ABSTRAK

PENGEMBANGAN SOAL EVALUASI BERBASIS LITERASI SAINS PADA MATERI SISTEM GERAK MANUSIA KELAS XI

Theofila Pati
191434063

Universitas Sanata Dharma

Pada abad 21 ini kemajuan sains di berbagai negara semakin pesat dan kunci dari kemajuan sains adalah pendidikan yang diterapkan dalam pembelajaran harus berkualitas sehingga bisa dipahami oleh peserta didik. Hasil analisis kebutuhan yang telah dilakukan pada 5 Sekolah Menengah Atas di Yogyakarta menunjukkan proses pembelajaran sudah menerapkan literasi sains. Tetapi, untuk kegiatan evaluasi pembelajaran guru jarang menggunakan soal evaluasi berbasis literasi sains. Tujuan dari penelitian pengembangan ini adalah untuk mengetahui daya beda, tingkat kesukaran, validitas empiris, reliabilitas kepraktisan soal evaluasi berbasis literasi sains yang dikembangkan pada materi sistem gerak manusia kelas XI.

Penelitian ini merupakan penelitian pengembangan (R&D) menggunakan model 4D yang terdiri dari 4 tahap yaitu *Define, Design, Development, Dissemination*. Tetapi, pada penelitian ini hanya terbatas pada tahap *Development.* Hasil penelitian soal evaluasi berbasis literasi sains yang dikembangkan mendapatkan validasi isi 0,87 dengan kategori "Tinggi" dan validasi butir soal 1,12 dengan kategori "Tinggi". Kepraktisan penggunaan soal sebesar 80% dengan kategori "Sangat praktis". Dari 30 butir soal yang dikembangkan memiliki 12 daya beda "baik", 3 daya beda "cukup baik" dan 15 daya beda "tidak baik". Sedangkan tingkat kesukaran soal memiliki 5 tingkat kesukaran "sulit", 5 tingkat kesukaran "sedang" dan 20 tingkat kesukaran "mudah". Selain itu, uji validitas empiris memiliki 10 soal "valid" dan 20 soal "tidak valid". 10 soal yang dinyatakan valid memiliki nilai reliabilitas sebesar 7,86 yang termasuk dalam kategori reliabel.

Kata kunci: Literasi sains, sistem gerak manusia, *research & development*.

ABSTRACT

DEVELOPMENT OF SCIENCE LITERACY-BASED EVALUATION QUESTIONS ON HUMAN MOVEMENT SYSTEM MATERIAL CLASS XI

Theofila Pati
191434063

Sanata Dharma University

In the 21st century, scientific progress in various countries is increasingly rapid and the key to scientific progress is education that is applied in learning must be of quality so that it can be understood by students. The results of the needs analysis that has been carried out at 5 high schools in Yogyakarta show that the learning process has implemented science literacy. However, for learning evaluation activities teachers rarely use science literacy-based evaluation questions. The purpose of this development research is to determine the differentiation, difficulty level, empirical validity, reliability of practicality of science literacy-based evaluation questions developed on the material of the human motion system in class XI.

This research is a development research (R&D) using the 4D model which consists of 4 stages namely Define, Design, Development, Dissemination. However, this research is only limited to the Development stage. The results of the research on science literacy-based evaluation questions developed obtained content validation of 0.87 in the "High" category and item validation of 1.12 in the "High" category. The practicality of using the question is 80% with the category "Very practical". Of the 30 items developed, 12 had "good" differentiation power, 3 had "good enough" differentiation power and 15 had "not good" differentiation power. While the level of difficulty of the question has 5 levels of difficulty "difficult", 5 levels of difficulty "medium" and 20 levels of difficulty "easy". In addition, the empirical validity test has 10 "valid" questions and 20 "invalid" questions. The 10 questions that were declared valid had a reliability value of 7.86 which was included in the reliable category.

Keywords: Science literacy, human movement system, research & development.