DEVELOPMENT OF COMPUTER-BASED PROFESSIONAL COMPETENCY TEST FOR TEACHER PROFESSIONAL EDUCATION PARTICIPANTS (PPG) AUTHORITY OF AUTOMOTIVE TECHNIQUES

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ABSTRACT

Abstract

The purpose of this study was to develop a Computer-Based Professional Competency Test Problem. This matter is very important for the success of the implementation of PPG, considering the quality of PPG is determined by the existence of a National Writing Examination that is computer-based with the dominant test material is the material of Professional competence.

This research was carried out with the Borg and Gall model research and development approach with a partial increase in steps, which are broadly grouped into three stages, namely: (1) making a planning, which includes activities: preliminary study, and developing preliminary models. (2) limited trials which include Preliminary Field Testing activities and Main Product Revision. (3) expanded trials (main test field / testing field), followed by production of the device (operational product), until the final device is obtained (final product revision).

The results of this study are: (1). The Development of Computer-Based Professional Competency Test Questions for PPG Participants in Automotive Engineering is carried out through various stages, namely: (a) the planning phase which includes: the content of the questions, the form of the questions and the number of questions, (b) the implementation stage of the question writing (c) the program development stage computer, (d) the testing phase, and (e) the quality evaluation stage of the development results, (2) The quality of the results of development based on rational analysis are: (a) in terms of material aspects: there are 2 questions that are not suitable if arranged in the form of Multiple Choices , (b) in terms of construction aspects: there are 5 questions that have a long formula for the choice of answers that are not the same, and (c) in terms of language: there is 1 question with a language that is not in accordance with the Indonesian rules that are good and right, (3) The difficulty level (TK) is: there are 23 questions with easy kindergarten, 32 questions with medium kindergarten and 5 questions with kindergarten difficult, meaning the comparison between Easy: Moderate: Difficult is 38.3%: 53.3%: 8.4%. (4) the price of distinguishing power (DP) is: there are 2 questions with a very good DP, 17 questions with good DP, 13 questions with enough DP, 21 questions with bad DP, and 7 questions with very bad DP. Means that there are still 28 questions (46.7%) that have not fulfilled the requirements as good questions. (5) Distribution of Distractors' Effectiveness, namely: there are 3 questions which with 1 distractor have not been effective, there are 15 questions which with 2 distractors have not been effective, there are 28 questions which with 3 distractors have not been effective, there are 14 questions which with 4 distractors have not been effective.

Kata Kunci: *Professional, Competency , Automotive*