International Journal Of Education, Information Technology And Others (IJEIT)
https://jurnal.unibrah.ac.id/index.php/IJEIT
Vol. 3, No.3, December 2020

Developing Flipbook Multimedia For Learning Motion Photos Techniques For Vocational High School Grade XII

Akhmad Redi Salim*[1], Nurdin Ibrahim[2], Suyitno Muslim[3]

[1]Student Master of Education in Technology, Universitas Negeri Jakarta
[2,3]Lecturer at Universitas Negeri Jakarta
*Email: akhmadredis@gmail.com

Article Info
Article History:
Received: October 25, 2020
Revised: October 30, 2020
Published: December 2020
e-ISSN: 2623-2324
p-ISSN: 2654-2528
DOI: 10.5281/zenodo.4308119

Abstract
This research is motivated by the fact that the flipbook multimedia using the flipbook maker can make the learning process more effective and also automatically improve student learning outcomes in learning photography. This research develops flipbook media to improve learning on camera movement material based on size (framing) and angle of view (angle). The problems that will be examined in this research are; (1) Produce multimedia learning flipbooks for the subject of image taking, (2) Produce a suitable flipbook learning multimedia for the subject of photography techniques, (3) Produce an effective multimedia learning flipbook for the subject of drawing techniques. This research is a development research. This study developed learning media in the form of a flipbook to make the learning process more effective and to improve student learning outcomes in learning motion picture taking techniques. The data of this study were collected from students at Vocational High School in Tangerang grade XII as an object of research. In collecting data using questionnaire method and documentation. This research is using approacing ADDIE method. The validation results from material experts and media experts were carried out in 2 stages obtained very feasible criteria with a percentage of 85.56% and media experts of 85.56%. The acquisition of material practitioners' results is 90.00% and media practitioners 86.67%. For the response of students to learning media in the form of a digital book based on problem solving to get the score results for Tangerang Vocational High School at 85.00%.

Keyword: Flipbook, E-Book, Photograpy, Film maker

INTRODUCTION

The rapid development of science and technology has given birth to a group of people who are literate towards knowledge (*knowledge society*) and digital society. Globally, life can

be influenced by the development of science and technology. Some of the main characteristics of globalization are (1) there is no world boundary (2) science and technology and their applications have progressed in human life; (3) struggling for human rights (4) cooperation and competence (Agung, et.al., 2014).

The influence of this technological development does not only affect the way people interact and communicate, and in class learning is no exception. This is as stated by Rushby and Surry that web and multimedia technology has become a "transformative" technology, which not only provides information and social resources but also functions as a learning medium that allows students to learn better from one another. In addition, our ability to instantly access people and information has changed the way we learn. We no longer have to remember formulas or remember important dates, but we need to know how to organize the information we need for study and learning purposes.

In learning in schools, the teacher's role is how to design and organize all learning resources in such a way as to really support the learning process itself. In terms of educational technology, an important element to support the learning process is the learning media. Learning media both designed (*by design*) and used (*by Utilization*) (Sadiman, 2009). That is, learning media can be designed and created by themselves according to needs or media for which information is used related to certain learning.

According to Mayer (2021) "*people learn better from words and pictures than from words alone*"; people learn better from words and pictures than from words alone. This opinion becomes a strong basis for teachers and education practitioners to develop multimedia-based learning materials, namely learning that does not only consist of words and pictures, but combines all elements that can increase student understanding of the material presented. . Besides, technological developments also allow students to interact with these learning elements.

The combination of various learning elements is called multimedia which, when added with interaction capabilities, is called interactive multimedia. According to Mayer (2021), multimedia learning refers to the presentation of material using words and images, with the aim of promoting learning. One such interactive multimedia is themultimedia *Flipbook*. Multimedia *Flipbooks* are interactive electronic books that can contain files in the form of videos, moving images, or animations and sounds, so they will be very helpful in the learning process which can make students not bored in carrying out learning activities.

Song, Kalet, & Plass's research (2016) reveals that the use of multimedia learning directly has a positive effect on learning outcomes, self-efficacy, goal orientation, student performance performance. The findings of this study help develop a more comprehensive understanding of multimedia learning abilities to improve student performance. Other research conducted by Liew, Zin, & Sahari, (2017) also found that multimedia learning was able to increase students' enthusiasm and positive attitudes towards learning. The positive emotional response of students in learning in a multimedia environment is related to their enthusiasm for mastering learning.

Learning media in the form of aapplication *Flipbook* at SMK Mandiri 2 Balaraja has not been widely used in the material of motion picture taking techniques. Based on the author's interview with the Multimedia teacher of Class XII Multimedia at SMK Mandiri Balaraja, namely Mr. Rizky Istiono on January 25, 2020, it was revealed that the teacher had not developed interactive media on his own, because this required the ability to use the program for making interactive learning media. On the other hand, in this school the availability of various facilities that support and enable the use ofmedia *flipbook*. Although other media such asslides are available *PowerPoint, their* use is still insufficient and rare. The teacher still explains the material only from books, articles and videos obtained from YouTube. Based on the descriptions that have been described, the authors conducted research

on the development of learning media using theapplication *Flipbook* on the technique of taking moving motion pictures for class XII Multimedia at SMK Mandiri 2 Balaraja.

Based on the description above, the researchers consider it very important to develop multimedia learning in the form of aapplication *Flipbook* at SMK Mandiri 2 Balaraja in the subject of moving image capture techniques. Through learning to useapplication *flipbook* the research and development results, it is hoped that students will find it easier to understand related material and provide motivation for students to be more interested in the subject of moving image shooting techniques.

RESEARCH METHOD

The R&D development method adapted from the ADDIE research model is combined with Maye's (2021) multimedia principles.

RESEARCH RESULTS AND DISCUSSION

The results of the development of the model in this study are a learning resource in the form of a flipbook using the Kvisoft Flipbook Maker Pro 3.6.10 application developed from products that are already in the study. The model developed has been assessed by experts. In accordance with the research objectives, namely to develop a learning resource in the form of a flipbook on the subject of motion picture taking techniques.

This research is a type of development and research or known as Research and Development. This study aims to produce learning resources in the subject of moving image capture techniques developed using the Kvisoft Flipbook Maker Pro 3.6.10 application. The results of this study are presented in 5 stages of the ADDIE model by means of summative assessment in Research and Development (R & D) research. A summative assessment is taken at the end of implementing a process to determine whether a process is continued or terminated (Sriyanti, 2019: 4).

This analysis is carried out by knowing in advance the ideal conditions and circumstances that exist when research activities are carried out.

1. Analysis stageAnalyze

At this stage, the researcher carries out activities related to efforts to find information about the gap between expectations and reality that occurs in learning moving image capture techniques at SMK Mandiri 2 Balaraja and the solution in the form of a learning intervention in the form of multimedia flipbook development.

2. Stage of development

the stage of development of the research refers to prepare materials that will be used in the delivery of the learning environment in this case flipbook multimedia development learning for learning the subject matter the size and angle of shooting moving in vocational Independent 2 Balaraja. This stage consists of six steps, namely as follows:

a. Review existing products

This step is an important part of the multimedia flipbook development process, which is to see what other people have done, then analyze the strengths and weaknesses of each and then become consideration for the development of multimedia flipbook learning that will be produced in research and development. this.

b. Developing a storyboard

The storyboard development step in this research is related to planning and designing a multimedia flipbook which is the product that will be produced through this research and development. In this step the researcher visualizes how the product should be displayed, and how each part of it will work together to prevent unnecessary rework and thus prevent waste of time and materials. The wireframing, or storyboarding planning step, will produce a

framework (*blueprint*) for what should appear in each frame and how each page will work together. To perform this step, the researcher mapped the pages in terms of function, provided an overview of the content on each page and showed how users navigate from one page to another.

c. Developing frames and segments

This step is related to implementing the design made in the previous step by creating data tables, inserting elements and other media, inserting active elements and links, and several other features so that can walk together.

d. Adding navigation links

Having made the pages of the main work in the previous step, in this step the researchers made links connecting navigation between pages. In this step, the *storyboard* researcher'sassembles each product element according to the storuboard generated in the previous research step.

e. Preview and revise

This step is related to examining how thelearning multimedia products *flipbook* that will be produced actually look how they will work. This step is intended so that the resulting product can run in accordance with the product design.

f. Publish the product

In order for the multimedia learning *flipbook of* the research and development results to be used by students, in this step the product development results are published in the form of an application that can be installed on digital devices. This step is to ensure that thelearning multimedia product display *flipbook* is correct and works properly.

CONCLUSION

Produce multimedialearning *flipbook* that is appropriate for the subject of image taking techniques at SMK Mandiri 2 Balaraja. Producingmultimedialearning *flipbook* an effectivefor the subject of image taking techniques at SMK Mandiri 2 Balaraja.

BIBLIOGRAPHY

Anglin, Gary, J. (1995). Instructional Technology: Past, Present, and Future. Englewood, CO: Libraries Unlimited

Arief S. Sadiman et al, *Media pendidikan: Pengertian, Pengembangan dan Pemanfaatanya* .Jakarta : PT. Raja Grafindo Persada, 2009.

Branch, R. M. (2009). *Instructional Design: The ADDIE Approach*. New York: Springer.

Branch, Robert, M. And Dousay, Tania, A. (2015). Survey of Instructional Development Models. Bloomington: AECT

Dick, W., Carey, L., & Carey, J. O. (2014). *The systematic Design of Instruction*. New Jersey: Pearson.

Dills, Charles R. and Romiszowski A. J. (1997). Instructional Development Paradigms. New Jersey: Educational Technology

Eggen, P. D., & Kauchak, D. P. (2010). *Educational psychology: Windows on classrooms* (8th ed.). New Jersey: Prentice hall.

Gagne, R. M., Wager, W. W., Golas, K. C., Keller, J. M., & Russell, J. D. (2005). *Principles of Instructional Design*. Belmont, CA: Wadsworth.

Gagné, R.M. and Briggs, L.J. (1979) Principles of Instructional Design. 2nd Edition, Holt. Rinehart, and Winston, New York.

Gall, J. P., Gall, M. D., & Borg, W. R. (1983). *Educational Research*. New York: Longman.

Gentry, CG. (1994). *Introdudion to instructional development: Process and techique.* Belmont, Calif.: Wadsworth.

Iskandar, A., Rizal, M., Kurniasih, N., Sutiksno, D. U., & Purnomo, A. (2018, November). The Effects of Multimedia Learning on Students Achievement in Terms of Cognitive Test Results. In *Journal of Physics: Conference Series* (Vol. 1114, No. 1, p. 012019).

I Gusti Agung et al, "Pengaruh Model Pembelajaran Generatif Terhadap Minat dan Hasil Belajar IPA pada Siswa Kelas V SD", E-Journal Program Pascasarjana Universitas Pendidikan Ganesha 4, no 3 (2014); 1-10.

Mayer, Richard E. (2014). The Cambridge Handbook of Multimedia Learning. Cambridge University Press.

Mayer, Richard, E. (2021) Multimedia Learning, Third edition. New york: Cambridge University Press

Roblyer,.M.D. (2016). Integrating educational technology into teaching. Boston: Pearson.

Song, H. S., Kalet, A. L., & Plass, J. L. (2016). Interplay of prior knowledge, self-regulation and motivation in complex multimedia learning environments. *Journal of Computer Assisted Learning*, *32*(1), 31-50.

Robayat, A. (2018). The Effect of Multimedia-Based 3D Flipbook Learning Media on Physics Learning Outcomes of 11th Science Grade Students in Work and Energy Subjects. *Omega: Jurnal Fisika dan Pendidikan Fisika*, *4*(2), 37-37.