TEACHERS' PERCEPTIONS OF COMPUTER USE IN EDUCATION IN THE TRNC SCHOOLS

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ABSTRACT

The aim of this study is to examine the perceptions of the classroom teachers on the computer use in the TRNC schools. A questionnaire was applied to 84 classroom teachers in 5 schools in Nicosia, the capital city of the TRNC. The answers to the first part of the questionnaire with five subsections were analysed. Descriptive statistics were used for the analysis. The findings showed that teachers in the TRNC highly believed in the benefits of computers in education. They agreed with the ideas that computers increased student motivation and improved students' skills and knowledge. Teachers were quite positive about computer-aided education and its application. Teachers also believed in the benefits of computers in increasing the learning levels of students. The ideas that teachers disagreed were that computers harmed learning when used in lessons and computers were very complicated to use.

Keywords: Classroom Teachers, Computer Use, Computer Aided Education

INTRODUCTION

During the last decade, as the computers and Internet technology became widespread, enthusiasm for the use of computers in schools also became more evident across many countries. Although computers offer no panacea in every corner of education system, they have become crucial components of education in the twenty-first century, in many countries (Lockard&Abrams, 2001), as well as in the TRNC. Teachers today are expected to prepare all students to reach higher academic standards than have previously been attempted through higher professional established standards. As the student population increases, the education systems of many countries seek for contemporary approaches in order to move on more active applications and to consider individual differences.

As Wiske (1998) stated the range of teaching and learning techniques and models demand extensive intellectual preparation and continual learning on the part of teachers as well as students. Technological development requires new tools for the classrooms in every school year. Teachers' attitudes or their decisions to make use of these tools differ according to several factors including goals and objectives, course units, teaching methods and techniques, and assessment. There are several studies which show how decisions, experiences, approaches, beliefs and attitudes of teachers affect the use of computers in education (Andris, 1995; MacArthur ve Malouf, 1991; Marcinkiewicz, 1993; Moursund, 1979; Stevens, 1980; Yaghi, 1996, in Çağıltay, Çakıroğlu, Çağıltay and Çakıroğlu, 2001). Teachers, frequently, have to make decisions about how to utilize computers effectively in their classrooms as wells as in their homes. The challenge is to employ very powerful tool to take advantage to expand and enhance learning opportunities in classrooms, and even in daily life.

Lockard and Abrams, (2001) contend that in the early years of the computer era, there has been a prediction in expansion of computer aided instruction in K-12 education. Numbers show us that there is a significant progress in getting computers into schools. Therefore, teachers face enormous and inescapable of rapid changes in technology world and they also need to acquire new content knowledge and computing skills. Computers do not only improve teaching in general but also accommodate instructional activities to serve to the different needs of students in schools (Jacobsen, Eggen and Kauchak, 1999).

Technology era requires teachers to shift on a different role in schools. Therefore, not only working teachers need to have such basic computer skills, but teacher candidates or novice teachers will have to enter this profession with certain skills in computers and computer-aided instruction. Computer-based tools help teachers plan, implement and evaluate instruction in classrooms. So, this shift also affects the style of teaching in classrooms. For example, several research studies showed that there were positive attitudes toward the use of computers in classrooms from the student point of view and this caused students to have positive attitudes toward school, academic achievement, problem solving and inquiry (Jacobsen, Eggen and Kauchak, 1999, Lockard&Abrams, 2001; Sadker & Sadker, 2003;).

Teachers' approach to technology differs according to different levels of confidence. Sadker&Sadker (2003) mention that there are teachers who use computers and technology as pathfinders in skill development and excitement, while some teachers adapt slowly. There are also teachers who suffer from technophobia and think that all technology and computers are frightening. There also considerable amount of information about the older teachers' less positive approach to computers in classrooms.

This research tries to answer the following research question: what are the teachers' perceptions of the computer use in the schools of the TRNC?

Participants

This study was carried out in five elementary schools (three center and two peripheral schools) of the city of Nicosia. The sample of the study includes 84 classroom teachers of whose 57 (67.9%) were female, and 27 (32.1%) were male. The sample covered one fourth of the population. A majority of the teachers (76.2%) were between the ages of 36-46.

Data Collection Instrument

In order to examine the perceptions of teachers in TRNC on the use of computers in education a questionnaire, developed by Cagiltay, Cakiroglu, Cagiltay and Cakiroglu (2001), has been utilized. The questionnaire has 14 questions. For this study only the first question which covers 5 sections was analysed. These sections cover 26 subquestions related to the teachers' perceptions on the issues of computer-aided education, benefits of computers for students, computers as learning tools, benefits of computers after school and benefits of computers for teachers.5 point Likert type scale with items "absolutely no=1, no=2, no idea=3, yes=4, absoutely yes=5 " was used in the study.

RESULTS

The results of the study are presented in full tables, yet only the high scores are discussed.

Teachers' perceptions on the computer-aided education.

As can be seen in Table 1, the teachers' perceptions on the computer-aided education revealed that majority of the teachers (56%) think that computer-aided education changes the role of teachers in the classroom. Vast majority of the teachers (85.7%) believe that computers increases quality of education while some teachers (18 %) report computers may cause problems in classrooms. Almost all teachers (95.3 %) agree that computer-aided education should be encouraged. Teachers (90.1%) do not believe that computer-aided education is difficult and same proportion of teachers (90.4%) state that computer aided education is a temporary enthusiasm. Teachers (90.3%) also report that computers do not complicate their work.

Computer-aided education	Absolutely no %	No %	No idea %	Yes %	Absolutely yes %
Should be encouraged	1.2	1.2	2.4	41.7	53.6
Causes problems	22.6	51.2	8.3	15.5	2.4
Increases quality in education	4.8	6.0	3.6	46.4	39.3
Is a temporary enthuisasm	32.1	58.3	6.0	1.2	2.4
Changes the role of teachers in classroom	13.1	19	11.9	52.4	3.6
Is difficult and complicated	26.2	63.1	6.0	4.8	0
Complicates teachers' work	40.5	48.8	4.8	4.8	1.2

Teachers' perceptions on the benefits of computers for students

The results concerning teachers' perceptions on the benefits of computers for students (Table 2) revealed that teachers believed in the benefits of computers for students in general: Computers increase students' skills and knowledge (95.3%); computers increase student motivation (94.1%), and computers increase student interest in lessons (92.9%). Teachers, in general, do not agree that student achievement decreases when using computers and computers cause difficulties for students in learning basic concepts.

Benefits of computer use for students	Absolutely no %	No %	No idea %	Yes %	Absolutely yes %
Computers increase student interest in lessons	3.6	2.4	1.2	63.1	29.8
computers increase students' skills and knowledge	1.2	2.4	1.2	67.9	27.4
Computers increase student motivation	2.4	1.2	2.4	64.3	29.8
Decreases	4.8	34.5	10.7	38.1	11.9

students' social interactions					
Decreases student achievement	23.8	56	11.9	8.3	0
Causes difficulties for students in learning basic concepts	19	57.1	15.5	7.1	1.2

Teachers' perceptions on the issue of computers as learning tools

As can be seen in Table 3, a vast majority of teachers (90.5%) believe that computers are effective tools for learning and computers are very important education tools (92.8%). While there are some teachers do not participate to the idea that computers can be useful in every field of study, there are still large proportion of teachers (78.5%) believes that computers can be useful in schools. The ideas that teachers disagreed produced same proportion (80.9%) that computers harm learning when used in lessons and computers are very complicated in use.

Computers as learning tools	Absolutely no %	No %	No idea %	Yes %	Absolutely yes %
Computers are effective tools for learning	4.8	3.6	1.2	61.9	28.6
They harm learning when used in lessons	22.6	58.3	10.7	8.3	0
They can be useful in every field of study	2.4	11.9	7.1	59.5	19
They are very important education tools	2.4	2.4	2.4	60.7	32.1
They are very complicated to use	22.6	58.3	9.5	8.3	1.2

Teachers' perceptions on the benefits of computers after school

Table 4 reveals that teachers highly believe that students may need to use computers in their lives after school (92.9%) and students must grasp the importance of computers for society (96.4%).

Benefits of computers after school	Absolutely no %	No %	No idea %	Yes %	Absolutely yes %
Students may need to use computers in their lives after school	2.4	1.2	3.6	52.4	40.5
Students must grasp the importance of computers for society	0	2.4	1.2	50.0	46.4

Teachers' perceptions on the benefits of computers for teachers

As shown in Table 5, teachers believe that they should be aware of using procedures of computers (91.7%). When asked to give their perceptions on the benefits of computers for teachers, a majority of teachers (83.3%) believed that teachers' knowing how to use computers is an important issue for the future of a nation. When they were asked if they cannot use the computers in their profession, they may be unemployed in the future; almost half of them (52.4%) do not agree with this, however there are crucial proportion of teachers (41.6%) who tend to accept this fact and not having .any idea about it at all (17.9%).

Benefits of computers for teachers	Absolutely no %	No %	No idea %	Yes %	Absolutely yes %
Teachers should know how to use computers	4.8	3.6	0	36.9	54.8
Teachers can be unemployed in the future if they don't know how to use computers	6.0	34.5	17.9	33.3	8.3
I prefer to buy a computer for my child instead of buying an encyclopedia	7.1	29.8	10.7	34.5	17.9
Computers isolate people from each other	3.6	39.3	6.0	46.4	4.8
Computers will replace teachers in the future	32.1	48.8	7.1	10.7	1.2
Knowing how to use computers is an important issue for the future of a nation	3.6	7.1	6.0	63.1	20.2

CONCLUSION

The results of the study showed that teachers in the TRNC schools highly believed in the benefits of computers in education. The ideas that computers increase student motivation and students' skills and knowledge were rated of greatest importance. This result indicates that teachers are very positive towards the benefits of computers for students. Therefore, technology era requires educators to employ computer technologies in classrooms considering individual differences of children and the authorities should take this finding into consideration when making decisions related to development of new curricula.

Most of the teachers did not believe that computer-aided education is difficult and complicated and has a temporary enthusiasm. This result may indicate that teachers are highly positive about computer-aided education and that they are kin on the idea of its application in TRNC. Most of the teachers also believe that computers are effective tools for learning and important tools for education. These results show that teachers have high expectations from the use of computers in education and are hopeful for its usefulness in increasing the learning levels of students.

The ideas that teachers disagreed are that computers harm learning when used in lessons and computers are very complicated in use. The former finding supports teachers' positive outlook to the use of computers in lessons. Teachers' not finding computers very complicated may show that teachers already know how to use computers or have positive attitudes toward using.

It is a crucial fact that technology should be integrated into the twenty-first century's classrooms as it is in many developing countries. The researchers believe that the instructional and curricular decisions will be affected by such implications when several research studies related to use of computers and how to integrate computer technology into classrooms are carried out.

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