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Digital Book Design with a Contextual Approach to Citizenship Education Courses

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ABSTRACT

Learning citizenship education courses at the university PGRI Semarang not yet used digital-based books in learning, usually lecturers only use printed textbooks so students are heavy carrying it. Therefore, lecturers are expected to be able to make online and offline-based digital books that are packaged attractively with animation, music, videos, etc., so that the lecture process becomes more enjoyable. The research method using the ADDIE R&D model (Analysis, design, development, desiminate) which was carried out for 2 years. Then the results of the analysis of the student questionnaire were limited and the FGD questionnaire with the lecturer to test material from the media aspect, material aspects, language aspects, and aspects of social diversity then it was proven that the digital book design was feasible to be used as a learning medium in the civics education course. The results of this research is a digital book product that is ready to be used in all citizenship education study programs such as UPGRIS, IKIP VETERAN, UNNES, and campuses around the city area of Semarang

Keywords: design, digital book, a contextual approach, citizenship education courses

1. INTRODUCTION

The development of information technology makes a variety of changes occur in society, especially in lifestyles in utilizing information. Information technology makes human access to information easier, practical, effective and efficient. This pattern of life, one of which is seen in information technology products called e-books or electronic books. By using these learning media, it is expected to provide updates in the learning process in the classroom. The use of Flash Flipbook media can increase students' learning motivation and can also affect student achievement or learning outcomes (Ramdania, 2013). The use of Flipbooks can also increase understanding and improve learning achievement (Nazeri, 2013). Learning media has two components, namely hardware and software and has forms in both text, audio, visual, images, and animation so that it can stimulate thoughts, feelings, attention, and students' interests and concerns in such a way that the learning process occurs. To develop learning media, it is necessary to pay attention to the VISUALS principle, which can be described as an abbreviation of the words: Visible: easy to see, Interesting: interesting, Simple: simple, Useful: useful / useful content, Accurate: True (responsible), Legitimate: enter resourceful / legal, Structured: well structured / structured. (Nurseto, 2011). The development of e-book technology encourages

the integration of print technology with computer technology in the activities of learning, one of which is the module. Modules can be transformed into electronic form so that they are termed electronic modules, virtual modules or digital books. An electronic book or digital book is a form of presentation of independent learning materials that are systematically arranged into the smallest learning units to achieve certain learning objectives that are presented in an electronic format in which there are animations, audio, navigation that makes users more interactive with the program. With this interactive electronic module the learning process will involve the display of audio-visual, sound, movie and others and the program is easy to understand so that it can be used as a good learning medium (Gunawan, 2010). Electronic modules can also be used anywhere, making it more practical to carry them anywhere. Because it is an amalgamation of print and computer media, electronic modules can present information in a structured, attractive manner and have a high level of interactivity. In addition, the learning process no longer depends on the instructor as the only source of information (Gunadharma, 2011). Electronic modules can also be used to improve conceptual understanding of the material delivered by educators (Wahyuni, 2013). According to observations made by researchers at the PGN Semarang University PKN Study

Program, the citizenship education course learning process has not been packaged in an interesting way, this is due to the lack of learning media used by lecturers, thus making students become bored quickly in class. Teaching and learning interactions in the classroom are inseparable from the influence of the media used by lecturers in delivering teaching material developed in the classroom. In the classroom the material should be related to daily life according to the Ministry of National Education (2002: 5) states contextual learning (Contextual Teaching and Learning) is a learning process that begins with the teacher linking the material taught with the real world situation of students and encouraging participants students make connections between the knowledge they have and their application in their daily lives. Based on this background, researchers will develop a digital-based learning media, especially material on citizenship education courses "

2. METHOD RESEARCH

This research method is a research and development (Research and Development). Research and development (Research and Development) is a research method used to produce certain products, and test the effectiveness of these products (Sugiyono, 2010: 407). The research model uses the ADDIE learning design model. This model, as the name implies consists of five main phases or stages, namely (A) analysis, (D) esign, (D) e-development, (I) implementation, and (E) valuation.

The five phases or stages in the ADDIE model, need to be done systematically and systematically (Personal, 2010: 125).The research procedure that adopts the development of ADDIE is as follows:
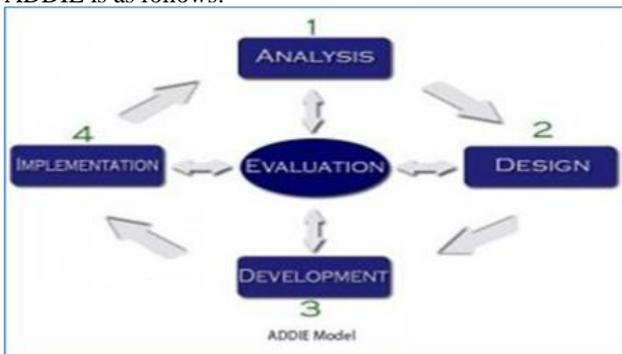

Figure 1 Modification Scheme for ADDIE Development Model

Preliminary studies

2.1. Analysis

The analysis step consists of two stages, namely performance analysis and performance analysis

analysis of needs or need analysis. The first stage, namely the performance analysis is carried out to find out and clarify whether the performance problems encountered require a solution in the form of program implementation or management improvement.

In the second stage, the needs analysis is a step that is needed to determine the abilities or competencies that need to be learned by students to improve learning achievement (Personal, 2010: 128).

2.2. Design

This step requires clarification of the learning program designed so
the program can achieve the learning objectives as expected (Personal, 2010: 130).
In product design, what is done is the next stage of the ADDIE model, namely design. In this step there is a need for clarification of the learning program that is designed so that the program can achieve the learning objectives as expected (Personal, 2010: 130).

2.3. Development

This development step includes creating, buying, and modifying media
learning to achieve predetermined learning goals. The development step, in other words, includes the activity of selecting and determining the appropriate methods, media and learning strategies used in delivering the material Personal (2010: 132). In this development stage the framework that has been designed will be realized so as to produce a product that can be implemented.
At the stage of developing Android-based learning media will be made in accordance with the material, after the Android-based media is finished it will be validated by the media expert and material expert by the validator to get input and evaluate according to the input provided by the validator. Furthermore, the Android-based media is revised according to the input provided by the validator to improve the product.

2.4. Implementation

Implement the learning program by implementing the design or program specifications learning. The main objective of the implementation phase, which is a step in the realization of design and development is to guide students to achieve learning goals, ensure solutions occur to overcome the learning outcomes gap faced by students, and ensure that at the end of the learning program students need to have competency in knowledge, skills, and attitude required (Personal, 2010: 134). In the implementation phase, researchers applied android-based learning media using Augmented Reality on the material to build flat side spaces.

2.5. Evaluation

The final step of the ADDIE model is to evaluate the learning program and
evaluation of learning outcomes. As in the analysis step, the evaluation process is carried out by clarifying the competencies of knowledge, skills and attitudes. The evaluation is known as formative evaluation. In addition, it can also be done by comparing learning outcomes that have been achieved by students with learning objectives that have been formulated previously (Personal, 2010: 135). In this research and development, researchers will conduct an evaluation of the learning program. The evaluations

included: a. Evaluation of the quality of teaching materials is based on the results of the evaluation of instructional materials given to media experts, material experts, field experts and students who take part in the trial. This evaluation can be used as input for the revision of the teaching material.

b. Evaluate the impact of the use of teaching materials on the problem-solving abilities of students working on posttest questions. This evaluation is used as a material consideration in the use of android-based learning media using digital books in teaching and learning activities in class.

After conducting the evaluation, it will be known how the effectiveness of the learning program with android-based math book math media uses digital books on the learning of citizenship education course.

3. RESULTS AND DISCUSSION
3.1. Discussion Questionnaire
The questionnaire given to students and FGDs with lecturers was aimed at finding out the practical level of using digital books, namely the questionnaire was given at the end of the use of digital books for learning PPKn courses and at the time of FGD with lecturers. Students and FGDs with lecturers fill out a questionnaire by giving a check mark (v) to one of the choices in the questionnaire. The rating system used is a Likert scale, so it fulfills several aspects:

Table 1 Grid of Student Response Questionnaire Sheets

Number	Aspect Name	Precentage Value
1	Media aspect	87%
2	Material aspect	87%
3	Aspects of language	83%
4	Aspects of social diversity	90%

Table 2 FGD Questionnaire Analysis Results With The Lecturer

Number	Aspect Name	Precentage Value
1	Media aspect	80%
2	Material aspect	70%
3	Aspects of language	80%
4	Aspects of social diversity	76%

3.2. Discussion of the Digital Book
Several digital books for learning about citizenship education (PPKn) culinary courses have been made and already have the website address https://pelelajarandemokrasi digitalbook.blogspot.com. Digital books for learning citizenship education (PPKn) courses have fulfilled all aspects of the media, material aspects, aspects of language

and aspects of social diversity and were declared fit for use in learning PPKn courses because the results were very good.

Table 3 Limited Range of Student Questionnaire Test Results

Number	Score	Criteria
1	80%<x<100%	Very good
2	60%<x<80%	Good
3	40%<x<60%	Good enough
4	20%<x<40%	Not good
5	0%<x<20%	Never good

Table 4 Range of FGD Questionnaire Test Results with lecturers

Number	Score	Criteria
1	80%<x<100%	Very good
2	60%<x<80%	Good
3	40%<x<60%	Good enough
4	20%<x<40%	Not good
5	0%<x<20%	Never good

For digital book displays, videos and links are directly connected to the internet and one of the materials from Chapter 2 Democracy and Human Rights has been made and can be opened with the website address, namely https://learnandemokrasidigitalbook.blogspot.com/2019/07/blog-post.html.
When you have entered the digital book page, you can adjust the music and open the pages for the next pages that are connected to each other in the digital book. The material contained in the digital book has been equipped with a youtube video that provides an explanation of the material Democracy and Human Rights. Then proceed to open a page that contains a summary of the material and a discussion that discusses the material. For the questions provided in the digital book are multiple choice questions and essay questions. Then on the last page the bibliography as a source of teaching material is contained in Chapter 2 Democracy and Human Rights.

4. CONCLUSIONS
Then it can be concluded from the results obtained in this study as follows:
a. Digital book using Kvisoft Flipbook Maker software that has been created by a research team that is used for learning PPKn can be opened through the site address https://learnandemokrasidigitalbook.blogspot.com/2019/07/blog-post.html
b. Digital books can be opened by using internet access through Android, i-phone, laptop, computer desk and i-pad by first downloading the photon browser for Android, i-phone and i-pad.

c. Digital book on the subject of Chapter 2 Democracy and Human Rights for learning courses Citizenship education has fulfilled all aspects of the media, material aspects, aspects of language and aspects of social diversity and declared fit for use in learning subjects Citizenship Education courses and the results are very good.

Then some suggestions that can support this research to be quality, then:

a. To be able to access the digital book for learning must be accompanied by instructions on how to use it and how to operate the software.

b. For computer desk and lap top using windows seven and windows ten

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