

Teaching Basic Concepts of Public Policy Using Whiteboard Animation Video Game Media

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ABSTRACT

Describe the teaching process about the basic concept material of public policy that is delivered using whiteboard animation video game applications that are able to increase graduate student motivation. From the results of the expanded field test at UNISBANK postgraduate partner universities, the results of the response of UNISBANK postgraduate students were very good judging from the media aspect; 88% of material aspects; 86% of language and display aspects; the latter 88% of the aspects of sample questions and exercises, so the average student response of 87.75 means that it is in the very good category. While the results of instructors / media users get 80% response from the media aspect; 80% of material aspects; 80% of the aspects of language and appearance and 90% of aspects of sample questions and exercises, so the average lecturer response of 82.5 means that it is included in the excellent category. This is of course a good and significant result according to the purpose of developing whiteboard animation media to facilitate students and lecturers in learning.

Keywords: *10 Stages R&D Research Method, whiteboard animation, video game media*

1. INTRODUCTION

The development of instructional media especially in the last decade or 10 years period is very rapid development, especially for universities this is very challenging to follow. One of the learning media developed at this time is whiteboard animation, where this media, although not absolutely necessary, is needed to support the success of learning activities, this is proven by its implementation being able to increase interest and make students more active in learning activities and interact directly with the help of this media. This year, an expanded test was conducted at UNISBANK Semarang, with the results of the questionnaire responses and student interviews showing that more than 85% of UNISBANK graduate students really like this whiteboard animation media, this is certainly very good to be applied in classroom learning, because learning success is wrong one of them is supported by the process of psychomotor growth and pedagogical behavior, and with the help of this media is able to prove this. This research targets outputs that can be applied, scopus indexed journal publications, authentic evidence of officially registered intellectual property rights which has been achieved in the first year of research and has continued development in the second year with the same output, namely publish in the International Journal of Engineering Research and Technology (IJERT) and the Journal of Advanced Research in Dynamical and Control Systems (JARDCS) indexed by Scopus. The level of technology readiness of the TKT of this study or applied research proposed is level 5 (five) in the first year and level 6 (six) in the second year running

2. LITERATURE REVIEW

2.1. Whiteboard Animation

Whiteboard animation videos are known by many other names, such as 'sketch videos' 'doodle videos', 'video scribing' or 'explainer videos', however, people are more comfortable calling them whiteboard animation.

Whiteboard animation is where an artist sketches pictures and text on a blackboard, or maybe paper or canvas, to illustrate a particular script or narration. The artist then records his own work from beginning to end and the recording is then edited and accelerated so that the images and text can coincide with what is said in the predetermined narration. In essence, blackboard animation is more accurately described as 'time-lapse' or 'stop-motion' video, because, although it is called whiteboard animation, the use of animation in the video is rarely displayed.

Whiteboard animation has almost unlimited uses, here are some ways in which people use whiteboard animation in their work or daily activities:

Whiteboard animation is used to attract the attention of website or blog visitors, to promote affiliate offers. , Promoting products or services online or offline., Using whiteboard animation to teach. So the whiteboard animation makes it easy for students to understand the material and be pleasant with instrumental music.

2.2. Smart Pedagogy Approach

What is meant by smart pedagogy is a way to help teachers create SMART pedagogy through smartphones. An effective SMART method that can make learning effective and successful with the help of different learning applications available on smartphones. The 'SMART' pedagogy is a custom for managing smartphone or cellphone invasions in addition to conventional teaching methods. SMART is an abbreviation of the first component 'S' is sharing of content describing sharing content. Whereas M is Massaging. This includes the design, delivery, and acceptance of course material, namely course content. A means that Assignment represents a reciprocal message between teacher and student. This message can be via email, SMS, WhatsApp and similar modes. It is very important that Smartphone technology must support the design, submission, and assessment of tasks using a Smartphone. The second last component is 'R' is Revision. Flashcards, quizzes, are a few examples of features available in Smartphones for quick revision of content. And the last component identified by the author in the SMART pedagogy is 'T' is testing, it is testing. Testing indicates completion of pedagogy. The teacher must be able to design the test using a smartphone and students must be able to attend this exam using their cellphone. This must be done without violating the credibility of the exam. (Djamarah, S. B. & Aswan. Z., 2006)

2.3. Previous Relevant Research Results

The relevant studies related to the research that researchers will conduct are:

1. Research conducted by Glover, D. and Miller, D. (2002): about *The Interactive Whiteboard As A Force For Pedagogic Change: The Experience of Five Elementary Schools in An English Education Authority*. Information Technology in Childhood Education. Norfolk, Vermont, AACE. which shows that elementary school children are greatly helped by their pedagogical abilities with interactive whiteboard media.
2. Research conducted by Kennewell, Steve and Alex Morgan. (2003) about "Student Teachers' Experiences and Attitudes Towards Using Interactive Whiteboards in the Teaching and Learning of Young Children." Department of Education, University of Wales Swansea. which shows that the wales children are very happy if the teacher uses interactive whiteboard in their learning, this is because the object of drawing, sound and others can be directly practiced by students.
3. Research conducted by Mercer, Neil. (2010) about. "Can the Interactive Whiteboard Help to Provide 'Dialogic Space' for Children's Collaborative Activity?". shows that students at school are very happy with interactive whiteboard because students can collaborate in delivering ideas and ideas directly in front of the class.

3. METHOD

This second year research still uses the Borg and Gall model of research and development which includes 10 stages, namely (1) Research and information collecting, (2) Planning, (3) Developing preliminary form of product, (4) Preliminary field testing, (5) Main product revision, (6) Main field testing, (7) Operational product revision, (8) Operational field testing, (9) Final product revision, (10) Dissemination and implementation. The first year has been carried out until step 6, while the second year has been carried out expanded testing at UNISBANK and UNNES Semarang as partners of this research

From step 7 to step 10, step seven and step eight have been implemented with the following results:

In step 7 (seven) which has been carried out is Operational product revision, in this case producing theoretical and practical outputs on the revised whiteboard animation product, theoretically the results of this study can enrich learning media, especially those based on information computer technology ICT, and practically this research provides input to students and lecturers at UNNES and UNISBANK Semarang so that they use whiteboard animation products as a supplement in the learning process, so that learning becomes more interesting and able to develop students' pedagogical abilities in using whiteboard animation.



Figure 1 Revised whiteboard animation product by UNISBANK postgraduate lecturer



Figure 2 Revised whiteboard animation product by UNNES postgraduate lecturers

From the revised results of the whiteboard animation product for this educational policy course, in general, it has been declared feasible to be used in learning, but there is input related to product animation images that are adjusted to the level of adult thought, then it is necessary to add more up to date reference material accompanied by pictures of the latest education policies such as 5 working days, 12-year compulsory education and so forth.

Followed by the 8th step in the development model of borg and gall is Operational field testing, in the expanded test the whiteboard animation product has been tested in the UNISBANK Semarang postgraduate program, which begins with an explanation of how to manufacture the product followed by the introduction of the product and the contents of the product material in sequence. Based on the field test at UNISBANK, data were obtained based on student response questionnaires and the results of interviews with students as follows:

From the results of the expanded field test at UNISBANK postgraduate partner universities, the results of the response of UNISBANK postgraduate students were very good judging from the media aspect; 88% of material aspects; 86% of language and display aspects; the last 88% of the aspects of the example problems and exercises, so the average student response of 87.75 means that it is in the very good category. While the results of instructors / media users get 80% response from the media aspect; 80% of material aspects; 80% of the aspects of language and appearance and 90% of aspects of sample questions and exercises, so the average lecturer response of 82.5 means that it is included in the excellent category. This is of course a good and significant result according to the purpose of the development of whiteboard animation media to facilitate students and lecturers in learning

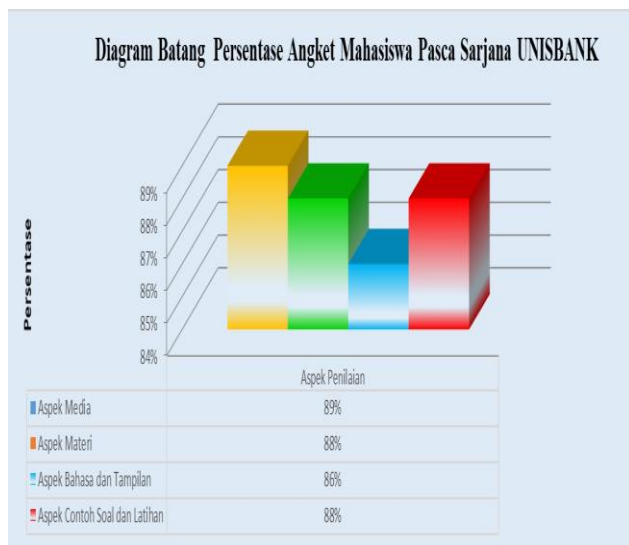


Figure 3 Bar chart of the responses of UNISBANK graduate students

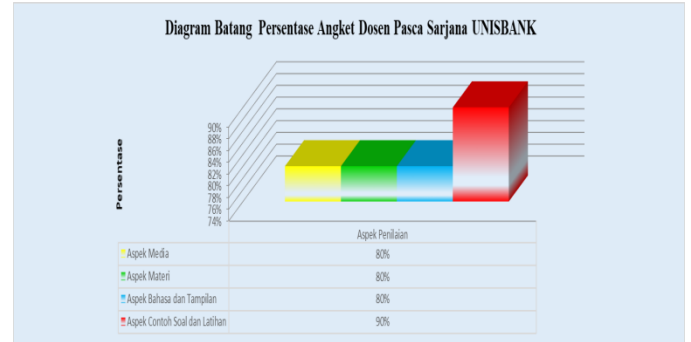


Figure 4 Bar chart of the results of the UNISBANK graduate lecturer response

In step 8 Operational field testing was carried out with 87.75% of UNISBANK students enthusiastic about learning in class with whiteboard animation, until they asked for files from researchers to be taught continuously in class



Figure 5 Applying whiteboard animation product at Postgraduate Program UNISBANK Semarang

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4. RESULT AND DISCUSSION

The output status for the product trial results is complete, the output status for copyright registration is granted with the registration data number 000106957 and the application date number EC00201810336, with the title creation of whiteboard animation education policy courses. Whereas the output status in the form of scientific journals of international journals is accepted in the Journal of Engineering and Applied Science of Scopus Q3, then in the

second year it has been submitted to the International Journal of Engineering Research and Technology (IJERT) and the Journal of Advanced Research in Dynamical and Control Systems (JARDCS) Scopus indexed

4.1. Role of Partners

The role of partners in this research took 2 (two) state and private tertiary institutions, namely from the postgraduate state university of Semarang and from the postgraduate university of Stikubank Semarang, as a place for field trials to expand the whiteboard animation product, while providing constructive input for the development and application of whiteboard products. forward animation

4.2. Next Stage Plan

The next phase of the plan is to conduct an expanded test at the Semarang UNNES postgraduate program, which is expected by the students and lecturers of the UNNES postgraduate program to study education management using this whiteboard animation media in subsequent learning, because this media is very suitable as a supplement to graduate student learning.

5. CONCLUSION

The conclusions of this study are (1) Produced computer-based learning media products using kahoot and prezi called multimedia interactive basic context approach in which discussing high school grade X mathematics material, (2) Development of multimedia interactive basic context approach is valid and suitable for use by students. This can be seen from the assessment of material experts, media experts, and student responses where the results are in very good criteria.

In carrying out this research there are several obstacles, namely:

1. In the Semarang UNISBANK postgraduate program as an expanded test site there are no devices that support playing whiteboard animation media, so we carry the media needed
2. Students who take educational courses are not as numerous as in UPGRIS, so it is necessary to do repeated research so that maximum results

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