Digital Media as a guide for Beauty Gymnastics in increasing student motivation during the COVID-19 Pandemic

Aniesa Puspa Arum[1]

Suyitno Muslim[1]

Jarudin[2]

[1] Department Education Technology, Universitas Negeri Jakarta, Indonesia
[2]Department Information Technology, Institut Teknologi dan Bisnis Bina Sarana Global, Indonesia

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Aniesa Puspa Arum[1],Suyitno Muslim[1],Jarudin[2]
[1] Department Education Technology, Universitas Negeri Jakarta, Indonesia
[2]Department Information Technology, Institut Teknologi dan Bisnis Bina Sarana Global, Indonesia
Email: aniesapuspa@unj.ac.id; suyitno@unj.ac.id; jarudin@global.ac.id

ABSTRACT

The study aims to develop digital media instruction to produce products in the form of digital media instruction in Beauty Gymnastics courses to increase students' learning independence. Subjects in this study included material experts, instruction media experts and students of the cosmetology study program. The number of content experts is one person, the number of media experts is one person, the instruction design is one person and students at the large group trial stage are 30. Data collection techniques in this study used a questionnaire. The questionnaire was used in the form of a closed questionnaire, a questionnaire with answers that have been provided so that respondents only need to choose. The data of this study was obtained from the distribution of material and media expert validation questionnaires and field trial questionnaires to assess the feasibility of digital media instruction that had been developed. The study results show that digital media can increase student motivation in independent learning during the COVID-19 Pandemic. Furthermore, project-oriented education positively impacts students' academic achievement more than direct teaching. The impact of project-based learning implementation on students' creativity and independence has also significantly increased.

Keywords: Digital media, independent learning, e-learning, motivation

INTRODUCTION

The new paradigm of education requires that educators play a role not only in transferring knowledge to students or simply memorizing but also as facilitators, instruction designers, mediators, and even managers in the classroom. Students are expected to memorize, understand, and master the learning content and to apply, analyze, evaluate, and even create something needed in the real world. The instruction media must follow the market's demands and needs so that the graduates produced can keep up with the times. Therefore, it is necessary to design instruction media by studying and understanding the development of information and communication technology today, one of which is the development of digital-based media instruction.

Digital media instruction is a form of effort to solve learning problems, especially in distance learning conditions during the covid 19 pandemic. For students to comprehend the information offered, the Beauty Gymnastics course learning should ideally be conducted face-to-face with demonstration methods and direct practice. Despite the limitations of the current situation and surroundings, the COVID-19 Pandemic has caused a paradigm shift in learning. Therefore, a student-centred learning approach must be designed and facilitated in such a way so that students can actively learn independently. Breakthroughs are needed to provide solutions by developing digital learning media, which are expected to reduce the independent learning process and increase student motivation.

Seeing the current conditions, innovative learning strategies are needed in the learning process, one of which is utilizing learning applications. First, develop digital learning media, adapting to the learning styles and characteristics of students of the digital native generation, where, according to (Prensky 2001), those born in the digital age environment. Digital learning media is a tool or intermediary; everything is used to channel messages from the sender to the recipient (Bastian et al. 2019), which is used in a series of planned and oriented events to achieve learning outcomes (Gagne, Briggs, and Wager 2005). Digital learning is a system that can facilitate students to learn more broadly, more, and more varied. Through the facilities provided by the system, students can learn anytime and anywhere without being limited by distance, space, and time.

The learning process has been impacted by seeing the current circumstances, where the COVID-19 Pandemic has not finished. Due to the limited face-to-face learning, there is difficulty in transferring knowledge and skills to students. This makes it a challenge for educators to develop a learning media that can facilitate and increase students' motivation and learning involvement in beauty gymnastics courses. One of them is the development of

digital learning materials, which, by utilizing scientific and technological advancements, increases student interest and engagement in studying beauty gymnastics while also adapting to their demands and way of life in the current era of digitalization. The development of digital learning media in the beauty gymnastics course is expected to align with the generation's needs for technology (digital native) so that the learning process is more effective and achieves the goals that have been formulated in the design of learning based on the development of a learning product or project-oriented.

Some research results show that project-oriented learning can increase students' satisfaction and interest in learning. This change can be seen in research conducted in 2012 on the application of project-oriented learning, which shows the overall level of student learning satisfaction is 9%, with an increasing trend(Cohen and Davidovitch 2020; Jiménez-Bucarey et al. 2021; Lin et al. 2018). Project-based learning enhances the standard of instruction and advances cognitive development at a higher level by allowing students to engage in difficult problem-solving and creative thinking while acquiring sophisticated techniques like independent study, planning, and communication.(Lasauskiene and Rauduvaite 2015; Veluvali and Surisetti 2022). More than direct teaching, project-based learning has a favourable impact on students' academic performance (Chen and Yang 2019; et al. 2016). The impact of project-based learning implementation on students' originality and freedom has grown significantly(Isabekov and Sadyrova 2018). In addition, learners have higher motivation in project-based learning (Lam, Cheng, and Choy 2010).

The results of (Efstratia 2014) state that there are several negative implications in project-oriented learning, so it is recommended that this learning be integrated with modern teaching, one of which is by utilizing technological advances, namely by using digital applications to support current learning media. Regarding the development of learning media, other research results state that in the development of digital learning, technology acts as an interaction medium and a tool for transferring information related to education. The essence of the implementation of online learning is how to choose a learning method that is assisted by technology to be able to deliver learning materials even though they do not meet face-to-face(Coman et al. 2020; Dhawan 2020). The development of this learning media is project-oriented in producing learning products. This teaching method can assist students in applying their knowledge from engineering and design courses to create real-world solutions and build both hard and soft skills(Kuppuswamy and Mhakure 2020).

This study aims to develop learning media to produce products in the form of digital learning media in Beauty Gymnastics courses to increase students' learning independence. Additionally, it is intended that the usage of digital learning media would aid in delivering messages to students and allow lecturers and educators to gauge the level of understanding of the content that students have acquired.

The quality of education itself, particularly the quality of learning, is one of the issues in education that should be addressed as a matter of priority. Developing student-focused knowledge is one of the efforts that may be made to improve the quality of the numerous situations and potentials. Building a learning system that enables students to learn in a more independent, interactive, and varied way is one way to implement learner-oriented learning. Based on the background described, the researchers consider that it is necessary to develop learning media that can assist educators in delivering learning materials to foster independence, motivation and learning involvement of students, one of which is by creating digital learning media in beauty gymnastics courses.

METHODS

This study uses the research and development method (Research and Development) Borg and Gall to produce digital learning media in beauty gymnastics courses. This research will be carried out until the product development stage. Then, there will be a validation process for material and media experts and students in large group trials. If the product is declared unfit, then the product design is improved. Still, suppose the product is displayed as feasible. In that case, the following research stage is the application of the effectiveness of digital learning media in beauty gymnastics learning and the evaluation of the use of digital learning media in beauty gymnastics courses. Limitations This research will only be carried out until the product trial stage in small groups, which is carried out by distributing instruments in the form of questionnaires to small group students and conducting performance tests in the form of skin beauty exercise movements which are assessed with performance instruments and using a performance assessment rubric.

Research subject

The subjects in this study include material experts, learning media experts and students of the cosmetology study program at the State University of Jakarta. As for the number of material experts as much as one person, the number of media experts as much as one person, the learning design expert one person and students at the large group trial stage as many as 30 people.

Data collection technique

This study's methods for gathering data included a questionnaire. The survey is closed, meaning the answers are already known, and responders must select one option. (Suharsimi 2016). This research data was obtained from

the distribution of material and media expert validation questionnaires and small group trial questionnaires to assess the feasibility of digital learning media that had been developed.

This study used a non-test instrument as a questionnaire that included (1) validation instruments from material experts and (2) validation instruments from learning media experts. In addition, researchers will use a Likert scale on each instrument where the material expert validation instrument and media expert validation are arranged in a statement with five answer choices. The questionnaires and value scales developed by Aiken and Lewis in this study are: (1) a numerical rating scale; and (2) a Likert rating scale. The following five answer choices exemplify these two value scales: (5) The answer is obvious/very appropriate/very appropriate/very feasible, very easy and very interesting, (4) The answer is clear/right/proper/decent, easy and exciting. , (3) The answer is quite clear/sufficiently appropriate/sufficiently appropriate/fair enough, relatively easy and quite enjoyable, (2) the answer is not clear/not appropriate/inappropriate/less relevant, less accessible and less attractive, and (1) the reply unclear/inappropriate/inappropriate/indecent, not easy/difficult and uninteresting.

In addition, other instruments that will be used are (3) small group test instruments in the form of questionnaires given to students and (4) when conducting a practice test for beauty gymnastics that is graded according to a rubric, non-test instruments in the form of observation sheets. To facilitate the preparation of research instruments, an assessment guide is needed in the form of a grid of assessment instruments as a reference for making instruments consisting of several aspects and indicators to be assessed and clear boundaries to facilitate the assessment process by informants.

Data analysis technique

This study uses quantitative data analysis techniques by processing data obtained from the Likert scale, using simple statistical calculations to calculate the percentage of the feasibility of the developed digital learning media. This study will employ two non-test instruments: (1) learning media expert validation instruments and (2) material expert validation instruments. The media expert validation and material expert validation instruments have five answer options, and the researchers will utilize a Likert scale for each instrument. In addition, small group trial instruments in the form of questionnaires given to students and non-test instruments in the form of performance sheets when conducting a practice test of beauty gymnastics movements were assessed using a rubric.

RESULTS AND DISCUSSION

Material specialists, instruction designers, and instruction media vouch for the validity of the instruction of digital material. The feasibility of the product being developed is determined by the findings of the expert team's validation. However, the effectiveness of the product being developed is determined by the findings of the group test with potential customers. The learning product can be used as a part of the beauty gymnastics learning guide to boosting student motivation during the COVID-19 Pandemic, according to the questionnaire data analysis and the assessments of the three experts on the feasibility of the extended learning digital media product. A complete description of the average percentage of the feasibility of digital learning media according to the validation of the three experts can be seen in Figure 1.
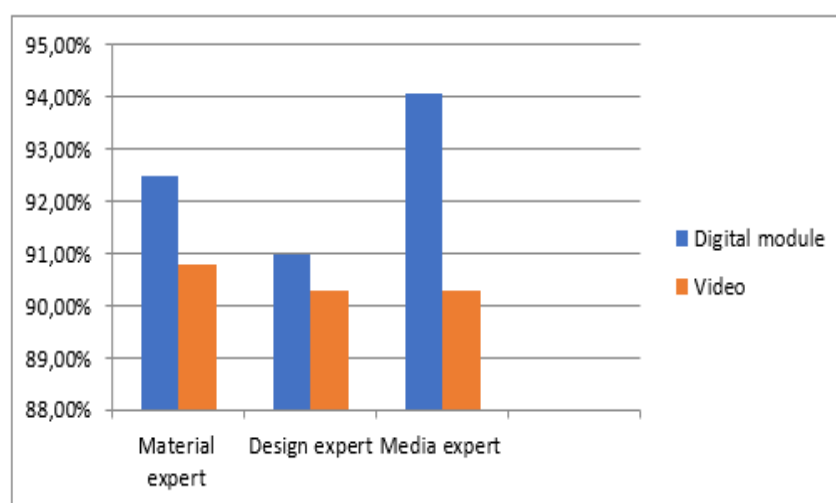

Figure 1. Expert Team Validation Test Results

Based on Figure 1, the average percentage of the feasibility of learning video analysis of the expert team's assessment questionnaire data is (90.80% + 90.27% + 90.28%)/3 = 90.45%. Based on the average percentage of

eligibility, it shows that the developed learning video is feasible to use without any revision suggestions from experts. Next, analyze the average rate of the feasibility of the digital module instruction data analysis of the expert team's assessment of (90.50% +90.97%+994.08%)/3 = 92.52%. The average percentage of eligibility shows that the digital module instruction developed is very feasible to use. There are several suggestions from the expert team that the layout of the images must be synchronized with the place, there is no need to frame each shot, the font size is made standard, the material is added about gymnastics and its development, the image size is adjusted to the actual or natural scale, and as well as digital modules are added with hyperlinks to make it easier for digital module users and integrated between digital modules and learning videos, after improvements were made according to the advice of the expert team, this digital module was approved and suitable to be used as a guide for students in conducting self-directed learning during the COVID-19 Pandemic to increase student motivation.

The field trial aims to evaluate how well digital learning resources accomplish predetermined learning objectives. Discover more about the teaching components, teaching materials, and display components. According to the number of pupils that showed up for the class, the trial was held with 30 students. Digital learning media are provided to learners, and they are given a chance to learn this because it is important to find any gaps or flaws in the content, goals, and learning outcomes of digital learning media. They were pursuing the initial objective of creating educational digital material to inspire students during the COVID-19 Pandemic. In addition, the criteria for field trials are conducting tests to see the results of beauty gymnastics learning by conducting initial tests and final tests, likewise, with the responses of students who learn to use digital learning media. The results of the pre-test field trials can be seen in Figure 2.
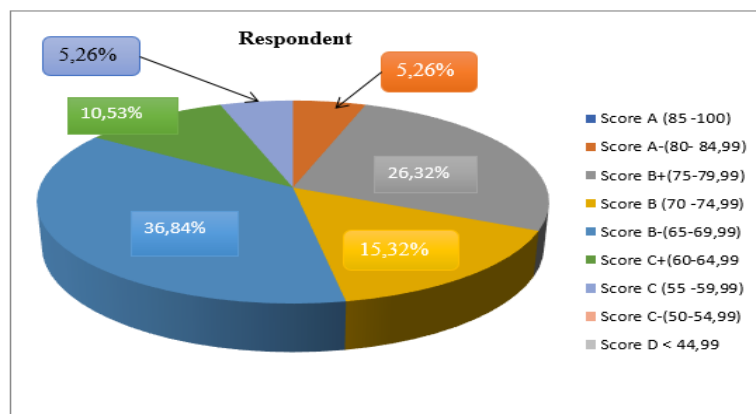

Figure 2:Pre-Test Results of Field Trials

According to Figure 2, field exams on 30 students produced the following findings: students who scored 85–100 (A) were 0%, students who scored 80–84.99 (A-) were 47.37%, and students who scored 75-79.99 (B+) were 46.32%.Students who scored 70–74.99 (B) were 15.32%, students who scored 65–69.99 (B–) were 36.84%, students who scored 60–64.99 (C+) were 10.53%, and students who scored 55–59.99. Conclusion: Nearly 60% of pupils receive ratings below the Minimum Completeness Criteria (MCC), which is set at 75. This suggests that you don't fully comprehend the subject. The results of the post-test field trials can be seen in Figure 3.
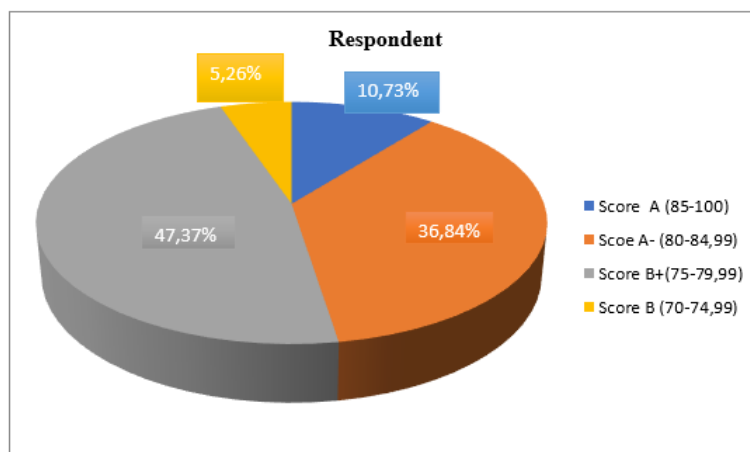

Figure.3:Field Trial Post Test Results

Based on the results of field trials on 30 students, it shows that students who score 85-100 (A) are 10.73%, students who get 80-84.99 (A-) are 36.84%, and students who score 80-84.99 (A-) are 36.84%. Students who gain 75-79.99 (B+) as much as 47.37%, and students who get 70-74.99 (B) as much as 5.26%, it can be concluded that all students 100% get grades A, A-, This B+ and B indicate a complete understanding of the material. Products developed at this stage are referred to as final products that are suitable for use by students.

The field trial's pre-and post-test results revealed an improvement in the post-test outcomes. As a result, it can be said that using digital learning resources to teach can boost student motivation and make such resources practical for use in independent study during the COVID-19 Pandemic. Furthermore, it may be deduced that learning with digital learning media can boost the motivation and efficacy of the products generated because the results of the initial and final tests in the field trials revealed an increase in the final test results.

The results of this study are supported by the opinion of (Nie et al. 2017), who states that digital media is effective in increasing study time, especially short breaks during the workday, new strategies for reading subject matter and low cost. This research is also supported by researchers (Sousa and Rocha 2019), who state that digital learning can drive skill development(Holtz, Kimmerle, and Cress 2018). It is also supported by researchers (Sartika 2017) that using digital media can inspire a student to develop their abilities, perform better, and feel more satisfied with their performance (Jarudin, Ibrahim, and Muslim 2020). Although it is becoming increasingly necessary for students to understand views and topics not covered in the curriculum, they still need to develop other kinds of support for learning through digital media (Cress et al. 2018). Learners who master social cognitive conflict resolution and constructive friction through digital media are essential for learning and knowledge creation (Bock et al. 2018).

Students' previous learning experiences and how they play a role in responses to e-learning experiences(Bayram et al. 2013; Li 2017). Stories are made more fascinating by objects that incorporate text, images, audio, and video aspects (Prasetya and Hirashima 2018). Successful learning (Rohman, Jarudin, and Khuzaimah 2020) can raise students' interest in, achievement in, and confidence in their education(Huang, Kuo, and Chen 2020; Kuo, Chen, and Hwang 2014; Taghizadeh and Hajhosseini 2021).

This research is also supported by researchers (Bajrami and Ismaili 2016). Using appropriate media can be improved and ensures student-centeredness, active involvement in activities, motivation and confidence in improving competence. They were also supported by researchers (Layona, Yulianto, and Tunardi 2017) to enhance students' understanding of the material. In addition, students generally believe that digital media can help them learn and attract their attention (Pérez et al. 2017; Robbins and Jones 2018).

Digital learning media is a tool or intermediary; everything is used to channel messages from the sender to the recipient (Bastian et al. 2019), which is used in a series of planned and oriented events to achieve learning outcomes(Wang et al. 2021). Digital learning is a system that can facilitate students to learn more broadly, more, and more varied. Through the facilities provided by the system, students can learn anytime and anywhere without being limited by distance, space and time. The learning materials studied are more varied, not only in verbal form but also in more varied forms such as text, visuals, audio, and motion

Gymnastics is a sport that involves the performance of movements that require strength, speed, and harmony of regular physical activities. One of them is in the beauty gymnastics course. Exercising has been proven to provide health benefits for the body. For example, regular exercise is beneficial for heart health. In addition, it helps lose weight, so it is said to be able to improve beauty because by moving, the blood flow or circulation becomes smoother so that it can improve body health and help maintain healthy skin

Regular exercise can help maintain healthy skin and improve beauty because the sweat from the skin pores will help bring out dirt, smooth blood circulation, and supply enough oxygen and nutrients to the skin, making the brain and body more relaxed. Therefore, it can provide benefits for the health of the body, namely overcoming acne. In addition, exercising can also trigger the production of endorphins, making the body feel calmer and happier. Furthermore, increased blood circulation due to exercise can also make hair stronger and healthier, and the increased production of collagen in the skin due to movement can cause a person to look younger.

According to one sports expert from America named Menke G. Frank in the Encyclopaedia of Sport(Zeigler 2009), he revealed that "Gymnastics is a collection of broad/many or comprehensive movements; Gymnastics is one of the various exercises that can be used to build or shape the muscles of the body, such as wrists, back, arms and so on. In addition, Gymnastics is one of the various types of somersaults, jumps, climbing and balance exercises.

The principles in gymnastics activities include: (1) Gymnastics exercise movements must always be planned, selected, and created by teachers, trainers, and even actors. (2) The selected gymnastics movements must be systematically arranged as a series of rounds, and (3) The preparation of the selection of these movements must be adjusted to the goals and needs of the gymnasts.

To be clear, the following is an example of an exercise that can be done alone or together. If there is plenty of time, it is better to do all these activities, but if it is the opposite, choose a few movements that are most sufficient or according to the situation. At least one-third, and do it every day with full awareness. Each exercise is repeated at least 3-5 times. If this is done perfectly, it is enough to maintain the body's condition and beauty.

In gymnastics, there must be a warm-up, core, and cool-down movements. Because if these three things are not done, the exercise that is done will not be applicable.

One of them is exercise or facial yoga poses, simple or natural ways to prevent premature ageing that can be done independently. Movements on the face are believed to train the 57 muscles of the skin, head, neck, and look so that the skin becomes firmer and smoother. In addition, if done regularly will also help reduce wrinkles while increasing blood circulation, relaxing muscles, and reducing stress.

CONCLUSION

The study's results stated that in the development of digital learning, technology acts as a medium of interaction and a tool for transferring information related to learning. The essence of the implementation of online education is how to choose a learning method that is assisted by technology to be able to deliver learning materials even though they do not meet face-to-face. The development of this learning media is project-oriented in producing learning products. Through the use of both hard and soft skills, this learning technique can assist students in applying what they have learned in engineering and design courses to create real-world solutions.

Project-oriented learning positively impacts students' academic achievement more than direct teaching. The impact of project-based learning on students' creativity and independence has increased significantly. Students have higher motivation in project-based learning. Technology is essentially a process to get added value from the products it produces to be helpful. By utilizing the development of information and communication technology, education can reach all levels of society. Therefore, topics or individuals with an interest in education must possess the ability to comprehend technology following their needs. The limitations of this research need to be material for evaluation. Further research needs to be done on how to do self-evaluation.

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