

THE DIGITAL SKILLS OF TEACHERS IN THE SCHOOL ENVIRONMENT

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Abstract: The purpose of this paper is to collect, process and discuss data, literature review and primary information using questionnaires, regarding the reasons for use by the Primary Education teachers in order to make use of digital skills, computers and other technological means in their workplace.

The statistical techniques mentioned in this paper are those of descriptive statistical analysis, the display of averages in relevant questions of the questionnaire and the use of inductive methods in order to verify the verification of the research questions or not. The methods of the aforementioned statistical analysis belong to the statistical program of SPSS No.23 and whose results are shown in the results.

The 33.8% of the interviewed parents stated that ICT is used in educational teaching for their children as students, for the production of teaching material to a very large extent, 25.6% to a moderate extent, 18% to a small extent, and the remaining 17.3% to a very large extent, the 36.3% of the interviewed parents stated that ICT is used in educational teaching for their children as students, to search for information via the Internet to a very large extent, 34.8% to a very large extent and 20% to a moderate extent degree and the 29% of the parents interviewed stated that they do not use ICT at all for their children as students, to manage e-mail, 26.7% use it to a small extent for this purpose, 19.8% moderately degree and another the same percentage, to a very large extent.

The majority of respondents would describe their technological / digital skills as quite satisfactory. Accordingly, the vast majority of interviewed teachers stated that ICT can be used in all subjects of the educational process. The main problems faced by teachers regarding the use of technology in the educational process are the inappropriateness of the infrastructure, connectivity problems, the non-supportive environment from the Director and the lack of resources to upgrade the existing computers. Therefore, a future research could focus on the factors that are set as obstacles for the use of ICT regarding the reasons for use by the Primary Education teachers in order to make use of digital skills, computers and other technological means in their workplace, both by teachers and students.

Keywords: Digital, Skills, ICT, Parents, Schools, Students.

1. INTRODUCTION

The use of new technologies in the educational process is an imperative of today's social reality. Information and Communication Technologies (ICT) in the educational environment are considered powerful tools, as they can lead positively to educational and pedagogical results. By the term Information and Communication Technologies, it is meant all the technologies that people use in computer basis and digital basis. That is, anything related to technology and devices that have been developed to date to improve our daily lives. Some of them are communication and access to knowledge (ICT – Information and Communication Technology). ICT helps the development of e-commerce, e-learning and many other factors. Therefore, technology plays a crucial role in our lives. (<https://www.orthology.gr/el/blog/item/26-20-ti-einai-tpe.html>). The use of new technologies in the educational process is an imperative of today's social reality. Information and Communication Technologies (ICT) in the educational environment are considered powerful tools, as they can lead positively to educational and pedagogical results. Despite the wide range of uses and applications, the new technologies were not equally accepted by all the teachers who are called to include them in the educational practice.

While the usefulness of ICT in education is recognized, it is found that a large percentage of teachers avoid using it. There are not a few who consider that if there is no political and educational planning during their integration, the problems that will arise are inevitable (Nikolopoulou, 2009). The necessity of this specific research and work refers to the fact that it will provide useful information for the use of ICT in the educational field today and especially in primary schools. In particular, specific information is offered on the reasons for use by Primary Education teachers in order to make use of computers and other technological means in their workplace, i.e. in the schools of the country, essentially reporting the opinions of teachers in this field.

2. MATERIALS AND METHODS

Subsequently, the cases (under examination) were formulated and it was considered whether they should be accepted or rejected. The examination of the cases refers, among other things, to the quantitative research of the views and perceptions of teachers regarding the reasons for use by the Primary. The different education teachers in order to make use of digital skills, computers and other technological means in their workplace. A statistical method

used to examine whether the mean of a variable differs between different groups in the population is 'Analysis of Variance'. If the data met the conditions, this method was expected to be used to decide whether or not to accept the hypotheses to be formulated in this research. Finally, correlation analysis was done to examine the correlation between pairs of variables, and for this purpose the Pearson coefficient was used.

The sample population of this work refers to the 50% of respondents where they were male teachers and the remaining 50% were female teachers. Also, the average age of the participants is about 40 years with a Standard Deviation of about 9 years. The youngest teacher was 25 years old and the oldest was 54 years old, and 35% of the respondents were university graduates, 35% were holders of a second degree, 20% were holders of a Master's degree and the remaining 10% were holders of a Master's degree. Accordingly, 60% of the respondents were married, 20% were in a relationship and the remaining 20% were single and finally the average length of service of the training participants is about 13 years with a Standard Deviation of about 9 years. The shortest length of service reported was 1 year and the longest 25 years.

Finally, the statistical techniques mentioned in this paper are those of descriptive statistical analysis, the display of averages in relevant questions of the questionnaire and the use of inductive methods in order to verify the verification of the research questions or not. The methods of the aforementioned statistical analysis belong to the statistical program of SPSS No.23 and whose results are shown in the results.

3. RESULTS

According to the results of the primary research, the 50% of the respondents were male teachers and the remaining 50% were female teachers. The average age of the participants is about 40 years with a Standard Deviation of about 9 years. The youngest teacher was 25 years old and the oldest was 54 years old. The 35% of the respondents were university graduates, 35% were holders of a second degree, 20% were holders of a master's degree and the remaining 10% were holders of a Master's degree. The average length of service of the training participants is approximately 13 years with a Standard Deviation of approximately 9 years. The shortest length of service reported was 1 year and the longest 25 years. All the teachers have taken part in an ICT seminar.

The 40% of the respondents have completed A1 level in ICT, another 40% have completed B1 level in ICT, 10% have completed B2 level in ICT and the remaining 10% have completed all ICT levels. The 30% of the respondents stated that they use ICT in teaching with a very high frequency, another 30% to a fairly large extent, 20% to a small extent while the remaining 20% use it daily. The 50% of respondents rated their ICT performance above average (6), 35% (cumulative) rated their ICT performance fairly high (7-8) and 10% (cumulative) rated their ICT performance with a very high score (9-10). The 65% of respondents would rate their technology skills fairly satisfactory and 25% moderately satisfactory. The 45% of the respondents consider that ICT is useful in education to a fairly large extent, 30% to a moderate extent and 15% to a very large extent and the 80% of the interviewed teachers stated that ICT can contribute to all subjects of the educational process and the remaining 20% only to specific subjects.

4. DISCUSSION

By confirming findings of previous research, the present study of teachers' views showed that young children use digital devices mainly for entertainment purposes and for employment so that teachers have free personal time or do household chores (Fesakis, 2009, Kabali et al., 2015, Radesky et al., 2016, Seo & Lee, 2017). Despite the prevalence of the entertainment side, parents recognize the educational value of digital technologies and their contribution to the development of children in the cognitive, emotional and psychomotor areas, as also reported in the literature (Aldhafeeri & Palaiologou, 2016, Preradovic, Lesin & Sagud, 2016). During the pandemic, children's use of digital devices at home increased. It seems that the implementation of distance kindergarten education has given some parents the opportunity to experience the educational value of PSTs and to combine entertainment with the education of young children at home.

On the other hand, the teachers who participated in the research are concerned about the negative effects of the use of digital devices on the cognitive, social and physical development of their children, in agreement with earlier research findings (Palaigeorgiou et al., 2018, Preradovic, Lesin & Sagud, 2016, Radesky et al., 2016). The mediation practices applied by the parents of preschool children in this study are restrictive mediation, setting rules regarding the time, frequency and content of the use of ICT, supervising their children's use and/or choosing to share of PSS for entertainment and educational purpose (McCloskey et al., 2018, Palaigeorgiou et al., 2018, Seo & Lee, 2017). Confirming the findings of previous research (Preradovic, Lesin & Sagud, 2016, Radesky et al., 2016), parents raise Internet safety, the negative consequences of ICT use, appropriate educational applications and the correct ways of using ICTs by young children.

The use of information and communication technologies also has a great impact on education. So much so that there have even been qualitative changes, through audiovisual material. Another advantage of using technologies is that provided by computer simulations (Cladellas & Castelló, 2010). Other advantages of using ICT (Cladellas & Castelló, 2010) are that students connect technology with playful activity. In this way we activate positive emotional states in children, thus managing to maintain attention on the activity for longer than before with other more conventional means. On the internet there is a significant amount of information, both textual and audio-visual. This information can be used to facilitate learning. It is necessary to know how to distinguish the quality of information and its quantity. It is interesting to know the advantages that ICT can offer us. However, there are also cases where the use of technologies can have disadvantages:

- ✓ The use of ICT implies a cultural and social transformation that affects such important points as human relationships, the world of work, study and entertainment (Suasnabas, Ávila, Díaz & Rodríguez, 2017)
- ✓ The ICT is likely to have a more playful approach than an educational one. In this way, the proposed goal will not be pursued (Cladellas & Castelló, 2010).
- ✓ As has been commented on the advantages of ICT, we have a lot of information on the internet, but this may not be reliable, outdated or wrong (Cladellas & Castelló, 2010).
- ✓ Most of the teachers do not have knowledge about the technology that can be used to carry out the educational process (Fuentes, Carrera & Fernández, 2017).

5. CONCLUSIONS

The majority of respondents would describe their technological / digital skills as quite satisfactory. Accordingly, the vast majority of interviewed teachers stated that ICT can be used in all subjects of the educational process. The main problems faced by teachers regarding the use of technology in the educational process are the inappropriateness of the infrastructure, connectivity problems, the non-supportive environment from the Director and the lack of resources to upgrade the existing computers. Finally, male teachers scored a higher average than female teachers, which means that the former consider themselves to have better ICT performance than their female colleagues.

RECOMMENDATIONS

According to what was mentioned above, it could be said that this innovative study arises as a response to the current educational reality. It is essentially referred to as a methodological proposal applied to the teaching and specifically of primary school students, to improve the academic performance of these students. The educational reality faced by teachers is, without a doubt, a difficult challenge that with motivation and work we must achieve in order to achieve the goals set each academic year and that is where the use of ICT plays a role. Therefore, a future research could focus on the factors that are set as obstacles for the use of ICT regarding the reasons for use by the Primary Education teachers in order to make use of digital skills, computers and other technological means in their workplace, both by teachers and students.

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