ABSTRACT

DEVELOPMENT OF PROBLEM-BASED MATHEMATICS MODULE TO IMPROVE HIGH ORDER THINKING SKILLS

By

Mahfuddin

This research is a development research that aims to describe the process and obtain a product development in the form of a problem-solving-based mathematical module, as well as to analyze the validity, practicality, and attractiveness of the product in the form of a problem-solving-based mathematical module. This study uses the Barg & Gall development procedure with five stages of development. The subjects of this study were students of class XI IPS 4 at SMAN 13 Bandar Lampung in the 2020/2021 academic year. The data analysis technique used descriptive analysis and Q-Cochran test.

The results of this study, namely (1) a preliminary study shows the need to develop a product in the form of a module that trains students in problem solving, trains students to learn independently and is able to develop high order thinking skills, (2) the development of problem solving-based mathematics modules meets very valid criteria. on the material aspect with an assessment percentage of 89.06%, (3) the development of problem-solving-based mathematics modules meets the very valid criteria in the media aspect with an assessment percentage of 91.67%, (4) the development of learning tools in the form of syllabus and lesson plans meets the very valid criteria with the percentage of assessment is 95.83% and 93.05 %, respectively, (5) the development of the high order thinking skills instrument meets the very valid criteria with an assessment percentage of 90.62%, (6) the results of the initial field trial show that the developed module meets the criteria very well. practical with an assessment percentage of 86.25% and very attractive with a percentage of 85.3%. Based on this description, it can be concluded that the problem-solving-based module product is feasible to be used in learning

Key words : module, problem solving, high order thinking skills.

ABSTRAK

PENGEMBANGAN MODUL MATEMATIKA BERBASIS PEMECAHAN MASALAH UNTUK MENINGKATKAN *HIGH ORDER THINKING SKILLS*

Oleh

Mahfuddin

Penelitian ini adalah penelitian pengembangan yang bertujuan untuk mendeskripsikan proses dan mendapatkan produk pengembangan berupa modul matematika berbasis pemecahan masalah, serta menganalisis kevalidan, kepraktisan, dan kemenarikan produk berupa modul matematika berbasis pemecahan masalah. Penelitian ini menggunakan prosedur pengembangan Barg & Gall dengan lima tahap pengembangan. Subjek penelitian ini adalah peserta didik kelas XI IPS 4 SMAN 13 Bandar Lampung Tahun Pelajaran 2020/2021. Teknik analisis data menggunakan analisis deskriptif dan uji *Q-Cochran*.

Hasil penelitian ini, yaitu (1) studi pendahuluan menunjukkan perlunya dikembangkan sebuah produk berupa modul yang melatih siswa dalam pemecahan masalah, melatih siswa untuk belajar mandiri serta mampu mengembangkan *high order thinking skills*, (2) pengembangan modul matematika berbasis pemecahan masalah memenuhi kriteria sangat valid pada aspek materi dengan persentase penilaian 89,06 %, (3) pengembangan modul matematika berbasis pemecahan masalah memenuhi kriteria sangat valid pada aspek media dengan persentase penilaian 91,67 %, (4) pengembangan perangkat pembelajaran berupa silabus dan RPP memenuhi kriteria sangat valid dengan persentase penilaian berturut-turut 95,83 % dan 93,05 %, (5) pengembangan instrumen *high order thinking skills* memenuhi kriteria sangat valid dengan persentase penilaian 90,62 %, (6) hasil ujicoba lapangan awal menunjukkan modul telah memenuhi kriteria sangat praktis dengan persentase penilaian 86,25 % dan sangat menarik dengan persentase sebesar 85,3 %. Berdasarkan uraian tersebut, maka produk modul berbasis pemecahan masalah sudah layak digunakan dalam pembelajaran.

Kata kunci : Modul, Pemecahan Masalah, *High Order Thinking Skills.*