



Development of Prezi-Based Learning Media on Economic Growth Materials for Senior High School 1 Tamban

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Abstract. The learning process will run well if the selected learning media follows the development of technology and art (science and technology). One of the supports for the learning process so that it takes place well and must follow technological developments is learning media. The objectives of this study are to: (1) determine the feasibility of Prezi-based learning media on economic growth material. (2) Knowing the level of students' understanding of the material on economic growth using Prezi media. This research is a research development or Research and Development (R&D) with the ADDIE development model. The results showed that the Prezi-based learning media based on the validation results of media experts, material experts and student responses in small and large groups obtained an average score of 4.36 very good criteria and a percentage value of 87.35% a very decent category. The level of understanding of students learning using Prezi learning media is also classified in the high category with a percentage of 78.4%. Based on the results of the study it can be concluded that prezi-based learning media is feasible to use in learning and can improve student understanding. The advice given is that schools can provide wifi access to students as a support for learning.

Keywords: Learning Media · Prezi · ADDIE

1 Introduction

The world is entering the era of the industrial revolution 4.0 where technology is the basis of human life, including the world of education [1]. Regulation of the Minister of National Education of the Republic of Indonesia No. 16 of 2007 concerning academic qualification standards and teacher competencies, states that one of the competencies that teachers must have is to utilize technology, information and communication for the benefit of learning [2]. Problems that often become obstacles to learning include teachers still using conventional methods [3], learning processes that do not involve students [4], media that are less attractive [5] and low levels of students' understanding of economic growth material because students do not master the material [6].

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Technology has had a major influence on the advancement of education. Along with the development of technology, the learning process has also experienced many developments, for example learning media [7]. Learning media used at this time according to technological developments such as PowerPoint, Prezi and others. However, powerpoint has limited content on each slide so that the clarity of information that will be conveyed through this presentation platform will be difficult to convey [8]. Whereas Prezi is internet-based software that can be used as a presentation medium and a tool to explore various ideas on a virtual canvas, equipped with audio and animation that can provide a sensational experience for students so that the learning material presented through Prezi is memorable and makes an impression on students' memories compared to other digital presentation tools [9]. Powerpoint requires its users to create a stack of slides whereas Prezi only requires one virtual canvas [10]. Therefore the researcher chose Prezi as the learning media used.

Previous research that has examined Prezi learning media was carried out by [11]. The results of the study show that Prezi learning media is interesting for students in understanding the lessons given. Next is the research conducted [12] and [13] the results of the research show that students give positive responses and are interested in the resulting Prezi learning media products.

To achieve learning objectives, one of the alternative innovations that should be used by educators is learning media. Therefore, it is necessary to develop learning media that can overcome the problems that exist in the adjusting journal material. The development of learning media is also a form of support so that the learning process is more interesting and creates student independence in the learning process using prezi-based learning media.

2 Literature Review

Sardiman defines learning in a broad sense as a psycho-physical activity that shows personal development as a whole, while in a narrow sense learning is an effort to master scientific material which is an activity towards the whole person [14]. Gagne Berlinger defines learning as the process of an organism changing its behavior as a result of an experience [15]. Learning is not only limited to reading, listening, writing, doing assignments and tests but there must be a change in behavior from the results of learning, where in the learning process there is active interaction with the surrounding environment and changes that are permanent [16]. Learning occurs due to the interaction of stimulus and response. A person is considered to have learned if he can show changes in behavior [17].

Learning is the process of getting knowledge to students who are given education [18]. Learning activities are the delivery of educational messages to students in the form of learning materials. Learning activities will be successfully achieved depending on the communication that occurs between educators and students [19]. If a person shows a change in behavior then he is considered to have learned [20].

Learning media is a tool used to assist educators in the learning process and arouse students' learning interest. Interactive learning media can describe learning material more clearly and look bigger [19]. Learning media is useful for increasing students'

learning motivation [20]. Prezi is a software that is used as a presentation medium to explore various ideas on an internet-based virtual canvas [8].

Anderson & Krathwohl divides the categories of cognitive understanding processes into seven, including 1) Interpreting; 2) exemplify; 3) Classify; 4) Summarize; 5) Summing up; 6) Comparing; and 7) Explaining [21]. Silversius stated that understanding can be translated into three, namely 1) Translating; 2) Interpret; 3) Extrapolating [22].

3 Methods

The method used in this research is research and development (R&D). The procedure used is ADDIE which has five development steps [23]. Data collection techniques using questionnaires and tests. The subjects in this study were all students of class XI Social Sciences at Senior High School 1 Tamban. The following is an instrument indicator that will be provided. Assessment of learning media consists of three aspects, namely format, content and language (Table 1).

Assessment of learning material consists of two aspects, namely learning and content with each explanation contained in Table 2.

Table 1. Prezi Learning Media Assessment Indicators

| Aspect | Indicator |
|----------|--|
| Format | <ol style="list-style-type: none"> 1. Prezi view. 2. Consistency of presentation between pages. 3. Layout. 4. Music support. |
| Content | <ol style="list-style-type: none"> 1. The level of student interactivity with the media. 2. Ease and freedom of use of the media. 3. Efficiency of text, images, and videos |
| Language | <ol style="list-style-type: none"> 1. Use of language according to EYD |

Source: Mods [24]

Table 2. Economic Growth Material Assessment Indicators

| Aspect | Indicator |
|----------|--|
| Learning | <ol style="list-style-type: none"> 1. Compatibility of content competencies, basic competencies and learning objectives. 2. Easy to understand. |
| Content | <ol style="list-style-type: none"> 1. Truth and accuracy of material coverage. 2. Sequential presentation of material. 3. Examples of questions and discussion presented. 4. Proper use of language. 5. Suitability of images and videos to clarify the material. |

Source: Mods [25]

Table 3. Student Response Indicators on Prezi Learning Media

| Aspect | Indicator |
|-----------|---|
| Responses | 1. Format 2. Relevance |
| Reaction | 1. Interest 2. Satisfaction 3. Self-confident |

Source: Mods [26]

The assessment of the responses given by students to media and learning materials has two aspects, namely responses and reactions with explanations in Table 3.

The data obtained in the next study were analyzed to determine the ratings and opinions of the products produced. Quantitative data is used to process data in the form of scores from assessments by media experts, material experts, student responses and levels of understanding while qualitative data is used to describe data in the form of comments and suggestions from media experts and material experts.

4 Results and Discussion

4.1 Results

The result of this development research is a Prezi-based learning media on economic growth material used in class XI Social Senior High School 1 Tamban with an explanation of the steps as follows:

4.1.1 Analysis

At this stage, information is obtained through interviews with the teacher concerned and students that the teacher still uses conventional methods in learning, the learning process that does not involve students makes students lose concentration, the media used is less attractive because it only uses textbooks and PowerPoint, students also have difficulty understanding economic growth material.

The next stage of analyzing the existing resources in the school was found that the school provided LCD and laboratories even though their use was carried out alternately with other classes. Schools also allow the use of mobile phones during learning to open materials or find other learning resources on the internet.

4.1.2 Design

In the design phase, the researcher began compiling material and designing Prezi learning media that contained the material to be taught. The material used is taken from an economics book for class XI Senior High School. Prezi learning media design made there are several components, namely 1) Profile; 2) Main Competence, Basic Competence and Learning Objectives; 3) Learning Materials; 4) Learning Modules and Videos; 5) Attendance and Assignment Collection Place.



Fig. 1. Front View of Learning Media

4.1.3 Development

4.1.3.1 Making Prezi Learning Media

On the initial display or cover there is a menu that can be selected during learning such as researcher profiles, and learning objectives, learning materials, learning modules and videos, as well as attendance and assignment collection points (Fig. 1).

4.1.3.2 Publish

Prezi-based learning media will be published so that everyone can access the media. The following are the steps taken to access prezi-based learning media.

1. Make sure all students have turned on mobile phone data or if using a computer has been connected to an internet connection.
2. Mobile users first download the Prezi Viewer application on the Playstore and log in with an account. Computer users go to www.prezi.com and log in with the account.
3. The teacher distributes prezi-based learning media links through the WA group.

<https://prezi.com/view/IT47t6p9eEXel4KbwYfd>

4.1.3.3 Validation

The media expert validator as a whole gave a total score of 4.21 very good criteria and obtained a percentage of 84.21% a very worthy category. While the material expert validator as a whole gave a total score of 4.52 very good criteria and obtained a percentage of 90.48% a very worthy category.

4.1.3.4 Revision

The validation results in addition to the validator's assessment also provide comments and suggestions for improvement of Prezi-based learning media. The comments given by media experts are, 1) The learning media used must be premium so that the features contained in the media can be used entirely; 2) add for whom the material is taught; 3) Add researcher profile; 4) Add audio after premium; 5) add evaluation questions and assignment collection points as a complement; 6) Instructions for using media.

Table 4. Category Student Understanding Level

| Interval Class | F | (%) | Category |
|-----------------------|----|------|----------|
| $X \geq 11,33$ | 69 | 78,4 | High |
| $5,67 \geq X > 11,33$ | 12 | 13,6 | Medium |
| $X < 5,67$ | 7 | 8 | Low |
| Total | 88 | 100 | |

Source: Primary Data (2022)

Comments and suggestions given by material experts are to improve the order of material on differences in economic growth and economic development from third to last. Another suggestion is to add more examples from life when explaining the material.

4.1.4 Implementation

This stage is the application of prezi-based learning media in class XI Social Senior High School 1 Tamban. The application of this media is carried out in two stages, namely small groups and large groups to find out how students respond to Prezi-based learning media.

Student responses obtained from the application of small group Prezi-based learning media obtained an average score of 4.31 very well and a feasibility percentage of 86.27% in the very feasible category. Whereas in the application of large groups, the average score is 4.39 with very good criteria and the percentage of eligibility value is 88.44% with a very decent category.

4.1.5 Evaluation

The research data were then analyzed using descriptive statistical techniques using percentage calculations.

Based on Table 4 it is known that the level of understanding of 69 students has a high category, 12 students have a medium category and 7 students have a low category. So, it can be said that the level of understanding of students has a high category.

4.2 Discussion

4.2.1 Feasibility of Prezi-Based Learning Media

The media expert validator obtained a score of 4.21 with very good criteria and a percentage value of 84.21% in the very feasible category. Media expert validation is relevant to research [28] and [29] which have very decent categories. Validation carried out by material experts obtained a score of 4.52 very good criteria and a percentage value of 90.48% in the very worthy category. The results of the material expert validation are in line with research [30] which has a very feasible category.

Student responses to Prezi-based learning media in small groups obtained an average score of 4.31 with very good criteria, while the percentage value was 87.35% with a very worthy category. Meanwhile, student responses from the application of Prezi-based

learning media in large groups obtained an average score of 4.39 with very good criteria and a percentage score of 88.44% with a very decent category. Overall at the implementation stage, small groups and groups scored 87.89% in the very decent category. Student responses are relevant to research [27] and [28] which obtain very feasible or interesting categories.

Results of the assessment of the development of prezi-based learning media on economic growth material for class XI Social Senior High School 1 Tamban obtained a score of 4.36 with very good criteria and a percentage value of 87.35% in the very worthy category. Thus, the Prezi-based learning media developed in general can be used in the learning process because it meets the criteria, namely very good and very worthy, obtained from the validation of media experts and material experts as well as the responses given by students when carrying out small groups and large groups.

4.2.2 The Level of Understanding of Students on Economic Growth Material

The level of students' understanding of economic growth material is high for 69 students, while it is low for 12 students and 7 students. Thus, the level of students' understanding of economic growth material is relatively high. This research is classified as high compared to research [29] which is in the low category. In research [30] and [31] it is also proven that instructional media can increase student understanding. This means that in economics learning the use of Prezi learning media on economic growth material can be well studied by students, although there are still some students who have a moderate or low level of understanding. In future research, it is necessary to add instructions for use so that Prezi-based learning media is easier to understand.

5 Conclusion

Prezi-based learning media on economic growth material in class XI Social Senior High School 1 Tamban as a whole is stated to be very suitable for use in learning. The level of students' understanding of economic growth material for class XI Social Senior High School 1 Tamban is in the high category.

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