

The Development Of Learning Evaluation Tools By Utilizing Wordwall Application On Indonesian Subject

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Abstract. This research is a development research on evaluation tools by utilizing *the Wordwall* application as a tool to evaluate learning. This research aims to describe the data from trials on products that have been developed. Then this research, included in R&D research with the ADDIE model, which contains several steps, namely: 1) analysis, 2) design, 3) development, 4) implementation, and 5) evaluation. As for the data in this study, it was obtained from a questionnaire distributed to 40 sampel participants from class X using a google form. In addition, the data in this study was also taken from the results of trials on class X students with the same number of 40 students. As for data analysis techniques using quantitative descriptions. As for the results of research on the selection of media to conduct evaluations, it can be seen that as many as 28 respondents with a percentage of 70% chose *the Wordwall* application as the most effective media for evaluation. Then for the practicality and effectiveness of *the Wordwall* application has a very practical and very effective category with a percentage of 85%, while for the flexibility of the *Wordwall* application obtained a percentage of 77.5%. Then for students' impressions of the use of the *Wordwall* application, 87.5% data was obtained. As for these data, it can be seen that the *Wordwall* application has a positive impact on teachers and students. This can be seen from the scores obtained by students with an average score of 85.

Keywords: development, evaluation tool, wordwall

1. Introduction

Education in various countries at this time, has undergone many changes. This is due to the Covid-19 pandemic. Even before the pandemic took place, the world of education already knew or applied technology-based learning. However, this innovation is still not fully

implemented in various schools, especially schools in Indonesia. Until the pandemic took place, many schools in Indonesia began to implement technology-based learning. This certainly has a positive impact on education in Indonesia, many teachers in Indonesia have begun to innovate to create interesting and effective learning by utilizing various existing applications. Learning by utilizing its own application, can help teachers to conduct learning and evaluate learning. Meanwhile, learning evaluation is an activity that must be carried out, so that teachers can find out the level of understanding of students about the material that has been taught and learned together. Then the evaluation activities themselves can be carried out in various ways, for example by utilizing existing applications. One application that can be used is the *Wordwall application*.

The use of the *Wordwall* application in this study was chosen based on the results of the needs analysis that has been carried out by the researcher. Where many students who want interesting learning not only use printed book media but use applications, thus making students more interested in participating in learning activities. Therefore, the use of *the Wordwall application* was chosen as a provision for learning and evaluation. The *Wordwall* application is an interactive learning application in which there are features such as puzzle games, word search, and so on. These features can be used as an evaluation medium in learning.

Meanwhile, another study was also conducted by Gusman, Burhan A, et al., with the research title, "The Effectiveness of the *Wordwall* Platform on PAI Learning in State Aliyah Madrasah (MAN) during the Pandemic Period". Later in the study, it was explained that the use of the *Wordwall* application as a way to increase student understanding and as an evaluation medium was very effective. This can be seen from the learning results of students who show very good results, with an average score obtained as much as 88.04%. [1]

Then another research on the development of learning evaluation tools was also carried out by Dewi, Cahya Kurnia [2] with the title "Development of Evaluation Tools Using the Kahoot Application in Class X Mathematics Learning". As for the study, it can be seen that the evaluation tool in the form of an online test that has been developed by the researcher is very feasible to be used as an evaluation tool in Mathematics subjects.

In line with previous studies, this study discusses how to use *the Wordwall* application as a tool for evaluation. Then in this study, researchers focused more on using the *Wordwall* application as a medium to conduct evaluations with a focus on the Text of the Observation

Report material conducted on class X students as many as 40 people. Selection of *Wordwall* interactive media as a solution to problems experienced by students. Where based on the results of the needs analysis students have difficulty understanding the material of the Observation Report Text only by using the text book, resulting in the value obtained by students is not optimal. With this research, researchers hope to be able to provide and motivate students. Then another purpose of this research is to produce valid, practical and evaluation learning and evaluation media. In addition, another objective is to describe the validity, practicality and effectiveness of opportunity theory learning modules to improve learning outcomes and mathematical dispositions of mathematics education students.

2. Methode

This research is a type of development research using a formative evaluation model. The formative evaluation model itself according to Mardiah & Syarifuddin [3] evaluation is carried out when the program is running. Then the purpose of the formative evaluation model is to find out how far the program that has been prepared runs. Then another goal is to identify obstacles that occur or arise during learning, so that they can be addressed early. Meanwhile, because this research is included in the type of development research with the ADDIE method, several steps are needed. The steps that must be taken in development research with the ADDIE model according to Rayatno & Sugianti [4] include: 1) analysis, 2) design, 3) development, 4) implementation, and 5) evaluation. As for this study, the analysis stage is that researchers analyze the needs of students in learning. After knowing the needs of students to support interesting teaching and learning activities, researchers choose appropriate and interesting media for students. So the use of the *Wordwall* application was chosen as a medium to evaluate and help students' understanding of the material taught. After choosing the media used by researchers began to design, at this stage researchers began to develop in making exam questions by utilizing the *Wordwall application*. Where the test questions are no longer printed on paper, but are made online and designed into the form of matching questions and word searching. After the product is in the form of finished evaluation media and can be used, researchers show it to expert validators. Then after showing it to the validator, and the validator approves on the next stage which is implementation. At the implementation stage, researchers tested their products for grade X students at SMA Muhammadiyah 4 Purbalingga with 40 participants. After the product is tested, researchers

can conduct an evaluation. Where at the evaluation stage it can be known that products that have been tested can be used in learning. This is in accordance with the data that the results of formative test assessments that have been carried out by learners.

Then the data taken in this study is based on the results of a questionnaire distributed to grade X students at SMA Muhammadiyah 4 Purbalingga through google form. As for the data analysis technique used, namely quantitative description analysis. Quantitative description analysis itself according to Rayatno & Sugianti [4] is a technique used to analyze data from validation, observation, response questionnaires and processing results. In addition, quantitative description analysis techniques are used to describe the data from the analysis. The data analysis techniques in this study include:

2.1 Questionnaire Data Analysis

Questionnaire data analysis includes analysis of validity and practicality data.

2.1.1 Table Validity

The criteria for the validity of a questionnaire can be seen in the criteria table according to Widoyoko [5] as follows:

Table 1. Validity Criteria

Score Interval	Validity Categories	Information
$X > 4.21$	Excellent	Perfectly valid and usable
$3.41 < X \leq 4.20$	Good	Valid and usable needs minor improvements
$2.61 < X \leq 3.40$	Enough	Valid enough usable needs major improvement
$1.81 < X \leq 2.60$	Less	Less valid cannot be used
$X \leq 1.80$	Very lacking	Invalid, unusable

2.1.2 Practicality

As for knowing the practicality of a media can be determined using practical criteria according to Akbar [6] as follows:

Table 1. Practicality Score Criteria

Percentage (%)	Categories	Information
86% – 100%	Very Practical	Can be used
71% – 85%	Practical	Can be used but there are minor revisions
56% – 70%	Quite Practical	Can be used but there are major revisions
41% – 55%	Less Practical	Cannot be used

25% - 40%

Impractical

Cannot be used

2.2 Effectiveness Data Analysis

Analysis of the effectiveness of a teaching material according to Aisyah, Siti Nur, et al., is obtained from the success of students in completing learning outcome tests [7]. The maximum score that must be obtained by students is 100. While the minimum score that must be obtained by students is 70 on the learning outcomes test. As for the formula for calculating the effectiveness of learning media as follows:

$$p = \frac{\text{skor yang tuntas}}{\text{jumlah siswa}} \times 100\%$$

After calculating the effectiveness test, the next step is to categorize the completion percentage by intervals. The criteria for the completeness of student learning outcomes test results as follows:

Table 3. Criteria for completeness of student learning test results

Percentage (%)	Categories	Information
$x \geq 80\%$	Excellent	Very effectively used in the learning process
$60\% \leq x < 80\%$	Good	Effectively used in the learning process
$40\% \leq x < 60\%$	Enough	Quite effectively used in the learning process
$20\% \leq x < 40\%$	Less	Less effective use in the learning process
$x \leq 20\%$	Very lacking	Not effectively used in the learning process

3. Results and Discussion

According to Rayatno & Sugianti [4], development is an effort to produce a product, with the aim of finding new knowledge based on research results. Meanwhile, according to Kantun Sri development is an effort to develop or perfect existing products, so as to create new products that can be accounted for [8]. Meanwhile, according to Seel & Richey (in Teguh & Kirna) development is the process of translating a concept that has been designed into physical form, so that it becomes a new and interesting product [9]. Meanwhile, interesting teaching materials are able to have a positive impact on students, this is as conveyed by Siswanto and Dewi Ariani the use of interesting teaching materials and in accordance with the material will have a positive impact on students, namely motivating students in learning and increasing student creativity". If students are motivated, the creative spirit of children arises which will produce creative thoughts, ideas and imagination. Teachers and students will find it

easier to carry out learning activities if the teaching materials used are interesting, flexible and contextual. With these teaching materials, students can learn freely without knowing the place and time.[10]

Meanwhile, according to Widoyoko, evaluation is a systematic and continuous measurement and assessment process to collect, describe, to present information that can be used as a basis for making decisions [11]. Then, according to Hamdi, evaluation is the process of giving an assessment or the meaning of something considered. Evaluation is also understood as the final stage of assessment and measurement in which it has an element of consideration in making decisions about something [12]. According to Ratnawulan & Rusdiana, evaluation is an assessment by comparing goals with real results in the form of data, to determine the success or failure of the goals that have been determined or designed [13]. As for education-based applications and games according to Suryadi it can be seen from the word game which means game. Game itself refers to intellectual agility that allows a person to make decisions and actions with the aim of achieving predetermined goals in the game. While education or education is a conscious effort that is carried out continuously to develop and build themselves [14].

Based on the explanation above, it can be concluded that development is an effort to create an innovative new product, which in its manufacture utilizes technological assistance. One of the developments that can be done is the development of learning evaluation activities, where in these activities teachers use an edugame application to carry out formative tests, with the aim of measuring the level of learning achievement that has been carried out.

As for this study, regarding the development of evaluation tools by utilizing the *Wordwall* application, in the first step, the researcher gave questionnaires to students to choose applications that could be used in learning. As for this study, regarding the development of evaluation tools by utilizing the *Wordwall* application, in the first step, the researcher gave questionnaires to students to choose applications that could be used in learning. In choosing the application to be used, researchers refer to the results of a survey conducted by Atsani, Lalu Gede M. Z., shows various online learning media that are widely used in the world of education, namely: Whatsapp, Educandy, Google Form, Ruangguru, Zenius, and Zoom [15].

Then from this data, researchers used the Whatsapp application and Google Form, in questionnaires. This is tailored to the experience of students who already use both applications for learning. Then the researcher added the *Wordwall* application to the students with the aim

of updating. As for the evaluation media selection questionnaire that aims, so that researchers can determine the media to be developed as follows:

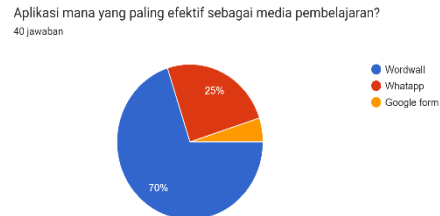


Figure 1. Learning media selection diagram

Based on questionnaires that have been distributed through google forms related to the selection of applications that can be used as tools to carry out evaluation activities such as *wordwall*, *whatapp*, and *google form*. It can be seen that of the three applications, 28 respondents with a percentage of 70% chose *the Wordwall* application as the most effective medium to be used as a tool for evaluation. Then 10 respondents with a percentage of 25% chose the *Whatapp* application as an effective application to use for evaluation. In addition to the *Wordwall* and *Whatapp* applications, *the Google Form* application was also chosen by several respondents with a percentage of 5% as a tool for conducting evaluation activities. Although of the three applications have a response, most choose the *Wordwall* application as the most effective application used as an evaluation.

After determining the application that can be used to evaluate. In the next stage, researchers design an evaluation tool in the form of an online formative test. Here's what the test has developed:



Figure 2. view matter of the observation report

Aisyah, Siti Nur, et al., which states that effectiveness can be known based on the values obtained by students [7].

Based on data on student learning outcomes which are then processed using formulas, it can be seen that of all class X students totaling 40 people, there are 4 students who score below KKM, which is 60. Then the number of students who completed was 85.00. Based on these data, it can be seen that the use of the Wordwall application as an evaluation medium can be categorized as very effective. Meanwhile, the results of the questionnaire regarding the successful use of the Wordwall application obtained the following data:



Figure 5. Data regarding the successful use of the application *Wordwall*

Based on the data above, it can be seen that 35 respondents with a percentage of 87.5% chose the answer "Yes". While 5 respondents with a percentage of 12.5% chose the answer "No". Although there were some who answered "No", but overall respondents felt that the *Wordwall application* could help respondents to understand the material of the Observation Report.

After knowing the level of practicality of the *Wordwall application as an evaluation tool*, the next stage is about the flexibility of the *Wordwall application* when used by students. Based on the results of the questionnaire, it can be known as follows.



Figure 6. Data fleksibilitas of *Wordwall*

Based on the data above, it can be seen that 31 respondents with a percentage of 77.5% chose the answer "Yes" that the *Wordwall application* is flexible for use by students. This can also

be seen when students access and work on the questions that have been displayed, students can easily adapt and use the application in accordance with the directions given by the researcher.

After that, it can also be known the impression of students after conducting an evaluation using the *Wordwall application*. The impressions of students are as follows:



Figure 7. Impressions on the use of *the Wordwall application*

Based on the survey results above, it can be seen that 35 respondents with a percentage of 87.5% chose the answer "Yes" when presented a question "whether the use of the *Wordwall application* can attract students to learn Indonesian". Thus, it can be seen that the use of media in learning can give a positive impression to respondents. Although there are some who do not like, but when viewed from the survey results most are happy with the use of *Wordwall* as an evaluation tool. Although the process is limited by time, the final result shows a fairly maximum value to the questions tested.

4 CONCLUSION

Based on the results of research that has been done, it can be seen that the evaluation tool that has been carried out to grade X students by utilizing the *Wordwall application*, shows good results. Where as many as 70% of students choose to use the *Wordwall application* as an application for evaluation tools. Then based on the results of the trial using the *Wordwall application* as an evaluation tool, it can be known that the average score obtained by students shows 85 and the average student who takes the test gets a score above KKM. It shows positive results both for teachers and for students. In addition, based on the practicality test, the *Wordwall application* is also categorized into a very practical category with a presentase of 85%. Meanwhile, for the impression of using *the Wordwall application* based on the results of the questionnaire that has been distributed, it can be known that as many as 35 people with

a percentage of 87.5% chose jawaban “Ya”, From all the explanations above, it can be concluded that the use of the *Wordwall* application has a good impact if used in learning.

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