OPEN-ENDED APPROACH: AN EFFORT IN CULTIVATING STUDENTS’ MATHEMATICAL CREATIVE THINKING ABILITY AND SELF-ESTEEM IN MATHEMATICS

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Abstract

The present study aims at examining the use of open-ended approach in cultivating senior high school students’ mathematical creative thinking ability (MCTA) and self-esteem (SE) in mathematics viewed from school category. The subjects of this research were the students grade XI at three schools; high, middle and low category in Kota Serang, Banten Province.

In every school category, two classes were chosen; one class was the experimental group which was taught by open-ended approach, while another class was a control group which was taught by conventional way. This quasi-experimental research employed MCTA test and SE in mathematics scale as the instruments. In general, the research result shows that the MCTA improvement and SE level of the students who are taught by open-ended approach is better than those who are taught conventionally. The results of students’ MCTA and SE viewed from school category will be further discussed.

Keywords: mathematical creative thinking ability, self-esteem, open-ended approach

Abstrak


Kata Kunci: kemampuan berpikir kreatif matematis, self-esteem, pendekatan open-ended

Nowadays, there has been a growing attention towards creativity among educators and researchers. It is due to the fact that the 21st century with its high technology creates numerous basic differences on the way people live. As a consequence, creative people are required to respond these uncertain differences (Piirto, 2011). Creative product on every aspect of life is expected to give solutions to every problems resulted from these differences. Thus, creativity has become one of the essential learning skills on this 21st in many countries in the world to face the fast development of the world (Asia Society Partnership for Global Learning, 2012).