

Developing Assessment of Fifth Element Based on Merdeka Curriculum with Quizizz for Vocational High School of Office Management and Business Services

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Abstract:

Developing Assessment of Fifth Element Based on Merdeka Curriculum with Quizizz for Vocational High School of Office Management and Business Services (OMBS) aims to determine the quality of the assessment by looking at validity, reliability, level of difficulty, discriminating power, and question distractors and to know student responses for assessments given through the Quizizz platform. This is R&D research using the ADDIE development model with the Analyze, Design, Development, Implementation, and Evaluation stages. This research is limited to class X of OMBS. The results showed that, according to material quality experts, 100% "very strong", 98% "very strong" for language experts, and 65% "strong" for assessment experts. 35 valid and 5 invalid questions with a 0.91 "high" reliability. Regarding the level of difficulty of the questions, 6 items (15%) have the criteria of "easy", as many as 27 items (67%) have the criteria of "moderate", and 6 items (15%) have the criteria of "difficult". Of the differentiating power, 33 items (82.5%) have "very good" criteria, as many as 3 items (7.5%) have "good" criteria, and as many as 4 items (10%) have "poor" criteria. Of the distractors, 29 (73%) had several distractors that functioned well, and 11 (27%) had all that functioned properly. Furthermore, for student responses, the average participant from 30 students chose the answer "NO" or did not agree as much as 3%, while students chose "YES" or agreed with as many as 97% of students stated, "very positive". The conclusion that can be drawn from this study is that the feasibility of developed assessment is feasible to use and gets a positive response from students. For further research can develop all assessments in phase E of the subject "Fundamental of Office Management and Business Services."

Keywords: Assessment, Multiple Choice, Merdeka Curriculum, OMBS

INTRODUCTION

The government formed a Merdeka curriculum that was adapted to the needs of students in learning, in which the process of forming this curriculum went through a fairly long transition from the 2013 curriculum to an emergency curriculum during the Covid-19 pandemic so that it became a Merdeka curriculum that is currently implemented according to educational goals. Mariati, (2021) states that the Merdeka curriculum content aims to optimize students' talents and abilities in learning. According to (Syafuri, 2022), it is expected that teachers can innovate when delivering learning so that the Merdeka curriculum can produce students according to expectations. Based on the Merdeka curriculum guide (McTighe et al., 2017) assessment is divided into 2 (two), namely formative and summative. Formative assessments are given during the learning process both before and after the implementation of the delivery of material to students, and the summative assessment is the assessment given at the last evaluation such as PTS or UAS.

Adapted to the 21st century, the use of Information and Communication Technology (ICT) platform is used for assessment to replace conventional assessments to become more modern with the help of technology media platforms. According to (Widiyawati, Y., Nurwahidah, I., & Sari, 2019), media is needed to develop assessments with digital Information and Communication Technology (ICT) platforms to realize assessments in the form of digital Computer Based Tests (CBT) for descriptions and multiple choices. The researcher developed an assessment in the form of multiple choice because it has the advantage of being able to present an assessment for students by providing the arguments presented in the questions, besides that the researcher developed a test in the form of multiple choice to measure cognitive abilities in students. Products are presented by utilizing digital platforms in the form of a Content Management System, one of which is the Quizizz digital assessment platform (Quizizz.com). According to (Citra & Rosy, 2020), Quizizz is a supporting application in the field of education with an interactive game model that can be used as a forum for carrying out learning evaluations for students.

Noor, (2020) states that Quizizz is an interactive game media that can be used to carry out assessments. Based on the opinion of (Putri, N. W., & Dwijayanti, 2020) Quizizz can display information and statistical data about student performance. Therefore, according to (Wihartanti, L. V., Wibawa, R. P., Astuti, R. I., & Pangestu, 2019), the implementation of the assessment through the Quizizz media platform, questions and answers can be seen directly by

students through the display screen when doing assessments on the Quizizz platform. Dwihartanti, (2018) state that one of the benefits of carrying out an assessment using a digital platform is being able to find out the material that has been submitted easily so that it can be viewed periodically.

Based on the results of interviews that were carried out at State Vocational School 1 Surabaya with informants from teachers and students in class XI and XII used the K13 curriculum, while class X has used the merdeka curriculum. In practice, in class X or now called Phase E the Office Management and Business Services expertise program in the subject "Fundamentals of Office Management and Business Services" requires an assessment to function as a measure of evaluation at the end after learning is carried out. The formative assessment developed at State Vocational School 1 Surabaya is still very simple and does not by the assessment writing principles in the Merdeka curriculum and still uses the form of questions developed in the previous curriculum, namely curriculum 13 where the questions developed still use the HOTS C4-C6 form. Adequate conditions of facilities at SMK Negeri 1 Surabaya greatly facilitate access to communication and help the learning process, but in reality, teachers are still not able to adapt to make students more interesting and innovative. In addition, the characteristics of students at State Vocational School 1 Surabaya are very comfortable learning with the help of technology. According to (Pratita et al., 2021) generation Z students tend to prefer digital activities (reading, viewing, and listening to information) through smartphone or computer devices. (Pratita et al., 2021) stated that the goal was to produce an evaluation tool based on High Order Thinking Skills (HOTS) with the help of the "Quizizz" application in the daily marketing assessment (PH) subject to assess student competency after studying KD 3.7, namely the product life cycle. This study obtained data quality based on the results of expert validation to obtain a proportion of 92.5% (very high) and from the construction of 85% (very high). The results of the study were declared fit for use from the material and construction aspects. So that it can be known the purpose of making assessment products based on the merdeka curriculum on element 5 which is assisted by Quizizz, the researchers hope to be able to help teachers State Vocational School 1 Surabaya to make assessments according to the tension of the merdeka curriculum. Furthermore, feedback is needed by students which is a form of evaluation of the implementation of learning. In this study, students' responses were used to assess the use of ICT media, namely Quizizz.

According to (Aisyah, Panjaitan, R. G. P., & Marlina, 2016), student responses are forms of acceptance, response, and action during learning as student feedback.

METHOD

The research method used is Research and Development (R&D) research and development (Sugiyono, 2019). In this study, the researchers used the development model used was ADDIE development model (Analysis, Design, Development, Implementation, and Evaluation). The data collection technique used by the researcher was unstructured and direct interviews. As stated by (Arifin, 2009), direct interviews are conducted between questioners and sources and can be carried out through intermediaries. In addition, researchers collected data using expert validation sheets, namely instrument sheets that are useful for measuring and assessing multiple choice test questions based on a Merdeka curriculum made by researchers containing material, language, and assessment components. The development of an assessment based on the Quizizz a Merdeka curriculum was tested on students of class X for Vocational High School of OMBS who were taking the subject "Fundamentals of Office Management and Business Services." According to (Singarimbun, 1995), to represent the target population, a sample of 30 students is required as the subject of a limited trial. The data analysis technique used was first carried out qualitatively in the form of material expert validation, language, and assessment to see the feasibility of the questions asked. Both were carried out quantitatively by using the Anates application version 4.0, namely measuring the feasibility of questions including measuring validity, reliability, level of difficulty of questions, discriminating power of questions, and question distractors. As well as using student responses to measure interest in working on questions with the help of Quizizz.

RESULT AND DISCUSSION

Developing Assessment of Fifth Element based on Merdeka Curriculum by Quizizz

In the initial stage, namely Analysis, which was carried out by researchers on February 3, 2023, there were several steps, one of which was a needs analysis where researchers found problems, namely that State Vocational School 1 Surabaya was currently using the latest curriculum, namely the Merdeka curriculum. After conducting interviews by researchers with teacher informants on the subject "Fundamental of Office Management and Business Services" is a subject that contains basic competencies in strengthening office work skills programs and

business services. The following subjects are useful as provisions for students to know knowledge, skills, attitudes, and a great will so that they have a foundation in studying subjects in concentrations of expertise in grades XI and XII (Sulistiowati, 2022). The resource person explained that schools still apply the old assessment model, which is based on curriculum 13, prioritizing summative assessments at the end of evaluations such as UTS and UAS. According to the Merdeka curriculum guide by (McTighe et al., 2017), bloom taxonomy is suggested to be used in designing learning and assessment assessments with adjusted taxonomic development, namely C1-C6. Further analysis of students, researchers used subjects in class X majoring in MPLB. Class X of the MPLB major is divided into 5 (five) classes, namely MPLB 1, MPLB 2, MPLB 3, MPLB 4, and MPLB 5. According to interviews conducted by teacher researchers at schools, it is stated that schools are divided equally without distinguishing or sorting based on superior or low academic ability. So, the researchers took only 30 students from 33 students in the MPLB 5 class as research subjects. This was motivated by the fact that 3 students out of 33 students with special needs so the researchers took a policy of only 30 subjects used in this assessment development research. In addition, according to the characteristics of students at State Vocational School 1 Surabaya, they are currently very comfortable learning with the help of technology. This is evidenced by (Pratita et al., 2021), that the characteristics of Generation Z tend to like digital activities. The last step of the analysis is curriculum analysis where State Vocational School 1 Surabaya for classes XI and XII still uses curriculum 13, while class X has implemented the Merdeka curriculum. In preparing the assessment the researcher conforms to the provisions stipulated in the Merdeka curriculum.

The second step is Design. At this stage, the researcher asks questions according to the indicators that have been taken, namely a total of 40 questions. In addition, according to (Citra & Rosy 2020), the researcher designed a procedure for entering questions into Quizizz to make it easier for teachers to operate Quizizz. The Quizizz platform has the advantage that the questions presented can be set according to the desired time limit, and scores can be viewed or set directly, making it easier for students to anticipate accuracy in working on the questions. As stated by Noor (2020), the Quizizz platform is a game that is packaged interestingly and interactively to serve as a companion tool in carrying out the learning process in class and to function as a tool to assist in the implementation of assessments. One of the advantages of Quizizz is that it can statistically display quality construction data from students (Putri, N. W., & Dwijayanti, 2020). The Quizizz platform can be opened with the help of computers, IOS, and

Android which are sure to be connected to the internet network. Besides that, the Quizizz platform has an attractive appearance and makes it easier for question makers to input into the provided Quizizz platform (Agustina, L., & Rusmana, 2019; Purba, 2019).

Next namely Development, at this stage, after compiling the 40 items the researcher validates the expert by the material experts to determine the quality of the material in the questions according to the learning outcomes (CP), linguists to determine the quality of the language in the questions, and assessment experts to determine the quality of construction on the problem. In addition, the researcher analyzed the questions that had been developed using the Anates application program version 4.0 to determine the validity, reliability, level of difficulty of the questions, discriminating power, and deceptiveness of the questions.

The next step is Implementation. Namely, the product will be tested on students with research subjects in class X majoring in MPLB and as many as 30 students. At this stage, the researcher also gave scores to students as a response to using the Quizizz platform to work on questions, where the average results given to the assessment of student scores stated positive results. According to (Pratita et al., 2021), Gen Z students tend to prefer digital activities via smartphones or computers, therefore developing an Element 5 assessment based on an Merdeka curriculum assisted by Quizizz will be liked by students.

The final step is the Evaluation of the researcher to accommodate suggestions and improvements by material, language, and assessment experts. So that at this stage the researcher revises the final product and product results, after the researcher analyzes the first item together by utilizing the Anates application version 4.0, the researcher will choose the 20 best questions to use and discard the other 20 questions. This is enhanced by research by (Sari, D.R.U., Wahyuni, S., & Bachtiar, 2018), stating that an item can be used if it has been declared valid, while the item is not used if the item is declared a person with a disability with the consideration that it may be corrected or discarded.

The feasibility of Developing Assessment of Fifth Element based on Merdeka Curriculum by Quizizz Qualitatively and Quantitatively

The feasibility of developing an element 5 assessment based on the Quizizz a Merdeka curriculum qualitatively can be seen from the validation results by several experts. Widana, (2017), state that he used validation by several experts, namely material, language, and assessment (evaluation) experts so that the quality of the assessment that had been developed

could be known. Based on material expert validation by subject teachers "Fundamentals of Office Management and Business Services" at State Vocational School 1 Surabaya, there are 4 (four) indicators in the preparation of questions related to the content of the material. From this value, the content of the material in the assessment that has been developed has the criteria of "very strong" by obtaining an average of 100%. Next is the validation of linguists by Indonesian language teachers at State Vocational School 1 Surabaya, there are 3 (three) indicators. From this value, the language used in developing this assessment has the criteria of "very strong" by obtaining an average of 98%. Furthermore, the expert validation of the assessment by the lecturer of the Office Administration Education Study Program, 4 (four) indicators was assessed 2 (two) times. Based on the considerations of the researcher using the 2nd (two) assessment, namely with the results the construction assessment in the development of this assessment has a "strong" criterion by obtaining an average of 65%.

Furthermore, the feasibility of developing a Merdeka curriculum element 5 assessment with the help of Quizizz quantitatively can be seen from the product analysis. Proven in the research of Widana (2017), Hamidah & Wulandari, (2021), Dewi et al., (2020), Indana,(2022), Irwansyah & Izzati, (2021), Pitoyo et al., (2020), Darmawan et al., (2020) that to determine the quality of developing assessment instruments can be seen through validity, reliability, level of difficulty of questions, and distinguishing power. In developing this assessment, the researcher used the Anates application version 4.0 to help calculate validity, reliability, item difficulty level, and discriminating power. To see the validity of the item declared valid if the r count in the correlation table in the Anates version 4.0 application is greater than the r table, namely the r table of 30 respondents of 0.361. After analyzing the items that were declared valid and feasible to use, the result was that 35 items (88%) were declared valid, and 5 items (12%) were declared valid. The reliability results have a value of 0.91. In this case, the reliability criteria for the development of this assessment are classified as "very high". This was stated by (Nurhasanah, 2017), a test is declared reliable if the reliable coefficient is > 0.200 , the test has a reliable coefficient of $-1.00-0.200$, so it is declared unreliable. A good difficulty criterion is showing "medium". In developing this assessment, 6 items had "easy" criteria, 16 items had "moderate" criteria and 18 items had "difficult" criteria. While the differentiating questions that can be seen from the Anates application version 4.0, as many as 33 items have "very good" criteria, 3 items have "good" criteria, and 4 items have "poor" criteria. Here for a good question distractor, each item is chosen by all students. In this assessment development

research, 29 items had several distractors functioning properly, and 11 items had all distractors functioning properly.

Student Response to the Assessment of Fifth Element based on Merdeka Curriculum by Quizizz

Student responses are student reactions and responses (Aisyah, 2016). To collect student responses, namely by using a questionnaire. Questionnaires according to (Lijina et al., 2018), are a list of questions given to research subjects to respond according to what the researcher wants. Student responses in this study measure information through a questionnaire in the form of a description (illustration) of Quizizz media as is the case with research by (Jannah, 2020). The questionnaire consists of 2 (two) aspects, namely responses, and reactions. The response aspect consists of a format and relevance. Meanwhile, the reaction aspect consists of interest, satisfaction, and confidence. Student responses to the development of the element 5 assessment based on the Quizizz-assisted Merdeka curriculum can be seen from the characteristics of Generation Z students who tend to like technology-assisted learning. This is evidenced in the opinion of (Pratita et al., 2021), Generation Z students tend to prefer digital activities (reading, viewing, and listening to information) through smartphone or computer devices. The results of student responses got a good response "very positive" seen from the enthusiasm of students in assessing with the help of Quizizz. Student response will be low when students are "less interested" in the platform used (Widana, 2017). The following is the result of a student response questionnaire used for Quizizz media which consists of 2 (two) aspects, namely responses, and reactions.

Response

In the response aspect, 2 (two) criteria received very positive responses, namely format and relevance where the display on Quizizz was interesting so that it was easy to understand, and the combination of views presented in the series. According to (Agustina, L., & Rusmana, 2019; Purba, 2019), the Quizizz platform can be opened using a computer or Android that is connected to the internet network, has an attractive appearance, and makes it easier for question makers to enter questions into the Quizizz platform. In the implementation of tests and quizzes can take advantage of digital platforms that are used to bring together students in understanding learning material periodically (Dwihartanti, M., M, S. U. K., & Ramadhan, 2018).

Reaction

In the aspect of the reaction that gets the highest response to the indicators of satisfaction and self-confidence. On the indicators, the sentences used in the satisfaction assessment are easy to understand, and the confidence indicator gets the highest response when the assessments contained in Quizizz can help facilitate understanding of the material. This is the opinion of (Amri & Shobiri, 2020) that the advantage of using the Quizizz platform is that it provides a learning experience that is presented interestingly, can reduce boredom in the implementation of learning and the Quizizz platform is flexible when used.

CONCLUSION

developing an element 5 assessment based on the Merdeka curriculum with the help of Quizizz using the ADDIE research model (Analyze, Design, Development, Implementation, and Evaluation). The Analysis phase (Analysis) has steps namely needs analysis, student analysis, and curriculum analysis. The Design (Design) stage has steps, namely compiling learning achievement indicators and question grids, steps for entering questions into Quizizz, and compiling scoring. The Develop stage has steps, namely expert validation assessment, and product analysis by measuring the validity, reliability, difficulty level of questions, discriminating power, and problem deception. The Implementation Stage (implementation) has product trial steps and student responses. Evaluation stage (evaluation) namely product revision and consideration of the questions taken. Revisions are made based on evaluation results and unmet needs.

The quality of the development of the element 5 assessment based on the Merdeka curriculum with the help of Quizizz can be seen from the results of expert validation and product analysis. The results of the expert validation consisted of material experts, language experts, and assessment experts. Judging from the product analysis, namely the results of the analysis of the items using the Anates program version 4.0, a total of 35 items were declared valid and had high reliability. Based on the considerations of the problem researchers, 20 items were taken which were declared valid and suitable for use.

From the average results, it is known that students in class X MPLB at SMK Negeri 1 Surabaya can work on element 5 assessment based on the Merdeka curriculum with the help of Quizizz, well seen from the results of product analysis and, interest in doing it seen, from the responses of students with an average percentage students chose the answer "NO" or did

not agree as much as 4% while students chose "YES" or agreed as many as 96% of students use the Quizizz platform as a forum for working on questions.

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