

## English Teachers' Views and Attitudes toward Training Programmes in Innovative Teaching Practices and ICT: An Empirical Research

Iosif Fragkoulis , Efthymios Valkanos, Areti. Keramida

**Abstract:** Developments in pedagogic science and technology, the rapid diffusion of the internet, as well as social changes, which mean less homogeneous classrooms than before, render necessary the ongoing training of English teachers so that they can keep up with changes. Teacher training programmes should be designed in such a way so as to be in line with teachers' needs. In this framework, in this paper we present the results of an empirical study on the attitudes of teachers of English as a foreign language in primary and secondary education toward teacher training programmes in innovative teaching practices, and more specifically the pedagogical use of Information and Communication Technologies (ICT) in education. The research results show that the majority of the teachers believe that teacher training programmes are instrumental in enriching the teaching process with innovative and modern teaching practices, which are essential in education, due to the changing social conditions, the developments in pedagogical science and the diffusion of ICT in society and education. Teachers also expressed their preference for participation in teacher training programmes that are practical in nature and help them deal with everyday problems they face in the classroom. The research results provide useful information to those engaged in the planning and implementation of teacher training programmes.

**Keywords:** Information and Communication Technologies (ICT), Teacher Training, Teaching English

### 1. Introduction

#### 1.1 The need for teacher training programmes

It is generally accepted that the Greek school needs to engage in a process of transformation in order to enhance the quality of education it offers and to adjust to the evolutions of modern era in the scientific, technological and social sector.

On scientific level, new learning theories and the results of modern research in the field of education require the teacher to take on a new role. More specifically, developments in the methodology of teaching and pedagogics place emphasis on project-based teaching and collaborative work, where the student is at the heart of the teaching and learning process with emphasis on a cross-curricular approach (Papagiannopoulos, Simoni and Fragoulis, 2000), learner autonomy, active participation and on providing "equal opportunities to all students regardless of their socioeconomic background" (Fragoulis and Tsiplakides, 2009:113). As regards developments on the technological level, the rapid growth of Information and Communication Technologies (ICT) renders their use in the learning process indispensable. The use of ICT in the foreign

language classroom offers the opportunity of using the foreign language for real life purposes, while at the same time it acquaints them with the culture of other countries (Ghasemi and Hashemi, 2011). Additionally, changes in the social sector (e.g. the existence of immigrants which entails less homogeneous classrooms in relation to the past and different needs and experiences on the part of learners) mean that teachers should use different pedagogical approaches that offer equal opportunities for every student, such as differentiated instruction.

In this framework, teachers constitute an important factor for the enhancement of the level of education offered at school, since they need to adapt to the needs in order to motivate their students and help them improve their school performance. This means that systematic teacher in-service training programmes are of crucial importance so as to ensure that teachers will be effective. Bearing the above into consideration, this paper focuses on English teachers' training needs concerning the use of ICT in the English language classroom. Next, we present a short review of the results of research studies concerning the use of ICT in the learning process and especially

This article is published under the terms of the Creative Commons Attribution License 4.0  
Author(s) retain the copyright of this article. Publication rights with Alkhaer Publications.  
Published at: <http://www.ijsciences.com/pub/issue/2019-02/>  
DOI: 10.18483/ijSci.1894; Online ISSN: 2305-3925; Print ISSN: 2410-4477



Iosif Fragkoulis (Correspondence)

+

in the teaching of English as a foreign language.

### 1.2 ICT in the teaching of English

According to the theory of social constructivism, learning constitutes a social process (Vygotsky, 1978). Consequently, students' needs and experiences need to be taken into consideration and exploited in the learning process in classrooms. In this framework, students collaborate (Agelopoulos, Karagiannis, Karantzis, Fragoulis and Fokas, 2002) and use innovative teaching material, such as work of arts in order to help them develop critical thinking and inventiveness (Fragkoulis and Koutsoukos).

In this framework, the use of ICT in classroom can have many beneficial outcomes as it can help students construct knowledge. More specifically, the pedagogic use of ICT helps the transition from the teacher-centered model to an innovative learning environment in which learners are at the center of the learning process, cooperate with each other and have more opportunities for interaction with the target language (Luzón Marco, 2002) and for practicing quality thinking (Papageorgiou and Fragkoulis, 2018). Additionally, the use of ICT in classroom can lead to multiple benefits, bringing innovative elements in the learning process. For example, the use of ICT can help with active construction of meaning on the part of learners, encourage cross-thematic approaches in the teaching of English (keramida & Tsiplqkides, 2013) and increase learner participation and student motivation (Grabe and Grabe, 2008).

Moreover, ICT in the teaching of English as a foreign language can promote the development of critical thinking skills (Warschauer 1999) and increase student creativity (Azmi, 2017) and independence (Murray et al, 2005). At the same time, the pedagogic use of Information and Communication Technologies (ICT) in the English classroom can enrich the teaching of English as a foreign language and boost student motivation and foreign language performance (Keramida, 2018).

### 1.3 Importance of the research

The above discussion leads to the following conclusions. First, changes on a scientific, technological and social level mean that the school should adapt in order to take into account these changes and help all students develop their true potential. Secondly, as teachers constitute an important element in the educational process and impact strongly on the effectiveness of educational system, they need to be well trained. Moreover, they need to update the knowledge they have gained from their undergraduate studies. In turn, this means that teacher training programmes are important for the creation of well trained teachers who can motivate their students and help them increase their school performance. In short, the significance of ICT use in the English classroom and the fact that the teachers of English language may not have acquired sufficient

knowledge concerning the use of ICT from their undergraduate studies has led us to the decision to conduct the following empirical research.

Apart from the above, the research is important, since the efficiency and the usefulness of teacher training programmes depends mainly on the extent to which these programmes have been designed in such a way as to take into account teachers' training needs and preferences. Research has shown that effective teacher training programmes, especially initial training programmes, are those in which the teachers actively participate in all parts of these programmes, including the design, implementation and evaluation of the teacher training programmes and those which take into account the teachers' training needs and characteristics (Fragkoulis and Valkanos, 2011).

For example, if teachers prefer their training programmes to have a practical dimension and help them deal with everyday challenges (apart from a theoretical orientation), then teacher training programmes that do not cater for these needs are bound to be ineffective.

As a result, the research presented in this paper is significant, since it is closely related to the effectiveness of teacher training schemes. As it is stated in the literature, teacher training is important, as it closely affects the effectiveness of the teaching process, student achievement levels, student dropout (Anagnou and Fragoulis, 2014) and generally the upgrading of the education provided at schools (Anastasiou, Valkanos and Androutsou, 2011).

## 2. Method

The research presented in this paper used quantitative research methods employing a questionnaire and was conducted in the following steps: identifying the problem to be studied, reviewing literature, defining the research aim, deciding on research questions and hypotheses, collecting, analyzing and interpreting the research data and writing the results of the research.

The research is part of a wider research study that aimed at examining teachers' perceptions regarding teacher training programmes in the implementation of innovative teaching methods in the teaching of English as a foreign language in primary and secondary education. In this paper, we present the research findings in relation to the views of English teachers regarding the use of ICT in the teaching of English as a foreign language. It is an issue that needs to be examined more closely, since a literature review concerning teachers' training needs reveals that there is lack of research studies focusing on English teachers' training needs. What is more, research findings have shown that teachers wish to be trained in ICT use in the English foreign classroom (Pedagogical Institute, 2009).

### 2.1 Aim

Taking the above into consideration, the aim of the research was to examine the views and attitudes of teachers of English toward teacher training programmes in innovative teaching practices and ICT. The main reason that led us to the decision to examine the views on the above topic is that according to the new curricula, teachers of English in Greece are required to make use of such practices, including project work, using ICT, collaborative learning and differentiated instruction.

### 2.2 Research questions

The identification of the research problem, the literature review and the aim of the research led us to the decision to attempt to answer the following research questions: (a) what are the English teachers' views concerning the thematic units they wish to train in and more specifically innovative teaching practices and the use of ICT? Second and connectedly, (b) what are teachers' expectations from training programmes?

### 2.3 Data collection

In order to examine the research questions, we chose to conduct quantitative research with the use of a questionnaire that contained both open-ended and close-ended questions, a technique often associated with quantitative research (Creswell, 2014). The completion of the questionnaire was anonymous and the teachers who agreed to complete the questionnaire were assured as regards anonymity and the fact that the results will be used for scientific purposes only. The questionnaire was pilot tested to check for any errors in relation to clarity, the elimination of ambiguous terms and questions, content and issues related to the overall appearance of the questionnaire (Cohen, Manion & Morrison, 2007).

### 2.4 Population and sample

The population of the research was 60 English teachers in primary and secondary education in Greece. The research sample, using simple random sampling in which all teachers had an equal chance of being included in the sample (Taherdoost, 2016), was teachers of English in schools of primary and secondary education from the prefectures of Ioannina and Thesprotia, in the region of Epirus, in Greece.

As regards the demographic data of the sample, thirty teachers taught in primary education, while thirty teachers were from secondary education. Fifty one teachers (86.4%) were female teachers, while 9 teachers (13.6%) were male teachers, as shown in Table 1.

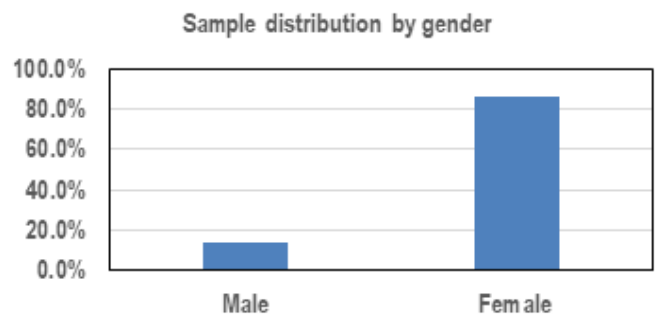
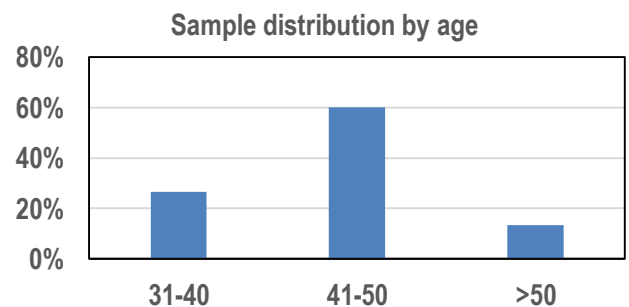


Table 1: Sample distribution by gender

This reflects the fact that, according to official statistics, in European Union countries women teachers are over-represented in primary education (Eurostat, 2016). In relation to the age of the teachers of the sample, there was no teacher below 30 years of age. Sixteen teachers (26.7%) were aged 31-40 years, 36 teachers (60%) were aged 41-50 years, while 8 teachers (13.3%) had an age of more than 50 years, as shown in Table 2.

Table 2: Sample distribution by age



### 3. Results

The demographic data of the sample provide interesting information. First of all, the fact that the vast majority of the teachers were female points to the fact that in the Greek society English language and literature, and consequently teaching the English language in primary and secondary education settings, is believed to be suitable for women. Teaching English in schools is considered as an occupation that provides the opportunity to combine a job with family responsibilities. In addition, the data we collected shows that most teachers of English are over 41 years. This can be attributed to the fact that in the last decade there have been hardly any new English teachers at schools, because recruiting new teachers has stopped. This explains the fact that in the study we conducted all teachers were over 31 years of age.

In relation to the first question of the research, that is, the thematic units teachers wish to train in, the

analysis of the questionnaire provided useful insights into the teachers' views and attitudes towards teacher training programmes. It is an issue worth examining, since according to the Integrated Foreign Languages Curriculum, which is the national Curriculum for foreign languages in Greece, and which "adopts a generic approach to language learning and the use of foreign languages for communication and is intended to apply to all languages that may, at some time, be included in the school curriculum" (Dendrinios, Zouganeli and Karavas, 2013:15), new teaching methodologies (including use of ICT) are essential.

More specifically, the research findings show that teachers' first priority concerning training issues was to be trained in tackling learning difficulties. In other words, the wish to participate in teacher training programmes that help them address students' learning difficulties was the one that was most often mentioned. It is a finding that is not surprising, given the fact that teachers face a number of challenges related to students' learning difficulties, such as foreign language speaking anxiety (Tsiplakides and Keramida, 2009) and the fact that many students have low levels of motivation for participation in the teaching and learning process. Therefore, most of the teachers in the sample expressed the opinion that having a sound theoretical and practical background will help them deal with the students' learning difficulties, increase their motivation levels and eventually provide them with skills and knowledge that will increase student performance and foreign language proficiency. Research into teachers' training needs has also shown that teachers wish to be trained in thematic units that help them deal with practical problems they face at school (Mastrodimitris, Valkanos and Kioulanis, 2014).

Apart from teacher training programmes that focus on learning difficulties, a significant number of preferences concerned training programmes on the implementation of differentiated instruction and the use of ICT in the teaching and learning process. The English teachers in the sample expressed the view that differentiated instruction and ICT exploitation in the English classroom can lead to beneficial outcomes, so they wish to be trained on these issues. More specifically, as regards the use of ICT, the majority of the teachers in the sample expressed the opinion that participation in teacher training programmes that focus on ICT use is really important. Most teachers of the sample believe that training in the use of ICT is significant, because the wide use of ICT in all sectors of society along with the recent pedagogical theories transform the educational process and provide new and multiple dimensions to

the teaching practice (Kritsotakis, 2011). The above views and opinions agree with previous research which provides strong evidence that teachers of foreign languages wish to be trained in new technologies (National Centre of Social Research and Kedros, 2008).

English teachers' next preference concerned teacher training programmes in relation to the implementation of project-based teaching and collaborative work. The English teachers in the sample seem to acknowledge the benefits of project work in the teaching of English in foreign language settings, especially as regards the development of their self-esteem (Stoller, 2006), collaborative skills (Papagiannopoulos, Simoni & Fragoulis, 2000) and the improvement of language skills (Levine, 2004). The wish of many English teachers to be trained in this thematic area can also be attributed to the fact that many schools in Greece participate in programs (e.g. Erasmus+ programs) that involve engaging students in project work, often in collaboration with schools from other countries. This means that there is a real need for teachers to be able to design and successfully manage such projects. The thematic unit with the least preferences was learners' assessment. It seems that either teachers believe that they have received enough training during their undergraduate studies, or they believe that they can rely on their experience in order to evaluate their students' performance.

In addition, the answers of the teachers in the open-ended questions showed that it was widely held that the use of ICT **needs** to constitute a fundamental element of the teaching process. As a teacher of English in primary education said: "computers consist a significant part of education". Another teacher of English expressed preference in training programmes with a focus on modern teaching practices, stating that "training in innovative teaching practices and especially in ICT is absolutely necessary and helps both teachers and learners understand the lesson better." In the same framework, another teacher expressed the view that: "developments in the field of technology are radical. Thus, innovative educational practices evolve in a similar way. It is necessary to be trained in these fields, so that we can keep up with the demands of modern era". Another teacher referred to the potential training in innovative educational practices offers for interdisciplinary cross-thematic examination of issues, stressing that "a cross-thematic approach of English and ICT would be of great interest". The above quotations clearly show that teachers are fully aware of the potential of successfully incorporating ICT in

the teaching of English in Greek schools. They understand the benefit deriving from new technologies and believe that they can upgrade foreign language proficiency. As a result, it comes as no surprise to discover that they feel that training in the successful use of ICT should constitute an integral part of teacher training programs. Nevertheless, it is important to note that some teachers referred to the shortage of technological equipment, expressing the view that “in relation to ICT, there is no infrastructure at schools in order to implement ICT-based project work.” In the same framework, according to a teacher of secondary education: “not all schools are adequately equipped”. It is clear that the teachers of the sample firmly believe that adequate training should be accompanied by efforts aiming at equipping schools with modern technological equipment that will allow teachers to take full advantage of innovative teaching methodologies and ICT use in the teaching of English.

In relation to the **second research question** concerning the expectations teachers of the English language have in relation to training programmes, research data show that most teachers prefer teacher training programmes to focus on the improvement of teaching methods. They wish to attend training programmes that will help them use modern and innovative teaching methods, because they believe that the modernization of teaching methods is necessary for modern schools that effectively support English language learning. The answers of the teachers in the sample has clearly shown that teachers wish to abandon old teaching methods, which have often proven to be insufficient, and explore the potential of using innovative teaching methods with the aim of increasing student motivation and foreign language proficiency.

Another important finding that emerged from the analysis of their responses was that teachers prefer training programmes that combine both theoretical issues and practical implementation in the classroom. In other words, teachers of English wish to be provided with a sound theoretical background, but also with opportunities to implement innovative teaching practices in a real classroom context, so that there is equilibrium between theory and practice in the teacher training programmes they attend. It is not uncommon for teacher training programmes to have a focus on theoretical issues, sometimes placing less importance on practical issues, and a focus on how these theoretical principles can be put into practice in real-life educational projects. It is, then, only logical that teachers express their preference for a balance between theory and practice as far as teacher training

programmes are concerned. It also has to be taken into consideration that some theoretical issues, e.g. how to help students construct knowledge, the implementation of differentiated instruction, or even the use of ICT are not always easy to implement in the English language classroom, since teachers, students, but also the educational system need to make changes and adapt to the new emerging needs. In this framework, theoretical training is not adequate to equip English teachers with the skills and knowledge necessary for an upgrading of their teaching methodology. This is why teachers express their wish for training programmes that take into account their needs and preferences and not focus exclusively on theoretical aspects. The above views are in accordance with references in the relevant literature according to which the combination of academic theory with teaching practice is of fundamental importance, so that teachers do not reproduce the teacher-centered models of the past (Liakopoulou, 2014).

The above results are interesting and shed light into the opinions and attitudes of teachers of English in primary and secondary education settings. They provide those responsible for the design and implementation of teacher training programmes with invaluable information that will help them successfully manage such programmes. Consequently, any attempts to improve teacher training programmes need to take into account teachers' preferences.

#### **4. Discussion**

The findings described above have provided clear evidence that the research was important and it was worth conducting it, since it deals with the issue of teacher training programmes, which is closely related to the effectiveness of the level of foreign language education offered by an educational system. In general, the answers to the questions we posed provided useful insights into the attitudes of English teachers in relation to an interesting and crucial issue.

It is necessary to acknowledge a limitation of the research study presented in this paper. Due to the relatively small size of the sample, and the fact that the English teachers come from only two regions, care should be taken in generalising the research findings. In this vein, future research directions should include a greater sample size, including teachers from many areas and from all levels of education. Future research could also benefit from using a mixed methods approach, which involves the combination of both qualitative and quantitative research methodology and data in an empirical research study, using triangulation in the collection

and analysis of the data that has been collected (Creswell, 2014). The combination of quantitative and qualitative research can offset their disadvantages and lead to greater credibility (Bryman, 2006) and more reliable findings. Despite the above limitation, however, we believe that the results of the research are important and can provide useful data for the effective implementation of teacher training schemes that will be truly beneficial for teachers, students and the teaching of English alike.

Apart from the above caveat, research findings show that teachers' training needs in relation to innovative teaching practices and especially the use of ICT are great. The majority of the English teachers who participated in the study expressed the opinion that the incorporation of innovative teaching practices in contemporary education is important, since they can support the transition from a teacher-centered school to an educational system that prioritizes students' needs and experiences. This is an interesting, as well as an optimistic finding, since it shows that English teachers do not wish to stick to age old teaching methodologies, but, instead, they acknowledge the benefits of modern teaching methodologies and express a clear preference for attending teacher training programmes. Also and connectedly, according to the attitudes expressed by the majority of the sample, the learning process needs to be enriched with innovative teaching practices, such as the pedagogic use of ICT, as it increases students' interest and motivation. It is worth noting that a research study with a sample of 157 teachers of Secondary Education from General and Technical-Vocational High Schools in the prefecture of Central Macedonia also showed that the majority believe that innovative teaching practices, such as experiential teaching methods can have beneficial outcomes, especially as regards environmental education (Koutsoukos, Fragoulis and Valkanos, 2015). The research findings show that the English teachers who participated in the study actually believe that it is their responsibility to provide a learning environment that increases student motivation and helps them develop independent learning.

It is important to note that the belief that it is the teachers' responsibility to motivate learners is common in the relevant bibliography, which stresses the fact that teachers can be instrumental in boosting students' interest for the lesson and motivation to participate in the teaching and learning process. For example, Alderman (2004:3) suggests that an important task for teachers is to "help students cultivate a primary responsibility of motivation". In the same vein, Dörnyei (2001:27) asserts that

motivating learners and providing motivational strategies concerns "every teacher who thinks of the long-term development of his/her students". In summary, it is generally accepted in the relevant bibliography that the teachers' role in increasing and maintaining teacher motivation is of primary importance.

Teachers also recognized that training in ICT and collaborative teaching and learning in the classroom can equip them with knowledge, attitudes and skills that will allow them to approach their students in a more effective way and attract their interest so as to achieve better learning results for all students. Boosting the proficiency levels of all students is important, since it is not uncommon for great differences in relation to proficiency levels to exist among students who attend the same class. The data we collected from this research have provided strong evidence that teachers believe that teacher training programmes can also be beneficial in this respect.

Bearing the above findings into consideration, the practical outcomes and the usefulness of the research study we present in this paper are obvious. The research results and the opinions expressed by the teachers in the sample provide useful information to those engaged in the planning and implementation of teacher training programmes, since the teachers' needs and preferences should form the foundation of effective teacher training programmes. In turn, effective programmes aiming at upgrading the skills and knowledge of English teachers and at helping them use innovative teaching methodology and practices are closely linked to the general improvement of the education system and the level of foreign language education they offer.

## References

1. Agelopoulos, H., Karagiannis, P., Karantzis, I., Frangoulis, I., & Fokas, E. (2002). *The Teaching of Elementary Schools with Computer*. Athens: Kaleidoscope.
2. Alderman, M., K. (2004). *Motivation for Achievement*. Mahwah NJ: Lawrence Erlbaum.
3. Anagnou, E., and Fragoulis, I. (2014). The Contribution of Mentoring and Action Research to Teachers' Professional Development in the Context of Informal Learning. *Review of European Studies*, 6(1), 133-142. <http://dx.doi.org/10.5539/res.v6n1p133>.
4. Anastasiou, A., Valkanos, E., and Androutsou, D. (2011). Factors associated with the correlation and improvement of the personal and professional development of newly appointed teachers in Greece. *Conference Proceedings of the 4<sup>th</sup> Panhellenic Conference "Organisation and Management in Education"*, Drama, 9-10 December 2011, pp. 466 – 480.
5. Azmi, N. (2017). The Benefits of Using ICT in the EFL Classroom: From Perceived Utility to Potential Challenges. *Journal of Educational and Social Research*, 7(1), 111-118.
6. Bryman, A. (2006). Integrating quantitative and qualitative research: how is it done?. *Qualitative Research*, 6(1), 97-113. <https://doi.org/10.1177/1468794106058877>.
7. Cohen, L., Manion, L., & Morrison, K. (2007). *Research*

- Methods in Education* (6th edition). Routledge: London and New York.
8. Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (4th edition). Thousand Oaks, California: Sage.
  9. Dendrinou, B., Zouganeli, K., & Karavas, E. (2013). Foreign Language Learning in Greek Schools: European Survey on Language Competences. Athens: National and Kapodistrian University of Athens, Ministry of Education and Religious Affairs, Research Centre for Language Teaching, Testing and Assessment, and Institute of Educational Policy (IEP).
  10. Dörnyei, Z. (2001). *Motivational Strategies in the Language Classroom*. Cambridge: Cambridge University Press.
  11. Eurostat (2016). *Women teachers largely over-represented in primary education in the EU*. Eurostat Press Office. Available at: <https://ec.europa.eu/eurostat/documents/2995521/7672738/3-04102016-BP-EN.pdf/9f0d2d04-211a-487d-87c3-0a5f7d6b22ce>.
  12. Fragoulis, I. & Tsiplakides, I. (2009). Project-based learning in the teaching of English as a foreign language in Greek primary schools: from theory to practice. *English Language Teaching*, 2(3), 113-119. <https://doi.org/10.5539/elt.v2n3p113>.
  13. Fragkoulis, I., and Valkanos, E. (2011). Investigation of teachers' views regarding their training in the regional training centre of Patras. In Oikonomidis, V. D. (ed.) *Teacher Education and Training: theoretical and research approaches* (pp. 763-775). Pedio: Athens.
  14. Fragkoulis, I., and Koutsoukos, M. (2018). Environmental Education through Art: A Creative Teaching Approach. *Education Quarterly Reviews*, 1(2), 83-88. <https://doi.org/10.31014/aior.1993.01.01.8>.
  15. Grabe, M., & Grabe, C. (2008). *Integrating technology for meaningful learning* (5th ed). Boston: Houghton Mifflin Company.
  16. Ghasemi, B., & Hashemi, M. (2011). ICT: New wave in English language learning/teaching. *Procedia Social and Behavioral Sciences* 15, 3098-3102. <https://doi.org/10.1016/j.sbspro.2011.04.252>.
  17. Keramida, A., and Tsiplakides, I. (2013). Educational scenario with the use of ICT in the teaching of English in Junior High School. *Conference Proceedings of the 3<sup>rd</sup> Panhellenic Conference "Use of ICT in the Educational Process"*, Greek Scientific Union for ICT, 10-12 May, 2013. University of Piraeus.
  18. Keramida, A. (2018). Project Work and Information and Communication Technologies in the Teaching of English as a Foreign Language. *Journal of Linguistics and Literature*, 2(1), 20-24.
  19. Luzón Marco, M. J. (2002). Internet Content-Based Activities for ESP. *English Teaching Forum*, 40(3), 20-25.
  20. Kritsotakis, E. (2011). Investigation of the preconditions for an effective teacher trainer. IN G. Bagakis (Ed.) Initial training: Promotion of good practices, investigation of problems, detection of perspective (pp. 74-80). Athens. Ministry of Education, Teacher Training Organization..
  21. Kritsotakis, E. (2011). Investigation of the requirements for an effective trainer. In Bagakis, G (Ed.). Initial training: *Good practices, problems and perspectives* (pp. 74-80). Athens: Ministry of Education, OEPEK.
  22. Levine, G., S. (2004). Global simulation: a student-centered, task-based format for intermediate foreign language courses. *Foreign Language Annals*, 37, 26-36.
  23. Liakopoulou, M. (2014). The school unit as the epicenter for teachers' professional education. In Z. Papanou and M. Liakopoulou (Eds.), *Supporting teachers' professional development: a training manual* (pp. 36-60). Athens: Access Graphical Arts.
  24. Liakopoulou, M. (2014). The school unit as a teacher professional education. In Z. Papanou and M. Liakopoulou (Eds.) *Supporting teachers' professional development: a training textbook* (pp. 36-60). Athens: Access Graphic Arts.
  25. Koutsoukos, M., Fragoulis, I., and Valkanos, E. (2015). Connection of Environmental Education with Application of Experiential Teaching Methods: A Case Study from Greece. *International Education Studies*, 8(4), 23-28. <http://dx.doi.org/10.5539/ies.v8n4p23>.
  26. Mastrodimitis, A., Valkanos, E., and Kioulanis, S. N. (2014). An approach to teachers training needs with dissimilar educational background. The case of the Model Manufacture Unit of Lakkia, Thessaloniki. *Educational Circle*, 2(3), 47-77.
  27. Murray, D. E., et al (2005). Information technology and innovation in language education. In Davison, C. (Ed.) Hong Kong: Hong Kong University press.
  28. National Centre of Social Research and Kedros A.E. (2008). *Identifying training needs in secondary education*. Athens: Teacher Training Institute.
  29. Pedagogical Institute (2009). *Proposal for teacher training*. Athens. Pedagogical Institute.
  30. Papageorgiou, T., & Fragkoulis, I. (2018). The Use of Information and Communications Technology (ICT) in the Teaching of Tragedy "Antigone" by Sophocles. *International Journal of Sciences*, 7, 134-138. <http://dx.doi.org/10.18483/ijSci.1698>.
  31. Papagiannopoulos, K. Simoni, E., & Fragoulis, I. (2000). *Local history in the framework of teaching*. Athens: OEDB. (in Greek).
  32. Stoller, F. (2006). Establishing a theoretical foundation for project-based learning in second and foreign language contexts. In Beckett, G., H. & P. C. Miller (Eds.), *Project-Based Second and Foreign Language education: past, present, and future* (pp. 19-40). Greenwich, Connecticut: Information Age Publishing.
  33. Taherdoost, H. (2016). Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research. *International Journal of Academic Research in Management*, 5(2), 18-27.
  34. Tsiplakides, I., & Keramida, A. (2009). Helping Students Overcome Foreign Language Speaking Anxiety in the English Classroom: Theoretical Issues and Practical Recommendations. *International Education Studies*, 2(4), 39-44. <http://dx.doi.org/10.5539/ies.v2n4p39>.
  35. Vygotsky, L. S. (1978). *Mind in Society. The Development of Higher Psychological Processes*. Harvard: University Press.
  36. Warschauer, M. (1999). *Electronic literacies: Language, culture, and power in online education*. Mahwah, NJ: Lawrence Erlbaum Associates.