

Using Convergent and Divergent Thinking in Creative Problem Solving in Mathematics

Authors : Keng Keh Lim, Zaleha Ismail, Yudariah Mohammad Yusof

Abstract : This paper aims to find out how students using convergent and divergent thinking in creative problem solving to solve mathematical problems creatively. Eight engineering undergraduates in a local university took part in this study. They were divided into two groups. They solved the mathematical problems with the use of creative problem solving skills. Their solutions were collected and analyzed to reveal all the processes of problem solving, namely: problem definition, ideas generation, ideas evaluation, ideas judgment, and solution implementation. The result showed that the students were able to solve the mathematical problem with the use of creative problem solving skills.

Keywords : convergent thinking, divergent thinking, creative problem solving, creativity

Conference Title : ICMMM 2018 : International Conference on Mathematics and Mathematical Models

Conference Location : Singapore, Singapore

Conference Dates : March 22-23, 2018