών μεταξύ τους.

**Keywords:** *Κοινωνικά δίκτυα, μάθηση, αποτελεσματικότητα, Καθηγητές*

## INTRODUCTION

### Social networks

Social networks are technologies that facilitate social interaction, make collaboration possible, and allow discussion among stakeholders. These technologies include blogs, wikis, media (audio media, photos, videos, texts) as well as networking platforms (such as Facebook, Instagram, etc.) and virtual environments (Panagiotakopoulos, 2018 p. 154). In other words, social media is the social interaction between people who create, share, or exchange information and ideas within virtual communities and networks

(Bryer & Zavatarro, 2011). Many studies have been conducted in recent years on the inclusion of social networks in education, mainly in secondary and higher education, while it is noteworthy that all of them lead to positive results and lead to the fact that the use of social networks brings many advantages to educational work (Koutsogiannopoulou, 2013; Kolliopoulou, 2015). The use of social networks improves the educational process, the communication of teachers with their students and students with each other while at the same time it contributes to the deepening of learning through the reflection that is created (Siemens & Tittenberger, 2009).

### **Teacher's efficiency and new ways of learning**

According to Shea & Bidjerano (2010), there are two ways in which e-learning can be integrated into the teaching method: learning "from" computers and learning "with" computers. In the case of learning "with" computers, students and the teacher have a direct and active role in the learning process by using educational technologies as tools that contribute to the learning process. Also, the teacher himself should take advantage of all the possibilities that exist for new technologies as well as social networks, which play a decisive role in the learning process. In this way, the teacher himself becomes more effective and the lesson becomes more important for the students (So, Choi, Lim, & Xiong, 2012). In other words, teacher's effectiveness is directly related to his beliefs about the value and usefulness of new technologies while at the same time playing an important role in the acceptance and adoption of new technology in the classroom (Shea & Bidjerano, 2010). As Tilton and Hartnett (2016) argue, higher levels of individual effectiveness are linked to the willingness to discover new innovative ways of learning. However, many studies (Shahlou & Izadpanah, 2016; Celik & Yesilyurt, 2013; So, Choi, Lim, & Xiong, 2012) state that, despite the fact that individual effectiveness in technology is a key component of education, it should be examined every time the teacher wishes to incorporate it into the classroom.

### **Use of Social Networks and education**

Social Media can now be accessed from anywhere, thanks to the development of technology and the full portability of a number of everyday devices. All that is needed, of course, is an Internet connection. All of these features shape the dynamics of human interaction on the Internet. (Dewing, 2010; Zotos & Armakolas, 2018). According to Panagiotakopoulos (2018), "social media works like a big "melting pot", in which the created tolerances contribute to the creation of conditions for smooth coexistence with everyone and mitigation of stereotypes or differences."

According to Piaget (1974), knowledge and intellect have a social origin and develop as a result of social interaction. The main features of Vygotsky's sociocultural approach (1997) are that the development of the intellect is socially determined and that the higher psychological functions of the intellect, such as thought, have a social origin. Social interaction not only facilitates development, but it creates it. Also, using social networks in teaching methods and creating e.g. a group with specific topics where students are asked to "upload" relevant sources and information they will find on the internet, these people "learn how to learn". As Bruner (1969) points out, learning and the general transfer of knowledge, principles, and attitudes occur when conditions are designed to lead individuals to "learn how to learn." At the same time, the use of social

networks strengthens students' critical thinking and improves the atmosphere in the classroom (Ellison, Steinfield & Lampe, 2007).

In this way, the teacher becomes closer to the students and the gap between them is reduced as they both use the same networking tool while at the same time the lesson acquires more meaning and becomes more attractive for all students who show more interest in the process of learning. Besides, students who do not perform as well using verbal communication in the classroom, are more encouraged.

Also, the use and utilization of social networks in the classroom can be used as a means of exercising "authentic learning" (Sotiriadou & Papadakis, 2013) while at the same time the teacher uses blogs, wikis, videos, discussion forums, social networks, etc. to provide education through activities that link education and the problems of everyday life (Kulmala & Stanton, 2008). Finally, the teacher through social networks encourages the active participation of students in the process of reflection (Mazman & Usluel, 2010) and helps them to construct new knowledge (Balaji & Chakrabarti, 2010).

In other words, learning takes place through the informal exchange of information through organized networks that are supported by digital media. Learning is a lifelong network of online activities through virtual and/or real communities. Searching and evaluating information becomes a collaborative action and this is the biggest motivation for students (Panagiotakopoulos, 2018, p.48).

## **1 WAYS OF USING SOCIAL NETWORKS IN SECONDARY EDUCATION**

There are many social networks that teachers choose to use informally during the learning process. Some of the most well-known social networks used in secondary education are presented below.

- Facebook is a very powerful tool that contributes to the exchange of information in a direct way and better cooperation between teachers and students and students among themselves. Team members can share files, send links, information, and videos directly and quickly at the touch of a button. Teachers can publish assignments for students and educational information that students or other teachers can easily access, from home or from anywhere else. It is also possible for teachers to add additional information that was extracted at a later stage even from social media, like for example websites, which the interested parties can instantly see through published links (Zotos & Armakolas, 2018).
- Twitter is also applicable in social sciences, history, modern Greek language in secondary education. Many professors conduct a daily study of the latest events, through the publications made on Twitter by respective pages as they watch "tweets" with news and developments from around the world. All of this can be accessed by students and with the appropriate discussion, their knowledge and awareness can be strengthened (Elliniadou & Zakopoulos, 2016).
- Pinterest could be used by the teacher as a "board" where he would post online sources related to the sections he teaches for further investigation by the students. The same can be done on youtube, where he can post relevant videos as additional material in each module.

- LinkedIn plays an important role in vocational guidance courses, but also for later professional development. Many teachers use this social network in the relevant module, using their profile and various examples.

## **2 METHODOLOGY**

This study investigates the connection between social media and the teaching process and how teachers use it in secondary education. The research questions that this study may answer are:

- Are social media used during the educational process?
- Are teachers in Greek schools properly trained to be able to use social media efficiently?
- Does the inclusion of social networks contribute to the achievement of their teaching objectives according to teachers? Does it facilitate the teaching method?
- According to the teachers, what problems are created during the teaching process by the use of social networks?

The questionnaires used in the present research study were distributed directly to the respondents (to teachers of Gymnasiums and Lyceums in private and public schools) in electronic form through social networking. A structured questionnaire was used for this study.

The questionnaire was based on the research of Venkatesh & Davis (2000) and Wastiau, Blamire, Kearney, Quittre, Van de Gaer & Monseur, (2013). Participants were selected using the "convenient" sampling method. The sample collected is 168 questionnaires while each questionnaire consisted of open and closed type questions, multiple-choice, dichotomous as well as questions with a Likert scale of five levels (1 = I agree and 5 = I disagree). The questionnaire was divided into three sections. The first section concerned demographics and other elements (age, years of teaching experience, B-level education, level of studies, specialty), the second section related to personal engagement with social networks and the integration of networks in their classroom, the third section concerned their views on the inclusion of social networks in the classroom and the fourth section was about the possible reasons that prevent them from integrating them.

The questions related to demographic characteristics - individual data of the subjects of the sample are characterized as "independent" variables, while the questions that investigate the attitudes, views of teachers, and the degree of satisfaction of all parties with the use of ICT are characterized as dependent variables. Category and layout scales were mainly used to measure the variables of this research. More specifically, the items used to measure satisfaction are (Isari & Pourkos, 2015):

- Category scale: used to register people or events in various categories.
- Arrangement scale: this scale categorizes people or events into groups based on a variable.

### 3 ANALYSIS

The present section presents the results of the research, as they emerge from the questionnaires that were shared. The sample of teachers consists of 168 people, of which 61.9% (i.e 104 people) were women and 38.1% (ie 65 people) were men (Table 1). In other words, we observe that there is an unequal distribution of the sexes in the research process.

<b>Gender</b>	<b>Frequency</b>	<b>Percentage%</b>
Female	104	61,9
Male	65	38,1
<b>Total</b>	169	100,0

**Table 1: Gender distribution**

From the table below (Table 2) it is observed that the largest percentage of the participants belong to the age group of over 50 years. A percentage of 35.7% follows for the 40-49 age group and finally, participants in the 30-39 age group follow with a percentage of 18.5%. It is worth noting that there was only 1 participant from the 22-29 age group.

<b>Age group</b>	<b>Frequency</b>	<b>Percentage%</b>
22-29	1	0,6
30-39	31	18,5
40-49	60	35,7
>50	76	45,2
<b>Total</b>	168	100,0

**Table 2 Age group distribution**

Regarding the years of teaching experience, it is obvious that the majority of the participants have 16-20 years of experience. The group that follows has 11-25 years of teaching experience with a percentage of 21,4% and the group with over 25 years of teaching experience at 21,4% also. The minority of the participants are those who have less than 5 years of teaching experience and they add up to a percentage of 7.2%.

Teaching experience (years)	Frequency	Percentage%
<5	12	7,2
6-10	16	9,5
11-15	36	21,4
16-20	38	22,6
21-25	30	17,9
>25	36	21,4
<b>Total</b>	168	100,0

**Table 3 Years of teaching experience distribution**

The main findings of this research study will be presented below. When asked if they have attended a training seminar on the use and application of digital technologies in the classroom, the majority of respondents answered positively with 57.7%, while only 40.5% answered negatively. It is worth noting, however, that 3 people were unaware of the existence of such training seminars.

Training seminars attendance	Frequency	Percentage%
Yes	97	57,7
No	68	40,5
N/A	3	1,8
<b>Total</b>	168	100,0

**Table 4 Training seminars attendance**

When the participants were asked whether they have a profile in a social media platform the majority of them replied positively with a percentage of 82,1%, while 17,9% replied negatively.

Personal profile	Frequency	Percentage %
Yes	138	82,1
No	30	17,9
<b>Total</b>	168	100,0

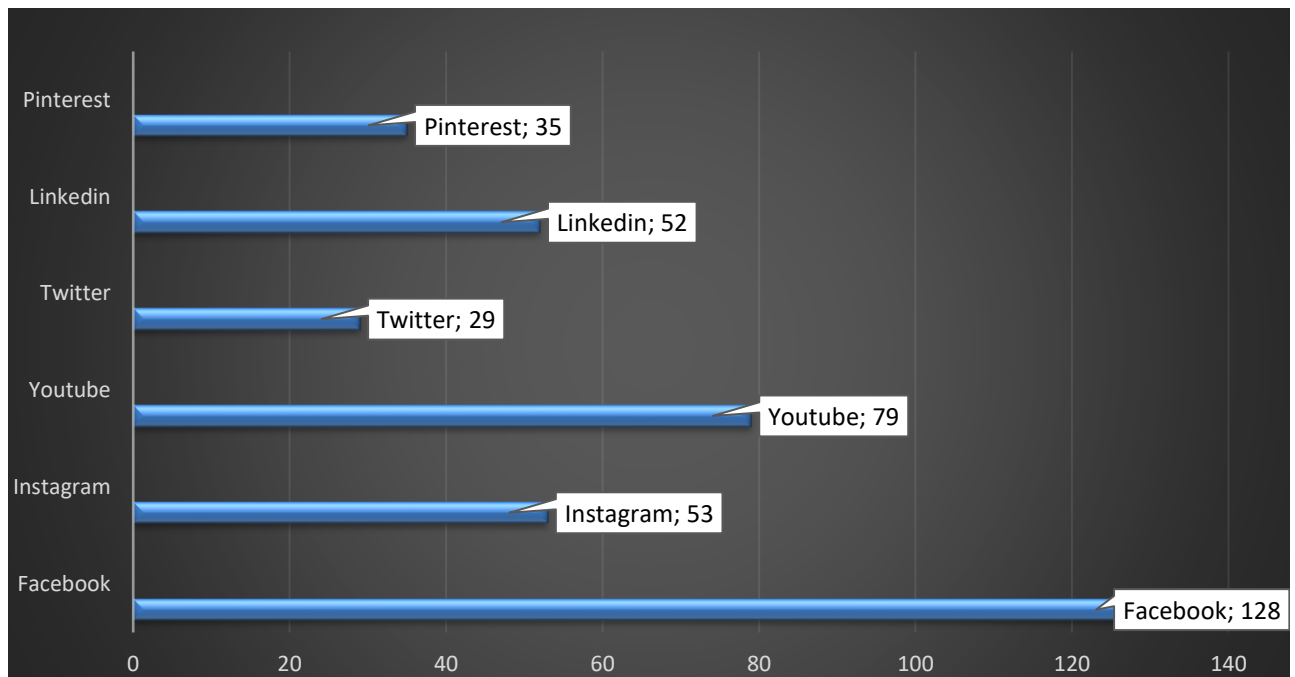
**Table 5 Personal profile in a Social media platform**

When asked if social media is used during the educational process, the majority of respondents answered positively with 56%.

Social media use during the educational process	Frequency	Percentage %
Yes	94	56,0
No	74	44,0
<b>Total</b>	<b>168</b>	<b>100,0</b>

**Table 6: Social media use during the educational process**

When they were asked if teachers in Greek schools are trained so that they can make significant use of social networks, the majority (38%) answered “agree” (38%) and 12% answered “strongly agree”. Also, 19% of respondents answered “Neither agree nor disagree” and 19% answered “disagree”. When asked whether the integration of social networks contributes to the achievement of their teaching objectives and to facilitating their teaching, teachers responded “agree” with a percentage of 36%. Only 12% think answered “strongly disagree” while 8% answered, “strongly agree”. When asked which social media they use the most for educational and personal purposes, the majority of respondents answered Facebook (128 people), and then it was Youtube (79 people), Instagram (53 people), and LinkedIn (52 people). Few teachers use Twitter (29 people) and Pinterest (35 people).



**Graph 1 Type of Social media used**

At the last open form question, the participants were asked of the problems that are created during the teaching process by the use of social networks, the teachers answered the following:

- irresponsible use by students
- phobia about disorienting students from the learning process
- the legal framework
- lack of infrastructure
- Personal negative beliefs about social networks
- Internet addiction
- cyberbullying

- lack of time by teachers
- lack of adequate training

## 4 CONCLUSIONS

With the ever-increasing use of technology as well as social networks invading more and more of our lives, the need to "exploit" these networks to the learning process is imperative. The new way of learning is becoming more constructive and more exciting for the younger generations. Young people now have the opportunity to learn how to use social media in a secure environment, such as schools, so students are allowed to learn from an early age how to use these tools in a positive way and for future use in their professional and social life.

Students now acquire the ability to interact with each other while maintaining constant communication with their teachers while in this way they can more easily seek help from them. Through our research, we find that teachers use social media not only for personal purposes but also for the process of teaching their courses. In fact, the majority of them mainly use two of the most popular social networks, Facebook, and Instagram.

Students use social networks very actively and they go through them, as they can find endless amounts of information and communication opportunities with the whole world, things that with the right guidance, can be exploited having really impressive educational benefits. After all, teachers believe that the use of social media contributes to the educational process and in fact to a significant extent while at the same time helping teachers to fulfill their teaching goals easily and effectively.

At this point, it is worth noting that although the teachers themselves use social media to teach in schools, they are not adequately trained. At the same time, several problems are created due to the lack of infrastructure in Greek schools. The fact that there are not enough technology tools (such as new computers, video projectors, printers, scanners, etc.) at schools, except in some laboratories, is a blow to the process itself and seems to significantly affect the way we teach. Besides, the irresponsible and reckless use of these tools by students and in extreme cases, internet addiction exacerbates the problem. Finally, the lack of information about teachers on legal issues as well as the issue of personal data security significantly affects teachers' perceptions of the use of social networks in learning.

Despite the limitations of conducting this research, due to the local investigation of such a serious issue as the use of social media in the educational process, we believe that the findings can be useful and lead to positive conclusions in the more efficient use of ICT in Secondary Education.

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