

THE DEVELOPMENT OF LEARNING MEDIA INTERACTIVE BASED PROBLEM SOLVING IN BANKING SUBJECT AT STUDENTS SENIOR HIGH SCHOOL CLASS X

Anita, Asri Laksmi Riani, and Sudiyanto

Post-graduate of Economics Department Universitas Sebelas Maret, Surakarta.

ABSTRACT

Research aims to determine the feasibility of learning media interactive based problem solving on the bank's materials, non-bank financial institutions (LKBB) and central banks in state senior high school 9 Tanjung Jabung Timur. The research method used is research and Development (R & D) using Model 4D (Define, Design, Develop, and Disseminate). Data is obtained from validation questionnaires assessed by material experts and media experts. The type of data resulting from the study is qualitative data assessed according to the assessment category regarding the problem-based interactive media products. Research results that based on expert assessment of the material with average score 3.58 and a percentage of 89.58% fulfilled very well and the assessment of media experts with average score 3.6 with a percentage 89.06% category very decent. Based on the expert assessment of the material and media expert that the learning media interactive based problem is very decent of use as a learning media economic.

KEYWORDS: Learning, Interactive Media, Problem Based Learning

1. INTRODUCTION

Education is one of the determinants of the state of the nation, because the more quality education will create human resources that have high quality. In the law No. 20 of 2003 stated that education is a conscious and planned effort to create a learning atmosphere and learning process so that learners actively develop their potential to possess religious spiritual strength, Self-planning, embodied, intellect, Akhlaq's majesty, as well as a need of himself, society, nation and country.

In the 21st century learning with technology that is increasingly sophisticated or commonly referred to as the era of digital learning. Economic learning in the 21st century requires something different and interesting to know the development of an ever-changing economic phenomenon. Based on that, the should be economic learning is done using the media by utilizing technology so that learning is increasingly. Interactive learning Media can be used to support interesting learning (Yudiantara, Salam, dan Ikman, 2015). Interactive Media with real examples or problems that exist in everyday life will help and motivate learners to learn. Interactive Media based problem solving can be a solution that can be used as an innovative and effective tool to acquire problem solving skills and improve the ability of critical thinking (Avianty & Cipta, 2018; Husein, gunawan & Herayanti 2017; dan Joshi, 2011).

Learning media Interactive based problem solving consists of two words that are interactive media and problem solving. Interactive media is a media that combines text, graphics, audio, even video animations that invite students to follow the learning process so that learners can choose the media with a learning style that suits him each (Anitah, 2012). Interactive learning Media is a medium designed to be able to perform a feedback for users perform activities to make it easier for its users to learn the material and is designed fully from the instructions Using until assessment (Prastowo, 2013).

Furthermore, the problem solving emphasizes authentic problems such as those that occur in everyday life (Santrock, 2011). So, interactive media-based problem solving is a media that is presented with problems that occur in everyday life. Interactive Media-based problem solving is made in Web form. Media in digital form is very appealing to learners because it is more accessible and almost all learners have Android. It is backed up by data indicating that 67% of students in Indonesia use Android in class and 81% of students use it to home work (bbc.com). In addition, as much as 134 million of the population of young people in Indonesia, 54% have been using the Internet (Central Statistics Agency, 2018). Based on the above, researchers need to develop an interactive media-based problem solving.

REVIEW ABOUT LEARNING

1. Interactive Media Based Problem Solving

Interactive learning Media is a means or educational tool that can be used as an intermediary in the learning process to enhance the activity, effectiveness and efficiency in achieving the objectives of learning (Sanaky, 2013). Interactive learning Media is any person, ingredient, tool, or event that can create a condition that allows learners to receive knowledge, skills and attitudes (Anitah, 2009). Interactive learning Media is everything that can be used to channel messages from senders to recipients so that it stimulates the mind, attention, and interest and willingness of learners in such a way that the can achieve Objectives learning that Effective (Sukiman, 2012). Learning media Interactive is not only in the form of printed text but also image and sound forms (Buckingham, 2003).

While according to Fuchs, Powell, Fuchs and Seethaler (2008); Martinez (1998); and Mayer & Wittrock (2006) revealed that the problem solving is the ability that can be taught and learned. Problem resolution is the application of knowledge and ability to achieve a specific goal (Slavin, 2011).

Learning media Interactive based problem solving is a media that is presented in accordance with the problems that occur in daily life and is designed to make the command back to users to facilitate the understanding of materials and make Learners are actively learning so that learning objectives can be achieved effectively and efficiently.

2. Benefits Interactive Media Based Problem Solving

The benefit of learning media interactive based problem solving is to provide ideas, drawings, representations (facts and fiction) that direct our views to a reality (Buckingham, 2003). Interactive Media based problem solving provides benefits for learners as a source of learning to explore, analyze, try and explore concepts and principles that are loaded so that it is relatively faster to build understanding because of the integration of components such as sound, text, animation, images or graphics and video to receive information into the system of memory (Sudarmanto, Widya, and Ekawati, 2006).

RESEARCH METHOD

The research uses the Research and Development (R & D) method. Research and Development in the field of education as a process used to develop and validate the products used and to show learning activities in education (Gall, Gall and Borg, 2003).

The development model used is model 4D (Define, Design, Develop, and Disseminate). Research Data is collected through a validation sheet consisting of media validation and material validation using a Likert scale. The validation sheet consists of 20 statements. Then look for a media feasibility percentage by using the following formula.

xi = (ΣS / Smax) x 100%

Information:

Smax = Maximum score

ΣS = Number of scores

Xi = Eligibility value of each aspect

The validation questionnaire consists of 4 options with each of the following categories:

Table 1. Category Score. Table with 3 columns: Scale value, Score, Category. Rows: 1 (20-35, Very not good), 2 (36-51, Not good), 3 (52-67, Good), 4 (68-80, Excellent).

Source: (Riduwan, 2010)

The percentage results obtained from the media validation results and the material performed by the experts are interpreted in the following criteria:

Table 2: Percentage Eligibility

Percentage	Category
80%-100%	Very decent
60%-79%	Worth
40%-59%	Not worth it
20%-39%	Very unworthy

Source: (Riduwan, 2010)

The media eligibility percentage table is used as a guideline in assessing the of a eligibility medium with a very decent category if $x \geq 80\%$, worth if $60 > x \leq 79\%$, is Not worth it if $40 > x \leq 59\%$, and is Very unworthy if $20 > x \leq 39$.

FINDING

The results of product analysis that will be developed done using a questionnaire of media needs indicate that the interactive media-based problem resolution has not been used by teachers in the learning activities. In addition, there are still many learners who do not have an economic guide book. Based on observations and interviews with students, all learners have smartphones used as supporting learning by accessing the Internet to complete tasks and mostly for communication and social media. The many students using smartphones so that it can be used as a means to access the problem-based interactive learning media in the Web address (<https://www.meinkoanita.com/>).

Based on the results of a questionnaire analysis the needs of teachers that the media in the form of web is very helpful in learning activities because it is able to minimize the time so that it is more effective and efficient and help students learn independently. Validation of learning media interactive based problem solving in the web form is done by two experts as a material expert and one media expert. Revisions were made to make the media increasingly good and perfect for use in economic subjects on bank materials, non-bank financial institutions (LKBB) and central banks. The following describe result validation by material expert and media expert.

Table 3. Validation material expert

Aspect	Percentage
Content quality	93.75%
Goal quality	87.5%
Instructional quality	89.58%
Technical quality	87.5%
Average	89.58%

Source: Data on results (2020)

The material expert validation assessment analysis results show that aspects of the content quality with a feasibility percentage of 93.75%. On the aspect of quality objectives get a percentage of 87.5% feasibility and instructional quality with a percentage of 89.58% and technical quality aspects with an eligibility of 87.5%. Thus, the average percentage of the material expert validator assessment was 89.58% with the category "very decent".

Table 4. Validation of media experts

Aspect	Percentage
Conformance	87.5%
Ease	87.5%
Interesting	93.75%
Benefit	87.5%
Average	89.06%

Source: Data on results (2020)

The results of the analysis of media experts on table 4 showed that the conformity aspects get a percentage of 87.5% with very decent categories and aspects of ease with a percentage of 87.5% very decent category. While the aspect interesting with the percentage of 93.75% and the aspect of 87.5% benefit. Therefore, the average of these four aspects is 89.06% which means the learning media interactive based problem solving in the category are very decent.

CONCLUSION

Media Interactive based problem solving very decent use in economic learning. Product eligibility is based on material expert assessment with an average percentage of 89.58% in very decent category. The media experts assessment the product with an average percentage of 89.06% in very decent categories. So, learning media interactive based problem solving subject bank materials, non-bank financial institutions and central banks can be used in Learning activities economic Effectively and efficiently.

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