ABSTRACT

Arianti, Siti. 2018. *Designing Technology-Based Media for Assessing Ninth Graders' High Order Thinking Skills (HOTS) (A Developmental Research Conducted at SMP Negeri 1 Sedayu).* Thesis. Undergraduate Program. Mercu Buana University of Yogyakarta. Advisor: Dr. Dra. Hermayawati, S.Pd., M.Pd.,

Keyword: Assessment, High Order Thinking Skills (HOTS), Secondary School

Assessment is a meaningful tool to measure and improve students' High Order Thinking Skills (HOTS) which is needed to face 21st century challenges. However, it was found that the ninth graders in SMPN 1 Sedayu were not very well-acquainted with the questions which has been designed to assess their analyzing (C4), evaluating (C5), and creating (C6) skills. The limited number of computer and less of teacher's ability in designing Computer Based Test (CBT) as the current trend in assessment were other problems which needed immediate solution. Therefore, this study aimed at accomplishing purposes as follows: (1) to describe the design of technology-based media for assessing ninth graders' HOTS; (2) to evaluate the appropriateness of the designed technology-based media for assessing ninth graders' HOTS.

The research was included as Research and Development (R&D). Several research phases like Analysis, Design, Develop, Implementation, and Evaluation were adapted and known as an abbreviation of "ADDIE". The data were collected by using some instruments such as interview, document analysis, documentation, questionnaire, and test. Furthermore, qualitative and quantitative data analysis were utilized to analyze the data.

The research finding was in the form of technology-based media namely HOTS Quiz contained 50 multiple-choice items. The HOTS Quiz design was stated as applicable and acceptable as very appropriate by 1) the material and language testing expert with the average 84% achievement; 2) the IT experts with the average 87,5%. Moreover, the result of the first and second implementation showed an improvement, where the students' average score in first implementation was 65, 7 while the second implementation reached 79, 4. Thus, it can be concluded that the designed HOTS Quiz was appropriate for the research participants. Then, HOTS Quiz was integrated in compact disk (CD), so it could be used for learning at school or at home.

ABSTRAK

Arianti, Siti. 2018. *Mendesain Media Berbasis Teknologi untuk Menilai Keterampilan Berpikir Tingkat Tinggi Siswa (Penelitian Pengembangan yang Dilaksanakan di SMP Negeri 1 Sedayu).* Skripsi. S1. Universitas Mercu Buana Yogyakarta. Pembimbing: Dr. Dra. Hermayawati, S.Pd., M.Pd.,

Keyword: Penilaian, Keterampilan Berpikir Tingkat Tinggi, Sekolah Menengah Pertama

Penilaian merupakan salah satu cara yang tepat untuk mengukur dan meningkatkan keterampilan berpikir tingkat tinggi generasi mendatang. Akan tetapi, siswa kelas 9 di SMP Negeri 1 Sedayu tidak terlalu familiar dengan pertanyaan yang didesain untuk mengukur keterampilan analisis, evaluasi, dan mencipta. Terbatasnya fasilitas komputer dan kurangnya kemampuan guru dalam mendesain tes berbasis computer yang merupakan tren penilaian saat ini merupakan permasalahan lain yang membutuhkan solusi secepatnya. Oleh karena itu, penelitian ini bertujuan untuk: (1) mendeskripsikan desain media berbasis teknologi untuk penilaian keterampilan berpikir tingkat tinggi siswa kelas 9; dan (2) untuk mengevaluasi kesesuaian media berbasis teknologi yang telah didesain untuk penilaian keterampilan berpikir tingkat tinggi siswa kelas 9.

Penelitian ini termasuk penelitian pengembangan. Beberapa tahapan penelitian meliputi menganalisis, mendesain, mengembangkan, mengimplementasikan, dan mengevaluasi diadaptasi dan lebih dikenal dengan singkatan ADDIE (*Analysis, Design, Develop, Implement, and Evaluate*). Data diperoleh dengan menggunakan beberapa instrumen antara lain wawancara, analisis dokumen, dokumentasi, kuesioner, dan tes. Selanjutnya, analisis kuantitatif dan kualitatif digunakan untuk menganalisis data.

Hasil penelitian berupa media berbasis teknologi ini disebut "*HOTS Quiz"* yang terdiri dari 50 soal pilihan ganda. Desain "*HOTS Quiz"* dinyatakan dapat diimplementasikan dan sangat sesuai oleh: 1) ahli materi dan tes dengan rata-rata skor penilaian 84%; dan 2) ahli teknologi dan informasi dengan rata-rata penilaian 87, 5%. Selanjutnya, hasil dari implementasi pertama dan kedua menunjukan peningkatan, dimana rata-rata skor siswa saat implementasi pertama yaitu 65, 7, sedangkan pada implementasi kedua mencapai rata-rata 79, 4. Oleh karena itu, dapat disimpulkan bahwa HOTS Quiz yang telah didesain sesuai untuk digunakan. Selanjutnya, file HOTS Quiz disimpan di CD agar dapat digunakan untuk latihan soal baik di sekolah maupun di rumah.