Learning media analysis in the development of Physics E-
module for Senior High School with land and forest fire theme

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Abstract. The purpose of this study was to analyze the media that use learners in school. Analysis of the media is one of the initial investigation steps in the development of e-module High School Physics. This research is a descriptive qualitative approach. Samples are learners XI IPA SMAN 6 Padang. Based on the results, it can be concluded that quality of the content and purpose of the media used poorly with an average value of 74.6; the quality of learning that are used both by the average value of 79.5; technical quality of the medium used both with an average value of 79.3

1. Introduction

Learning media is a vehicle for channeling information learned or information messages [1]. Learning media is quite important position as one component of the learning system. Without the media, communication will not occur and the learning process as a communication process also cannot take place optimally. Some research shows the positive impact of the use of media in the classroom or as a primary way of direct learning that lesson delivery become more standardized. Each student who saw or heard the presentation through the media receive the same message even though the teachers interpret the content in a way that is different. Media use can reduce the variety of interpretations of the results so that the same information can be presented to students as a basis for assessment, exercise, and further applications. Learning can be more interesting. Media can be associated as the attention and keep students awake and pay attention. Clarity of the message, the appeal of the image, the use of special effects that can lead to curiosity lead the students laugh and think, all of which indicate that the media has the aspect of motivation and interest [2].

Learning becomes more interactive by using instructional media. Long learning time required can be shortened because most media required only a short time to deliver messages and content in a number of considerable and likely to be absorbed by the student. The quality of learning outcomes can be improved when words and images as a learning medium to communicate the elements of knowledge in a manner that is well organized, specific, and clear. Learning can be given when and where desired or necessary, especially if the learning media is designed for individual use. A positive attitude of students to what they are learning and the learning process can be improved. The teacher's role may be changed to a more positive direction; the burden on teachers for repetitive explanation concerning the content can be reduced and even eliminated so that he can focus on other important aspects of the learning process, such as a consultant or adviser students. The media according to the form of presentation and the way they are presented can be classified into seven groups of media
rendered, namely: (a) group to one; graphics, print materials, and a still image, (b) the second group; silent projection media, (c) a third group; audio media, (d) a fourth group; visual media, (e) a fifth group; live image media / film, (f) the sixth group; television media, and (g) the seventh group; multimedia [3]. For example, as a consultant or adviser students. The media according to the form of presentation and the way they are presented can be classified into seven groups of media rendered, namely: (a) group to one; graphics, print materials, and a still image, (b) the second group; silent projection media, (c) a third group; audio media, (d) a fourth group; visual media, (e) a fifth group; live image media / film, (f) the sixth group; television media, and (g) the seventh group; multimedia [3].

At school, teachers have not been using a variety of learning media. Teachers usually use media printed materials such as textbooks and worksheets. It can make learners feel bored. In physics learning not all the material can be described with words but also explained by video so that students better understand and did not imagine it.

In this paper, the research conducted by an analysis of school learning media. The aim is to describe the instructional media used in schools.

2. Research Method
Based on the problems and research objectives, the type of study is a descriptive study with a qualitative approach. Descriptive research not intended to test a specific hypothesis [4]. Descriptive research conducted to describe, interpret and describe or explain as is on a variable or a state [5]. The instrument used to collect data that media analysis of questionnaires filled learning in school immediately by 30 learners XI IPA SMAN 6 Padang. Steps in analyzing the questionnaire data that provides a score for each item, and then summing the total scores for all indicators, after summing the scores of each aspect then made average. The predicate determination of competency levels are as follows.

| No. | Category     | Value         |
|-----|--------------|---------------|
| 1   | Very good    | 90 < N ≤ 100  |
| 2   | Good         | 75 < N ≤ 90   |
| 3   | Less         | 60 < N ≤ 75   |
| 4   | Very less    | ≤ 60          |

3. Results and Discussion
Results from this study is the percentage of data analysis instructional media used in XI IPA SMAN 6 Padang. Media analysis consists of three components: quality content and purpose, the quality of learning and technical quality.

3.1. Content Quality Analysis and Objectives
Analysis of the quality and content of the media used includes the accuracy of the learning material, the order of presentation of the material is described from simple to complex, instructional media load images / photographs, instructional media containing charts and diagrams, and learning media only carried an article / material description. Analysis of the quality of the content and purpose of learning media is shown in Figure 1.
Figure 1. Graph Content Quality Analysis and Objectives

Figure 1 shows that the accuracy of the media used with learning material obtained a score of 83.3 in the good category; the order of presentation of the material is explained from simple to complex obtaining a value of 80.8 with a good category; Learning media contains pictures/photos with a score of 75 in the unfavorable category; Learning media contains graphs and diagrams to get 73.3 in the unfavorable category; and learning media only contains writing/description of material obtaining a score of 60.8 in the unfavorable category. Overall the quality of the content and the purpose of the media used are not good with an average value of 74.6. Based on this, it is necessary to improve or improve the quality of content and objectives in the media.

3.2. Learning Media Quality Analysis
Analysis of the quality of instructional media covering quality of media used in the learning process can foster student interest in learning, learning media to help students understand the material physics so easy to understand, learning media broaden the students in learning, learning media to motivate students in learning, and learning media makes students be independent (able to learn on their own). Analysis of the quality of the media used in the study are shown in Figure 2.
Figure 2. Graph Learning Quality Analysis

Figure 2 shows that the quality of the media used in the learning process can foster interest in learning students get a score of 85.8 with a good category; Learning media helps students in understanding physical material so that it is easy to understand to get a score of 82.5 with good categories; Learning media adds insight to students in learning to obtain 77.5 grades in good categories; Learning media motivates students to learn to get 80 grades in good categories; and learning media make students become independent (able to learn by themselves) obtain a score of 71.6 in the unfavorable category. Overall the quality of learning media used is good with an average value of 79.5. Even though the results are good, there is a need to improve the quality of learning.

3.3. Technical Quality Analysis

The analysis includes the technical quality of design quality media display, type the letters in the media, the media portrays the actual circumstances, the media is easy to use, and harmonization colors on the media. Analysis of the technical quality of the media used in the study are shown in Figure 3.
Figure 3 shows that the quality of the media display design gets a value of 80 in the good category; the type of letters in the media get a value of 80 in the good category; the media describes the actual situation of obtaining a score of 76.6 in the good category; easy-to-use media get a value of 80.8 with good categories; and color harmonization in the media obtained 79.1 with good category. Overall technical media are used well with an average value of 79.3. Even though the results are good, there is a need to improve technical quality.

4. Conclusion
It can be concluded from the analysis of instructional media, the need to improve the content and purpose; quality of learning; and the technical quality of learning media to make learning engaging, interactive, and easy to understand learners. Results of analysis quality of the content and purpose of the media used poorly with an average value of 74.6; the quality of learning that are used both by the average value of 79.6; the quality of learning that are used both by the average value of 79.5; technical quality of the medium used both with an average value of 79.3.

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