

ABSTRAK

Gita Sonia Simbolon, NIM 4183111060 (2018). Pengembangan Bahan Ajar Interaktif Berbasis Pendekatan Kontekstual Untuk Meningkatkan Kemampuan Pemecahan Masalah Matematis Siswa Kelas XI SMA Negeri 3 Sibolga.

Penelitian ini dilakukan untuk menghasilkan bahan ajar interaktif berbasis pendekatan kontekstual yang berkualitas dengan kategori valid, praktis, dan efektif, untuk menaikkan kemampuan memecahkan permasalahan matematika peserta didik pada materi program linear. Instrumen penelitian yang digunakan merupakan lembar validasi bahan ajar interaktif, lembar validasi RPP, lembar validasi angket respon, lembar validasi tes kemampuan, angket respon guru dan siswa, serta tes kemampuan siswa. Setelah bahan ajar interaktif, RPP, angket respon dan tes kemampuan dinyatakan valid oleh para ahli, tahap selanjutnya dilakukan uji coba lapangan. Sehingga hasil penelitian menunjukkan bahwa: (1) Perangkat pembelajaran berbasis pendekatan kontekstual yang dikembangkan sudah memenuhi kriteria dari aspek kevalidan menurut penilaian para ahli dengan rata-rata validitas bahan ajar interaktif yaitu 3,44 untuk validasi materi dan 3,49 untuk validasi media dengan kategori sangat layak serta rata-rata validitas RPP adalah 3,54 dengan kategori sangat layak, (2) Bahan ajar interaktif berbasis pendekatan kontekstual yang dikembangkan sudah memenuhi kriteria dari kepraktisan dengan: a) hasil angket respon peserta didik mengenai bahan ajar interaktif menunjukkan persentase kepraktisan 80,46% dengan kategori sangat praktis; b) hasil angket respon pendidik mengenai bahan ajar interaktif menunjukkan persentase kepraktisan 90,47% dengan kategori sangat praktis; (3) Bahan ajar interaktif berbasis pendekatan kontekstual yang dikembangkan memenuhi kriteria efektif melalui: a) aktivitas waktu pembelajaran dengan menggunakan bahan ajar interaktif yang dikembangkan sama dengan waktu pembelajaran biasa, dan sesuai dengan waktu yang telah ditentukan di dalam RPP, (b) respon peserta didik terhadap produk pembelajaran positif, dan (c) ketuntasan belajar siswa secara klasikal 88,89%. Melalui uji Gain, tampak bahwa kemampuan pemecahan masalah matematis peserta didik dengan menggunakan bahan ajar interaktif berbasis pendekatan kontekstual mengalami kenaikan sebesar 0,74 dengan kategori tinggi.

Kata Kunci: Bahan ajar interaktif, pendekatan kontekstual, kemampuan pemecahan masalah matematis, program linear.

ABSTRACT

Gita Sonia Simbolon, NIM 4183111060 (2022). Development of Interactive Teaching Materials Based on Contextual Approaches to Improve Mathematical Problem Solving Ability of Class XI Students of SMA Negeri 3 Sibolga.

This research was conducted with the aim of producing quality contextual approach-based interactive teaching materials with valid, practical, and effective categories, to improve student's mathematical problem solving skills in linear programming material. The research instruments used were interactive teaching material validation sheets, lesson plans validation sheets, response questionnaire validation sheets, ability test validation sheets, teacher and student response questionnaires, as well as student ability tests. After the interactive teaching materials, lesson plans, response questionnaires and ability tests were declared valid by experts, the next stage was field trials. So the results of the study show that: (1) The developed contextual approach-based learning tools have fulfilled the criteria from the aspect of validity according to the assessment of experts with an average validity of interactive teaching materials, namely 3,44 for material validation and 3,49 for media validation with categories very feasible and the average validity of the lesson plan is 3,54 with a very feasible category, (2) The interactive teaching materials based on the contextual approach developed have met the criteria of practicality with: a) the results of the student response questionnaire regarding interactive teaching materials show a practical percentage of 80,46% in the practical category; b) the results of the teacher's response questionnaire regarding interactive teaching materials showed a practicality percentage of 90,47% in the very practical category; (3) The interactive teaching materials based on the contextual approach developed meet the criteria of being effective through: a) learning time activities using interactive teaching materials that are developed the same as regular learning times, and according to the time specified in the lesson plans, (b) participant responses students towards positive learning products, and (c) classical student mastery of 88,89%. Through the Gain test, it appears that student's mathematical problem solving abilities using interactive teaching materials based on a contextual approach have increased by 0,74 in the high category.

Keywords: Interactive teaching materials, contextual approach, mathematical problem solving ability, linear programming.