

Interactive Multimedia Development by Using Powerpoint on Citizenship Education for Class X in 8 State High School at Samarinda

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Abstract. This research is aiming to 1) Develop interactive multimedia using power point on Citizenship Education for class X in State High School 8 in Samarinda , 2) Find out the interactive multimedia quality using power point on citizenship education for class X in state high school 8 in Samarinda , 3) Know the interactive multimedia feasibility using power point on citizenship education for class X in state high school 8 in Samarinda. This research is a development research involving 40 students of class X in state High School 8 Samarinda. The data was collected used observation, interview, questionnaire and documentation. The data obtained through unstructured interview analyzed with descriptive qualitative approach. While the data obtained through questionnaire was analyzed with descriptive quantitative approach. The results of the research showed that (1) the design development using the ASSURE model included 6 stages; Analysis Learner (analyzing on students), State objective (formulating destination), Select media and materials (choosing the media and learning material), utilize media and materials (using media and learning material), Require Learner participation (Involving student), Evaluate and Revise (assessment and revision); (2) the quality of an interactive multimedia product on PKN/citizenship education according to the results of evaluation 71% of media experts was categorized " enough " with sufficiently revision, the results evaluation of material expert was 80% categorized "good" and a few revision, the results evaluation on the teacher of the subject was 94% was categorized " very good ", while the results test on trial of small group 78% categorized " good ", and the results test trial of large group was 79% categorized on " good " qualification; (3) For each of test of media expert, material expert, teacher of citizenship education stated that the interactive multimedia on PKN/ citizenship education was declared " appropriate " to be used as a source learning and learning media on Citizenship education to class X state High School 8 in Samarinda.

1. Introduction

The usage of power-point in citizenship (PKN) as the tool of learning is common used by the teachers in the school to deliver the materials in the class, but the usage of the media has not been maximized. It is only limited in the power text which is less attractive and motivating to the students in the process of learning. As we know that the subject of democracy education is intended to educate the youngsters to be democratize and participatory through a diagonal education. Knowing the fact, the deeper understanding of the material is needed, so that the students are able to apply the theory they receive in their daily life. The usage of power-point media with its advantages will make the students more interested, focus and concentrate and that the students will be more attractive and motivated the find the new things in the material.

According to [1], *multimedia systems may consist of traditional media in combination or they may incorporate the computer as a display device for the text, pictures, graphics, sounds, and video.* It means that multimedia systems consist of the combination of computerized traditional media include texts, images, graphs, sounds and video. According to [1] the goal of multimedia in education and training is to bring the students into the sensory experience to increase the learning. [2] Expressed that Microsoft Office Power-Point is software that is capable of showing attractive multimedia program, easy in the making and relatively cheap. Microsoft Office Power-point has the ability to combine all the elements of media, such as text processing, color, images, graphs, and also animation. Power-point software is a software that is suggested to be used by the teachers for several reasons, besides the easiness and economic reasons the main point is this software can fulfill all the criteria needed for an interactive multimedia. However to design an interactive multimedia it takes the creativity of a designer so that the multimedia that is produced will be more attractive and motivating to the learners and also increase the result of the learning. The formulation of the problems: 1) How to develop an interactive multimedia using power point on the subject of citizenship in class X of Senior High School 8 Samarinda?; 2) How is the quality of an interactive multimedia using power point on the subject of citizenship in class X of Senior High School 8 Samarinda?; 3) Is the development of an interactive media using power point on the subject of citizenship in class X of Senior High School 8 Samarinda proper to be used in the teaching and learning process?.

2. Theoretical Framework

2.1 The definition of development

Research and development are two words. The main activity is; first conduct research and literature study to produce the design of certain product, second is development which is testing the affectivity and the validity of the design that has been created so that it could be the product that can be tested and applicable to the society [3].

According to [4] the research of development is a research that aims to produce and develop a product such as prototype, design, learning materials, media, learning strategies, education measurement tools. The research is to solve practical problems in the field of education, class problems faced by the teachers and lecturers in the teaching and learning process. The research is not intended to test the theory and hypothesis but to test and accomplish the product.

Concluding from the two ideas above that the research development in the field of education means the research to accomplish or produce a product that can be used to solve the problems faced by the teachers in the class.

2.2 Assure Model Development

The ASSURE MODEL describes systematic and comprehensive steps of the activity which conducted in developing learning systems. The ASSURE MODEL is the steps that used to create more effective and integrated learning using the technology and media to improve the students' learning.

The researcher concluded that the development model using ASSURE MODEL is appropriate with the goal research development expected by the researcher as the product which will be developed is the product of an interactive learning multimedia.

untuk menggabungkan berbagai unsur media, seperti pengolahan teks, warna, gambar, dan grafik, serta animasi.

2.2.1 *Multimedia definition.* According to [5] multimedia could be stated as the thing that generates tremendous sensation. When you combine all the sensual elements of multimedia simultaneously, integrate the images and animation, beautify the sounds, make video clips and raw textual information.

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From the conclusions above, if it is connected to the process of learning then multimedia is the combination of audio media, video, images, texts, graphs, and animation to facilitate the delivering materials and represent every learner's learning style so it increases the enticement and motivation of the learners.

2.3 The concept of Microsoft Office Power Point

[2] expressed that Microsoft Office Power-point is software that is capable of showing attractive multimedia program, easy in the making and relatively cheap. Microsoft Office Power-point has the ability to combine all the elements of media, such as text processing, color, images, graphs, and also animation. Among the suggested learning tools media is using power point media. As we know that the usage the usage of power point media by operating the supporting tools like computer or laptop and LCD as learning media. The power point material is to present the learning subject that can be made as our urge. The more interesting matter is the material can be shown using LCD (Liquid Crystal Display) projector. As if the monitor screen where it can be seen by the learners. The display could be text-combining, images or photos, even sounds effect where it can be the distinctive attraction. Through the computer program, the result of the power point can be changed into living images and has dynamic quality. It is expressed by Suharno in [6].

From the explanations above the power point software is the software media suggested to the teachers to be used as learning multimedia for several reasons, apart from the economist and easiness the main reason is it can fulfill all the criteria needed for interactive multimedia. However, in designing interactive multimedia it needs the designer's creativity so that the produced multimedia can be more attractive and motivating the learners.

3. Research Method

This research is an R and D research which used the ASSURE MODEL which consisted of 6 stages of development, as follows:

First step is analyzing learners. In this step of analysis, the researcher conducted 3 kinds of analysis and identification; they were general analysis of learners' characteristic, the analysis of learners' basic competence, and the analysis of learners' learning style. The general analysis of learners' characteristic was done to get the information about ages, classes, sex, cultures, and social-economic background of the students in Senior High School 8 Samarinda. The analysis of learners' basic competence was done to find out how wide the knowledge and basic competence own by the students; the skill that the students must have to use the product and students' attitude. The analysis of the learners' learning style was done to gain the information about students' characteristic, the perception of learning, emotion stages, and also their response toward the environment. The learning style analysis used De Porter and Hernancky questionnaire (2010) which had been proved for its qualified and reliability since it was used before by [7] in her research.

The second stage was stating objective (formulating the goals). In this stage the researcher set the goals and basic competence also appropriate materials that was suitable with the curriculum applied by the school.

The third stage was selecting the media and materials. This stage was the preparation production of media, it was where the activity of selecting the materials needed in the making of product, such as: main material, supporting aspects (text, images, animation, audio and video). In developing the interactive learning multimedia; the navigation plot from the developed product was needed. The researcher selected the software that was going to be used to create the interactive multimedia. Here the researcher selected Microsoft Office Power point 2013 and helped by various supporting software. The material that would be developed as the content of the interactive multimedia was citizenship subject, about the equality of citizen in Indonesia. In the developing of interactive multimedia, it needed the navigation plot and interactive multimedia draft which was advantageous for the product making so that in the time of making the product was more structured and organized. Whereas the steps of interactive multimedia was the manufacture of the outline program of media, the making of flowchart and storyboard, material collecting, programming and finishing.

The fourth stage was utilizing media and materials. This was the step of utilizing the interactive multimedia in the learning process. The usage of designed of multimedia was addressed to the teachers and applied to the learners in the learning process to find out the quality and appropriateness of the interactive multimedia to be applied in Senior High School 8 Samarinda. Before it was applied, it would be reviewed first, the facilities and the infrastructure should be prepared, also the students' readiness to follow the teaching and learning process.

The fifth stage was requiring students' participation (involving the students) participation of the students in the class, the active involvement of the students in the class showed whether the media was proper or not. The learning must be designed to create the activity that allowed the students to apply the knowledge and receive feedback for their effort before and after the learning.

The sixth stage was evaluating and revising. In this step of evaluation, the aim was to see how far the created product could reach the target and the goal which had been set before. The measurement of the product was done by two experts; the content expert and the media expert. The questionnaire of measurement would be given to the experts corresponded to their fields. After the revision was being done, the next step was trial done in small and big group.

The collecting data method in this research was observation, interview, and questionnaire. The observation used unstructured observation, it was used to find out the early condition of research site and to find out the possibility of the problems. The research used unstructured interview to find out the early condition of the school, the citizenship learning process condition, the basic competence of students in operating the computers in the school. Here the non-formal unstructured interview was used. While the questionnaire was open questionnaire (the answers were written by the reviewer) and close questionnaire (the answers were chosen by the reviewer), those were used to measure the interactive multimedia product of citizenship.

The analysis data technique consisted of two; descriptive qualitative analysis techniques and quantitative analysis technique. The descriptive qualitative analysis technique was used to process the data of review result or expert validation of subject, learning media expert, small and big group trial. The analysis data technique was done by grouping the information from the qualitative data such as; input, improvement suggestions, and comments on the questionnaire sheets. The result of the analysis was used to revise the product that would be developed in order the product could be better. Meanwhile the quantitative descriptive analysis technique was used to process the data gained by questionnaire with likert scale using scale 5.

4. Result and Discussion

The developing of citizenship interactive multimedia in this research was the media that could be used in the process of learning. Beside it could be used in the learning process, the interactive multimedia was also used independently by the students. Based on the goal of developing interactive multimedia which was designing a learning multimedia using power point with the material of citizen equality in Indonesia; also to find out the quality and the appropriateness of the media which had been designed.

The research of the development used procedural ASSURE model stated by [1] which consisted of 6 steps; analyse learners, state the objectives, select the media and material, require the learners' participation, and evaluate and revise. It also used 3 stages of development; preliminary research, development, and evaluation. The tools used to collect the data was the questionnaire as the main tool of data collecting, interview and documentation, and the quantitative descriptive as a tool to analyse the data. The questionnaire was spread to all sample students of class X Senior High School 8 Samarinda. The questionnaire contained the quality measurement also the students' response of interactive multimedia using power point.

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The researcher also designed the introduction in citizenship multimedia interactive, consisted of 1) subject identity, 2) apperception, 3) the objective users, 4) main menu which could deliver the users to explore all the content of multimedia interactive. The material presentation was made structured and hyperlink to ease the users to move from one slide to another. Additional video, images, and audio (narration) was put to help the users in understanding the presented material. In the end of the presentation section, there were evaluations in the forms of interactive questions. It consisted of 20 numbers of multiple choice and 5 numbers of essay. The evaluation was made and developed interactively, where the users would get the feedback of every solved question in the form of scoring to show the degree of material mastery. Apart from that, users were also given the choice to send the evaluation result of counting to the teachers or developer through emails.

In the closing section in the program of citizenship interactive multimedia consisted of developer's identity, motivational quotes, addressed to build the users' spirit, the instruction of how to use the program, also sources used by the developers to present the material.

From the result of observation and unstructured interview, in the process of teaching and learning done by the citizenship teachers; the method of lecturing, and questions-answers also texted power point from internet were widely used. The limitedness of teachers' understanding toward the power point media and limitedness of time to prepare interested power point were obstacles to work on the interactive media.

The result of quality and appropriateness measurements by the media and material experts stated that the citizenship interactive multimedia was proper to use as learning media and source for the teachers and the students. As it was said by Setywan that power point media with all the advantages make students more interested, focus, and concentrated, so that they would be more active and motivated to study and find new things.

The section of presentation in interactive multimedia of citizenship consisted of the standard competence (SK), the basic competence (KD), indicator, learning goals, map concept, also material description. They were divided into 5 sub-materials, consisted of the state of citizen and the naturalization, the citizen accordance to citizenship law, the equality state of Indonesian citizenship, the principal of equality state of Indonesian citizen, honouring the equality state of citizen.

The From the result of quality measurement questionnaire of the media expert stated that the media quality with the percentage of 84% was categorized 'good' from the aspect of material with the percentage of 79% was also categorized 'good' while from the aspect citizenship teacher with the percentage of 94% was categorized 'fine'. Meanwhile, the result of small group testing with the percentage 78% was categorized 'good' and big group testing was also categorized 'good' with the percentage of 79%. It was stated that it produced the learning media based on Microsoft Office Power point which was feasible to use with good quality and met the needs of the students so that it could motivate and increase the process of learning also the students' learning result.

The citizenship interactive multimedia could also support the students' various learning style such as visual, audio, and kinaesthetic. The visual learning style could be represented by the written presentation which could read clearly and the playable structured video display also the tutorial presented in the text, the audio learning style was represented by the narrated material or the audible usage of voice heard by the users, while the kinaesthetic learning style was represented with the presentation of the material and program that can be used independently and interactively.

5. Conclusion and Suggestion

5.1 Conclusion

Based on the results of research developing done by the researcher, it could be concluded that:

1. The process of developing interactive multimedia of citizenship used the ASSURE procedure stated by Smalldino consisted of 6 steps; analyse learner, state objective, select media and material, utilize media and material, require learner participation, evaluate and revise. The using of Microsoft Office Power point as the core software and Ispring 7to design the evaluation and publish the product, and the online application to convert the audio, searching application www.google.com as the source of pictures, icon, and animation, the www.youtube.com as the site of video source also the material textbook and module as the source of presented.
2. The quality result of citizenship interactive multimedia was gained nased on the data from the questionnaire of product validation and then analysed by descriptive qualitatively and quantitatively. The result data od descriptive qualitative and quantitative analysis were used to revise the program of citizenship interactive multimedia and then conversed so that the test result by the media expert resulted 81% which categorized '**good**', the result test of material expert resulted 79% which categorized '**good**', the result test on teacher resulted '94% categorized '**very good**', the result test of interactive multimedia in the small group resulted in 78% categorized 'good' and the result test of big group on 79% categorized '**good**'
3. From the result of quality examination and appropriateness of the experts and respondents stated that the interactive multimedia of citizenship with the material of the equality citizenship in Indonesia was proper to be used as the learning media and good source of learning.

5.2 Suggestions

1. The interactive multimedia of citizenship could be used as the alternation media for the teachers in the learning process.
2. The interactive multimedia of citizenship could be used as one of the learning sources for the students outside.
3. The multimedia could be further evolved by making another attractive program.
4. For the headmaster, this interactive multimedia could be used as the collection of learning media, also it is important for the school to procurement another learning media needed in the process of learning. And for another researcher it is expected that the result media developing could give motivation in conducting more innovative research in order to make useful learning media.

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