

ABSTRACT

DEVELOPMENT OF STUDENT WORKSHEET TRIGONOMETRY APPROACH TO PROBLEM BASED LEARNING IN GAJAH MADA SENIOR HIGH SCHOOL BANDAR LAMPUNG

By

NURASHRI PARTASIWI

This study aimed to: 1) describe the condition and potential early, 2) develop the LKS design, 3) analyze the effectiveness, 4) efficiency, and 5) the attractiveness of the use of material trigonometric math worksheets with PBL approach. This study was a Research and Development (R & D), with a research subject was class X in Gajah Mada Senior High School, Muhammadiyah Senior High School and Al-Azhar Senior High School Bandar Lampung. Data were collected through questionnaires, tests and observation and analyzed quantitative descriptive.

The results of this study are : 1) teaching materials and methods used in the study of mathematics are less varied, LKS conditions are not optimal, 93.75% of students and teachers of mathematics requires LKS, 2) LKS development process is based on the results of a needs analysis which is 93.75% of the teachers require math worksheets as a student learning materials are being validated by subject matter experts, design experts, and media experts, 3) LKS effectiveness of the experimental class and control is 48.7 and 37.2 for Gajah Mada Senior High School, 46.8 and 41.0 for Muhammadiyah Senior High School, 44.7 and 39.5 for Al Azhar Senior High School, 4) LKS efficiency testing with PBL models in the form of savings of 0.5 times is greater than the learning that is not using worksheets with the PBL approach, 5) testing the attractiveness of the development of LKS obtained yield was 84.4%.

Keywords: student worksheets, problem based learning, trigonometry

ABSTRAK

PENGEMBANGAN LEMBAR KERJA SISWA TRIGONOMETRI DENGAN MODEL *PROBLEM BASED LEARNING* DI SMA GAJAH MADA BANDAR LAMPUNG

Oleh

NURASHRI PARTASIWI

Penelitian ini bertujuan untuk: 1) mendeskripsikan kondisi dan potensi awal, 2) mengembangkan desain LKS, 3) menganalisis efektifitas, 4) efisiensi, dan 5) kemenarikan penggunaan LKS matematika materi trigonometri dengan pendekatan PBL. Penelitian ini merupakan Research and Development (R&D), dengan subjek penelitian siswa kelas X SMA Gajah Mada, SMA Muhammadiyah, dan SMA Al-Azhar Bandar Lampung. Data dikumpulkan dengan angket, tes dan observasi serta dianalisis secara deskriptif kuantitatif.

Hasil penelitian ini adalah: 1) bahan ajar dan metode yang digunakan dalam pembelajaran matematika kurang bervariasi, kondisi LKS belum optimal, 93,75% siswa dan guru matematika membutuhkan LKS, 2) proses pengembangan LKS dilakukan berdasarkan hasil analisis kebutuhan yaitu 93,75% guru membutuhkan LKS matematika sebagai bahan belajar siswa yang divalidasi oleh ahli materi, ahli desain, dan ahli media, 3) efektifitas LKS kelas eksperimen dan kontrol sebesar 48,7 dan 37,2 untuk SMA Gajah Mada, 46,8 dan 41,0 untuk SMA Muhammadiyah, 44,7 dan 39,5 untuk SMA Al Azhar, 4) pengujian efisiensi LKS dengan model PBL berupa penghematan waktu 0,5 lebih besar dibandingkan dengan pembelajaran yang tidak menggunakan LKS dengan pendekatan PBL, 5) pengujian kemenarikan terhadap pengembangan LKS diperoleh hasil sebesar 84,4%.

Kata kunci: lembar kerja siswa, *problem based learning*, trigonometri