PLAGIAT MERUPAKAN TINDAKAN TIDAK TERPUJI

ABSTRAK

PENGEMBANGAN SOAL EVALUASI BERBASIS LITERASI SAINS PADA MATERI VIRUS KELAS X

Monica Felisiana Cindy Waluyo

Universitas Sanata Dharma

2024

Penelitian ini berangkat dari permasalahan rendahnya kemampuan literasi sains pada peserta didik sesuai dengan hasil PISA *(Programme for International Student Assessment)*. Dari hasil analisis kebutuhan melalui wawancara 6 sekolah, diketahui bahwa para guru masih merasa kesulitan untuk menyusun soal evaluasi berbasis literasi sains maupun soal dengan tingkat kognitif tinggi serta kurangnya variasi soal yang digunakan. Penelitian ini bertujuan untuk mengembangkan, mengetahui kelayakan soal, serta menganalisis kualitas butir soal evaluasi berbasis literasi sains pada materi virus fase E.

Penelitian yang dilakukan merupakan penelitian *Research & Development* (R&D) dengan model 4D yang dilaksanakan dalam tiga tahapan yaitu *define*, *design*, dan *development*. Teknik pengumpulan data yang digunakan berupa wawancara dan kuesioner. Penelitian menghasilkan soal evaluasi berbasis literasi sains pada materi virus fase E yang terdiri atas kisi-kisi dari 30 butir soal pilihan ganda, soal evaluasi, serta rubrik penilaian. Soal evaluasi yang dikembangkan memiliki rata-rata nilai validasi yaitu 0,94 sehingga dinilai layak untuk digunakan setelah dilakukan revisi sesuai komentar dan saran validator. Berdasarkan uji validitas, terdapat 20 butir soal (66,7%) yang dinyatakan valid dengan skor reliabilitas 0,939. Hasil uji tingkat kesukaran menunjukkan sebanyak 25 soal (83,33%) berada dalam kategori sedang dan 5 soal (16,67%) dalam kategori mudah. Hasil uji daya beda menunjukkan 10% soal termasuk dalam kategori rendah sekali, 10% termasuk dalam kategori rendah, 26,67% termasuk dalam kategori cukup, 46,67% termasuk dalam kategori tinggi, dan 6,66% termasuk dalam kategori tinggi sekali. Intrumen evaluasi memiliki rata-rata skor kepraktisan sebesar 85,1%. Dengan demikian, soal evaluasi berbasis literasi sains pada materi virus fase E layak untuk digunakan.

Kata kunci: *research & development*, literasi sains, virus

PLAGIAT MERUPAKAN TINDAKAN TIDAK TERPUJI

ABSTRACT

DEVELOPMENT OF SCIENCE LITERACY-BASED EVALUATION ON VIRUS MATERIALS PHASE E

Monica Felisiana Cindy Waluyo

Sanata Dharma University

2024

This research started from the problem of low scientific literacy skills among students according to the results of PISA (Program for International Student Assessment). From the results of the needs analysis through interviews with 6 schools, it is known that teachers still found it difficult to prepared evaluation questions based on scientific literacy and questions with a high cognitive level and there is a lack of variety in the questions used. This research aims to develop, determine the feasibility of questions, and analyze quality scientific literacy-based evaluation questions on virus material phase E.

The research carried out was Research & Development (R&D) research with a 4D model which was implemented in three stages, namely define, design and development. The data collection techniques used were interviews and questionnaires. The research produced science literacy-based evaluation questions on phase E virus material which consisted of a grid of 30 multiple choice questions, evaluation questions, and an assessment rubric. The evaluation questions developed had an average validation value of 0.94 so they were deemed suitable for use after revisions were made according to the validator's comments and suggestions. Based on the validity test, there were 20 questions (66.7%) which were declared valid with a reliability score of 0.939. The results of the difficulty level test showed that 25 questions (83.33%) were in the medium category and 5 questions (16.67%) were in the easy category. The results of the differential power test showed that 10% of the questions are in the very low category, 10% are in the low category, 26,67% are in the sufficient category, 46,67% are in the medium category, and 6,66% are in the good category. The evaluation instrument had an average practicality score of 85.1%. Thus, science literacy-based evaluation questions on virus material phase E are suitable for use.

***Keyword** : research & development, science literacy, virus*