

Evaluating the Opinions of the Preschool Teachers on Computer Assisted Education

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Abstract

Preschool education is highly important for pediatric development. During this period which covers 0-6 age, a child develops rapid physical, mental and social developments. Child's acquaintance with computer before school age is highly important. The purpose of this study is giving the opinions of the preschool teachers on computer assisted education. In this study, one of the qualitative researching methods, content analysis, and semi-structured interview forms are used to collect the required data. The participant group of the study consists of 33 preschool education teachers who are working in Sakarya. The data of the research are tested through reasoning analysis. The opinions of the preschool teachers on computer assisted education are examined within 8 themes and results are presented according to the gathered findings. The participant teachers indicated that computer assisted education is useful as it provides visual-audial abundance, interesting points and also develops hand-eye coordination. The teachers indicate that they use computer software actively in most activities in preschool education.

Key Words

Preschool Education, Computer Assisted Education, Teacher Opinions.

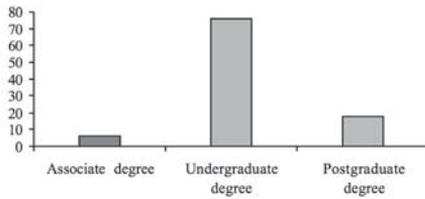
Preschool education period is a highly important period in individual development. Especially, a high ratio of mental, physical and social development takes place in this period and this situation makes this period more meaningful (Grotewell & Burton, 2008). Preschool education is crucial for a preparation to youth and adulthood and also it is important on its own. So, childhood must be perceived as a separate period more than being a preparation period to adulthood in life (Oktay, 2007). Preschool education can be defined as an education period that occurs between 0 and 72 months with

convenient developmental stages and individual features, providing abundant stimuli and a nice environment, helping children in developing emotionally, mentally, socially and physically and leading them to cultural assessments of society, preparing children to primary education and meanwhile a part of basic education integrity (Gürkan, 2002). It can be possible to increase the education quality of children with careful efforts in this area. Thus, it is a need to qualify children's education, developing and learning life from the very beginning of preschool education (Tuğrul, 2002).

The use of computers in preschool education is not an old concept. The computers we can see in every part of life are the most important technological devices of our century that contains all intellectual reservoirs (Altun, 2005). It encounters 1960s that computers involve in education and the concept of Computer Assisted Education (CAE) appears. At these times hardware was more important than software, but with time this concept changed and software became more important (Akkoyunlu,

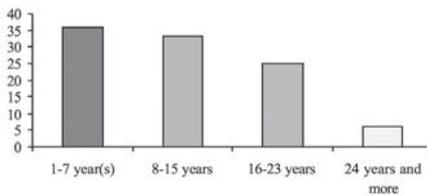
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bution according to their teaching experience is in graphic 2, and their ages were shown in graphic 3.



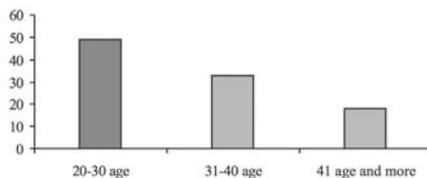
Graphic 1.
The Education Level of Participant Teachers

Basically, 6% of teachers have associate degree, 76% of them have undergraduate degree and 18% of the teachers have a postgraduate degree.



Graphic 2.
Teaching Experience of Participant Teachers

36% of teachers have experience of 1-7 years, 33% of them have 8-15 years, 25% of them have 16-23 years' experience of teaching, 6% of teachers have experience of more than 24 years.



Graphic 3.
Age Distribution of Participant

49% of teachers are 20-30 years old, 33% of them are at 31-40 age range, 18% of them are 41 and more.

Data Gathering Device

In this study, as data collection tools semi-structured interview forms have been used. It is possible to determine experiences, attitude, ideas, intentions, comments, mental perceptions and reactions within an interview process (Yıldırım & Şimşek, 2005). Before preparing interview questions a

broad literature research was conducted on the topic of study and also other studies concerning the topic were examined. Based on the literature review the bases of the study were formed. The questions prepared for the study were debated with three academics and four preschool teachers, and some re-arrangements were done according to their advice. After this process, the interview items which would be in the form were decided. There are four questions in the interview form and they are as stated; (i) What are your opinions about computer assisted education in preschool education? (ii) What are your opinions about the computer software which is prepared for preschool education? (iii) How often do you use the computer software which is prepared for preschool education and in which activities do you use them? (iv) If you don't use the computer software which is prepared for preschool education, what are your reasons for not using it? In data collection process, teacher views were noted down and saved. The interview with each preschool teacher lasted for 35 minutes and the whole study lasted for almost 7 weeks. As a part of nature of qualitative studies, the generalization of collected data is not aimed.

Data Analysis

The reasoning analysis was used in this study. In reasoning analysis, data are coded, themes are determined, data are arranged according to codes and themes and a definition is given and lastly findings are interpreted (Yıldırım & Şimşek, 2005). All the gathered data of the study from interview forms were transferred to the computers and the coding process was carried out. After coding process, all the codes brought together and the common points were found, the basic themes of study were put forth. **The validity of qualitative studies depends on researcher's objective attitude to findings and examined topic (Kirk & Miller, 1986).** Within the frame of validity of the study, the convenience of findings with the academic environment that it held in was examined, the clear presentations of events and phenomenon were provided, any expected fault was held with an attitude of removing the fault and correcting the code. To enhance the solidity of study, the categories and themes found out were examined by two other academics of same university who are expert in qualitative studies and the disagreements on common themes were removed, and they reached a consensus on found themes and codes.

negative opinions of preschool teachers on convenience of CAE software in preschool education.

Table 6.
Distribution of The Preschool Teachers' Negative Opinions on The Suitability of Computer Assisted Education Software for Early Childhood Education

Codes	η	%
1- The design is not appropriate to the level of the child	8	47
2- Content is not suitable for the child's level	5	29
3- Commercial purposed software is built	4	24
TOTAL	17	100

When we look at the table 6, 47% of teachers say that the prepared software is not conveniently designed for preschool education, 24% of them indicate that the software is prepared with commercial point of views, so it is not informative. In table 7, the opinions concerning CAE software employed in the preschool education activities are shown.

Table 7.
Distribution of The Preschool Teachers' Opinions on Computer Assisted Education Software Contributed Activities

Codes	η	%
1- Riddles, puzzles and matching activities	22	18
2- Activities for the development of the concept	19	14
3- Story activities	13	11
4- Movie show	12	10
5- Art events	12	10
6- Free time activities	11	9
7- Science and nature activities	8	7
8- Music events	7	6
9- Math activities	6	5
10- Reading and writing activities in preparation	6	5
11- Power point presentations	6	5
TOTAL	122	100

When we look at the table 7, 18% of the teachers say that CAE software is used for puzzle and matching activities, 14% of them say software is used for concept developing activities, 11% of them say that it is used for story activities, 10% of them mention that it is used for movie watching and art activities, 9% say for free time activities, 7% say for science and nature activities, 6% say for music, and the other 5% of the teachers say CAE software is used for mathematics and power point presentations. In table 8, there are opinions about how often CAE is used in preschool education.

Table 8.
Distribution of The Preschool Teachers' Opinions on The Frequency of Computer Assisted Education Software Usage

Codes	η	%
1- From time to time	17	52
2- Each time	7	21
3- Rarely	5	15
4- Never use	4	12
TOTAL	33	100

When we look at the table 8, 52% of the teachers use CAE software from time to time, 21% of them use always, 15% of them use seldom, and the other 12% indicate that they never use CAE software. In table 9, there are opinions about insufficiencies about CAE software.

Table 9.
Distribution of The Preschool Teachers' Opinions on Computer Assisted Education Software of Insufficiencies

Codes	η	%
1- Hardware failure	11	38
2- Missing software	9	31
3- Physical impairments	4	14
4- Teacher's improper use of the software	3	10
5- Foreign language software	2	7
TOTAL	29	100

When we look at the table 9, 38% of the teachers say that they cannot use CAE software because of insufficiencies, 31% of them say their schools do not have the software they need, 14% of them indicate that they cannot use CAE software efficiently because of the physical insufficiency in their school, 10% of them say they cannot use CAE software as they do not have enough technological information, 7% say that they cannot CAE software as it is in English.

Discussion and Suggestions

The researches regarding CAE in preschool education have started to be carried out in the last 30 years. When these researches are examined, it is seen that when traditional education methods are supported with CAE, we can have positive consequences. The use of CAE in pre-school education is so new in our country. In this study, the opinion of teachers about necessity of CAE in preschool education is clearly seen. The other studies also give similar consequences. (Akkoyunlu & Tuğrul 2002; Alabay, 2006; Coşkun, 1990; Couse & Chen, 2010; Crawford, 2000; Çekbaş et al., 2003; Davis & Shade, 1994; Demir, 2007; Fish et al., 2008; Haugland, 1992; Hoot & Kimler, 1987; Huffstetter et al., 2010;

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