Development of an Evaluation Tool for Writing Learning Using Interactive Multimedia

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Abstract

The development of an evaluation tool for learning to write using interactive multimedia applications is an innovative and interesting approach to increasing the effectiveness of the learning process for writing. By combining multimedia and interactive elements, this tool can provide a more interesting learning experience, enabling students to be actively involved in the process of learning to write. This study aimed to develop an evaluation tool using Nearpod in writing courses. This study used a quiz with the number of students totaling 30 people. This study deployed the ADDIE development model using the feasibility assessment of material experts, media experts and student responses. Data analysis was used and developed with rating scales and item analysis using moment products by Kuder Richarson which focused on differentiating questions and difficulty levels. There were 20 multiple choice questions. The results of the validation research by material experts were 85.5%, media experts were 92.3%, student responses were 93.5%. In terms of content feasibility, the overall learning evaluation instrument using the Nearpod application is declared feasible. From the research results, it can be concluded that the development of an evaluation tool using Nearpod was able to support the writing learning process and as an alternative learning evaluation tool.

Keywords*: Evaluation tools; text writing; Nearpod application

1. Introduction

One of the competencies that educator must possess is teaching evaluation. Evaluation has an interrelated relationship with learning objectives and the learning process and can be used as a basis for improving the learning process, and also the learning process can be used as a basis for carrying out evaluations. (magdalena, https://ejournal.stitpn.ac.id/index.php/bintang) Evaluation is not just a product or result, but a series of activities, as giving value or meaning, evaluation must show the quality being assessed. Evaluation is one of the important components and stages that must be taken to determine the effectiveness of learning. The results obtained from the evaluation can be used as feedback for educators in improving and perfecting learning programs and activities, guided by instruments commonly referred to as evaluation tools. (Aulia, 2020,) The objective of this research is to develop evaluation tools to support more effective learning process in writing. The reason for this research was if there was no evaluation tools in learning process then the learning process would be monotonous and boring. Educator must create innovations to develop new learning process to be applied in the classroom, from the material, media, and evaluation.

The evaluation tool must contain several indicators according to what will be evaluated, so an evaluation tool is needed as a standardized and detailed measurement tool in the form of an assessment, containing a list of assessment criteria that can be accounted for by all parties. Evaluation tools are basically classified into two types, namely tests and non-tests. (Ramadhani et al., 2019; Triadi et al., 2022).

The test is a method or technique used in order to carry out measurement and assessment activities, in which there are various questions or a series of tasks that must be done to measure student learning outcomes.

The rapid development of technology has a positive impact on using interactive media-based learning media. (Setyowati & Sukmawan, 2021) ICT-based learning media consists of all technologies related to the retrieval, collection, processing, storage, dissemination, and presentation of information or material with the help of computers and telecommunications (Nunuk, 2015). The use of learning media in assessment plays a very important role at this time, especially as an effort to help the effectiveness of the learning process and the delivery of material. The principle of assessment should emphasize improving learning outcomes and a tool for deciding on further instruction (Arikunto, 2012). Online media-based assessment can help improve students' understanding by presenting interesting and interactive data. Assessment activities in learning in universities or institutions include several activities, namely observing, collecting, giving assessments describing, analyzing and interpreting.

Starting with the Covid-19 pandemic, educators use various learning applications that are used for assessment, which can be in the form of Google Forms, Kahoot, NearPod, Wordwall, Quiziz and others. Nearpod is a learning support application software. The nearpod application has many interesting features that can be used to support interactive learning and can be accessed for free by students and teachers. However, the nearpod application has not been widely known and used by the general public, especially educational practitioners. Research conducted by Wahyudi (Wahyudi, 2023) regarding the use of nearpods in developing teaching materials obtains a very good category and is suitable for use. Nearpod is a website-based application that requires an internet network so students do not need to install the nearpod application on their cellphones which may take up space. The advantage of nearpod media is that it is also very flexible, can be operated on cellphones or laptops, and can be used independently by students or used directly together with other students. Assessment using nearpod has the feature that each test can be set using time. This makes it easier for educators that students are more focused on questions and there is no opportunity to cheat. The use of nearpods in the assessment can minimize cheating during the evaluation. After the test is completed, the score of the test results will be announced quickly. Based on this to determine the feasibility of developing an evaluation tool for learning to write using nearpod.

2. Research Methodology

The method used in this study was Research and Development (R&D) research methods with the aim of producing a product and testing the effectiveness of the product. The product resulting from this research was an evaluation tool using nearpod media. The development model used in this study were the ADDIE model, namely: analysis, design, development, implementation, and evaluation (Pribadi, 2009). The selection of the ADDIE model was based on the consideration that this model was composed of several systematic sequences based on needs, problem solving, and the characteristics of learning to write. The place of research at the State University of Jakarta, there were 30 classmate students from the Indonesian Language and Literature Education Study Program. The 30 students were based on random selection.

The procedure for developing a writing evaluation tool using nearpod had several stages according to the ADDIE development model, namely (1) analysis stage, analyzing semester learning plans and analyzing student needs, (2) design stage, creating an evaluation tool framework, (3) development stage, this stage is the process making a nearpod-based validation instrument in writing courses. This was done to determine the feasibility of the media that has been made. (4) Implementation stage, applying the media that had been prepared to be tested in lectures to students, to find out whether the media that has been designed can help the learning process. After that, students provided an assessment of the media through a questionnaire as a data collection tool. (5) evaluation stage, this evaluation stage is the final stage of media development research. This stage was carried out to see whether the goals and objectives have been achieved or not by concluding based on the results of the questionnaire and student learning outcomes. Thus researchers can determine the success of the product that had been designed.

The instrument used a questionnaire with 20 questions using a Likert scale (1, 2, 3, 4, and 5) (Gumalti, 2016). The rules on the Likert scale can be presented as follows: (5) Very Eligible, (4) Eligible, (3) Less Eligible, (2) Inadequate (1) Very Inadequate. (Sugiyono, 2018). Based on the validation and student responses, it was then known the feasibility of the quality of the media.

3. Results and Discussion

This study used development research employing an R&D (Research and Development) approach to the 4-D development paradigm proposed by Triagarajan and Semmel. (Kartini et al., 2019) The 4-D stage consists of Define, Design, Develop, and Disseminate. This study surveyed and conducted semi-structured interviews with 30 Language and Literature Education students in State University of Jakarta. Using a validator evaluation sheet and a respondent questionnaire, the data collection technique consisted of a validator assessment sheet and a respondent questionnaire. In the meantime, an item analysis was conducted for the question instrument, including tests of discrimination power, level of difficulty, validation, and reliability. (Luthfiyyah et al., 2022).

Nearpod is a learning space platform that provides interaction between lecturers and students which is easy to download in various devices. Nearpod can be used on all devices and can be used anywhere and anytime. Nearpod is internet-assisted, therefore, nearpod media is very relevant to digital-based learning, both online and offline. There are 20 multiple choice questions in the form. Students can submit answers with the applications available in nearpod.

3.1. Results of the Development of a Writing Evaluation Tool using Nearpod

This questionnaire application employs the 4-D development paradigm proposed by Trigarajan and Semmel (Year) for the creation of online learning assessment instruments. The four phases are Define, Design, Develop, and Disseminate. Nonetheless, research was conducted up until the third stage, which is Develop (Ansoriyah, 2021; Winarni, 2003) In this study, learning evaluation instruments were developed using the Quizizz application as part of an initiative to implement a hybrid learning program.

At this stage, activities are performed to define and establish learning requirements through needs analysis. Circular letter No.4 of 2020 from the Ministry of Education and Culture prohibits universities from conducting face-to-face lectures and requires them to implement online education. This is one of the government's initiatives to implement hybrid courses that require the use of digital learning platforms, collaboration applications, and online communication tools. There is interaction between lecturers and students even though learning is organized online. Lecturers must make time for question-and-answer sessions, online consultations, and effective communication via online media. (Puspitayani et al., 2020; Sismiati & Latief, 2012) The hybrid system thus includes an evaluation of pupil performance that reflects learning in both face-to-face meetings and online learning environments. Online assignments, online examinations, discussions, and group projects can all be used for grading purposes. A cycle of evaluation occurs prior to, during, and after online learning. It is necessary to evaluate learning in order to determine the extent to which learning objectives have been attained. Therefore, in online learning, it is necessary to select a tool capable of measuring the attainment of learning objectives. (Tahang, 2021).

By incorporating technology in the development of the nearpod evaluation tool, learning writing becomes more interactive, interesting and varied. The use of technology can help increase student engagement and understanding in learning, and provide valuable information to improve future teaching strategies. (Mustafa & Samad, 2015; Sudirman et al., 2021).

3.2. Material expert validation results

The implementation of this material expert validation was by filling out a response questionnaire that had been prepared by the researcher. The response questionnaire contains 20 questions. The validator is asked to provide input, comments, and suggestions regarding the media used because this is used as material for revision of the media that has been designed.

Table 1. Material expert validation results.

Assessment Indicator	Number of Assessment	Assessment Score
Material Eligibility	40	35
Content Eligibility	30	30
Resource Eligibility	30	20.5
Total	100	85.5

Calculating the percentage of validity Score:

Score: Score achieved / Max Score x 100%

The value of the questionnaire from material experts as a whole is worth 100, the validation of material experts is 85.5. Then the results obtained from the material expert validation response questionnaire at a percentage of 85.5% with proper interpretation. Therefore, this assessment instrument product for learning to write using the Nearpod can be used by educators and can be tested on students.

3.3. Media expert validation results

Media expert validation assessment by filling out a response questionnaire that has been prepared. The response questionnaire contains 20 questions. The validator was also asked to provide input, comments and suggestions for the media, because this was used as material for revision of the media that had been designed.

Table 2. Media expert validation results.

Assessment Indicator	Number of Questions	Score
Clarity of Instruction	20	18,3
Language Appropriateness	25	25
Text Clarity	35	29
Presentation Accuracy	20	20
Total	100	92.3

Calculating the percentage of validity values:

Score: Score achieved / Max Score x 100%

The value maximal of the questionnaire from material experts as a whole is worth 100, the validation of media experts is 92.3. Then the results obtained from the media expert validation response questionnaire at a percentage of 92.3% with proper interpretation. Therefore, this assessment instrument product for learning to write using the Nearpod can be used by educators and can be tested on students.

3.4. Student's Response Results

After the product evaluation tool has obtained validation values from material experts and media experts, then it is tested directly on students. The trials on students were carried out by 30 students from the Indonesian Language and Literature Education Study Program, Jakarta State University. The lecturer gives some Nearpod questions to students. After students use the media and get the results, students are asked to fill out a questionnaire using a Likert scale rating of 1-4. From the results of the questionnaire given to students, the average result was that they expressed their interest in conducting an assessment using the media using nearpod, this can be seen in the table below.

Table 3. Student's response results.

Aspects	Average Score	Percentage
Material Suitability	3,8	95%
Presentation	3,6	83%
Ease of Use	3,9	97%
Utility	3.8	95%
Total	3.7	93.5%

Based on the Likert scale given to students, the category is very good, with an average percentage of 93.5%. Students stated that they were interested in conducting evaluations using nearpod media, they also said that nearpod media was useful and helpful in independent learning at home.

4. Conclusions

From the results of research on developing an evaluation tool for learning to write using Nearpod media, it is stated that the product developed has been validated by the material expert validator, obtaining 92.3% results in the appropriate category and 92.3% media expert validator with the feasible category. Likewise the results of trials on students get a percentage of 93.5%. From the results of the validity and trials, this nearpod-based media can be developed and used in learning to write. The application of an evaluation tool using nearpod media is expected to be able to support the implementation of learning to write and can be used as an alternative learning media.

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