

MULTILINGUAL ACADEMIC Journal of EDUCATION AND SOCIAL SCIENCES



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To Link this Article: http://dx.doi.org/10.46886/MAJESS/v8-i1/7334

DOI:10.46886/MAJESS/v8-i1/7334

Received: 07 May 2020, Revised: 24 June 2020, Accepted: 01 July 2020

Published Online: 19 July 2020

In-Text Citation: (Panousi & Zorbas, 2020)

**To Cite this Article:** Panousi, A., & Zorbas, V. (2020). Investigating EFL Teachers' Attitude towards the Use of Educational Technology in Greek Education. *Multilingual Academic Journal of Education and Social Sciences*, 8(1), 233–248.

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## MULTILINGUAL ACADEMIC JOURNAL OF EDUCATION AND SOCIAL SCIENCES

## Investigating EFL Teachers' Attitude towards the Use of Educational Technology in Greek Education

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#### Abstract

This article attempts to explore EFL teachers' attitudes towards educational technology in the Greek context and focuses on the positive and negative aspects of using educational technology in the classroom. The main instruments used are a questionnaire administered to 125 teachers, 10 EFL teachers' interviews and observation notes from 5 teaching sessions. The findings confirm that the majority of teachers have positive attitudes toward the use of educational technology. They also make use of technology in their lessons when they are given the opportunity. Nevertheless, with regard to the technological equipment available, it appears that the language institutes are far more equipped than public or private schools. The lack of time is another major barrier which prevents teachers from using technology in class. The findings also suggest that the use of technological tools is partly integrated in the syllabus and there should be found ways to fully integrate it in the syllabus and by extension in the teachers' lessons.

**Key words**: Educational Technology, Technological Equipment, Web 2.0 Tools, EFL Teachers' Knowledge, EFL Teachers' Training

#### Introduction

Nowadays, it is evident that our life is interwoven with the rapid progress of technology. Technology is present in almost every aspect of our lives. The internet, computers, smart phones and social media have become part and parcel of a person's daily life. More specifically, young people seem to have fully adopted a new way of learning and communicating through technology (Prensky, 2001). Therefore, there is no doubt that technology plays an essential role in the development of humanity and international relations. As the world keeps on developing, various emerging technologies influence us in different ways, either in positive or negative ones.

Over the last few decades technology has been embraced by the field of education. Information and communication technologies in education have taken on multiple roles. Not only have ICTs served as an important factor in national economic development since everything is based on computers (Modum, 1998) but they have also been useful in the development of learners' skills and new literacies (Sylvester & Greenidge, 2009: 284) by creating a more motivating and challenging new environment. Thus, learners are now ready to cope with the

www.kwpublications.com ISSN: 2308-0876 needs of the digital era -one that continuously changes. However, have teachers realized the significance of this new reality?

It has been pointed out that the adoption of technology in educational contexts has not been as immediate as in other countries (Zhao & Frank, 2003). As a result, many studies have been carried out to date on the factors that hinder the use of computer technology in educational practices (Levin & Wadmany, 2008; Wozney, Venkatesh, & Abrami, 2006; Khalid, Islam & Ahmed, 2019). One of the findings is that teachers, for some reasons, avoid using educational technology in their language teaching practices. To this end, this article probes into English language teachers' attitudes toward educational technology within the Greek education system.

#### **Literature Review**

By the term Educational Technology we refer to "the study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources" (Robinson, Molenda, & Rezabek, 2008: 15; Alzgool, 2019; Umrani, Ahmed & Memon, 2015). Of course, educational technology is a complicated process as it involves not only people but also ideas, organization and devices in order to analyze problems which deal with human learning, and implement, evaluate as well as manage solutions to those problems (Jonassen, 2006). In other words, educational technology is a study whose main goal is to facilitate the learning process by using educational methods and resources (Lucido & Borabo, 1997). Its role is multiple since it serves as an information vehicle for knowledge exploration and learning-by-constructing support. To that end, information is accessed and perspectives, beliefs and world views are compared at the same time. Thus, collaboration, discussion, critical thinking and argumentation among members of a community are achieved to a great extent.

Nevertheless, the major question here is: Is technology about to replace teachers? No matter how invaluable sources and authentic materials are provided to learners in order to improve their learning skills, language teachers are the ones who should use technology as a functional tool for successful language learning and teaching. In particular, teachers should embrace the new language learning technologies and discover the numerous advantages computer-assisted language learning (CALL) offers (Blake, 2013). CALL is not only "the search for and the study of applications of the computer in language teaching and learning" (Levy, 1997: 1). In its broader sense, it embraces a whole set of approaches to teaching and learning foreign languages. One of these approaches is Web 2.0 tools which can help CALL become even more effective (Chambers & Bax, 2006; Zin & Ibrahim, 2020).

As Kern (2006: 183) specifies: "Images, animation, color and visual design interact with language in Web-based communication. E-mail, instant messaging, chat rooms, Usenet groups, MOOs, blogs and wikis enable new forms of discourse; new forms of authorship; new forms of identity construction; new ways to form, choose and maintain learning communities and affinity groups that cross-national boundaries."

However, there seem to be some factors which hinder, in a way, the successful use of ICT in the classroom. Those are mostly teachers' attitudes and perceptions towards computer technology and its use in their teaching practices. Of course, institution and resources are two more factors to be taken into consideration (Mumtaz, 2000). To be more specific, it appears that schools or institutes which welcome changes are more likely to embrace new technologies and use them in a successful way in the classroom. In order to do this, however, it is essential that

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schools be given the financial resources to ensure that excellent facilities as well as technical equipment are provided (Cox, Cox, & Preston, 2000; McDougall & Squires, 1997).

What is also important is the contribution of language teachers to the integration of the ICT in the classroom. Some of them already use technology in class as they have realized the numerous advantages technology offers not only for the development of their learners' skills but also for their own professional development. Prior research shows that many teachers seem to welcome educational technology and more specifically Web 2.0 tools (Crook, Fisher, Graber, Harrison, Lewin, Cummings, & Sharples, 2008; Hadjirigas, 2012; Spiris, 2014). More than 50% of teachers in China agree technology-based tools are of great importance for a productive collaborative learning (Li & Walsh, 2011). As for Greece, recent studies show that teachers understand the significance of using educational technology in class and agree that this kind of instruction can offer students numerous benefits such as motivation and development of communication skills (Karkoulia, 2016; Katerini, 2013).

Others are positive towards new technologies and have the need for change but they are not given enough opportunities to understand and use them the way they want (Robertson, Calder, Fungi, Jonest, O'Shea, & Lambrechtst, 1996). Nevertheless, over the last few years, many EFL Greek teachers have decided to attend educational seminars on the use of educational technology in the classroom. Many efforts have also been made to provide English teachers of public primary and secondary education with special training in using ICT. This year the Ministry of Education provided EFL Greek teachers with an introductory training program on using new technologies in education. The teachers' response towards this new concept seems to be positive. However, although the theoretical background of this program covers the teachers' needs, it remains unclear whether these practices are used in the Greek classroom.

Last but not least, there are those who seem to be totally negative towards technology either because they lack proper education and are hesitant to use it or because they are not interested in it as they believe that the conventional methods of teaching are more than efficient (Albion, 2008). As Demetriadis, Barbas, Molohides, Palaigeorgiou, Psillos, Vlahavas, & Pombortsis (2003: 20) mention "teachers' attitudes regarding ICT use in schools not only pose difficulties in the use of technology per se but also cancel the learning benefits expected to spring from the instructional reform."

What is widely accepted is that unless teachers develop a positive attitude towards technology, they will surely not use it in their teaching practice (Albirini, 2006, Watson, 1998, Woodrow, 1992). The delicacy of this situation calls for further investigation. What remains to be seen is whether teachers have understood the real value of this digital revolution which automatically brings a social revolution as well (Blake, 2013).

#### **Research Methodology**

This research is grounded in the qualitative research paradigm and employs various tools in order to triangulate the data and ensure validity. Therefore, a questionnaire as well as interview questions and observation are employed for the needs of the research in order to obtain a broad

understanding of the situation presented. The participants are EFL teachers who live and work in Greece and teach in primary and secondary education both in the public or private sector.

#### The Research Tools

#### Questionnaire

For the purposes of this research a self-administrated questionnaire was designed to collect descriptive data. The particular questionnaire aims to explore the views of a larger number of study participants in order to make the study even more reliable. It includes a variety of closed and open- ended questions. The closed questions can be answered by choosing from the alternatives (Richards, 2001). They are considered less time-consuming to complete and it is probable that there will be a richer response rate (Bryman, 2015; Dörnyei, 2003). The present questionnaire consists of 8 parts each of which collects different types of data. The first part consists of 'personal data' questions of demographic character such as gender, age, academic qualifications, teaching experience, current employment, training and teaching methods used. Those questions are in the form of multiple-choice in order to "capture the likely range of responses" (Cohen, Manion, & Morrison, 2000: 251).

Pilot testing was conducted to enhance the validity1 of the questionnaire (Cohen, Manion, & Morrison, 2007; Dörnyei, 2003). It actually tests the time each participant needs to complete it and ensures that there are no ambiguous or difficult questions to answer. Through this process valuable feedback is collected and adjustments were made until the final version of the questionnaire was presented (Dörnyei, 2003).

#### Interviews

The qualitative technique of interviewing is also employed in order to make the research more reliable and valid. The questions created for this interview are based on the ones used in the questionnaire but are created in order to give some more detailed information<sup>2</sup>. Therefore, generalizations are avoided and the framework of interview seems semi-structured as there are presupposition questions in which "the interviewer presupposes that the respondent has something to say" (Patton, 2002: 369) and leading questions in which "the interviewer makes obvious the direction in which he or she would like the answer to go to" (Glesne, 2010: 107).

The teachers' interview framework consists of 11 questions all of which focus on different information. There are questions about teachers' personal information, questions about their attitude towards the use of educational technology as well as questions about the available school/institute equipment. Moreover, teachers are asked questions about their knowledge and use of educational technology. They are also asked to define the possible constraints that prevent them from using educational technology in class and the possible types of professional

<sup>&</sup>lt;sup>1</sup> Validity sheds light on "whether an item or instrument measures or describes what is supposed to measure or describe" (Bell, 2005: 117).

<sup>&</sup>lt;sup>2</sup> According to Maxwell (1996: 74) "research purposes formulate what you want to understand but your interview questions are what you ask people to gain that understanding."

development that would be useful for them. Finally, they are asked to give suggestions for the successful use of educational technology in class.

#### **Classroom Observation**

In an attempt to supplement the research even more, the qualitative technique of observation is also used. Although it was not feasible to observe many teaching sessions, there was the ability to understand the research setting and the participants. By keeping notes, it was easier to describe the different settings, the participants' personal details as well as their interactions and attitudes.

Thus, important information was not neglected and the specific research technique allowed the research to be a little more extensive providing more insights which undoubtedly serve the study goals and focus on the most important issues to be analyzed.

#### Data Analysis

#### **Educational Technology**

The research findings, with regard to the teachers' perceptions towards educational technology, suggest that educational technology is interesting (76.8 %) and in some cases (15.2%) interesting but difficult to use. The most prevalent justifications for this answer are that technology is motivating for students (90.4%) and it caters for a variety of students' learning styles and preferences (79.2 %). Of course, more than half the questionnaire respondents (64. 8%) answered that technology makes both teaching and learning easier and almost half of the respondents (41.6%) think that it improves students' performance. Those justifications might indicate that the teachers responded by primarily taking their students' needs into account rather than their own.

The above conclusion is clearly illustrated by taking into account the teachers' interviews. More specifically, almost all of them responded that educational technology brings only positive changes to students. Excitement, motivation, concentration as well as participation are the benefits of using technology in class. Students have an active role during the lesson, they are more willing to cooperate and they long for these kinds of such lessons. Thus, the lessons have *become more "fresh"* and shy students who need more guidance or students with learning disabilities are equally motivated.

#### **Benefits of Educational Technology**

With regard to the benefits of educational technology, it appears that most of the participants contended that they strongly agree or agree with the advantages of educational technology. More specifically, it becomes apparent that with the use of technology the lesson becomes more intriguing (54.4% strongly agree & 31.2% agree) and all four skills can be integrated in the lesson (42.4% strongly agree & 38.4% agree). Moreover, teaching through computers offers real benefits over traditional teaching (40% strongly agree & 36.8% agree).

The majority of the respondents also agreed that with the use of technology students are actively involved in the learning process (49.6% agree & 26.4 % strongly agree). Thus, student-centered learning is encouraged (48.8% agree & 26.4 % strongly agree) and students' autonomy is enhanced (46.4% agree & 27.2% strongly agree). Moreover, with the use of technology language is presented in authentic linguistic contexts (44.8 % agree & 30.4% strongly agree) and

students critical thinking is increased (43.2 % agree & 16.8% strongly agree). Computers can adapt well to the curriculum goals (41.6% agree & 34.4 % strongly agree) and it is essential to use computer applications for language learning purposes (40.8% agree & 34.4% strongly agree).

Lastly, students take ownership of their own learning (40 % agree & 24.8 % strongly agree). The majority of the respondents also agree that students develop their communication and collaboration skills (37.6 % agree & 24 % strongly agree) and are engaged in constructive learning having a sense of community (36.8 % agree and 21.6 % strongly agree). Their intercultural understanding is also promoted (36 % agree & 32 % strongly agree). What is worth mentioning is that most teachers partly agree (51.2%) with the statement that students work harder when using computers. This might indicate that some teachers feel that technology has a lot to offer but it may prevent students from working hard.

The interesting result of this part of the study is that almost all teachers have understood the value of computer instruction and they believe in the power of educational technology in the EFL teaching environment. Almost all teachers feel that teaching English through new technologies make the lesson more appealing and motivating for students. By observing some teaching sessions it is evident that the teachers who had the opportunity to use technology in the classroom provided students with a more engaging lesson. Not to mention that students had the opportunity to work on their own through collaborative learning, enhancing in a way their autonomy. However, there is still a minority of teachers who has not realized the value of educational technology and they disagree or totally disagree with the aforementioned statements. The reason could be that they lack the requisite experience or that their attitude towards technology is negative.

#### **Drawbacks of Educational Technology**

It appears that most of the respondents disagree or totally disagree with the negative statements related to educational technology. To be more specific, the participants do not agree with the fact that technology in English language learning is a passing trend (45.6% totally disagree & 35.2% disagree). The vast amount of teachers also disagree with the statements that that the use of technology in general encourages students to become lazy (42.4% strongly disagree & 31.2% disagree) and that it weakens their research skills (41. 6% strongly disagree & 37. 6% disagree). Nevertheless, the result of this statement contradicts the result of the previous statement contemplating whether students work harder when using technology.

What is more, it seems that teachers disagree with the fact that that students' attention to language learning is distracted by computers (44.8% disagree & 28% totally disagree). They also do not believe that technology troubles students who do not know how to use it (31.2% disagree & 10.4 % totally disagree) or do not like it (26.4% disagree & 16.8% totally disagree). What is partly agreeable or agreeable by the respondents is that indeed the use of technology can cause noise and inconvenience in the classroom (36% partly agree, 13.6% agree & 4% strongly agree). However, only one out of ten interviewees mentioned that there might be difficulty in using technology especially in classes with discipline problems.

Another striking result is that the majority of participants agrees that the use of technology in the classroom demands more time for the preparation of the lesson (28 % agree, 25. 6 % partly agree & 24. 8 % strongly agree). This interesting result might well indicate the reason why several teachers avoid using technology in their lessons.

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Vol. 8 No. 1, 2020, E-ISSN: 2308-0876 © 2020 KWP

#### Teachers' Knowledge of Using Educational Technology

Most of the respondents know how to use a CD player (94.4%), a DVD player (90.4%), a computer (73.6%), a projector connected to a computer (59.2%) and an interactive whiteboard (42.4%). It seems that the last two (computer/interactive whiteboard) are not easily used by everyone. Perhaps they lack some knowledge or experience because they do not have access to them.

Almost all the participants use YouTube (99.2%), E-mail (98.4 %), the Word processor (96.8%), and the WWW (96%). Many the respondents also know how to download/upload files (95.2%), communicate with people in real time (92%) and use PowerPoint (88.8%). A good number of them know how to use spreadsheets (77.6 %) as well as blogs (75.2%) and how to participate in newsgroups, mailing lists and chat rooms (73.6%). Several participants responded that they know how to use wikis (60%) and text-construction software (44.8%) whereas a few know how to create WebQuests (33.6%) or use concordancers (25.6%). Generally speaking, the above results indicate that teachers have good knowledge of using both technological equipment as well as technological tools. Therefore, they should be able to use them in their teaching practices.

#### Problems & Constraints in Using Technology in English Language Teaching

As regards the barriers which prevent language teachers from using educational technology in their lessons, it seems that the basic reasons for not using it is the lack of school/institute equipment (54.9%) and the lack of technical support (49.6%). Several participants stated that educational technology is time-consuming (31.9%) whereas others mentioned that they face classroom management problems (27.4 %). Few participants also responded that there is a lack of freedom to create their own lessons (23%) while others admitted that their training is not adequate (20.4%).

From the above it is evident that the lack of equipment and technical support are the two basic obstacles which hinder the use of educational technology in class. Additionally, it appears that most teachers may not use educational technology not only because they have not had the appropriate training but also because they feel that the use of educational technology is timetaking and may lead to classroom management problems. Also, some of them do not feel free to create their own lesson -something which prevents them from teaching technology-based lessons.

Apart from lack of equipment, the teachers were asked to state some more obstacles which prevent them from using educational technology in class. Indeed, the lack of equipment and training are the top two barriers. Time is definitely another factor which restricts them from using technology. This is because some of those teachers probably have to follow orders and complete a specific syllabus on time. Therefore, it seems that lack of freedom may also be a major problem. What is also worth-mentioning is that teachers sometimes consider technology unnecessary and as one interviewer says teachers are "set in their ways and it seems like a lot of work to suddenly change your method of teaching."

#### **Professional Development & Training**

Adequate training in educational technology was another issue explored. The findings show that the majority of the respondents believe that they are adequately trained (56%) whereas many of them are not sure (32%). Few participants responded that they do not feel adequately trained

(12%) which means that most of the teachers in Greece have taken the necessary steps to become trained in the use of educational technology.

As for their professional development, it appears that the majority of the respondents would like to expand their knowledge by learning to use specific applications (72.4%). More than half of them would like to learn more about Web 2.0 tools and its applications (56.1%) while many of them want to know how to use an interactive whiteboard (35%). There are also those who want to learn to engage in on-line interactions (20.3%), use network services (14.6%) and learn about research sources on the internet (14.6%). Very few would like to learn how to use their computer desktop (3.3%) which indicates that almost all teachers have already the required knowledge to use technology and they would definitely like to broaden it in order to acquire the skills that will enable them to use educational technology in numerous ways.

#### Suggestions for the Effective Integration of Technology in the EFL Education

Regarding the effective integration of technology in the EFL classroom, it seems that training and seminars are the most common suggestion (79%). It has been shown throughout this research that teachers have invested in their training to a great degree. The availability of equipment (71.8%) and technical support (63.7%) are equally important because their lack has handicapped the effective use of educational technology. Furthermore, many participants suggest that educational technology be part of the syllabus (61.3%) something that advocates the integration of technology in their syllabi as well as their lessons. Several participants also feel that technology will be successfully integrated if students are assigned homework and projects which require the use of technology- tools (34.7%) or if they are provided with laptops (29%). Those findings show that only when students are actively involved in using technology, will educational technology be integrated successfully in class.

The interviewees also made some interesting recommendations. For starters, apart from training courses they also talked about continuous support and counseling from experts. Moreover, many of them referred to peer-observations as well as online forums, websites and groups in which teachers can express their views, exchange opinions or provide advice to other teachers. According to some of the interviewees, the university courses should focus on new methods which promote technology. Thus, the future teachers will be more familiar with using educational technology in class. Of course, the strongest suggestion by an interviewee is to *get some practice! Experience in the classroom is the key!* This can be achieved though, given that technological equipment is provided.

#### **Cross-tabulations and Correlations**

The following are some possible correlations between variables and contingency tables based on the data from the questionnaire.

#### **Chi-square Tests**

First, the chi-square test of independence was calculated and three important relations were revealed. To begin with, there was an important correlation between the CEFR levels that the respondents teach and the possible constraints that prevent them from using educational technology in class (X<sup>2</sup>=1408.493, df=1176, p=0.000). This finding might indicate that the use of educational technology depends on the CEFR levels to which the teachers teach. For example,

they might not use technology when they teach higher levels because students sit for the certificate exams and they practice on the exam format. There is also the possibility that teachers might not use technology when they teach lower levels because the students are noisy and easily distracted.

For this reason, the teachers who were interviewed were asked how the use of technology is affected by the CEFR levels they teach. Some interviewees feel that it is easier to use technology with younger students. On the other hand, some interviewees believe that it is more feasible to use technology with higher-level students. Nevertheless, there are those who believe that since the use of technology is beneficial for both younger and older students, it is up to the teachers to adjust their teaching methods depending on the level they teach.

The second examined correlation was between the types of professional development that would be useful for teachers and the possible constraints that prevent them from using technology in class ( $X^2$ =2184.425, df=1862, p=0.000). The above finding might well mean that the more teachers are trained in technology, the fewer problems they will face in using educational technology in class or the opposite.

By taking this correlation into account, the interviewees were asked whether their professional development is related to the use of educational technology in class. All of the interviewees consider that training is totally interrelated with the use of technology in class. They feel that seminars and workshops in technology can pave the way for a successful technology-based lesson.

There was also a third correlation between the questions related to the teachers' place of employment and the available equipment ( $X^2$ =1793.575, df=1600, p=0.000). It appears that the availability of technological equipment depends highly on the place the teachers work. For instance, as it was mentioned earlier, a foreign language institute might provide better equipment than a public school. Therefore, not all teachers have the opportunity to use technology even if they wanted to. This example is verified by the interviews and observations conducted for the particular study.

#### Analyses of Variance (ONEWAY ANOVA)

An analysis of variance was also conducted to explore the differences of means with regard to the respondents' age. The age factor proved significant in the following items: teaching experience ( $F_{3.120}$ =147.553, p=0.000). Are you satisfied with the technological equipment provided ( $F_{3.120}$ =3.317, p=0.022)? In your classroom, do you use: a CD player( $F_{3.110}$ = 3.340, p= 0.022), a computer ( $F_{3.113}$ = 3.657, p=0.015), an interactive whiteboard ( $F_{3.668}$ =3.668, p= 0.015)? Is your role in your classroom that of an organizer and a facilitator ( $F_{3.121}$ =3.734, p=0.013)?

Then, post hoc analyses of multiple comparisons were adjusted by Bonferroni correction to estimate the differences of the following groups. A significant difference in the item regarding teaching experience was found for the ages 23-30 and 31-40 (MD=-1.563, p<0.05), 23-30 and 41-50 (MD=-3.036, p<0.05), 23-30 and 51+ (MD=-3.563, p<0.05). The means of the teaching experience of the respondents aged 23-30(M=1.44, SD=0.564) was smaller than the one of the respondents aged 31-40 (M=3, SD=0.684), 41-50 (M=4.47, SD=0.687) and 51+ (M=5.00, SD=0.000).

There was also a significant difference in the question: *Are you satisfied with the technological equipment provided* between the ages 23-30 and 31-40 (MD=0.615, p<0.05)? The

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means of those aged 23-30 (M=1.72, SD=0.729) was lower than the one of those aged 31-40 (M=2.33, SD=1.038).

From the above it appears that teachers who are 51+ have more teaching experience which is absolutely logical. However, what needs to be highlighted here is the fact that teachers aged 51+ are more satisfied with the technological equipment provided compared to other age categories. Moreover, they use a CD player, a computer and an interactive whiteboard more than the other age categories. Lastly, it seems that teachers aged 41-50 feel more like facilitators and organizers in the classroom compared to other age groups.

There was one more analysis of variance in order to explore the difference of means with regard to the respondents' teaching experience. The teaching experience was overall significant in the following questions: Is educational technology interesting ( $F_{4.119}$ =2.890, p=0.025)? Are you satisfied with the technological equipment provided ( $F_{4.118}$ =3.071, p=0.019)? Do you use: a computer ( $F_{4.111}$ =2.619, p=0.039), an interactive whiteboard ( $F_{4.107}$ =4.214, p=0.003) in your classroom?

Post hoc analyses of Bonferroni were also adjusted to explore the differences of the following groups. More specifically, there was a significant difference in the following statement: *"Educational technology is interesting"* AND *"Educational technology is interesting but difficult to use"* between those who had 11-15 and 16-20 years of teaching experience respectively (MD=-0.669, p<0.05). The means of those who had 11-15 years of teaching experience (M=1.21, SD=0.410) was lower than the one of those who had 16-20 years of teaching experience (M=1.88, SD= 1.191).

There was also a significant difference in the question: "Are you satisfied with the technological equipment provided?" between those who had 6-10 and 21-25 years of teaching experience (MD=-0.889, p<0.05). The means of those who had 6-10 years of teaching experience (M=1.67, SD=0.840) was lower than the one of those with 21-25 years of experience (M=2.56, SD=1.013).

It seems that teachers who have more years of teaching experience (21-25 years) think that educational technology is more interesting compared to those with less teaching experience. Furthermore, they seem more satisfied with the technological equipment provided and they use a computer and an interactive whiteboard more than those with less teaching experience.

In the end, there were two more analyses of variance. The first explored the differences of means with regard to the respondents' attendance at seminars. The seminar attendance was found significant in the following statement: *Indicate how much you know how to use: a projector connected to a computer* ( $F_{1.122}$ =4.360, p=0.039). No important differences were found among the other groups.

The second analysis of variable explored the means with regard to the respondents' academic qualifications. The academic qualifications were overall significant in the following items: *Students take ownership of their own learning* ( $F_{4.117}$ =2.553, p=0.043). *Are you satisfied with the technological equipment provided* ( $F_{4.116}$ =2.383, p=0.055)? *Are you satisfied with the frequency of using educational technology in the classroom* ( $F_{4.110}$ =3.036, p=0.020)? *Are you satisfied in the ways with which you use educational technology in your teaching* ( $F_{4.110}$ =6.042, p=0.000)? There were no significant differences among the groups.

#### Discussion

According to the research findings, the majority of teachers, who work either in the public or private sector, believe that educational technology is interesting because it is motivating for students and it caters for a variety of styles. The results indicate a strong positive teachers' attitude towards educational technology (Blake, 2013) and are in consonance with previous research concerning teachers' attitudes toward technology (Albirini, 2006; Hadjirigas, 2012; Hermans, Tondeur, van Braak, & Valcke, 2008; Jimoyiannis, Tsiotakis, Roussinos, & Siorenta, 2013; Karkoulia, 2016; Katerini, 2013; Kontodimou, 2011; Park & Son, 2009; Spiris, 2014).

In light of the above, it appears that educational technology is considered not only necessary but also beneficial for the Greek foreign language context. Teachers have acknowledged that students already use technology in their private affairs. Therefore, it is evident that teachers responded having in mind their students' needs, learning styles and interests. Moreover, adopting positive attitudes towards ICTs is considered the first and major step in the integration of educational technology in the Greek education (Kavvadia, 2017; Pelgrum, 2001). In other words, being positive towards technology can definitely generate many opportunities for both teachers and students to make teaching and learning effective.

It seems that over the years, teachers feel more confident when using technology in their classrooms. They have understood that teaching needs to have a more learning-centered approach (Levine, Ferenz, & Reves, 2000). Therefore, when teachers use technology, they prefer to have the role of organizer and facilitator. They actually avoid being the centre of attention and they intervene only when it is necessary.

Compared to other studies (Zhu, 2010) it appears that technology has definitely transformed the role of EFL teachers in the classroom as they have realized that students should be given the freedom to engage with the English language beyond a superficial level, allowing them to be active learners who discover knowledge on their own. The fact that their role has changed is encouraging and it seems that in a few years time the traditional knowledge-provider role of the teacher will be part of the past.

The findings show that almost all teachers are qualified and experienced. Most of them have made an effort to acquire knowledge related to educational technology by attending seminars and workshops. However, it appears that neither the Digital School project nor the inservice program designed by the Ministry of Education is popular especially for those working in the public sector.

Educational technology appears to have a variety of benefits and teachers believe that its use can help students in numerous ways. According to the findings, students appear to have embraced technology as well. As for drawbacks, the prevailing one is only the lack of time.

The oxymoron of this study is that although the first results of the study showed that technological equipment is available in schools/institutes and teachers are satisfied with it, a great number of teachers showed their dissatisfaction in the equipment provided when it came to talk about the constraints of using technology in class. Another conclusion is that foreign language institutes are far more equipped than public or private schools.

What is clear is that almost all teachers have knowledge of using technology and most of them use technology- based tools in their lessons. The interesting part of this study is that older teachers seem to be using technology to a great extent! However, the use of those tools is partly integrated in the syllabus as well as the teaching process, and, thus, they should find ways to fully

integrated it. What is also striking is that teachers avoid using the Web 2.0 tools they are not completely comfortable with. Also, although there are several ways of using such tools in the lesson, most teachers use it mostly for students' excitement.

Overall, teachers appear confident in using technology. They have totally understood that the lesson should be more student-centered and when using technology, their role should be that of an organizer and facilitator. Most of them are ready to weave technology in their lessons. They are also aware of the fact that technology should be integrated in the EFL education and they are willing to offer suggestions.

#### Conclusion

As years go by, technology prevails in almost every sector of our life! Educational technology in class is definitely the most common concept discussed in Greek education. Nevertheless, what do EFL teachers believe about it? The particular study tried to shed light on today's EFL teachers' attitude towards technology. The results were positive with some issues in question.

To recapitulate, educational technology is embraced by almost all teachers. What needs to be done is to find some ways to fully integrate it in the EFL classroom and be aware of its pedagogical goals. The Greek conditions prove that in comparison to the public sector, the private sector has made major steps to achieve the aforementioned. The public sector has definitely made some steps but there is always the need to bridge the theory and the practice gap.

#### References

- Alzgool, M. (2019). Nexus between green HRM and green management towards fostering green values. *Management Science Letters*, 9(12), 2073-2082.
- Albion, P. R. (2008). Web 2.0 in teacher education: Two imperatives for action. *Computers in the Schools*, 25(3-4), 181-198.
- Albirini, A. (2006). Teachers' attitudes toward information and communication technologies: The case of Syrian EFL teachers. *Computers & Education*, *47*(4), 373-398.
- Bax, S. (2003). CALL—past, present and future. System, 31(1), 13-28.
- Bell, J. (2005). Doing your Research Project: a Guide for First-Time Researchers in Education, Health and Social Science (4th ed.). Buchingham.
- Blake, R. J. (2013). *Brave new digital classroom: Technology and foreign language learning*. Georgetown University Press.
- Bryman, A. (2015). Social research methods. Oxford University Press.
- Chambers, A., & Bax, S. (2006). Making CALL work: Towards normalisation. *System*, *34(4)*, 465-479.
- Cohen, L., Manion, L., & Morrison, K. (2000). *Research methods in education*. London: Routlege-Falmer.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education (6<sup>th</sup> ed.).* London: Routlege- Falmer.
- Cox, M. J., Cox, K., & Preston, C. (2000). What factors support or prevent teachers from using ICT in their classrooms? University of Sussex, Brighton.
- Crook, C., Fisher, T., Graber, R., Harrison, C., Lewin, C., Cummings, J., & Sharples, M. (2008). Implementing Web 2.0 in secondary schools: Impacts, barriers and issues at

http://www.academia.edu/2111606/Implementing\_Web\_2.0\_in\_secondary\_schools\_Imp acts\_barriers\_and\_issues, accessed on 29 October 2017.

- Demetriadis, S., Barbas, A., Molohides, A., Palaigeorgiou, G., Psillos, D., Vlahavas, I., & Pombortsis, A. (2003). Cultures in negotiation: teachers' acceptance/resistance attitudes considering the infusion of technology into schools. *Computers & Education*, 41(1), 19-37.
- Dörnyei, Z. (2003). *Questionnaires in second language research: Constructing, administering, and processing.* London: Lawrence Erlbaum Associates.

Glesne, C. (2010). *Becoming qualitative researchers: An introduction*. Pearson.

- Hadjirigas, D. (2012). Investigating Greek EFL public school teachers' attitudes towards educational technology and its uses in foreign language teaching. Unpublished M. Ed. Dissertation, Hellenic Open University.
- Hermans, R., Tondeur, J., van Braak, J., & Valcke, M. (2008). The impact of primary school teachers' educational beliefs on the classroom use of computers. *Computers & education*, *51(4)*, 1499-1509.
- Jimoyiannis, A., Tsiotakis, P., Roussinos, D., & Siorenta, A. (2013). Preparing teachers to integrate Web 2.0 in school practice: Toward a framework for Pedagogy 2.0. *Australasian Journal of Educational Technology*, 29(2).
- Jonassen, D. H. (2006). A Constructivist's Perspective on Functional Contextualism. *Educational Technology, Research and Development*, 54, 1.
- Karkoulia, K. C. (2016). Teachers' attitudes towards the integration of Web 2.0 tools in EFL teaching. *Research Papers in Language Teaching and Learning*, 7(1), 46.
- Katerini, K. (2013). *Designing an inset program as a proposal for teacher development on Web* 2.0 tools in the Greek primary education. Unpublished M. Ed. Dissertation, Hellenic Open University.
- Kavvadia, O. (2017). *Teachers' and students' attitudes toward the integration of educational technology in Greek state schools*. Unpublished M.Ed. Dissertation, Hellenic Open University.
- Kern, R. (2006). Perspectives on technology in learning and teaching languages. *Tesol Quarterly*, 40(1), 183-210.
- Kontodimou, K. (2011). *Implementing educational technology in the foreign language classroom: friend of foe*? Unpublished M.ed. Dissertation, Hellenic Open University.
- Khalid, N., Islam, D. M. Z., & Ahmed, M. R. M. (2019). SENTREPRENEURIAL TRAINING AND ORGANIZATIONAL PERFORMANCE: IMPLICATIONS FOR FUTURE. *Humanities & Social Sciences Reviews*, 7(2), 590-593.
- Levine, A., Ferenz, O., & Reves, T. (2000). EFL academic reading and modern technology: How can we turn our students into independent critical readers. *TESL-EJ*, 4(4), 1-9.
- Levin, T., & Wadmany, R. (2008). Teachers' views on factors affecting effective integration of information technology in the classroom: Developmental scenery. *Journal of Technology and Teacher Education*, 16(2), 233.
- Levy, M. (1997). *Computer-assisted language learning: Context and conceptualization*. Oxford University Press.

Lucido, P. L., & Borabo, R. G. (1997). *Educational technology*. Goodwill Trading Co., Inc.

Maxwell, J. (1996). *Qualitative Research Design: An Interactive Approach.* Thousand Oaks. CA: Sage Publications.

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- McDougall, A., & Squires, D. (1997). A framework for reviewing teacher professional development programmes in information technology. *Journal of Information Technology for Teacher Education*, 6(2), 115-126.
- Modum, U. (1998). Information Technology education and training initiatives—the Nigerian experience. In *Capacity Building for IT in Education in Developing Countries* (pp. 91-100). Springer US.
- Mumtaz, S. (2000). Factors affecting teachers' use of information and communications technology: a review of the literature. *Journal of information technology for teacher education*, *9*(*3*), 319-342.
- Park, N. C., & Son, J. B. (2009). Implementing computer-assisted language learning in the EFL classroom: Teachers' perceptions and perspectives. *International Journal of Pedagogies and Learning*, *5*(2), 80-101.
- Patton, M. Q. (2002). Designing qualitative studies. *Qualitative research and evaluation methods*, *3*, 230-246.
- Pelgrum, W. J. (2001). Obstacles to the integration of ICT in education: results from a worldwide educational assessment. *Computers & Education*, *37(2)*, 163-178.
- Prensky, M. (2001). Digital natives, digital immigrants part 1. On the horizon, 9(5), 1-6.
- Richards, J. C. (2001). Curriculum development in language teaching. Ernst Klett Sprachen.
- Robertson, S. I., Calder, J., Fungi, P., Jonest, A., O'Shea, T., & Lambrechtst, G. (1996). Pupils, teachers & palmtop computers. *Journal of Computer Assisted Learning*, *12(4)*, 194-204.
- Robinson, R., Molenda, M., & Rezabek, L. (2008). Facilitating learning. *Educational technology: A definition with commentary*, 15-48.
- Spiris, S. (2014). Investigating normalisation: Do teachers of English in Greece integrate technology in their everyday teaching practice? *Research Papers in Language Teaching and Learning*, *5*(1), 351.
- Sylvester, R., & Greenidge, W. L. (2009). Digital storytelling: Extending the potential for struggling writers. *The reading teacher*, *63(4)*, 284-295.
- Umrani, W., Ahmed, U., & Memon, P. (2015). Examining the absorptive capacity construct: A validation study in the Pakistani banking context. *Management Science Letters*, 5(12), 1053-1058.
- Watson, D. M. (1998). Blame the technocentric artefact! What research tells us about problems inhibiting teacher use of IT. In *Capacity building for IT in education in developing countries* (pp. 185-192). Springer US.
- Woodrow, J. E. (1992). The influence of programming training on the computer literacy and attitudes of preservice teachers. *Journal of research on Computing in Education*, *25(2)*, 200-219.
- Wozney, L., Venkatesh, V., & Abrami, P. C. (2006). Implementing computer technologies: Teachers' perceptions and practices. *Journal of Technology and teacher education*, 14(1), 173.
- Zhao, Y., & Frank, K. A. (2003). Factors affecting technology uses in schools: An ecological perspective. *American educational research journal*, 40(4), 807-840.
- Zhu, C. (2010). Teacher roles and adoption of educational technology in the Chinese context. *Journal for educational research online*, 2(2), 72.

Zin, M. L. M., & Ibrahim, H. (2020). The Influence of Entrepreneurial Supports on Business Performance among Rural Entrepreneurs. *Annals of Contemporary Developments in Management & HR (ACDMHR), 2*(1), 31-41.