ABSTRAK

SITI HALIMA SIREGAR. Pengembangan Bahan Ajar Matematika Dengan *Model Eliciting Activities* Untuk Meningkatkan Kemampuan Representasi dan Disposisi matematis Siswa SMA Negeri 1 Lubuk Pakam. Tesis. Medan: Program Pascasarjana Universitas Negeri Medan, 2021.

Penelitian bertujuan untuk: (1) mengetahui validitas, kepraktisan dan efektivitas bahan ajar yang dikembangkan, (2) mengetahui bagaimana peningkatan kemampuan representasi matematis siswa, dan (3) mengetahui disposisi siswa terhadap matematika setelah mengikuti pembelajaran menggunakan bahan ajar yang dikembangkan. Penelitian ini merupakan penelitian pengembangan. Model pengembangan yang digunakan adalah model 4-D yang terdiri dari empat tahap yaitu pendefinisian, perancangan, pengembangan dan penyebaran. Hasil tahap pendefinisian digunakan untuk merancang bahan ajar, selanjutnya draf hasil rancangan divalidasi dan diuji coba ke lapangan untuk melihat kepraktisan dan keefektifannya. Bahan ajar yang valid, praktis dan efektif disebarkan ke forum MGMP untuk digunakan saat mempelajari materi Trigonometri. Uji coba dilakukan pada siswa kelas X SMA Negeri 1 Lubuk pakam. Uji coba 1 di kelas X IPS-2 dan uji coba 2 di kelas X IPS-1. Dari hasil pengembangan ini diperoleh bahwa: (1) bahan ajar yang dikembangkan valid dengan rata-rata total validitas buku pegangan guru = 4,46; buku siswa = 4,46; RPP = 4,45, LKS = 4,43, berada pada kategori valid, (2) bahan ajar praktis, dilihat melalui angket kepraktisan oleh guru dan siswa, rata-rata angket kepraktisan oleh guru = 3,21 berada pada kategori “baik” dan rata-rata angket kepraktisan oleh siswa = 3,17 berada pada kategori “baik”, (3) bahan ajar yang dikembangkan efektif, dilihat dari ketuntasan belajar yang dilihat melalui ketuntasan klasikal kemampuan representasi matematis adalah 93% siswa yang mengikuti pembelajaran mampu mencapai skor > 65; rata-rata tingkat kemampuan guru mengelola pembelajaran sebesar 3,35 berada pada kategori “baik”; waktu aktivitas siswa dalam pembelajaran ideal; dan respon siswa yang positif, (4) peningkatan kemampuan representasi matematis siswa menggunakan bahan ajar yang dikembangkan = 0,861 atau kategori “sedang” dan indikator kemampuan representasi matematis paling meningkat adalah indikator verbal yaitu dapat menyelesaikan masalah dengan melibatkan kata-kata dan ekspresi matematika yakni sebesar 35,25%. (5) peningkatan kemampuan disposisi matematis siswa menggunakan bahan ajar yang dikembangkan = 3,75%.

Kata kunci: Pengembangan Bahan Ajar, Model Eliciting Activities, Kemampuan Representasi Matematis, Disposisi Matematis

ABSTRACT

SITI HALIMA SIREGAR. The Development of Teaching Materials with Model Eliciting Activities to Improve Mathematical Representation and Disposition Skills for Students of SMA Negeri 1 Lubuk Pakam. Thesis. Medan: Post Graduate Program, State University of Medan, 2021.

The research aims to: (1) determine the validity, practicality and effectiveness of the learning instruments are developed, (2) determine the increasing of study mathematical representation skills, (3) determine the disposition of students towards mathematics afte participating in learning using the developed teaching materials. This research was development research. Development model used was 4-D model wich consists of four stages: definiting, designing, development and disseminate. The results of the definiting phase is used to design a learning instruments, then this draft validated and tested in classroom to see its practicality and effectiveness. The Learning instruments which satisfied valid, practically and effective criteria distributed to MGMP to be used while studying the material Trigonometry. The test is done in class X SMA Negeri 1 Lubuk Pakam. This research was done in class X IPS 2 and X IPS 1. From the results of this development is obtained that: (1) The teaching material developed was valid with an average validity total of teacher book = 4.46, student book = 4.46, RPP = 4.45, and LKS = 4.43, on the criteria of "good" (2) teaching materials was practical, it can be seen from practicality questionnaire by teacher and students, average practicality questionnaire by teacher = 3,21 on the criteria of "good" and average practicality questionnaire by students= 3,17 on the criteria of "good". (3) teaching materials are effective, it can be seen from classical completeness of mathematical representation skills was 93% of students who take the learning was able to achieve a score > 65; average level of teacher ability to manage learning is 3,35 on the criteria of “good”, time of the student activity was ideal, and students response was positive. (4) increasing mathematical representation skills using developed teaching materials = 0.861 or the “medium” category and the indicator of the most improved mathematical representation ability is the verbal indicator, which is able to solve problem involving words and mathematical expressions, which is 35.25%. (5) increasing mathematical disposition skills using developed teaching materials = 3.75%.

Keywords: Development of teaching materials, Model Eliciting Activities, Mathematical Representation Skill, Disposition Mathematic Skills.