



Development of E-Module Media on Learning to Make Body Proportion Images in Class X Fashion Design SMK Negeri 1 Buduran

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Abstract

Media Learning is an educational instrument to support the learning process. The purpose of this study is to determine the process of developing E-Module media, the feasibility level of E-Module media, and student learning outcomes after applying E-Module media to learning to make body proportion images. This research uses Research and Development (R&D) research with the ADDIE development model. The data collection technique used feasibility validation with 2 media validation experts and 2 material validations as well as tests by students in class X fashion with a total of 36 students. The data analysis technique used is an assessment of media feasibility and student learning outcomes. The results of the E-Module media feasibility level research on learning to make body proportion images were declared very feasible with a score of 4.25. Student learning outcomes in learning to make body proportion drawings are shown with classical percentages of 97% complete and 3% incomplete. E-Module learning media with very feasible categories can improve student learning outcomes in learning to make body proportion images in class X of SMK Negeri 1 Buduran.

Keywords: Learning Media, Eligibility Level, Learning Outcomes, Body Proportion Image Making

Introduction

Education is one of the basic needs for individuals to improve their quality and contribute to the growth of a country's human resources. In accordance with Law No. 20 of 2003, education aims to create a structured learning situation where students actively increase their potential in aspects of personality control, religious knowledge, intelligence,

and skills to have an impact on themselves, society, and the nation (Quraishi et al., 2024). Skilled human resources are developed through the educational curriculum of Indonesian educational institutions, and what is currently applied is the independent curriculum (Palangda et al., 2023). The independent curriculum requires teachers in the learning process to be more creative in delivering the learning so that students will be motivated and the learning process runs effectively (Palwati et al., 2023).

One of the State Vocational High Schools that has implemented an independent curriculum is SMK Negeri 1 Buduran located in Sidoarjo Regency. Class X students are required to excel in basic design subjects in phase E, namely the elements of fashion drawing. In phase E, students are expected to be proficient in drawing body proportions as a result of learning fashion drawing. Learning to make body proportion drawings is very important in basic design subjects, body proportion drawings can be used in making fashion designs so that the design making process can be more proportional and attractive. According to observations and conversations with teachers and students of SMK Negeri 1 Buduran on 22/08/2022, it was found that many students had not reached KKM in making body proportion images. Based on the analysis of student learning outcomes in learning body proportion images in the 2022-2023 academic year, it is relatively low in grade X fashion 3 students with a percentage of 67% incomplete, namely as many as 24 students with a score range of 60-74 below KKM. Students who score above 75 can be said to meet the KKM.

Teachers must design learning media to support the delivery of material to students to increase understanding and acceptance during the learning process. Djamarah and Zain (2010: 121) explained that learning media as a tool used to convey messages to achieve learning objectives. The use of teaching media can directly impact the level of student involvement to acquire new knowledge and improve their academic performance in teacher teaching. The learning process of making body proportion images in class X clothing in phase E at SMK Negeri 1 Buduran uses handout media as a teacher learning medium to convey the material to be delivered. The handout media used in class X body proportion learning of SMK Negeri 1 Buduran contains material in the form of a comparison of body proportions $71/2.8$, $1/2$, and $91/2$. The results of interviews conducted by researchers by several students, students stated that in the learning process of making proportional images at SMK Negeri 1 Buduran became less than optimal due to factors including: (1) difficulty understanding experienced by students on the material taught due to the lack of material delivered on media handouts given by the teacher such as the absence of special instructions for the process of making body proportion images, so that student learning outcomes are low (2) The teacher frees students to explore learning materials independently so that the knowledge obtained by each student is different because students have the ability to learn speed that is not the same, (3) Learning to make body proportion images is one of the lessons that is considered complicated because there are several steps in Its making is quite confusing for the students. While in the handout media provided, there are no structured steps to guide students to draw body proportions according to the procedure properly and correctly.

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The rapid progress of science and technology has led to an increase in educational resources utilized in schools (Hamid et al., 2020). The use of media in new learning rooted in information technology has great potential for improving student learning outcomes because of its effectiveness and efficiency in disseminating knowledge (Logan et al., 2021). Electronic learning media can be accessed anywhere and anytime by students because of the format of technical network devices. The ease of use of technology as a learning tool provides benefits for the field of education. One study related to the use of electronic-based learning media conducted by Long and Szabo (2016) stated that there were significant changes after students used digital-based learning media. Students who use digital-based learning media experience a positive increase related to their motivation in reading the material listed on the media. E-Modules are digital learning tools that can be used to study body proportions. E-Module or electronic module is a digital educational tool that utilizes advanced technology such as computers to present a collection of curated materials, including images and animations, in an interesting way designed as an independent learning resource for students (Directorate of High School Development, 2017: 3). This is supported by research conducted by Arsyad (2013) E-Module is a digital educational media designed for use on computers and electronic devices. E-Modules have a different look compared to printed modules. Physical modules are processed and converted into modules in electronic form. Electronic modules offer advantages over printed modules because they contain multimedia elements such as images and animations that students can view many times.

Literature Review

E-Module media creation can be done through the Canva application (Vargas et al., 2022). According to Sony (2021) the Canva application is an online program that can help create various designs such as pamphlets, posters, brochures, resumes and so on (Dantas & Cunha, 2020). Using the Canva application is very easy to access through any device, and media creation will be easier and more creative. This media is in accordance with the independent curriculum that optimizes technology in the learning process (Knoop-van Campen et al., 2020). Based on the results of research conducted by Irawati (2020) electronic module-based biology learning media (e-module) that has been validated by experts, the e-module practicality test produces a "very practical" score with an average of 96% which shows high practicality to be used in the learning process.

Researchers have identified and tried to solve existing problems based on theoretical studies, following the background of the problems described, then researchers will develop and then apply E-Module learning media to learning to make body proportion images in class X SMKN 1 Buduran. Researchers will conduct a research entitled 'Development of E-Module Media on Learning to Make Body Proportion Images in Class X of fashion design SMK Negeri 1 Buduran'.

Research Method

This research is a development research with research and development (R&D) methods with the ADDIE development model. Tegeh, et al (2014: 41) stated that ADDIE is a methodical learning design model that emphasizes learning objectives, including the use of learning media. This type of research is qualitative and quantitative research with research subjects of 4 expert validators and 36 grade X students of SMK Negeri 1 Buduran. The research instrument was obtained through media validation sheets and materials regarding E-Module learning media and cognitive tests and learning performance tests for making body proportion images. . The data analysis technique used is the assessment of media feasibility scores by 2 material expert validations and 2 media expert validations, as well as the assessment of learning outcomes in Class X of fashion design Negeri 1 Buduran.

Results and Discussion

The E-Module media development process is carried out with the ADDIE development model. According to Sezer in Yudi and Sugianti (2020), the ADDIE model is a methodology that emphasizes examining interconnected components according to their respective stages. Tegeh et al. (2014: 41) describe the five phases of ADDIE research, including the stages of analysis, design, development, implementation, and evaluation. This research was conducted with the first stage being an analysis step, namely by analyzing the needs and problems in the student learning process, school curriculum, student characteristics, and learning materials. The second stage is the design stage by designing the product concept to be developed. The third stage is development. by developing the E-Module framework into a comprehensive draft of the E-Module until it is validated and has been tested (Alp Christ et al., 2022). The fourth stage is implementation, namely by applying the media developed to real learning, the fifth stage is evaluation. This stage is carried out by identifying student learning outcomes after the implementation of E-Module media, so that student learning outcomes can increase and students are helped by the E-Module media. This research proves Iriani's (2020) statement in her research that E-Modules are used to achieve educational goals quickly and successfully. E-Modules involve students in the learning process by providing ease of access, supported by appropriate resources, and without causing difficulties for students.

The feasibility level of the E-Module learning media on the achievement of making body proportion images developed in this study received criteria of 4.25 (very feasible). Mardapi (2015) suggests that a media development is said to be very feasible in terms of validity if the results obtained exceed 4.1. As for the research conducted by Kuswidyaningrum (2022), the learning media E-Modul Sanggul Gala achieved an average validity score of 3.56 which shows a fairly good level. The validation results show that the learning media E-Module Sanggul Gala produced by researchers is considered very good and suitable for use.

Student learning outcomes obtained after applying the E-Module media in the form of making body proportion drawings were declared complete with a classical percentage of 97%. This research proves Teni's (2018) statement in his research that the advancement of educational media leads to improved learning outcomes of students. Student learning outcomes can

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increase with the use of E-Modules on subjects, thereby improving learning outcomes and increasing student involvement in the learning process (Nur, et al 2021). This is in line with research conducted by Nadia in 2023, The learning outcomes of class XI Garment Fashion Design students by utilizing the E-Module make patterns considered complete, with a success rate of 97%.

Conclusion

Based on the results of the analysis and discussion "Development of E-Module Media on Learning to Make Body Proportion Images in class X fashion design SMK Negeri 1 Buduran", conclusions can be made including: (1) The E-Module development process uses the ADDIE development model which consists of five stages, including, Analyze, Design, Development, Implementation, and Evaluation. The results stated that the E-Module media developed in the category was very feasible as a learning medium and student learning outcomes increased with the use of E-Modules in making body proportion images in class X of SMK Negeri 1 Buduran. (2) The feasibility level of the E-Module learning media on the learning outcomes of making body proportion images carried out at SMK Negeri 1 Buduran Sidoarjo proved to be very feasible after going through a series of media and material validity assessments by obtaining an average result of 4.25 categories very feasible with several revisions that have been carried out in accordance with validator suggestions. (3) The results of student learning in learning to make body proportion images in class X Fashion Design 4 SMK Negeri 1 Buduran Sidoarjo obtained after applying the E-Module media through cognitive and psychomotor tests were declared complete with a classical percentage of 97% as many as 35 students who obtained scores more than 75 and an incomplete category with a classical percentage of 3% as many as 1 child.

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