

## **VALIDITY ANALYSIS OF ANIMATED VIDEOS BASED ON SPARKOL VIDEOSCRIBE AS DIGITAL LEARNING MEDIA**

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### **ABSTRACT**

The lack of diverse creativity of educators in using learning media makes students feel bored with learning. Moreover, the rapid development of technology makes students more creative in using digital devices. Therefore, prospective teachers must have basic abilities in developing digital learning media to meet students' digitalization needs. This research was conducted to find out the validity of the Sparkol Videoscribe learning media as a digital learning media on the subject of movement in objects. This type of research is Research and Development (R&D) which is modified and developed through research procedures. This research uses the development of the ADDIE model. This development stage uses validation by videoscribes and Material Experts. The validity of the media was assessed through a questionnaire given to 2 Material Experts and 2 videoscribes. Based on the questionnaire given, the percentage of validation assessments by videoscribe 1 and videoscribe 2 was 88.66% and 95.7% respectively. In this way, the Sparkol Videoscribe learning media was categorized as "very valid" by videoscribes. Meanwhile, the validation assessments for Material Expert 1 and Material Expert 2 obtained percentages of 90.7% and 91.7% respectively, or the "very valid" category. Based on the expert's assessment, it was concluded that the Sparkol Videoscribe was worthy of being tried out.

Keywords: Media; validity; sparkol videoscribe

2018; 569). According to Suncaka (2023; 47)

### **PRELIMINARY**

Efforts to improve the quality of education continue to be carried out both conventionally and innovatively. According to Muslimin & Kartiko (2020: 76) education is the main basis of a nation and state, especially for developing countries. However, in reality the quality of education has not shown the results as expected. The quality of Indonesian education is still considered very low by many groups, especially in the fields of Mathematics and Natural Sciences (Masjaya & Wardono,

and Dewi, U. M. (2023; 15) and Zahara, dkk (2024; 315) There are two problems in education, namely problems in the macro scope and micro scope. One of the areas that occur in micro problems is learning methods that tend to be monotonous and learning media that are not creative. The lack of diverse creativity of educators in using learning media makes students feel bored with learning (Mujtahid, dkk, 2024; 80).

Students' abilities and habits in using digital devices lead students to learning

innovations that are far different from what teachers always present in class. Digital developments have brought changes in the way students are more likely to use existing digital media, while teachers in the classroom still present learning in conventional ways (Sinaga, 2024; 48) and (Novita, dkk 2024; 31). This fact raises hopes in the world of education that future teachers will be able to provide the latest digital learning media in the classroom. Therefore, prospective teachers must be equipped with an understanding of the use of digital learning media to be applied in future classes (Sukaryandi et al, 2021: 2) and (Mutakin, 2022: 3).

In this regard, using digital learning media as a micro-reflective learning resource in micro teaching classes for prospective teachers is one effort that can be made to provide changes in the learning system in the future. Digital learning media can be used as the main facilitator in improving education in Indonesia because appropriate digital learning media will increase the effectiveness and quality of the teaching and learning process (Lukman, I. R., & Ulfa, A. M, 2020).

One application that can be developed into a digital learning medium is Sparkol Videoscribe. Sparkol videoscribe is a form of digitalization that can be adapted into learning media in the form of interesting animations (Purba, et al, 2022: 2). Through learning media, animated videos will provide a new nuance in the teaching and learning process in the classroom. Teacher creativity in presenting interesting animated videos can increase student motivation and learning outcomes (Hidayat, dkk 2024; 18).

Students' abilities will also increase if learning is presented with a real approach that fits their daily lives. Students will understand the concept of material better if the presentation is given contextual problem and has the possibility for students to experience

them in their daily lives (Rodiyana, et al, 2019: 578). Efforts to find ideas and concepts are carried out by utilizing reality and the environment that is close to students also known as a realistic approach. According to Rodiyana, et al (2019: 579) and Setiawan, T. (2023: 87). A realistic approach will make it easier for students to understand the problems given by the teacher.

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Students' abilities will also increase if learning is presented with a real approach that fits their daily lives. Students will understand the concept of material better if the presentation is given problems that are contextual and have the possibility for students to experience them in their daily lives (Rodiyana, et al, 2019: 578). Efforts to find ideas and concepts are carried out by utilizing reality and the environment that is close to students or also known as a realistic approach. According to Rodiyana, et al (2019: 579) and Setiawan, T. (2023: 87). A realistic approach will make it easier for students to understand the problems given by the teacher.

Based on the description above, to provide interesting learning media that can be used as a reflective micro learning resource in micro teaching to form professional teacher candidates, it is necessary to develop animation-based learning media using Sparkol Videoscribe animation through a realistic approach to display each problem in

contextual form according to students' daily lives. It is hoped that further development of digital learning media can be used in reflective micro-learning for prospective teachers so that prospective teachers can apply the media developed in schools and improve student learning outcomes.

## METHODS

This research is development research (Research and Development) with innovative work techniques used to make certain items. The approach used is quantitative and qualitative descriptive to measure the feasibility, practicality and effectiveness of the product being developed.

The development model used in this research is the ADDIE Model (Analysis, Design, Development, Implementation, Evaluation) (Suratnu, R, 2023: 265) and (Moral, R., et al. 2023; 44). However, this research is limited to the development stage only, namely validation by experts.

The next stage that is carried out after the Sparkol Vidioscribe learning media has been developed is to carry out a validity test by asking videoscribe validators and Material Experts to fill in a validation sheet to obtain the level of validity of the Sparkol Vidioscribe learning media created. The validity weight of the Sparkol Vidioscribe learning media uses a Likert scale as presented as follows.

Table 1. Validity Assessment

| Category         | Score |
|------------------|-------|
| <b>Very Good</b> | 4     |
| <b>Good</b>      | 3     |
| <b>Not Good</b>  | 2     |
| <b>Very Bad</b>  | 1     |

Sources: (Sugiyono, 2018)

Determining the validity value of the Sparkol Vidioscribe learning media developed by using the following formula.

$$V = \frac{\text{Value of questionnaire result}}{\text{Max Value of the questionnaire}} \times 100\%$$

Through the formula and validity calculations, the validity level criteria use the conditions below.

Table 2. Validity Criteria

| Validity Value (%) | Validity Criteria   |
|--------------------|---|
| 85 -100            | Very valid, or usable without revision                                |
| 70 - 85            | Valid, or usable but needs minor revision                             |
| 50 -70             | Not valid, not recommended to use it because it needs major revisions |
| 0 -50              | Invalid, or may not be used   |

Rahmata dan Ekawati (2021: 32- 44)

## RESULTS AND DISCUSSION

The learning media development carried out in this research used the ADDIE development model. However, this research is limited to the development stage only, namely validation by media and Material Experts. The following is a description of the stages in developing Sparkol Vidioscribe learning media.

### 1. Analysis Stage

The analysis stages carried out are as follows:

#### a. Performance Analysis

In this stage, according to Ong Jr, D. (2024; 5) the basic problems faced in learning begin to emerge, namely the learning resources used by the teacher are only textbooks.

#### b. Student Analysis

Student analysis is carried out to determine the characteristics of students based on the development of their knowledge and skills. In this research, student analysis was carried out as an effort to obtain diversity

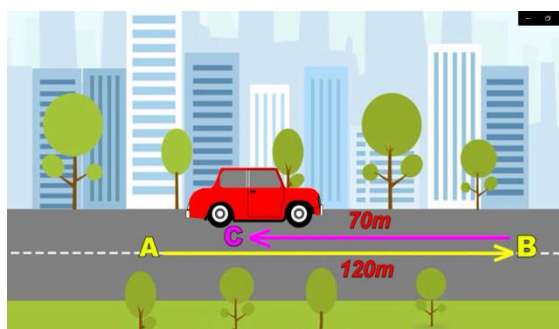
in student abilities. The analysis results obtained are used as a reference for developing learning media that suits students' abilities. According to Hamidi, A dkk (2024; 824) what is obtained in the student analysis process is 1) Learning by student characteristics; 2) The learning process by student characteristics; 3) Competence and ability of students in participating in learning; 4) Increasing student competence and abilities by the Sparkol Videoscribe learning media development form.

### 2. Design Stage

The next stage is designing Sparkol Videoscribe learning. The steps begin with determining the material, form of animation, type of letters used, language appropriate to the teaching material, and size of writing (Gofur, dkk 2024; 5). The design of the learning outcomes evaluation instrument in the form of essay questions was carried out after designing the teaching materials and created in the Sparkol Videoscribe media.

### 3. Development Stage

The development of the Sparkol Videoscribe learning media was carried out based on the results of the analysis that had been carried out. The development stage included product creation and validation assessment by experts (Yulia, dkk. 2023; 3970). Development of Sparkol Videoscribe learning media on the aspect of content suitability, adapted to learning objectives.



Picture 1. Sparkol Videoscribe Media Display

The learning media created with Sparkol Videoscribe consists of explanations of the material with animation, example questions related to the material and evaluation questions.



Picture 2. Sparkol Videoscribe Media Material

After the Sparkol Videoscribe media creation is complete, it is then assessed by the validator. According to Kharisma, dkk (2024; 3535) and Masuwai, dkk (2024; 4) the assessment from the validator aims to determine the quality of the learning media that has been developed. The validators in this research consisted of videoscribe validators and Material Experts, each consisting of 2 people. The videoscribe validator is a lecturer in informatics engineering at Samudra Langsa University, Aceh. Meanwhile, the Material Expert validators consisted of physics education lecturers and science teachers at SMPN 1 Dewantara, North Aceh.

Media validity assessment includes design, image layout and illustrations, grammar, and ease and benefits of use. The following are the validation results of 2 videoscribes

Table 3. Aspects of Videoscribe Assessment

| Assesement   | 1 <sup>st</sup>   | 2 <sup>nd</sup>   |
|--------------|-------------------|-------------------|
| Aspects      | Videoscribe Score | Videoscribe Score |
| Video Design | 49                | 51                |

|                         |           |           |
|-------------------------|-----------|-----------|
| Layout and Illustration | 29        | 28        |
| Language Presentation   | 31        | 33        |
| Ease of Use             | 28        | 28        |
| Benefits of Use         | 26        | 26        |
| Sum                     | 163       | 166       |
| Mean                    | 0,8858    | 0,9021    |
| Percentage (%)          | 88,6      | 90,2      |
| Category                | Very Good | Very Good |

Based on the table above, the percentage of Sparkol Videoscribe learning media in videoscribe validation 1 is 88.6% in the "Very Valid" category and the percentage of videoscribe validation is 90.2% in the "Very Valid" category. Based on the validation test results of videoscribe 1 and videoscribe 2, the Sparkol Videoscribe learning media developed is very valid from validation calculations.

Assessment of material validity includes material content, presentation and communication of material, and learning strategies. The results of the Material Expert validation can be seen in the following table.

Table 4. Aspects of Material Expert Assessment

| Assement Aspects               | 1 <sup>st</sup> Material Expert Score | 2 <sup>nd</sup> Material Expert Score |
|--------------------------------|---------------------------------------|---------------------------------------|
| Animated video content         | 66                                    | 69                                    |
| Presentation and communication | 21                                    | 19                                    |
| Learning strategies            | 15                                    | 14                                    |
| Sum                            | 102                                   | 102                                   |
| Mean                           | 0,879                                 | 0,879                                 |
| Percentage (%)                 | 87,9                                  | 87,9                                  |
| Category                       | Very Good                             | Very Good                             |

Based on the table above, the percentage of Sparkol Videoscribe learning media in Material Expert validation 1 is 87.9% with the "Very Valid" category and the percentage of Material Expert validation 2 is 87.9% with the "Very Valid" category. Based on the validation test results of Material Expert 1 and Material Expert 2, the Sparkol Videoscribe learning media is very valid.

Based on the validation results from media and Material Experts, it was concluded that the digital learning media-based Sparkol Videoscribe learning media developed was suitable for testing with students. It is in line with the research results obtained by Sirait & Sitohang, (2023:11876) an Indriani,dkk (2024;, which stated that the validation results by media expert lecturers and material experts were in the very suitable category to be continued in testing the practicality and effectiveness of media. Sitepu & Siregar (2023:298) also stated that the Sparkol Videoscribe animated video developed was suitable for testing in school although several things needed to be improved by the suggestions given by the validators for the animated video developed.

**CONCLUSION**

1. Conclusion

Development of Sparkol Videoscribe learning media on the subject of motion in objects using the ADDIE model. However, in this research, media development was limited to the validity of the experts, namely 2 videoscribes and 2 Material Experts. Based on the validation results from each selected expert validator, the developed Sparkol Videoscribe learning media received a videoscribe assessment of 1 with a percentage of 88.6% with very valid criteria, and media expert validation 2 assessed with a percentage of 90.2% with very valid criteria. .

Furthermore, the validation of Material Expert 1 and Material Expert 2 respectively provided an assessment with a percentage of 86.20% and 88.79%. In other words, the assessment of Material Expert 1 and Material Expert 2 categorizes learning media sparkol videoscribe on the subject of motion in objects is very valid. Based on this, the Sparkol Videoscribe learning media as a digital learning media regarding the movement of objects is declared valid and suitable to be tested on students.

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