

JOURNAL OF EDUCATIONAL AND INSTRUCTIONAL STUDIES IN THE WORLD DÜNYA'DAKİ EĞİTİM VE ÖĞRETİM ÇALIŞMALARI DERGİSİ November 2011, Volume 1 Issue 1 Article 17 ISNN: 2146-7463



MATEMATİK ÖĞRETİMİNDE BİLGİSAYAR YAZILIMLARI VE ETKİLİLİĞİ

Doç. Dr. Ömer F. Tutkun Sakarya Üniversitesi Eğitim Fakültesi Hendek-Sakarya <u>otutkun@sakarya.edu.tr</u>

Betül Öztürk Sakarya Üniversitesi Sosyal Bilimler Enstitüsü Sakarya <u>betul_zngldk@hotmail.com</u>

> Zeynep Demirtaş Abant İzzet Baysal Üniversitesi Sosyal Bilimler Enstitüsü Bolu <u>zeynept@sakarya.edu.tr</u>

Abstract

In this study, it is aimed to present softwares as an educational technology tool in mathematics teaching and the efficiency of softwares in the process of teaching-learning. In the line with this basic aim, answers have been tried to find to these questions; 1- What is learningware? 2- Interactivity between the learningwares and the teacher? and 3- What are the types of learningware? In this research, descriptive method (compiling) which is predicated to documentary research has been used. By analyzing the acquired data directed to fundamental problems and sub-problems, it has been worked up concerning the effectuality of learningware in mathematics teaching, the additives of teaching-learning process and the superiority to students. These are the findings acquired from the research result: Learningware; 1- has increased the performance, the level of depthmathematical thinking, argument and binding ability in learning environment. 2- has an active role to objectify the mathematical abstract concepts. 3- has increased the students' motivation and confidence towards mathematics, has contributed them to exhibit positive attitudes. 4- has provided students to develop high-level cognitive skills. 5- is effective on the students' understanding how to use mathematical knowledge and formation of spatial perception. 6- provides the teaching environments in which there is an active teacher and an expletory learning.

Key words: Mathematics Teaching, Mathematics Software, Learning-Teaching, Teacher.