ABSTRACT

IMPROVING STUDENT LEARNING OUTCOMES IN MATH THROUGH DISCOVERY LEARNING MODEL IN GRADE 10 OF VOCATIONAL HIGH SCHOOL MUHAMMADIYAH 2 BANDAR LAMPUNG

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The aim of this study was to improve the quality of learning by analyzing and finding out accurately: (1) learning model, (2) process of learning, (3) assessment instruments, and (4) improvement of learning outcomes in math with discovery model matriks materials. The method used this study was a three-phase action research cycle. Cycle 1 discovery models by guiding students to discover concepts, the second cycle to find a simple matrix operation process , and the third cycle to find the matrix multiplication operation. This study was conducted in vocational High school Muhammadiyah 2 Bandar Lampung grade10. Data were collected using observation and tests, and the qualitative descriptive analysis was then used to analyze the collected data. Results of this study are: (1) discovery learning model with the syntax of teachers delivering learning objectives, convey a problem, split the group, observed experimental data, reasoning, making conclusions, expressed the work , and teacher evaluate the activities and make conclusions, (2) the activity of learners in the learning is reading a book, listening to the teacher, writing, solving the problems, discussing, and communicating the results, (3) the assessment instrument form a essay test with a validity value of 0.88 (high), a reliability value of 0.99 (high), middle difficulty level of items, and a high acceptable discrimination power of items, and (4) learning outcomes of grade 10 students reached a minimum completeness criteria of 82.53% for cognitive domain, 87.5% for affective domain, and 82.35% for skill domain.

Keywords: learning outcomes,math, discovery learning model