

THE PROCESS OF CONSTRUCTING ABSOLUTE VALUE FUNCTION KNOWLEDGE FOR HIGH SCHOOL STUDENTS

Resrch. Assist, Yasemin KATRANCI
Kocaeli University
Kocaeli, TURKEY

Prof. Dr., Murat ALTUN
Uludağ University
Bursa, TURKEY

ABSTRACT

In recent years, there have been important changes in the construction of learning environment due to the scientific developments regarding cognitive process. This study aims to analyze high school students' processes regarding construction of the knowledge in the absolute value function in a learning environment prepared according to the recent developments. Using a case study method with a volunteer high school student regarding the teaching part of the project, this study has proposed two problems which expected to give student an opportunity to use his/her pre-experience and knowledge in a maximum level, and these two problems have been used respectively. The study has found out that, in solving the later problem, the student used the knowledge that s/he had acquired from the first two problems and that s/he would be able to conceptualize the absolute value function correctly in a certain level. The study has also found out a certain contribution of using environmental incidents and problems to teaching functions.

Key Words: Abstraction process, Absolute value function, Construction theory.