

Development of Multimedia Based Learning Media in Scouting Learning Faculty of Sport Science

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Abstract-Technological developments and changes in globalisation towards the digital era are challenges that must be balanced with the learning process to strengthen the commitment of universities to emphasise character education and increase productivity, especially in learning. The research objective of developing learning media is to produce products in the form of multimedia-based learning media on Scouting courses. Media development will facilitate lecturers and students in lecture interactions to achieve planned competencies. The research method used is research and development (RnD) with an Instructional design approach with the ADDIE approach, which is an extension of analysis, design, development, implementation, and evaluation. The instrument used to collect data was a questionnaire in the form of a questionnaire and was supported by the acquisition of data based on interviews, observations, documentation, and Forum Group Discussion (FGD). Conclusions based on the results of testing using questionnaires obtained a percentage of 94% in the "Very Good" category. The media is then applied in the learning process in Scout courses to achieve lecture competencies, instil Scout values, and support the development of technology as a culture of culture and must lead to good things by the Indonesian National Qualification Framework (KKNI) curriculum applied.

Keywords-Development, Media, Scouting

INTRODUCTION

The Indonesian National Qualification Framework (KKNI) is a decree of the Presidential Regulation of the Republic of Indonesia Number 8 of 2012 and is a provision of the curriculum applied in Higher Education. KKNI is a framework for qualifying human resources as a manifestation of quality related to the system of education, training, and assessment of equality of national learning outcomes to produce quality and productive national human resources [1]. Descriptions of each level of qualification are adjusted to the development of science, art, technology, and developments in the supporting sectors of the economy and people's welfare.

Universitas Negeri Medan (Unimed) as a university in North Sumatra has a responsibility in producing productive and knowledgeable human resources in answering all

challenges and changes that occur in the midst of society. Technological developments and changes in globalisation towards the digital era are challenges that must be balanced with the learning process to strengthen the commitment of universities to emphasise character education and increase productivity, especially in learning/lectures.

Munadi namely learning is the process of communication in education occurs because there are plans and desired goals [2]. The effectiveness of giving lectures needs to be done as a new transformation that is towards the modern era. Traditional learning is characterized by a meeting between educators and students in the teaching and learning process. This method faces many obstacles when faced with the limitations of place and time of implementation, as it relates to the increasing number of students and activities of students and learners in the global era, it is necessary for students to be given learning experiences with varied sources and learning media. Such learning paradigms begin to shift from face to face courses directly to web-based learning such as video conferencing and e-learning [2].

Learning media helps the learning process carried out to achieve competence. According to the Big Indonesian Dictionary, etymologically learning means "trying to get intelligence or knowledge". This definition has the understanding that learning is a person's activity to achieve intelligence or knowledge that was not possessed before. By learning humans become aware, understand, understand, and can carry out and have "something" [3].

Scouting is one of the compulsory subjects for the Department of Physical Health and Recreation Education at the Faculty of Sports Sciences of Universitas Negeri Medan. Scouting seeks to complement what has been done by filling in gaps in education that may not be carried out by other parties [4].

The Scout Movement as an organiser of non-formal education outside of school is a very strategic educational institution aimed at increasing the resources of Indonesian youth and realising an increase in the sense of nationalism which is the globalisation era has begun to fade [5]. The existence of Scouting is the basis for the creation of experienced and potential teachers in developing and creating scouting environments that are by the provisions of

the Scout Movement. Educated students as coaches are the main goal of Scouting as a compulsory subject to be professionally prepared for teachers of Physical and Health Education whose essence is a field teacher.

The development of technological innovations in the education process is generally very much needed by educators in improving the quality of education specifically Scouting courses so that new findings in the field of education are highly expected considering there are not many developments in technological innovation at this time. The use of computers as a media can be developed as an instructional tool that can be directly used in the learning process, can be a substitute for books according to the application used [6]. The findings in the form of developing computer system learning media and producing interactive media were carried out through research on the development of learning media. The development carried out will produce products in the form of multimedia-based learning media in Scouting courses which will facilitate lecturers and students in lecture interactions to achieve planned competencies.

II. RESEARCH METHODS

Development of Scouting learning media using research and development (RnD) research designs. The research activity in question is developing learning products in the form of multimedia-based interactive media. Product development is done by validation efforts to provide proof of the product that will be generalized [7].

Robert Maribe Brach said the development of the research carried out is the Instructional design approach with the ADDIE approach, which is an extension of analysis, design, development, implementation, and evaluation [7]. Analysis: Perform product analysis to be developed, Design: Product Design, Development and Implication: Making and Using (Product Testing), and Evaluation: Assessing and Revising Products.

Data collection techniques carried out with four levels, namely: 1) Data "analysis" to find out the problems that occur in Scouting learning, 2) data "design" to design a product as a problem-solving effort, 3) data "development and implementation" is making and product use for product testing. 4) data "evaluation" is product assessment data and will provide information about the feasibility of the product to use.

The instrument used to collect data was a questionnaire in the form of a questionnaire and was supported by the acquisition of data based on interviews, observations, documentation, and Forum Group Discussion. Data collectors by observation and documentation are used before making the product, meaning that the data obtained from the instrument is used as a reference in making products. The questionnaire and interview instruments were used during product design and completion so that the product feasibility results will be obtained.

Instruments compiled in the form of a questionnaire or questionnaire with a Likert Scale consisting of four parts namely "very appropriate" has a score of 4, "right" has a score of 3, "incorrect" has a score of 2, and "very inappropriate" has a score of 1. Results Data through questionnaires are processed using the formula:

$$P = \frac{f}{n} \times 100$$

Information :

P = percentage sought (%)

f = Number of scores obtained

n = Total score should be

moreover, included in the category of assessment results [8], namely:

- | | | |
|----|-------------|---------------|
| a. | 80% - 100 % | : Very Good |
| b. | 66% - 79% | : Good |
| c. | 56% - 65% | : Good Enough |
| d. | 46% - 55% | : Less |
| e. | ≤45% | : Very Less |

The validity of this research data is carried out through examining objectively tested data. The first data inspection is carried out by the validity process, namely the content accuracy and extraction of media products developed by the validator or media expert and Scouting. Examination of the second data is done with reliability, namely the determination of the results of measurements based on questionnaires (questionnaires) that are distributed to respondents to assess products from small and large-scale test processes. Data obtained based on the process of validation and reliability will be reviewed based on Forum Gorum Discussion to be studied as a reference for developing Scouting learning media.

The data analysis technique used in this study is to reduce data from data sources collected in writing and detail. Data reduction results are then presented in the form of tables, graphs so that the data is organized and arranged in a pattern of relationships that are easy to understand. After the data is arranged and understood, the next step is drawing conclusions and verification.

III. RESULTS AND DISCUSSION

Research on the development of multimedia-based learning media Scouting courses was carried out with the stages of Semester Learning Plan preparation during lectures as guidelines for making media development. The design of the development was carried out by a research team namely M.Irfan, Suryadi Damanik, And Zen Fadli, then made by Zupri Harahap (Student-Faculty of Sports Science) as a media expert. The results of the creation of learning media by media experts were then discussed in discussion forums namely Forum Group Discussion by the research team and media experts namely Abdul Latif, and Muklish, and Scouting Trustees namely Khairul Usman (Chairperson of Unimed Racana for the 2011-2012 Period) and Indri Prima Dewi (Racana Stakeholders for the period 2012-2013) which will then be referred to as media validator experts.

Multimedia-based interactive learning media is developed through the ADDIE approach (analysis, design, development, implementation, evaluation) with systematic stages as a scientific development method to obtain the right product. Products in the form of Scouting learning media

were developed through analysis, namely the stages of the study of Scouting courses which included analysis of student character, analysis of product objectives, determining the development model, determination of learning strategies, and assessment. The next stage is the design of making media by Zupri hopes as a media expert through the design of the research team. The media that has been made by media experts will then enter the stage of development and implementation, namely expert validation, revision I, small group test, the analysis I, revision II, test and large group.

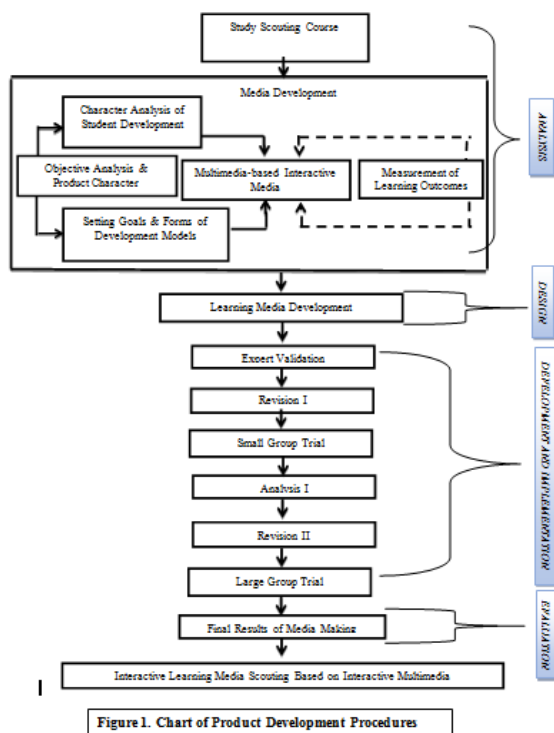


Figure 1. Chart of Product Development Procedures

Scouting media created by media experts was then validated by media experts and scouting to be corrected. The part that must be repaired is 1) the media must have complete information in the form of lecture contracts or Semester Learning Plans, 2) media content must have complete content, because it will be made as a reference material for students to conduct deepening outside lectures, 3) Resolution the image is adjusted to the actual picture conditions.

Expert validation was revised called revision I. The results of revision I were completed by media experts and then small-scale tests were carried out, namely 1 class of students (respondents) totalling 22 responded. Small-scale test activities are supported by instruments in the form of questionnaires (questionnaires) that will be filled out by respondents to obtain information about the description of the media developed in Scouting courses.

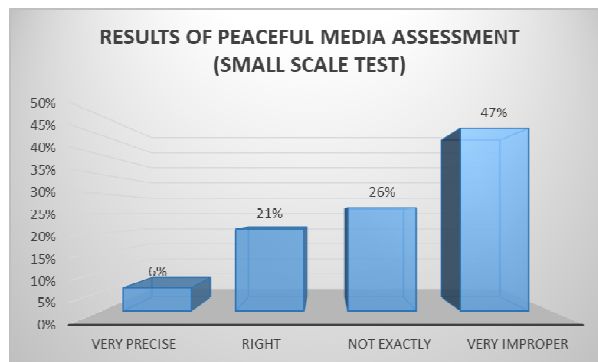


Fig. 2. Results of Scouting Media Assessment (Small Scale Test)

The instrument for media development through small-scale testing obtained results based on calculations, namely 47% in the very inappropriate category, 26% in the incorrect category, 21% in the right category, and 6% in the very inappropriate category. The conclusions obtained based on the results of the small-scale test percentage, namely the developed media has a percentage of 46%, namely the category "Poor". The "Poor" category means that the media developed on Scouting courses have not been able to improve the scouting learning process.

The acquisition of the results of the analysis I was then revised in phase II, which was guided by the research team and validator to complete the necessary repairs. The completion of revision II conducted by media experts will then be re-tested with large-scale respondents consisting of three classes totalling 66 respondent.

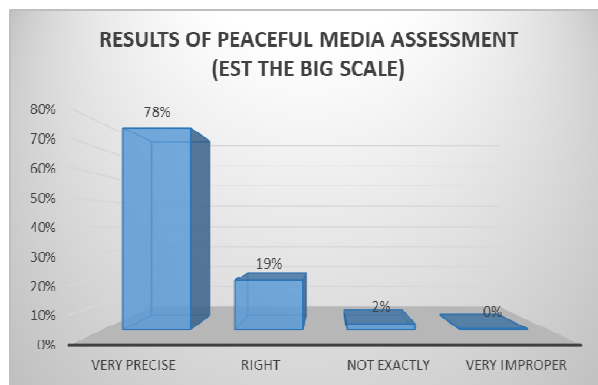


Fig. 3. Results of Scouting Media Assessment (Large Scale Test)

The large-scale test results obtained data, namely 78% in the "Very Exact" category, 19% in the "Right" category, 2% in the "Inappropriate" category, and 0% in the "Very Inappropriate" category. The conclusions obtained based on the results of a large-scale percentage test, namely the developed media has a percentage of 94% in the category "Very Good" and without special notes. The "Very Good" category means that the media developed on Scouting courses can influence improving the scouting learning process.

The last stage is the evaluation stage, which is to assess the media being tested and revised to be reviewed so that the media developed is right. The evaluation was carried out by analyzing the media on interactive, multimedia-based,

scouting material in accordance with the competencies of the subject, the display of media that could attract students' attention, and the contents of the media supplemented by evaluation or assessment according to the assessment at the Faculty of Sport Science, Universitas Negeri Medan.

Scouting media carried out through a series of development processes produced development products under the name "Multimedia Based Scouting Media". The media is then applied in the learning process in Scout courses to achieve lecture competencies, instil Scout values, and support the development of technology as a culture of culture and must lead to good things by the curriculum applied.

IV. CONCLUSION

Multimedia-based learning media Scouting courses are developed with ADDIE Instructional design (learning design) approaches, namely analysis, design, development, implementation, and evaluation. The analysis is the stage of the study of Scouting courses which includes the analysis of student character, analysis of product objectives, determining the development model, determination of learning strategies, and assessment. The design is the creation of media through the

design of the research team. Development and implementation are expert validation, revision I, small group test, an analysis I, revision II, test and large group. Evaluation is to assess the media being tested and revised to be reviewed so that the media that is developed is right. The development produces a development product with the name "Multimedia Based Scouting Media" as an interactive learning media presented with the Adobe Flash application as a device running the media.

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