

Development of Audio-Visual Learning Media IT-Based on Thematic Learning Primary School

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Abstract. The purpose of this study was to determine the feasibility of ICT-based audio-visual learning media. The type of research used is Research and Development. The subjects of this study were third grade elementary school students in Belawan. Data collection techniques using interview instruments and questionnaires. The results of the research from material experts show that ICT-based audio-visual learning media has a feasibility percentage of 84% in the Very Eligible category. The validation results from media experts obtain a feasibility percentage of 88% and fall into the Very Eligible category. Individual trials obtained an eligibility percentage of 93.3% in the Very Eligible category. So it can be concluded that the ICT-based audio-visual learning media is suitable for use in the process of learning activities.

Keywords: Learning Media, Audio Visual, ICT

1 Introduction

Learning is an interaction directly or indirectly that occurs between teachers and students. A learning will be carried out well if the teacher can choose the right media and learning methods. Media is everything that can be used to channel messages from the sender to the recipient of the message so as to stimulate the thoughts, feelings, attention, and interests and willingness of students (Simanungkalit, 2019). The use of learning media is very important to increase student learning activity, eliminate boredom, and the main thing is that students easily understand the material being studied.

The learning process without using media, students find it difficult to understand the material presented. The learning media developed will be very useful for teachers and students in the learning process. A teacher is required to be creative in order to be able to create learning media to create an effective and fun learning atmosphere. One of the learning media that can attract attention and create effective learning is audio-visual media. Audio-visual media is a tool that is used in the form of audio that is equipped with visuals, writing and colors. By using audio-visual media, it is hoped that students will easily remember and understand what they see and hear, making it easier for students to understand the learning material.

Along with the development of information and communication technology in the world of education, a teacher is required to be able to master it. This is in order to adapt to existing advances so as not to lag behind existing developments. Information and communication technology in education today is very important for a teacher. It can't be avoided because teachers should learn to use technology to advance learning in schools. Technology can be used

by teachers to come up with ideas in developing interesting media. so as to facilitate students' understanding of learning. By using technology today, the learning media used by teachers are also increasingly varied, which are used as tools to convey material to students.

Based on some of the expert opinions above, it can be concluded that learning media are all tools used by teachers to support learning activities. Thus, facilitating the delivery of material to students, not only that the learning media also provides reinforcement and motivation for students to take part in learning activities. Information and Communication Technology is an inseparable equivalent that contains a broad understanding of all activities related to processing, manipulating, managing and transferring information between media (Simatupang, 2018). According to Batubara (2017) Information and Communication Technology consists of three different words, namely technology, information, and communication. Technology means the application of tools, machines, materials and processes that help humans to solve problems. Information is the result of processing, manipulating and organizing a group of data that gives knowledge value to its users, while communication is a process of delivering information from one party to another so that there is a mutually influencing relationship between the two.

Budiman (2017) says that Information and Communication Technology (ICT) is all activities related to processing, manipulating, managing, and transferring information. Based on the above understanding, it can be concluded that Information and Communication Technology (ICT) is a tool that covers all parts of technology, both the use, process, and benefits obtained by the technology itself. According to Budiana et al (2015) stated that the benefits of using ICT in order to support the implementation of learning include: 1) improving the quality of learning, 2) expanding access to education and learning, 3) helping to visualize abstract ideas. 4) facilitate understanding of learning material, 5) display learning material to be more interesting, and 6) allow interaction between learning and the material being studied.

In other words, the benefits of information and communication technology are that it can help in developing student learning in an effort to achieve life skills such as communication skills, creativity, innovation, independence, and so on. So it can be concluded that the benefits of Information and Communication Technology (ICT) in learning are to simplify and create an effective and fun learning process.

2 Research Methods

The type of research used in this research is the type of research and development (R&D). Research Research and Development is the process of developing and validating educational products. Sugiyono (2013) states that Research and Development research is research that is used to produce a certain product that has been tested for the effectiveness of the product. This research was conducted in Belawan elementary school. This research was carried out in 2021. In Belawan elementary school.

Data collection techniques used are interviews and questionnaires. While the data analysis in this study was obtained from qualitative data and quantitative data. Qualitative data were obtained from the comments of the validators, both suggestions and criticisms contained in the questionnaire that had been given by the researcher. The suggestions and criticisms were used as material for improvement of the media developed by the researchers. Quantitative data were obtained through scoring the questionnaires that had been filled out by the validators, both material and media experts. The assessment or scoring of the questionnaire uses a Likert scale in the form of a checklist with five categories

3 Results and Discussion

Material Expert Validation

Validation in this study was carried out in May offline or face to face with the validator. The score obtained through material experts with a feasibility percentage of 84% and is included in the "Very Eligible" criteria,

Media Expert Validation

The first stage of validation for media experts was carried out in May offline or face to face with the validator. The first validation results obtained a score of 77 with a percentage result of 77% and was included in the "Eligible" criteria. In the first stage of validation, the validator only commented that the media that the researcher developed was good, but because the results obtained were still not very feasible, the researcher made revisions to carry out stage II validation to media experts. The second phase of validation was carried out in June online because the campus was in lockdown.

As for the material for revision by the researcher before carrying out the second stage of validation, namely improving the questionnaire statement which was given a value of 3 or sufficient. After the researcher revises the media, the second stage of validation will be carried out. The score obtained in the second stage is 88 with a percentage of 88% and is included in the "Very Eligible" criteria. The comments given by the validator are that the media is good.

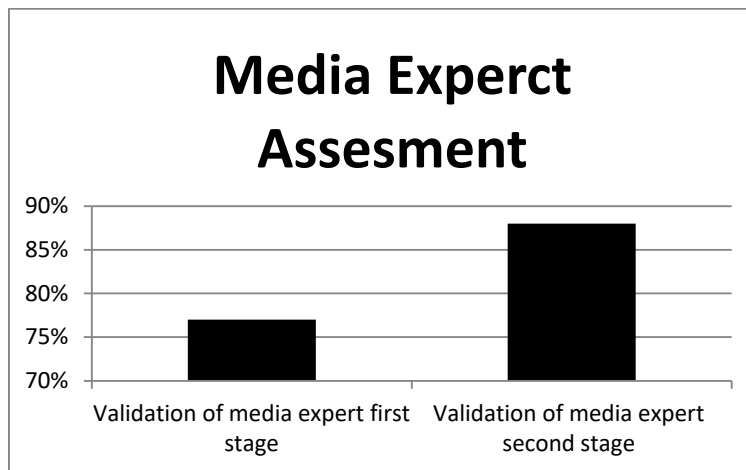


Fig.1. Results of Phase I and II Media Expert Assessments on ICT-Based Audio Visual Learning Media

Individual Trial

The media that has been validated by material experts, media experts and teachers will then be tested on 3 elementary school students. This trial was conducted in May online via google form. The percentage of eligibility is 93.3% and is included in the "Very Eligible" criteria.

The media has been validated by material and media expert validators, then the next step is the media will be tested in small groups to class III-A students, totaling 9 students. Small group trial sampling of 9 people was based on a situation where students in class III-A only had 12 people who had cellphones, so that only they were able to help researchers carry out research. Therefore, the researchers divided the 12 people into two groups, namely 3 people for individual trials and 9 people for small group trials. The small group trial of 9 people consisted of various abilities, namely, high, medium, and low.

Discussion

ICT-based audio-visual learning media is a media development carried out by the researchers themselves, the process of making it has been completed. The developed media contains material for grade III elementary school students contained in the thematic book theme 7 on Technological Development, sDevelopment of Food Production Technology in learning 1. This thematic learning is in accordance with the 2013 curriculum that has been set and used by the school where the research is conducted. This learning media is edited through one application, namely Power Director which is downloaded using a cellphone.

Before editing, the researcher looked for and collected various materials that were needed in making media, be it pictures, teacher animations, and others. As the title suggests, this audio-visual learning media is in the form of a video containing grade 3 material, the initial appearance contains the title of the material according to the thematic book, then there are basic competencies, learning objectives, the content of thematic material, namely from SBdP lessons, Indonesian Language, and Mathematics and ends with the closing and editor's bio. This learning media lasts 9 minutes 31 seconds and will be packaged into a CD to be used by teachers at the school where the study is located.

Setyawan and Arumsari (2019:) argue that with the development of information technology, teachers are required to be more creative in delivering learning materials using appropriate learning methods and media so that students are able to understand what they are learning, one of which is audio-visual media, slide shows and films. If previous research developed audio-visual media for slide shows and films, the researchers developed audio-visual media in the form of video.

Tic-based or multimedia-based learning media has the advantage that it makes students more active, it also makes it easier to understand lessons independently anytime and anywhere. This is in line with the opinion of Paseleng and Arfiyani (2015) who say that multimedia-based learning media will make students more active, independent, and more attractive to students. The advantages of media developed by researchers are that it can be used anytime and anywhere. only because audio visual video media can be stored on a mobile phone or tablet without using special tools such as a projector to display it. In addition, this audio-visual media also has material that is not only delivered verbally, but also displays pictures according to the material discussed so as to help students understand the world and their environment.

According to Fitria Ayu (2014) states that the benefits of using audio-visual media can convey learning content, because with the presence of audio which allows students to receive messages through their hearing, and visuals that allow students to capture material through sight. Similarly, in this study, the media developed was useful for conveying the content of learning materials through audio and visual, with these two elements students would focus and understand the learning material presented.

In developing the media, it must have weaknesses, but with suggestions and criticism from experts, these weaknesses are minimized by revising the product (Sugiyono, 2013). The purpose

of developing this media product is to find out whether the developed media is suitable for use in learning activities so that it is useful for students to more easily understand the lesson.

Based on the assessment of the relevance of the material, practicality, and language used in the learning media, the percentage of eligibility is 84% with very feasible criteria from material experts. While the aspects of appearance, content, and language of the learning media obtained a feasibility percentage of 77% with appropriate criteria from media experts for stage I and obtained a feasibility percentage of 88% with very feasible criteria from media experts for stage II. Furthermore, individual and small group trials were carried out in order to see the response of students whether the learning media developed by the researchers was interesting and fun to make it easier for them to understand the subject matter. The individual trial obtained a feasibility percentage of 93.3% with very good criteria, while the small group trial obtained a feasibility percentage of 91.1% with very good criteria.

4 Conclusion

Based on the results of the research and discussion above, it can be concluded that ICT-based audio-visual learning media can be said to be very feasible to be used in learning activities in elementary schools. The results obtained through the assessment of the material experts obtained a feasibility percentage of 84% with the "Very Eligible" criteria, while the media experts in the first stage obtained a feasibility percentage of 77% and were included in the Eligible criteria and there were revisions. The second validation stage carried out by media experts obtained a feasibility percentage of 88% and was included in the Very Eligible criteria. Furthermore, individual trials obtained a feasibility percentage of 93.3% with the "Very Eligible" criteria and individual trials obtained a feasibility percentage of 93.3% with the "Very Eligible" criteria. So it can be concluded that ICT-Based Audio Visual Learning Media is very feasible to be used in learning activities.

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