

INTED **2017**

**11th International
Technology, Education and
Development Conference**

6-8 March, 2017
Valencia (Spain)

CONFERENCE PROCEEDINGS



Sharing the Passion for Learning

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COMPUTERISATION IN MANDATORY SCHOOLING IN MACEDONIA WITH AN ACCOUNT TO FOREIGN LANGUAGE TEACHING

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Abstract

This paper reports on the outcome of a project 'Computer for Every Child' implemented in primary and secondary schools in Macedonia in 2007. The paper presents both foreign language teachers' and their primary and secondary school students' views, their personal judgement and evaluation of this project. It reports on a survey carried out on a number of primary and secondary school students' and their foreign language teachers. The paper aims at providing an insight into how teachers and students understand the implementation of ICT in the teaching process in the foreign language classroom, and it finally draws a few conclusions concerning corresponding changes necessary for the improvement of the teaching staff and the teacher training teaching process.

Keywords: ICT in education, foreign language teaching, ICT in foreign language education, outcomes.

1 INTRODUCTION

Education and the process of teaching have changed greatly over the last two decades. Information technologies, the computers, the Internet had inevitably imposed changes in the educational processes worldwide. The use of computers in education opened a new area of knowledge and imposed the use of new tools that changed some of the existing educational methods. This paper will report on a project named 'Computer for Every Child' implemented in primary and secondary schools in Macedonia in 2007. This project was successfully implemented in all state primary and secondary schools in Macedonia.

Following the contemporary and the newly accepted teaching methodology that includes ICT in the teaching processes, the Republic of Macedonia i.e. the Ministry of Education drafted a new national program for education in 2005. The project is based on the National Strategy for the Development of Education (2005-2015). This project is planned to provide 17,818 PCs, 98,710 LCD monitors, 98,710 keyboards, mice and 80,892 clients for primary and secondary schools in the Republic of Macedonia. These computers are to be used both as tools for teaching and as tools to access educational digital content on the global Internet network.

The project was being realized in three segments: Equipment purchase and installation; Maintenance, local and Internet connection of the equipment; and Development of digital content and teacher training for implementing instruction.

The project goal initially only for primary education was to improve and increase the use of ICT in all primary schools. The establishment of an effective and educational approach to the application of ICT is anticipated within the activities. The efforts of the country were not only focused on primary and secondary education but it further focused on the higher education institutions, encouraging the implementation of adapted new study programs that would follow the contemporary direction towards information societies. Therefore, the University for Information technology was founded. The reforms and the developments in the field of ICT, not only in the primary and secondary schools in Macedonia but also in the higher education institutions were made to produce qualified professional that would further improve the quality of life in the country.

2 APPLICATION OF ICT IN THE FOREIGN LANGUAGE CLASSROOM

The purpose of this paper was primarily found in our interest (as all authors of this paper have excessive foreign language teaching experience) to learn about the importance of the use of computers and ICT and how it is applied in the foreign language classrooms in the state schools in Macedonia. This paper will focus on the extent to which the foreign language teachers and their students recognize the use of ICT as an integral part in their foreign language classroom through personal views of both students and their teachers (primary and secondary). The shortcomings of the

contemporary teaching process in the classrooms of foreign language in terms of successfully applying ICT with the reflection on the available resources will also be further discussed and presented. The issues that we wish to tackle here are students' and teachers' views and problems with ICT and to which extent it is used in the practices in the real classrooms.

The role of the teacher is still central in the educational process even though the techniques and methods have altered greatly over the years. The teachers are leaving the role of the only source of knowledge but take a new role of manager and facilitator in the teaching process. It is in our beliefs that the teachers are still the key to implement effective utilization of these resources in the teaching processes and in the educational system as a whole. As this project imposed the use of computers, teachers must have been successfully prepared to implement them in their classrooms. The introduction of computers and ICT in the schools included a training process for the teachers in the planning process of the implementation of this project. Further in this paper this training process will be discussed. Many researchers from this field agree that the teacher's knowledge of technology should be taken into account in the process of planning for technology use because teachers who participated in computer courses showed lower anxiety. Furthermore, that increased computer experience diminishes computer anxiety. Hence, the lack of computer knowledge inevitably imposes high anxiety and negative attitudes. It has been proved that teacher's attitudes toward the use of technology can be significantly improved with proper and intensive training.

3 RESULTS OF THE SURVEY

The research questions in the conducted interviews were constructed in a manner to value and estimate the participants' understandings of ICT and their place in the classrooms.

The survey included foreign language teachers from primary and secondary state schools in Stip, Macedonia. Both teachers and students received two questions and were asked to give an instant answer. The teachers were asked these two:

- 1 What is your personal experience regarding the use of the computers in your everyday teaching process? And
- 2 Can you name any improvements, changes, problems or issues in your personal teaching process since the implementation of computers in your classroom.

The questions were designed to provide us with an insight to the teachers' personal experiences with the use of computers in the foreign language classrooms. We have selected some of the answers of the teachers (given in prose style as we collected them) as an illustration of the conducted interviews:

It was not very difficult for me to change my old way of teaching; on the contrary, it helped me to explain some notions that are not familiar to my students: you know, because of cultural differences (secondary school English teacher);

My students know much more about computers than I do and often I find myself lost in the middle of the class if a technical problem occurs. When they do assignments on the computers I don't get the right feedback of their progress, sometimes they can copy things and I find it difficult to keep track of that. There are some good sides of course, but I often lose track of the process (secondary school English teacher);

The positive side of the use of computers lays in creativity and possibilities but the excessive use of computers in all their classes can be harmful for the students. Other problem is that they are quite old now and they are not maintained properly.

Some teachers provided one answer as a sum of the two questions. The answers collected by the teachers allowed us to conclude that all of the interviewed foreign language teachers use ICT in their classrooms. A number of teachers even claimed that the foreign language teachers use ICT much more than the other teachers from their schools due to the nature of the subject itself. Some claimed that the fact that they had no problems understanding English (some German teachers also claimed that language was no barrier to them either) made it much easier to them to apply ICT in their classroom in much greater extent than teachers teaching other subjects. Some teachers even claimed that they used ICT even before computers were implemented, by using their personal computers. There were answers where the teacher completely chooses to rely on the materials and wishes to focus on the method of explicit explaining of the linguistic part of their subject. Many mentioned technical problems too, as well as the need of proper and better maintenance as many computers didn't work

and it made a problem organizing the lesson. Teachers reported that lack of appropriate teacher training is the biggest problem as many of the teachers that work today in the schools in Macedonia received their teaching diplomas before computer education was even there. Even though teachers had a computer training program, they feel that is not sufficient.

The students were asked these two questions:

- 1 What is your personal experience regarding the use of the computers in your English/ German classes? And
- 2 Do you often use the computers in your classes and do you prefer a class when you use computers or a traditional class? The research questions are posed to investigate the effectiveness of the use of ICT in the foreign language classes. The students were asked to provide an instant answer on the spot in order to avoid the tendency among students to copy from each other. Here, again, we have selected some of the answers from the students:
 - a) *yes, we use the computers in our classes of German quite often. Our teacher shows us things about German holidays, how they celebrate them... sometimes we do some exercises. I think I like it better when we use the computers in that class, but not always.*
 - b) *we don't use them much. Our teacher is not very good with computers, they are old, some are broken and if she has a problem she asks us for help and the whole lesson becomes a mess. It's ok as it is.*

This selection of the students' answers showed a range of perspectives. From the answers of the students it was evident that they think the use of computers in class is most effective in the classes of foreign languages. The technical problems were also mentioned among their answers.

In terms of expected answers, we can refer to students seeing ICT as part of their classrooms and prefer its presence in their classes. The second question intentionally did not focus only on the foreign language classes in order to make a comparison between the foreign language teaching process to that or the other subjects.

As a summary of all answers of both teachers and students it can be concluded that there is a range of views, experiences and understandings of ICT.

4 ANALYSIS AND DISCUSSION

From the results gathered here it can be concluded that the use of computers, as a process to develop education in Macedonia, was in great extent successful in the teaching process of foreign language teaching. This is in great extent due to the nature of the subjects, the possibility to present and bring closer the culture of the target language that is taught and the lack of language barrier for the teachers.

As explained above, the introduction of computers and ICT in the schools in Macedonia included a training process for the teachers in the planning process of the implementation of this project. Still, we found out that this part of the implementation was not sufficient and has not given the anticipated results. We believe that further trainings to the effective exploitation of computers in the teaching process should continue for all involved teachers in the state schools in Macedonia. Teachers' lack of computer knowledge and skill was the main problem found while implementing computer use in teaching. Other problems we have encountered in our survey were the insufficient expertise, guidance and help in this process as well as insufficient technical assistance.

Computer technology has already become part of education in Macedonia and it is likely that education will continue to develop in that direction in the future. We believe that domestic researchers and scientists from the field should be encouraged to do research into this new area, study the impact of the actions that are taken and come to evaluations about the extent of the use of computers in teaching and learning, as well as the factors affecting the use of computers. In the process of preparing this paper we have come to an insight that it is very important to study the perceptions of the school teachers. As reported in the results, teachers that work today in the schools in Macedonia received their teaching diplomas before computer education and claim that a basic computer training course is far from sufficient. This imposes a different perspective that can be reviewed and examined by professionals from the teacher training colleges, whether this kind of reforms should have been done differently.

The results that we received revealed that the foreign language teachers had more positive outcomes from the implementation of the computers than any other profiles of teachers.

And, finally, a similar survey can be made for the other subjects separately or the use of computers in the schools in Macedonia and in the entire educational process and also a study can be done in order to define certain educational technology standards for teachers and further develop plans how to reach those standards.

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