

Media Learning-Based Multimedia for Eye Studying Multimedia

Joulanda A M Rawis¹, Jeffry S J Lengkong¹, Johanis P Namsa^{1*}, Sherly D Tendean¹,
Yulit B Manumpil¹

¹Department of Educational Management, Graduate School of Universitas Negeri Manado, Indonesia

*Corresponding author: johanisnamsa@gmail.com

ARTICLE INFO

Article history:

Received: July 29, 2023; Received in revised form: August 25, 2023; Accepted: September 07, 2023;

Available online: September 10, 2023;

ABSTRACT

Study This is a study development media learning That aims To produce media learning eye studying Multimedia Which is expected can help in the process of Study teaching. Research This is a study development of the Multimedia Development Life Cycle (MDLC). In the method, 6 (six) stages are (1) Concept, (2) design, (3) Obtaining Content Material, (4) Assembly, (5), Testing, and (6) Distribution. On stage In this testing or testing phase, there are four forms of testing, namely Developer Tests, Expert Media, Expert Material, and End-user Tests. From study obtained good results, and from these results, the research drew conclusions that media applications learning multimedia.

Keywords: Media learning, multiplatform, MDLC

INTRODUCTION

Development technology moment This covers all aspects of life man, No exception aspect of Education. In development, technology brings influence Which big in process learning. Institutionalized Education Technology Information Communication must Keep going maximizing development Which has There is with take advantage of it in process learning. Wrong the only one in learning On Program Studies PTIK, with utilize development technology Which There is can create learning creative and innovative following developments technology. Progress technology information Lots bring impact positive for progress education Which give offer And choice for world education For

support process learning. Like development technology Which joins in share in change style Study, specifically utilization media learning (Budiyo, 2020). With existing development technology naturally will make it easier to process learning, as well as give learning following development Which there is.

Learning as something process is something system That involves various parts like educator, student, material teacher, source Study, media learning, And method. Success learning very determined by learning that can develop potency – potency Which owned student, so that the student can obtain benefits in a way direct to the learning process. There are obstacles that lecturers often encounter in their activities learning is chosen or determining the material taught (media) or material lectures Which is appropriate in a frame to help students reach competence. Based on the Semester Learning Plan (RPS), the course learning process of Multimedia consists of theory and practicum which discusses or provides an introduction to various types of media (text, picture, chart, audio, videos, And animation). Development material teaches Already appropriately Keep going so that learning No impressed monotonous and conventional.

There are two important elements in the process of learning to teach these two aspects each other related to educational methods and media. Utilization of media and presentation of material What is lacking can affect the learning process. The multimedia course given is not only limited to multimedia concentration but has become an eye studying general For all over concentration Which There is in Major Education Technology Information And Communication Faculty Technique UNIMA. Many learning media can be used to present material, not only limited to books. With the Ongoing development of technology media learning continues to innovate in fulfilling the teaching and learning process (Anggita, 2020). Insufficient use of media and presentation of material can have a profound effect on process learning. Multimedia technology can represent What is not enough capable educators say through certain words or sentences. For that, it is very necessary to use media and presentation of interesting material so that students can digest it material Which is delivered. In its use, modern media or tools are not intended to replace a good way of teaching, but rather to complement or assist the lecturers in conveying material or information, such as using learning media. Media Learning can also be interpreted as a useful tool to make things easier teaching and learning process (Jatiningtias, 2017). Using learning media, you can make it easier for lecturers and students to communicate effectively. Media objectives Learning is helping teachers in conveying messages or lesson material to a student so that students can easily understand the lesson. Presentation material with the use of media learning, inside it There are multimedia components that can make things easier for students to understand the material provided. In this Multimedia course, delivery The material is good, especially when delivering the material, it always shows some examples related to the material presented. But in Development media learning on eye studying This so that always interesting, it will Contents are added to complete the presentation of the material, examples in delivery material in the form of a video explaining the material. Learning media is created using Adobe Flash as media interactive.

One of the learning media in making learning videos that can be used used in Multimedia courses is Powtoon. Powtoon is a web application-based I.T. That can be used as media learning in inside features is interesting like features For making presentations or videos animation Which can used with easy And interesting (Ernalida, 2018). Through media Powtoon expects can make it easier for educators

to make material lessons Which seen as interesting And creative. Besides can make it easier for educators in matters such as This the is Teacher, Powtoon Also expected can make students more Spirit in listening material Which be delivered by Teacher. Media learning Powtoon This own excess that is many feature animation Which various - types as well as effects That make presentation or videos learning seen interesting. Besides That, the timeline Which there is in Powtoon Also can be used with ease compared to applications other Which kind with him. Adobe Flash is software that can make media learning interactive expected can create media learning Which interactive And innovative. Based on the background behind problem the, so writer seeks to develop A media That can used in learning, with the research title "Multimedia Based Learning Media for Eye Studying Multimedia.

LITERATURE REVIEW

Media Learning

The word media comes from the Latin medius which in the dictionary is "middle", "intermediary" or "introducer". Gerlach and Ely emphasized that, if the media is understood Broadly speaking, it is a person, material, or event that creates a situation that makes participants educated, and capable of obtaining Skills, attitudes, and knowledge. Media are educators, textbooks, and the school environment. Tools graphic, Photo or electronic For take, operate, And compile return Visual or verbal information is the definition of media in learning activities more specifically (Arsyad, 2016). Apart from being a delivery or delivery system, media Which is often replaced with say mediator, the term mediator media shows its function or role, namely managing an effective relationship between two main parties in the learning process, students and lesson content. In short, media is a tool That conveys or delivers messages teaching.

Learning is a process of interaction between educator with participant education and source Study in the environment Study (Rusman 2016). Media learning Can be understood as the media used in the learning process and objectives. In essence, the learning process is also communication, hence the learning media Can understood as media communication Which is used in process communication, media learning's role is important as means For channel message learning.

Using media in the process of learning will influence the atmosphere Learning is fun because it can build desired knowledge and interests, awaken motivation, And stimulate activity Study, even bring psychological influence on students and the application of learning media (Supriyadi, 2017). Learning objectives can be achieved if, in the learning process, educators can utilize, And develop media learning in a way creative And efficient, because media learning is Wrong One tool intermediary educator in delivering material to students in the learning process (Nur Aida, et al. 2020). From several definitions, one can conclude that media learning is a tool that is very helpful in the learning process wherever possible channeling messages creatively, interestingly, and easily understood so that they arouse the interest of the recipient.

Multi-Media

The path to mastering multimedia must start with a definition of multimedia. According to Munir (2012), "multimedia comes from the words multi and media. Multi- comes from Latin, which means many or various, while the word originates media from Language Latin, that is medium Which means intermediary or Which used For to deliver, deliver or bring something". The word medium in the American Heritage Electronics Dictionary (in Munir, 2012) is described as a tool For distributing And presenting information. Based on That, multimedia is a combination of various media (format files) Which form text, picture (vector or bitmap), graphics, sound, animation, video, interaction, etc packed to become files digital (computerization), used For convey or deliver a message to the public.

Based on opinion Neo & Neo (2004) state that multimedia, is defined, as the combination of various digital media types such as text, images, sound, and videos, into an integrated multisensory interactive application or presentations to convey a message or information to an audience. Warsita (2008) also defines multimedia as combined Lots of media or at least consists of more than one media. In line with the two previous opinions, Ahmadi et al. (2011) stated that multimedia is media that combines two or more media elements consisting of text, graphics, pictures, Photos, audio, videos, And animation in a way integrated. Multimedia divided become two categories, that is: multimedia linear And multimedia interactive. Linear multimedia is multimedia that is not equipped with a tool controller that can operated by the user. Multimedia This walks (sequentially), for example, TV and movies. Sutopo (2012) defines multimedia as gathering media-based computers and communication systems that have a role in building, storing, delivering, and accepting information in the form of text, charts, audio, videos, etc. Munir (2012) also defines multimedia as the unification of two or more communication media such as text, graphics, animation, audio, and videos with features characteristic of interactive computers to produce One percent interesting.

Function Multimedia

Multimedia learning abstracted from Ahmadi et al (2011) own function as follows:

- 1) Capable of strengthening response users as soon as possible and often possible.
- 2) Capable of giving a chance to a student to control rate speed learn it alone.
- 3) Notice that students follow some orders Which coherent and controlled.
- 4) Capable gives chance exists participation from a user in the form response, Good in the form of an answer, election, decision, experiment, etc.

METHODS

Research for application design will be carried out in the Education Department Technology Information and Communication Faculty Technique Universitas Negeri Manado.

Tools And Material

1. Device Hard (Hardware)
Laptop HP Processor Intel(R) Core i3-6006U CPU @ 2.00GHz, 1.99 GHz
RAM 4.00 GB (3,89 GB usable 3) Mouse

2. Perangkat Lunak (Software)

Adobe Flash CS6

Adobe PhotoShop CS6

Powtoon

Stage Which Done in Application Media Learning

1. Draft

The concept stage is the initial stage in the MDLC cycle. The concept stage started with determining the objective of making the application as well as determining the user of the application and determining the concept of the application content. Apart from that, this stage will also determine page application (presentation, interactive, etc) And objective application (entertainment, training, learning, etc.). Basic rules in design are also determined at this stage, for example, size application, target, etc.

2. Design (Planning)

A mature concept will make it easier to describe what it must done. The objective of stage planning is to make specifications in a way detailed regarding the architecture of the application, appearance, application requirements, and style. On stage This, specification is made in detail Possible so that on stage furthermore that is Obtaining Content Material and Assembly new decisions are not required Again, enough use Which Already determined on stage This. Staged This using Hierarchical structure and storyboard to describe the plot of the story or description of each scene.

3. Obtaining Content Material (Collection data)

Obtaining Content Material is the stage of collecting materials that are following needs. Material collected following need with method interview with lecturer guardian eye studying related material Which will be entered in the application. Other materials needed include images, photos, animation, video, audio, etc text Good Which Already So or Which Still needs to be modified following that need There is. Ingredients can be obtained for free or with booking to the parties other following the design Which already made on stage previously.

4. Assembly (Making)

Assembly is the stage of creating the entire multimedia material. The application will be created based on the design stage, such as navigation structure and storyboard. Stage this is what researchers use Adobe Photoshop CS6 and Adobe Flash CS6 software for making projects as well as device software for making video material.

5. Testing (Testing)

Testing is carried out to ensure that the results of creating multimedia applications are according to the plan. There are two types of testing used, namely alpha testing (Alpha test) And testing beta. Testing alpha the test is done by a creator or the creator's environment, such as displaying each page,

function knob as well as voice generated. If there is a malfunction so application will quickly repaired. If has gotten away in testing alpha so will next with testing beta Which involves user end (end user) will be done.

6. Distribution (Distribution)

Stage This is the stage final in the cycle of development multimedia. Distribution can be done after the application is declared fit for use. At this stage, the application will be saved on a storage medium. If the storage media is not Enough To accommodate the application, compression to the application will be done.

RESULTS AND DISCUSSION

Concept (Draft)

Structure hierarchy can be seen in Figure 1.

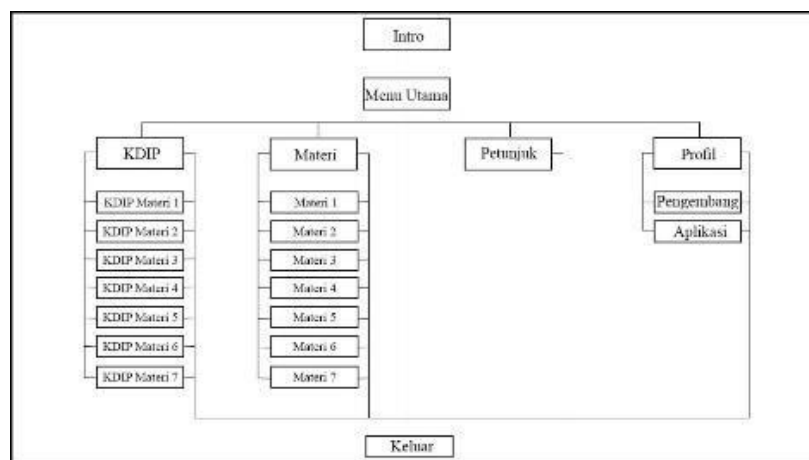


Figure 1. Structure Hierarchy

Design (Planning)

Design about application development media learning Which can be seen in Figure 2.

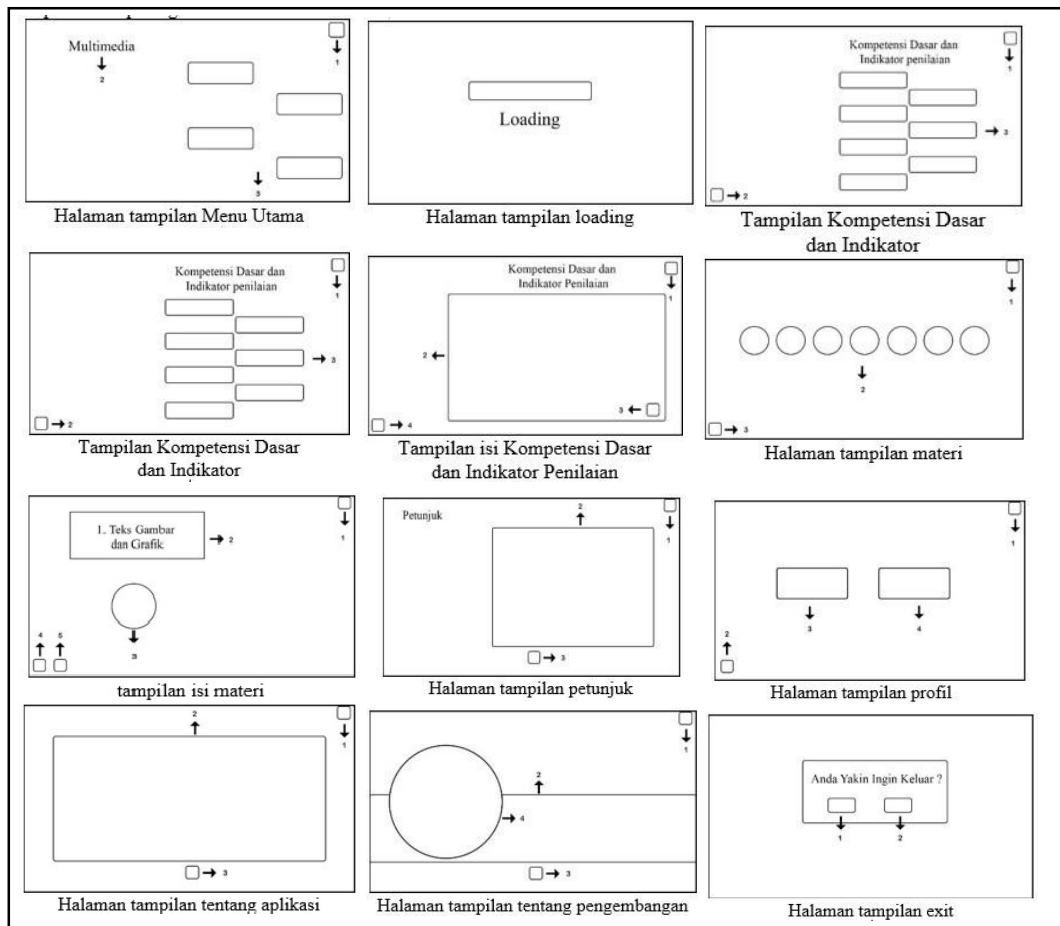


Figure 2. Design Appearance Application

Obtaining Content Material (Collection material)

The material used in making application media learning multimedia in the form of buttons and icons was taken from the internet and designed directly through the application Adobe Photoshop CS6.

Assembly (Making)

The following is a display of the process of creating a development application multimedia learning media which can be seen in Figure 3 and the results of its creation application which can be seen in Figure 3.

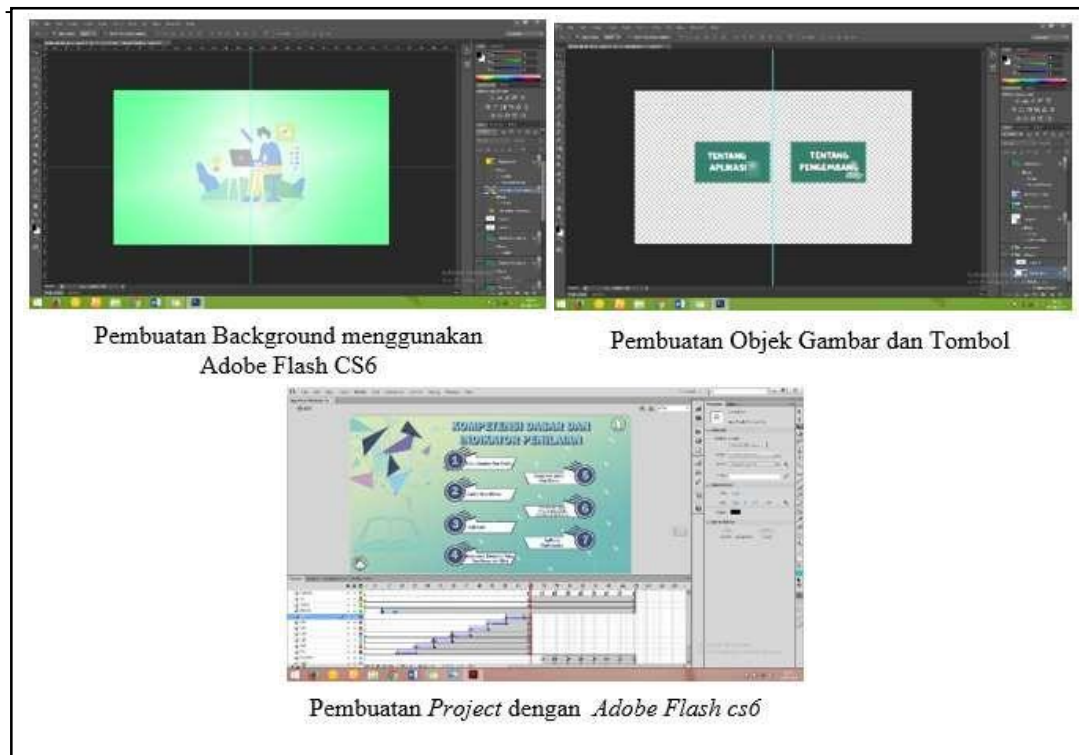


Figure 3. Process Making Application

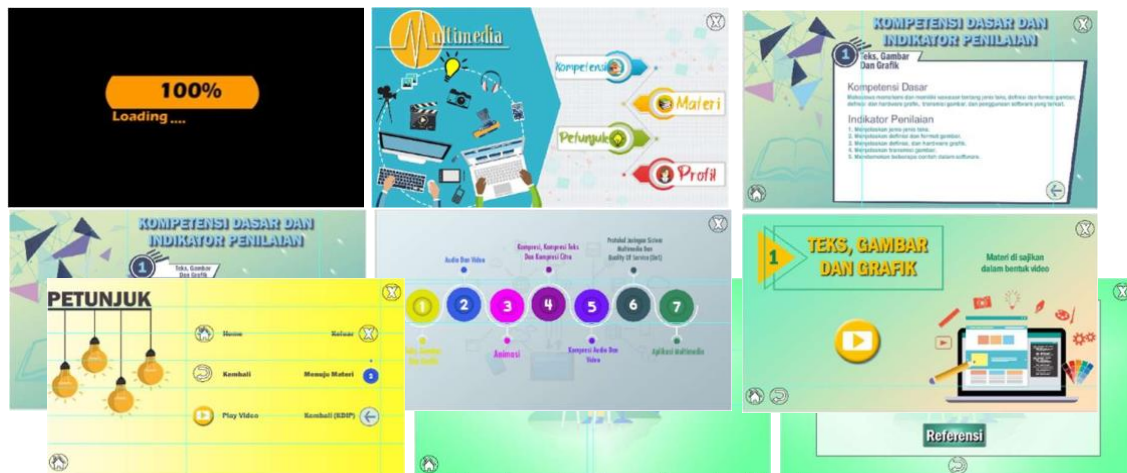


Figure 4. Appearance Application

Testing (Testing)

After the Application is finished made so step furthermore is to do system testing and commissioning where the purpose of testing this system is to find out if the application media is learning This is Already following Which is planned And works in a way whole or No. Stage Testing

is done after stage making And all over material (Materials) has entered. Testing is done using testing black box testing. Method Blackbox This is a test program to ensure that the application that has been created is following what has been written and planned previously.

Distribution (Distribution)

After the testing stage has been carried out on the application, the final stage will be the distribution of applications in. exe so that it can be run on a computer device. Following This appearance Publish the application on Software Adobe Flash CS6.

CONCLUSION

Based on on results study And discussion, so can concluded that a Media Based Learning Development application has been made Multimedia in the PTIK Department Faculty Technique UNIMA with the use of the method Multimedia Development Life Cycle (MDLC) Which consists of six stages.

REFERENCES

- Ahmadi, K., Amri, S., & Elisah Q. (2011). Strategy Learning Integrated School. Jakarta: Performance References Publisher
- Anggita, Z. (2020). Using Powtoon as a Learning Media Solution in the Future Pandemic Covid-19. Confix Journal, 7(2), 44-52.
- Arsyad, A (2016). Media Learning. Jakarta: King Grafindo Homeland.
- Budiyono, B. (2020). Innovation Utilization Technology As Media Learning in Era Revolution 4.0. Journal Education: Journal Results Study And Study Literature in Education, Teaching and Learning, 6(2), 300- 309.
- Jatiningtias, N. H. (2017). Development Media Learning Powtoon For Improving Student Learning Outcomes in Social Sciences Subjects Deviation Material Social Affairs at SMP Negeri 15 Semarang, (Doctoral dissertation, State University Semarang).
- Neo, T. K., & Neo, M. (2004). Classroom innovation: Engaging students in interactive multimedia learning. Campus-Wide Information Systems.
- Nur Aida, L., Maryam, D., Febiola, F., Agami, SD, & Fawaida U. (2020). Media Innovation Learning Islamic Religious Education Through Audiovisual Media. Skilled: Journal Education And Learning Base, 7(1), 43-50.
- Munir (2012). Multimedia And Draft Application In Education. Bandung: Alfabet. Rusman (2016). Learning Thematic Integrated Theory Practice And Evaluation. Jakarta: Rajawali Pers
- Supriyadi (2017). Adobe Flash to Support Learning. Journal Communication, Vol. 7 No. 2 (Sept 2017), h. 41

Sutopo, A. H. (2012). Technology Information Dan Communication Inside Education. Yogyakarta: Graha Science.

University, B. (2008). Technology learning foundation and the application.