

## **ABSTRAK**

### **PENGEMBANGAN PERANGKAT INSTRUMEN *PERFORMANCE ASSESSMENT* PADA PEMBELAJARAN FISIKA MELALUI *SCIENTIFIC APPROACH* DENGAN MODEL *PROJECT BASED LEARNING***

**Oleh**

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Penelitian ini bertujuan mengembangkan instrumen *performance assessment* berbasis *scientific approach* pada pembelajaran Fisika dengan model *Project Based Learning* serta mendeskripsikan kesesuaian, kemudahan, dan kemanfaatan penggunaan instrumen yang dikembangkan menurut pendapat guru. Desain pengembangan dilaksanakan menggunakan metode *Research and Development* dengan model pengembangan Borg & Gall (2013) dengan langkah-langkah (1) analisis penelitian, analisis kebutuhan dan pembuktian konsep, (2) perencanaan produk dan desain, (3) pengembangan produk awal, (4) uji lapangan awal, (5) revisi produk, (6) uji lapangan besar. Pada penelitian ini terdapat dua subjek, yaitu subjek penelitian, yaitu *performance assessment* berbasis *scientific approach* dan subjek uji coba produk.

Subjek uji coba ahli, yaitu dua orang ahli instrumen yang menguji konstruksi, substansi dan bahasa. Subjek uji coba produk adalah 3 guru Fisika di 3 SMA negeri, yaitu SMAN 9, SMAN 2 dan SMAN 3 Bandar Lampung dan subjek uji coba pemakaian adalah 2 guru Fisika di masing-masing 5 SMA negeri di Bandar Lampung, yaitu SMAN 1, SMAN 2, SMAN 3, SMAN 9 dan MAN 1 Bandar Lampung. Dalam hal ini guru diminta untuk mengisi angket uji kesesuaian, kemudahan, dan kemanfaatan instrumen. Selain itu, dilakukan juga wawancara mengenai instrumen hasil pengembangan.

Hasil analisis data menunjukkan persentase pendapat guru mengenai instrumen hasil pengembangan. Pendapat mengenai kesesuaian instrumen sebesar 83,13% yang berarti sangat tinggi, kemudahan sebesar 80,0% yang berarti sangat tinggi, dan kemanfaatan sebesar 85,0% yang berarti sangat tinggi. Penilai menganggap

instrumen ini sangat sesuai dalam menilai kinerja siswa khususnya dalam proses kegiatan pembuatan teropong karena rubrik yang ada pada instrumen sudah dapat menilai setiap tahap proses pembelajaran, dan penilai berpendapat bahwa instrumen *performance assessment* mudah untuk digunakan karena kalimat dan bahasa yang digunakan mudah untuk dimengerti serta lembar penilaian sudah memuat komponen secara rinci seperti KI, KD, indikator, tujuan pembelajaran dalam satu halaman sehingga tidak merepotkan guru saat melakukan penilaian. Selain itu, penilai juga berpendapat bahwa instrumen *performance assessment* sangat bermanfaat karena dapat membantu guru dalam menilai kinerja siswa. Hal itu berarti bahwa instrumen sudah sesuai, mudah, dan bermanfaat untuk digunakan.

**Kata kunci:** instrumen *performance assessment*, pembelajaran Fisika, *scientific approach*, model *Project Based Learning*

## **ABSTRACT**

### **THE DEVELOPMENT OF INSTRUMENT PERFORMANCE ASSESSMENT IN PHYSICS LEARNING BY SCIENTIFIC APPROACH WITH MODEL PROJECT BASED LEARNING**

**By**

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This research aims to develop performance assessment instrument based on a scientific approach to the physics learning model of Project Based Learning and describe the suitability, ease and expediency use of instruments developed in the opinion of the teacher. Design development carried out in the Research and Development with the development model Borg and Gall (2013) with the following steps: (1) the research analysis, requirements analysis and proof of concept; (2) the product planning and design; (3) the initial product development; (4) the initial field test; (5) The revision of the product; (6) a large field test. In this research, there are two subjects, namely the subject of research that is performance-based assessment of the scientific approach and the subject of product trials.

Subject trial expert that two experts were examining the construction of the instrument, the substance and language. While the subject of product trials are three teachers of Physics at 3 SMA country namely, SMAN 9, SMAN 2 and SMAN 3 Bandar Lampung and the subject of utility testing is 2 Physics teacher in each of the 5 SMA land in Bandar Lampung SMAN 1, SMAN 2 , SMAN 3, SMAN 9 and SMAN 1 Bandar Lampung. After using the instrument teachers were asked to complete a questionnaire test of suitability, ease and expediency instruments other than do interviews regarding instrument development results.

The results of data analysis showed the percentage of teachers' opinions regarding instrument development results. Opinion regarding the suitability of the instrument of 83.13% which is extremely high, the ease of 80.0% which is extremely high, and the expediency of 85.0%, which means very high. Appraisers consider these instruments sangat appropriate in assessing the performance of students, especially in the process of manufacture of binoculars for existing sections on the instrument has been able to assess every stage of the learning

process, and also appraisers found the instrument performance assessment is easy to use because of the sentence and the language used is easy to in the understanding and assessment sheet already contains detailed supplies such as KI, KD, indicators, learning objectives in one page so it does not bother the teacher when assessing, in addition, the assessor also argues that the instrument performance assessment is useful because it petrified teachers in assessing student performance. It means that the instrument is appropriate, easy, and rewarding to use.

**keyword :** Performance Assessment, assessment instrument, Scientific Approach, Project Based Learning Model