ABSTRAK

Katarina Ciesa Maharani Wardoyo, 2024. Pengembangan Modul Ajar berdiferensiasi dalam Mengakomodasi Kemampuan Representasi dan Disposisi Matematis Siswa SMPN 6 Yogyakarta. Program Studi Pendidikan Matematika, Jurusan Pendidikan Matematika dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sanata Dharma.

Penelitian ini bertujuan untuk (1) mengembangan modul ajar berdiferensiasi dalam mengakomodasi kemampuan representasi dan disposisi matematis siswa kelas VII SMPN 6 Yogyakarta (2) mendeskripsikan kualitas modul ajar berdiferensiasi dalam mengakomodasi kemampuan representasi dan disposisi matematis siswa

Jenis penelitian yang digunakan ialah *Research and Development (R&D)* dengan model pengembangan ASSURE. Subjek penelitian ini ialah siswa kelas VII A SMPN 6 Yogyakarta sebanyak 32 siswa. Teknik pengumpulan data yang dilakukan dalam penelitian ini adalah wawancara dengan guru, observasi sebelum pembelajaran, penyebaran angket gaya belajar, angket disposisi matematis, angket respon guru dan tes akhir.

Hasil penelitian ini terdiri dari: (1) Pada Proses pengembangan dilakukan sesuai dengan model pengembangan ASSURE yang terdiri dari; tahap pertama, menganalisis karakteristik siswa melalui wawancara dengan guru dan observasi pembelajaran bahwa kemampuan representasi dan disposisi matematis siswa masih tergolong rendah; tahap kedua, menetapkan tujuan pembelajaran dan kompetensi siswa yaitu menyelesaikan permasalahan terkait persamaan dan pertidaksamaan linear satu variabel; tahap ketiga, memilih materi Persamaan Linear Satu Variabel (PLSV) dan Pertidaksamaan Linear Satu Variabel (PtLSV) sebagai materi yang akan dikembangkan pada modul ajar dengan model pembelajaran *problem based learning (PBL)*; tahap keempat, modul ajar pembelajaran yang sudah selesai di desain divalidasi oleh validator dan hasilnya modul ajar layak untuk diimplementasikan; tahap kelima, pengimplementasian dilakukan setelah proses validasi dilakukan, modul ajar diujikan kepada 36 siswa kelas VII A; dan tahap keenam, dengan melakukan evaluasi dan revisi produk yang hasilnya valid, praktis dan efektif. (2) Kualitas modul ajar dapat ditinjau dari aspek validitas/kevalidan dengan presentase sebesar 83,95% termasuk kategori valid, efektifitas dengan presentase ketuntasan hasil tes sebesar 78,28% termasuk kategori efektif dan kepraktisan dengan presentase 93% termasuk kategori sangat praktis.

Kata kunci: penelitian dan pengembangan, modul ajar, representasi matematis, disposisi matematis, persamaan linear dan pertidaksamaan linear satu varibel.

ABSTRACT

Katarina Ciesa Maharani Wardoyo, 2024. Development of Differentiated Teaching Modules in Accommodating Representation Ability and Mathematical Disposition of Students of SMPN 6 Yogyakarta. Mathematics Education Study Program, Department of Mathematics and Natural Sciences Education, Faculty of Teacher Training and Education, Sanata Dharma University.

This study aims to (1) develop differentiated teaching modules in accommodating the representation ability and mathematical disposition of seventh grade students of SMPN 6 Yogyakarta (2) describe the quality of differentiated teaching modules in accommodating the representation ability and mathematical disposition of students.

The type of research used is Research and Development (R&D) with the ASSURE development model. The subjects of this study were students of class VII A SMPN 6 Yogyakarta as many as 32 students. The data collection techniques used in this study were interviews with teachers, observations before learning, distribution of learning style questionnaires, mathematical disposition questionnaires, teacher response questionnaires and final tests.

The results of this study consist of: (1) The development process is carried out in accordance with the ASSURE development model which consists of; the first stage, analyzing student characteristics through interviews with teachers and lesson observations that students' mathematical representation and disposition skills are still relatively low; the second stage, setting learning objectives and student competencies, namely solving problems related to equations and linear inequalities of one variable; the third stage, selecting the material of Linear Equation of One Variable (PLSV) and Linear Inequality of One Variable (PtLSV) as the material to be developed in the teaching module with the problem-based learning (PBL) learning model; the fourth stage, the learning teaching module that has been designed is validated by the validator and the results of the teaching module are feasible to implement; the fifth stage, implementation is carried out after the validation process is carried out, the teaching module is tested on 36 students in class VII A; and the sixth stage, by evaluating and revising the product whose results are valid, practical and effective. (2) The quality of the teaching module can be reviewed from the aspect of validity / validity with a percentage of 83.95% including the valid category, effectiveness with a percentage of completeness of test results of 78.28% including the effective category and practicality with a percentage of 93% including the very practical category.

Keywords: *research and development, teaching module, mathematical representation, mathematical disposition, linear equations and linear inequality of one variable.*