

Focusky: What is The Product Validity Level for High School Students

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ABSTRACT

The use of instructional media that suits students' needs becomes a problem in biology learning in high school, especially in protist material. This is because the teacher is not skilled in getting and developing media to support learning that suits students' needs. Although suitable learning media are provided, teachers still have difficulty using it, let alone develop it for other processes. One solution is to develop learning media using the "Focusky application" which is equipped with user manuals. Focusky will be one of the media that can stimulate student interest in learning. Focusky's advantage is its "drag and drop" method. The purpose of this study is to produce a Focusky-based media that is equipped with a guidebook on protist material for high school students, which is valid. The research subjects were two biologists at FMIPA Universitas Negeri Padang, and one biology teacher as a practitioner. Primary data in the form of validity values, obtained directly from research subjects using a validation questionnaire. Based on the analysis, Focusky's media was declared valid with an average value of 88.82%.

Keywords: *Validity, Focusky, Guided Book*

1. INTRODUCTION

Learning media is one component of a learning system that has an important role. The learning media functions to help learning be more effective in achieving goals and efficient in aspects of energy, time, and cost[1], where in recent years the development of media in learning is very fast[2]. Based on observations and interviews with education practitioners in one of the secondary schools in West Sumatra, information was obtained related to the use of media in learning Biology. Commonly used media are Microsoft PowerPoint, videoscribe, YouTube, laboratory equipment, torso, the environment, books, blackboards, and student worksheets.

Learning media available in schools are very diverse, but not all are practical and effective for teachers and students to use. The use of conventional media will create monotonous learning for students. Monotonous use of media influences students' interests, concerns and motivation. In fact, monotonous learning can reduce student creativity[3]. We observe this through changes in student behavior, such as yawning, supporting the chin, chatting, many students going in and out of class, using cell phones in learning, and scribbling on paper. The use of media in learning should be able to arouse desires, new interests, motivation, stimuli to learn, and even foster psychological influence on students[4].

The reason for the use of monotonous learning media is the teacher's skill in developing, and obtaining learning media. Most teachers utilize learning media without considering its impact on students. Teachers should have sufficient skills to design, develop, and utilize learning

media, so as to increase students' interest, attention, and motivation to learn[5]. There are several criteria in designing learning media, so that learning objectives are achieved. These criteria must be in accordance with the target media[6]. Learning media criteria that need to be considered are learning objectives, conformity to the material, student characteristics, student learning styles, environment, and availability of physical environment[7]. Each student certainly has a different learning style. Learning style is a way of learning students with their respective characters[8]. The teacher should know the learning styles of students, in order to be able to apply appropriate techniques and strategies in the use of instructional media[9]. In that school, the majority of learners' learning styles are 56.7% visual. Furthermore, 33.3% audio and 20% kinesthetic. This data is reinforced by the teacher's statement that students are more interested in learning if teaching material is delivered through animation. Adjustment of learning styles will increase learning initiatives[10]. Presentation of teaching materials through learning media will be more effective and helped by knowing students' learning styles[9].

Overall, learning success depends greatly on the success of teacher designing and delivering teaching material. As a result, students' perceptions of the level of difficulty of the subject matter emerge. As many as 66.70% of students stated that Protista material was difficult to understand, 63.30% of students chose Virus material, and 56.70% of students chose Archaeobacteria and Eubacteria material. The results of these observations are supported by the results of teacher interviews stating that students have difficulty understanding microscopic material, such as Viruses, Archaeobacteria and Eubacteria, and Protista.

Some of the difficulties of Protista's material are grouping objects, interpreting images of object characteristics, using scientific names in species, and microscopic objects, so students cannot interpret the material. Difficulties in understanding Protista material are also caused because there is no original object[11]. Judging from the presentation of the material with instructional media, some weaknesses include the lack of presenting examples, presenting very concise material content, presenting material verbally, and displaying simple instructional media designs. Whether we realize it or not, the use of instructional media has an effect on increasing students' understanding in the delivery of teaching material[7].

Learning media should be able to facilitate teachers in delivering subject matter. So that goals can be achieved by students[12]. A media is needed to realize the abstraction to be contextual. The Focusky application is a solution for developing Protista material learning media. At the school, the Focusky application has never been applied to students, nor has it been developed by teachers. Focusky functions to produce learning media with the advantages of transition effects and drag and drop methods. In addition, Focusky is more powerful and attractive and can be used online and offline[13]. The advantages of the application are alternative solutions to provide indirect observation experience for students.

Development of instructional media using the Focusky application certainly requires a guide in the form of a book, to help users use it. The guidebook also aims to guide users to develop media. This was supported by Setiawati and Handayani's research[14] that the guidelines provide a positive response to their easy and useful use. Based on literature studies in the Biology Department Library, Universitas Negeri Padang, it is known that there are no researchers who have developed instructional media equipped with guidebooks, so that it becomes an innovation for researchers and solutions for teachers who have difficulty developing instructional media and need guidance.

Based on literature observations on the internet and in bookstores, obtained information related to textbooks making learning media using the Focusky application. Idaharyani has published a guidebook that is relevant to the title "Cara Mudah Membuat Media Pembelajaran Interaktif dengan *Focusky*"[13]. Weaknesses in the book are the black and white content of the book in the presentation of images, the guide used still uses the Focusky application version 2.8.1, the guidance provided is only in the form of how to use the available tools, and does not yet present ways of making learning media as a whole and specifically in one product. The purpose of this study is to produce a valid learning media using the Focusky application complete with guidebooks on Protista material.

2. MATERIALS AND METHODS

This research is a development. Design development is a model of the Instructional Development Institute (IDI) through the stages of defining, developing, and evaluating[15]. This research aims to produce a product that can help facilitate and overcome the problems faced by teachers[16]. This research was conducted at the Department of Biology, Faculty of Mathematics and Natural Sciences, Universitas Negeri Padang, and at SMAN 2 Batang Anai. The study began in April to June 2019. The research subjects were two education experts at UNP and one biology teacher at SMAN 2 Batang Anai. The object of the research is learning media using the Focusky application, complete with a guidebook on the material protists. Research data is the validity value obtained directly through the provision of instruments to research subjects. Validity data is obtained by analyzing the validity test questionnaire that has been filled out by the validator.

3. RESULT AND DISCUSSION

Based on research that has been carried out with aspects of the appraisal of content, linguistics, presentation, and graphics, the results are obtained according to the following figure. The results of data analysis show that the product has a validity value of 88.82%, with a valid category.

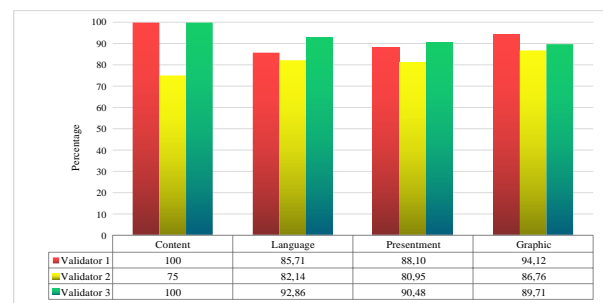


Figure 1. Data Result Distribution

The worthiness of the product content has a validity value of 91.67%, with a very valid category. This shows that the product is in accordance with the demands of basic competencies, indicators of achievement of competencies, and learning objectives. Making instructional media must pay attention to compliance with competencies based on the applicable curriculum[17]. Our assumption, good content worthiness can improve learning outcomes. Good learning media can improve learning outcomes as well[18].

The product language has a validity value of 86.90%, with a valid category. This shows that the product developed has an exact, clear, and simple sentence structure in accordance with good and correct writing rules. Sentences

used in learning media must be simple, clear, and effective so that students can easily understand them[19].

Presentation of instructional media has a value of validity of 86.51%, with a valid category. This shows that the product developed is in accordance with the indicators and learning objectives. In addition, the completeness of teaching materials is in accordance with the order of the indicators so that students can learn systematically and directed. Presentation of material or content of instructional media is very dependent on the competencies to be achieved[20].

Graphic of learning media has a validity value of 90.20%, with a very valid category. This shows that the design of

4. CONCLUSION

Based on the results of research and discussion that has been presented, it can be concluded that the learning media using the Focusky application equipped with a manual on Protista material are declared valid, both in terms of content worthiness, linguistic, presentation, and graphic with an average validity value of 88.82%. Teachers can use instructional media using the Focusky application with a guidebook on Protista material for high school class X students in the learning process as an alternative learning medium. Further research can be done on other material because this research is limited to Protista material and can be continued with practicality and effectiveness tests.

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