Development of Learning Media Based on Prezi on Sociology Subject at 11th Grade of Social Program

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Abstract

This research is aimed to make a proper learning media using application of prezi. The application can be used in learning process and helps the students to learn sociology subject especially on the material of conflict, violence and its solution. The research method was method of Research and Development (R&D). The procedure of learning media development was based on perspective of Alessi and Trollip (2001). It consisted of 2 development attributes, namely planning, design and development. This research was conducted in SMA N 1 Sukoharjo. Planning was conducted through the procedure of planning and development which consisted of necessity analysis and media design. The steps of product designing was conducted through media and content material selection, validation, revision and testing. The criteria of success in this development research reffered to the success of expert validation and product testing. This research shows that learning media of prezi belongs to proper category if it is reviewed from: 1) material aspect, the score is 95% (very good); 2) media aspect, the score is 85% (very good). The result of properness testing to the university students on each person obtained total score of 78, 53% (good). On the testing of small group, it obtained total score of 80,82% (good).

Keywords: Media; Learning; Prezi; Sociology

Introduction

The development of technology has been developing as the changes happen in all aspects of life, especially in education field. The change in education is required to improve the quality of education. Education as an attempt of human resource developer must pay attention to the advance of era. Indonesian education needs to improve its quality in several aspects such as teachers’ work and learning model and media. It is expected to create human resources who have knowledge, skill to obtain, behavior, and adequate skill to select and manage information to be better.

One of the efforts that can be conducted to create an attractive learning process and to emerge the learning motivation is using a proper learning media to the material given. It can be developed on the subject of sociology because this subject has strong structure and relation among its concepts. In learning sociology, it needs to use a proper learning media to emerge students’ learning motivation and improve students’ learning result. In learning process, it is expected that students have high interest to the learning
activity in order that the learning activity can be fun and interesting and creates good atmosphere and enthusiasm. Teachers must be able to select and use learning media which mostly involves students to be participative in learning process. A student will achieve optimum learning result if they have learning motivation. If they have strong learning motivation, they will be able to solve all the challenges in learning process in the school.

Based on the previous study in SMA N 1 Sukoharjo, sociology is not too attractive for most of students. Most of them think that the subject is difficult to learn. To solve the problem, teacher is expected to maximize their effort in learning process by creating interactive, inspirative and fun learning. More ideas are also required to support the learning process and motivate them to be more participative in learning sociology. The solution is making learning media based on Prezi on the material of conflict, violence and its solution. Prezi media (the zooming presentations) has main strength in the program of interactive multimedia. This media can explain a concept which is mostly difficult to be explained by other media. Prezi has its attractiveness in presentation using an interesting display and background that will motivate the students to involve in the learning process. Prezi can deliver ideas in a display. It can help teachers to easily deliver the material of conflict, violence and its solutions to the students.

**Literature Review**

Learning process can emerge new interest and desire, improve motivation and passion in learning activity and bring psychological influence to the students. The use of learning media will help the effectiveness of learning process and the delivery of message and material. It is expected to help the students to improve their understanding and motivate them to learn because the information is presented attractively. According to Suharsimi (2002), it enables to achieve the aim of learning which can improve the learning result.

The selection of proper learning media must be matched with the material needs in order that the function of media as a tool to stimulate students’ sense does not deviate with the needs of learning. Students are expected to accept the messages delivered by the teachers well.

In curriculum 2013, sociology is very important to be taught as the separated subject because it is as a media to improve useful thinking skill to solve the problem in daily life. It means that the implementation of curriculum in learning process demands the students’ involvement to develop their potential and thinking skill to solve a phenomenon or problem (Azar Arsyad., 2011). To achieve the learning process, students are demanded to participate and teacher becomes a moving learning source and facilitator to direct and guide the students to solve the problems and conditions along the learning process and find their own concepts and material that have been learned.

Curriculum 2013 expects that sociology subject covers a better interaction and communication between teachers and students in order that the aim of learning can be achieved well. An effective and efficient learning process can be realized well if the teacher use the proper media to achieve maximum result. Media is a tool to deliver messages. Meanwhile, learning is an interaction and communication process among the learner, teacher and material. Department of national education (2007) explains that learning media is a tool to assist the teacher to deliver messages and material to the students in the learning process, manage efficient time to understand the material and help students to obtain and develop knowledge in the school.

The advantage of learning media in *Department of National Education* (2008) as an assistance tool is to make the learning process more attractive and improve the learning motivation. The learning material will have clearer meaning and the learning activity can be better. Learning media also enables
the students to master learning aim and various learning method which is not merely about verbal communication through oral speech by the teachers. As a result, students are not bored. Teachers do not dominate the speech but they give thinking stimulation to the students to solve the problems. Students tend to do learning activity. They do not only listen to the teachers’ explanation, but also conduct several activities such as; observing, conducting activity procedure, demonstrating and etc.

The utilization of media plays a big role in giving students’ learning experience. It can emerge students’ motivation and improve new interest in learning activity which will influence students’ psychology. Besides that, the use of learning media will help the effectiveness of learning process, improve students’ understanding, present a more attractive and reliable information, make data interpretation easier and add more information. Therefore, it is believed that the function of media is as an assistance tool in conducting learning activity in the school.

*Prezi* is a kind of software used for presentation with internet basis. Besides that, *prezi* can also be used as a tool to deliver and share ideas and thought on virtual canvas. *Prezi* becomes a better tool than other presentation media because it uses *Zooming User Interface (ZUI)*. It enables the users to zoom in and out the display of presentation media with the collaboration and attractive colors through the available slides.

*Prezi* media can be used as a media to make more creative and innovative presentation in 2 forms, structure and mind-map presentations. In *prezi*, text, image, video and other presentation media are put on presentation canvas. It is divided and arranged in the frames of program. The users are free to determine relative size and position among all presentation objects. They can also surround and light up the objects as they want. To make linear presentation, the users can establish presentation navigation track that has been determined chronologically.

*Prezi* media has many advantages such as making visual presentation to be more attractive and creative. *Prezi* also collaborates to make and view presentation directly from anywhere with broader scope. *Prezi* can also deliver ideas and thoughts in a display and we can easily see the relation among the slides. *Prezi* gives broader moving space to share the creativity into presentation slide using *zoomable canvas*. The users can place the slide into each sentence with dynamic and various slide moving. We can do zoom in/out from a slide fast with a good display. *Prezi* opens free registration for public. The users can use it everyday from internet. The mission of *prezi* is making various answers to be better and structured. It is created as a tool and media to develop and share the answer in visual form with narration and concepts.

**Methodology**

**Research Setting**

The research was conducted in SMA N 1 Sukoharjo and started in the first semester in 2018/2019. The location was in SMA N 1 Sukoharjo. The research was conducted at 11th grade of social program with 30 students, 11 male students and 19 female students. Sociology subject was selected as the object of the research especially on the material of conflict, violence and its solutions.

**Research Method**

This research was based on *research and development (R & D)* or method of research and development. Sugiyono (2013) states that method of research and development is a method used to produce a certain product and examine the effectiveness of the product. Procedure of learning media
Development was based on the perspective of Alessi & Trollip (2001) which consisted of three development attributes, namely planning, design and development.

**Data Source**

Data source of this research was 30 students of 11th grade of social program, teacher of sociology, 2 media experts and three material experts. Place of the research was classroom of 11th grade of social program in SMA N 1 Sukoharjo.

**Technique of Collecting Data**

The kind of data collected in this research consisted of qualitative and quantitative data, namely (a) data about process of learning media development using *prezi* which consisted of critic and suggestion from media and material expert (qualitative data), (b) main data which consisted of assessment data about learning media of *prezi* from material and media expert and students of 11th grade of social program in questionnaire. Research instrument consisted of alpha test (material and media expert) and beta test (11th grade of social program).

**Technique of Data Analysis**

Data that have been obtained from material and media expert, small group and field testing through questionnaire was analyzed using analysis technique of descriptive qualitative and quantitative. Technique of descriptive qualitative analysis was used to process data of words which was obtained from material and media expert and students. Technique of descriptive qualitative analysis was also used to process data of scores obtained from the questionnaire.

**Development Procedure Through the Perspective of Alessi and Trollip**

The research procedure was based on the design which was developed by the researcher through model of Alessi an Trollip (2001). It consisted of three steps, namely planning, design, and development. It is explained as follows:

1. **Planning**

   The initial step in the process of learning media development of *prezi* is planning. A proper and wise planning makes the development easier. There are several steps in planning as follows;

   a. Determine the space of material that will be added into media. It is determined through involving the objects (students of social program) that learn about material of conflict, violence and its solutions in sociology subject.

   b. Identify students’ characteristic. It is conducted to make sure that learning media of *prezi* is needed by the students of 11th grade of social program in SMA N 1 Sukoharjo. Identification is conducted by analyzing the needs.
c. Determine the limitation which consists of material limitation (material of conflict, violence and its solutions) and video and image limitation used to explain the material which is added to the media.

d. Determine and collect the sources and production devices based on the needs along the media production.

2. Design

Design step relates to the design of learning media production based on prezi and determine on how the users will interact. This step consists of five steps such as;

a. **Develop ideas.** It develops the initial ideas of a learning media by identifying the curriculum and competition standard or basic competition on the material of conflict, violence and its solutions to create indicators.

b. **Conduct analysis of concept and task.** Concept analysis is conducted to know the concept theory which is relevant and not. Task analysis is aimed to prepare the steps in order that the learning process on the material of conflict, violence and its solution can be successful.

c. **Make flowchart** to show structure image and program sequence.

d. **Make storyboard,** it is designed and made in detail.

3. Development

The last step is media development as an implementation of planning and design. The steps are as follows;

a. **Media production.** It is conducted by making media components such as material text, making picture and video which is combined to result learning media program.

b. **Alpha test.** It is conducted to validate the media that has been produced by involving the expert of media and material and the person who is competent in the field.

c. **Revision.** The result of alpha test becomes the reference in this step. Revision was adapted from the response of validators in alpha test.

d. **Beta test.** It is conducted with big scale towards the media by the users (students).

e. **Last revision.** It is conducted after alpha test which results media product.

**Results and Discussion**

The initial step conducted in development research is identifying the problems. In this step, the field study was conducted through field observation to know the media that will be used in learning process and identify the problems about the students’ weakness in understanding the subject. Need analysis is a process in which the researcher analyzes the weakness of learning media on the material of conflict, violence and its solutions.
Step of planning the learning media is based on the concepts and learning media design of *prezi*. There are three steps as follows:

1. *Making initial design.* It uses the themes that have been available in application of *prezi*.
2. *Making material text.* Making text and collecting material in planning of learning media development of *prezi* is used to give the explanation on the material of conflict, violence and its solutions.
3. *Making slide.* The next process is making presentation slide using *prezi* and the contents are material of conflict, violence and its solutions.

The following picture is the main screen picture from the first to the last of the media. It can be seen in picture 1 to 6 as follows;

*a. Opening*

This part shows the main menu or background of *prezi*. In the main display, it consists of material of conflict, violence and its solutions. Below is the main display of *prezi*, it can be seen in Table 1.

![Fig. 1 Display of main menu of prezi](image)

*b. Main Menu*

This part shows the menu selection which consists of paltform menu with several materials such as, social regularity, social interaction, and conflict. Below is the display of slide menu on the material of conflict, violence and its solutions. It is shown in Figure 2 to 6;
1) Menu of Platform

Fig. 2 Display of platform menu

2) Menu of social regularity material

Fig. 3 Menu display of social regularity material

3) Menu of social interaction material

Fig 4. Menu display of social interaction material
4) Menu of conflict material

Fig. 5 Menu display of conflict material

5) Menu of social integration

Fig. 6 Menu display of social integration material

Validity testing is a step to test the content of instrument with the aim to measure the success of instrument in a research. In developing learning media of prezi, validity testing is meant to test whether the media can be developed to help learning process. Therefore, it is known its level of correctness and accuracy of the use of media itself.

The experts of model and product design in this research involved three material experts and two media experts. This activity is conducted to review first product and give suggestion to fix the product. Based on the process of review from the media expert in validation product, it obtained properness score of 85%. It shows that the product has been good to be tested with the revised requirements. Based on the material expert, it obtained properness score of 95%. It presents that the product has been good to be tested.

After product design was validated and revised, it was tested to several samples using technique of purposive sampling. The researcher tended to select informant who knew the deeper information and problem and could be reliable as the data source. Personal or limited testing was aimed to obtain properness information than product design or learning media. Total number of personal testing was 6 persons. The result of personal testing is explained at Table 1.
Table 1 Description of indicators of personal testing

<table>
<thead>
<tr>
<th>No.</th>
<th>Aspect</th>
<th>No. item</th>
<th>Average score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Learning aspect</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Material compatibility</td>
<td>1</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>Creating learning motivation</td>
<td>2</td>
<td>81</td>
</tr>
<tr>
<td>3</td>
<td>Completeness</td>
<td>3</td>
<td>78</td>
</tr>
<tr>
<td>4</td>
<td>Ease to understand</td>
<td>4</td>
<td>80</td>
</tr>
<tr>
<td>5</td>
<td>Clarity</td>
<td>5</td>
<td>79</td>
</tr>
<tr>
<td>6</td>
<td>Evaluation accuracy</td>
<td>6</td>
<td>79</td>
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<tr>
<td></td>
<td>The number of average (%)</td>
<td></td>
<td>80.00</td>
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<tr>
<td></td>
<td>Media engineering aspect</td>
<td></td>
<td></td>
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<tr>
<td>7</td>
<td>Maintenable</td>
<td>7</td>
<td>75</td>
</tr>
<tr>
<td>8</td>
<td>Usability</td>
<td>8</td>
<td>75</td>
</tr>
<tr>
<td>9</td>
<td>Documentation</td>
<td>9, 10</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>The number of average (%)</td>
<td></td>
<td>76.33</td>
</tr>
<tr>
<td></td>
<td>Visual communication aspect</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Communicative</td>
<td>11</td>
<td>81</td>
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<tr>
<td>11</td>
<td>Simplicity</td>
<td>12</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>Typography (letters and its arrangement)</td>
<td>13, 14, 15</td>
<td>80</td>
</tr>
<tr>
<td>13</td>
<td>Picture</td>
<td>16</td>
<td>77</td>
</tr>
<tr>
<td>14</td>
<td>Layout</td>
<td>17</td>
<td>79</td>
</tr>
<tr>
<td>15</td>
<td>Color</td>
<td>18, 19</td>
<td>79</td>
</tr>
<tr>
<td>16</td>
<td>Design</td>
<td>20, 21</td>
<td>81</td>
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<tr>
<td></td>
<td>The number of average (%)</td>
<td></td>
<td>79.28</td>
</tr>
<tr>
<td></td>
<td>Total number of average of media assessment (%)</td>
<td></td>
<td>78.53</td>
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<td></td>
<td>Source: data was processed by the researchers 2018</td>
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</tbody>
</table>

The result of assessment on learning aspect is 80.00%, media engineering aspect is 76.33% and visual communication aspect is 79.38%. The result of total average is 78.53% (good). Based on the result, it can be seen that the advantage of learning media of Prezi is useful for the students and the media belongs to good category.

After personal or limited testing finished, revision was conducted. Furthermore, learning media was applied based on the samples that have been determined. The researcher selected 24 students using purposive sampling. Based on the data obtained, it can be explained in the indicators at Table 2.
Table2 The indicator explanation of the result of field testing

<table>
<thead>
<tr>
<th>No</th>
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<td></td>
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<td>80</td>
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<tr>
<td></td>
<td>Clarity</td>
<td>5</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>Evaluation accuracy</td>
<td>6</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>The number of average (%)</td>
<td></td>
<td>80,66</td>
</tr>
<tr>
<td></td>
<td>Media engineering aspect</td>
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<td></td>
<td>7 Maintenable</td>
<td>7</td>
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<td></td>
<td>9 Documentation</td>
<td>9, 10</td>
<td>82</td>
</tr>
<tr>
<td></td>
<td>The number of average (%)</td>
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<td>13 Picture</td>
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<td></td>
<td>15 Color</td>
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<td>81</td>
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<tr>
<td></td>
<td>The number of average (%)</td>
<td></td>
<td>81,14</td>
</tr>
<tr>
<td></td>
<td>Total number of average of media assessment (%)</td>
<td></td>
<td>80,82</td>
</tr>
</tbody>
</table>

Source: data was processed by the researchers 2018

Based on the second assessment sheet examined to the 11th grade students of social program, there is an improvement on each indicator after the revision. The result on learning aspect is 80,66%, media engineering aspect is 80,66% and visual communication aspect is 81,14%. Total number of average of media assessment is 80,82% (good).

**Conclusion**

The conclusion of the research on interactive learning media development of *mechanic of technique IV* is as follows:

1. **Planning Step of Interactive Learning Media is Divided into Three Main Activities, Such as:**
   a. *Making first design.* It uses the available theme in application of *prezi.*
b. **Making material text.** Making text and collecting material in planning of learning media development of prezi is used to give the explanation on the material of conflict, violence and its solutions.

c. **Making slide.** The next process is making presentation slide using prezi and the contents are material of conflict, violence and its solutions.

2. **Properness (According to the Experts)**

   Learning media of prezi is proper to be used as alternative media in learning process especially on the material of conflict, violence and its solutions. It is proven from the validation result of the material and media experts. The result of expert validation research shows that media expert is 85% (very good) and material expert is 95% (very good). The result belongs to proper category.

3. **Properness (According to the University Students)**

   Media properness shows at small scale testing is 78,53% (good) and at field testing is 80,82% (good). It shows that learning media of prezi has been proper to be used as a supplement media on the material of conflict, violence, and its solutions.

**References**


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