

ABSTRACT

Eko Ambar wibowo. 2018. "The Development of Learning Tools of Physics in Senior High School by Using Learning Model *Problem Based Learning* Approach Characters Value Integration To Increase Learning Out Put". Thesis. Graduate of Padang State University

The standard of content and the standard of process of curriculum 2013 require scientific learning and scientific learning character with more active students especially in learning physics. The fact has showed that, the teachers do not have specific teaching devices that are able to activate students' potential. Problem Based Learning Model was supposed to be able to make the students becoming more active in scientific learning. Base on this fact it necessary to develop physics learning device orientated to Problem Based Learning Model integrated to characters value in Senior High School with valid, practice and effective criteria.

This type of research is the development of research (research and development). Development model that was applied in this research was 4-D, which consists of defining, designing, developing and disseminating stages. Defining stage covered curriculum, material and the student analysis. Designing stage covered the activity of formulating learning device in form of syllabus, *RPP*, media, *LKPD*, the assessment of knowledge competition, manner, characters, and skills. On development stage the test of validity were done through validity sheet of learning device, practicality testing through observation sheet on the using *RPP*, questionnaire response of the teachers and the students, affectivity testing were obtained from the assessment of knowledge, attitude, characters, skill, and questionnaire of student's response. Disseminating stage is the activity to disseminate learning device.

The result of the research on define stage obtained core competence; basic competence ; student characteristic, and fact, concept, principle and procedure from optical device material. The result of analysis on designing stage obtained syllabus, *RPP*, media, *LKPD*, knowledge competition assessment, attitude, character and skill that were designed according to the process of learning that applied Problem Based Learning Model approach. Development stage produced physics learning device that orientated to Problem Based Learning Model approach integrated to characters value with valid, practical, and effective criteria which as following: validity testing obtained continual device average, the syllabus was about 0,93. result of practical testing from the application of *RPP* was about 0,92, teacher response questionnaire, and continual student questionnaire were about 0,89. Moreover the result of effectiveness testing was obtained from knowledge assessment, attitude and characters, skill and student questionnaire response with the average 0,92. Disseminating stage was a process to distribute valid, practice, and effective teaching device in limited amount to the teachers and students of State Senior High School 6 Kerinci

ABSTRAK

Eko Ambar Wibowo. 2018. “Pengembangan Perangkat Fisika SMA Berbasis Model *Problem Based Learning* Terintegrasi Nilai-nilai Karakter Untuk Meningkatkan Capaian Pembelajaran Peserta Didik”. Tesis. Pascasarjana Universitas Negeri Padang

Standar Isi dan Standar Proses Kurikulum 2013 menuntut pembelajaran yang *scientific* dan berkarakter ilmiah serta peserta didik supaya lebih aktif dalam pembelajaran khususnya pada pembelajaran fisika. Kenyataan menunjukkan bahwa guru belum memiliki perangkat dengan model tertentu yang dapat mengaktifkan potensi siswa. Model *Problem Based Learning* dianggap mampu membuat siswa lebih aktif dalam pembelajaran *scientific*. Atas dasar ini perlu dikembangkan perangkat pembelajaran fisika SMA berbasis model *Problem Based Learning* terintegrasi nilai-nilai karakter dengan kriteria valid, praktis, dan efektif.

Jenis penelitian adalah penelitian pengembangan (*research and development*). Model pengembangan yang digunakan adalah model 4-D yang terdiri dari tahap pendefinisian (*define*), perancangan (*design*), pengembangan (*development*) dan penyebaran (*dessiminate*). Tahap *define* meliputi kegiatan analisis kurikulum, analisis materi, dan analisis siswa. Tahap *design* meliputi kegiatan perancangan terhadap perangkat pembelajaran berupa silabus, RPP, modul, LKPD, dan penilaian kompetensi pengetahuan, sikap, karakter dan keterampilan. Pada tahap *development* dilakukan uji validitas melalui lembar validasi perangkat pembelajaran, uji praktikalitas melalui lembar observasi keterlaksanaan RPP, angket respon guru dan siswa, uji efektivitas diperoleh dari penilaian kompetensi pengetahuan, sikap, karakter, keterampilan dan angket respon siswa. Tahap *dessiminate* merupakan kegiatan penyebaran perangkat.

Hasil penelitian pada tahap *define* diperoleh Kompetensi Inti; Kompetensi Dasar; karakteristik siswa; dan fakta, konsep, prinsip dan prosedur dari materi alat optik. Hasil penelitian pada tahap *design* diperoleh silabus, RPP, modul, LKPD, penilaian kompetensi pengetahuan, sikap, karakter dan keterampilan yang dirancang mengikuti langkah-langkah pembelajaran berbasis model *Problem Based Learning*. Tahap *development* menghasilkan perangkat pembelajaran fisika berbasis model *problem based learning* terintegrasi nilai-nilai karakter dengan kriteria valid, sangat praktis dan efektif dengan ketentuan: uji validitas diperoleh rata-rata perangkat berturut-turut yaitu silabus 0,93, RPP 0,92, modul 0,95, LKPD 0,89, dan penilaian 0,92. Tahap *dessiminate* melakukan pendistribusian perangkat pembelajaran yang telah valid praktis dan efektif dalam jumlah terbatas kepada guru dan siswa di SMA Negeri 6 Kerinci.