



Learning Media Development Telegram-based Courses Exhibition

Rizki Yulianingrum Pradani*, Endang Prahastuti, Annisau Nafiah¹

Industrial Technology, Faculty of Technology, State University of Malang, Malang, Indonesia

*Corresponding author. Email: rizki.yulia.ft@um.ac.id

ABSTRACT

Interactive multimedia-based learning media in the learning process will shift boring learning into fun learning. The use of interactive multimedia makes lecturers no longer the only source of learning and multimedia is expected to make students active in the learning process, it will also increase learning motivation. Learning multimedia provides opportunities for students to learn independently, so that learning can be done anytime and anywhere. Learning media is used to attract attention and make students active in the learning process, one of which is by using interactive multimedia-based learning media using the Telegram application. The Telegram application which can be downloaded free of charge and used as a chat, apart from being a communication via Telegram chat can also be a means of learning media. Because in the application there is a Built Operate and Transfer (BOT) menu. Through the BOT menu in the Telegram application, you can enter learning materials, you can even include learning videos. Its use is quite easy for students, participants only write down the name of the BOT that has been made so that students can see the material to be taught.

Keywords: *Media, Learning, Telegram, Fair.*

1. INTRODUCTION

Current digital era This all needs and activities daily No free with exists mix hand technology therein, development technology This not Except also must be followed in the world of education where students and teachers should always increase ability in use technology in every learning process. According to Dewantara (2020) Global demands expect the world of education For always always adapt development technology to business in enhancement education quality [1].

Utilization digital development in the learning process teach especially in physics push birth various learning media that can be teacher chose _ utilized in the learning process teach. For example, like putting ideas in make animation or simulation used _ in the learning process. Besides That exists progress in the field Technology and Information (IT) gave birth design new in an IT - based learning process or more known with designation of E-Learning. [2]

Application technology Alone in the world of education Can applied in digital - based learning media that will interesting interest participant educate for participate active, independent, as well responsive moment do the learning process teach. Media use is not

only creating a learning process more efficient, but material lessons can also absorb deeper.

Innovation This can form development of learning media and methods learning. The use of learning media that has not utilized in activity Study teaching, making the learning process become monotonous and boring. Learning media This for example power points, learning videos, interactive multimedia, and others. Beside That method learning used _ part big Still conventional, that is method lecture.

Several studies shown with interactive media _ make learning more attract and improve interest Study participant educate not except for students. A lecturer must be capable of packing learning with creative Possible so that submitted material _ can accepted with enthusiastic by students. One medium each _ students are considered have is telegram social media. Social media has become a phenomenon that is not inseparable in life every day. Likewise, the method participant educates Study Not only from book conventional or online learning. Social media Now be a medium for Study Where course, when just and fun . [3]

Learning media used for interesting attention and create student active in the learning process, one of them is using learning media based on interactive multimedia

with use Telegram application. The telegram application that can downloaded for free and use as a chat, besides as communication via telegram chat also can as a means of learning media. Due to the application, there is a Built Operate and Transfer (BOT) menu. Through the BOT menu on the Telegram application, you can enter material learning, even can _ Include learning videos. Its use Enough easy for participant learn, participant only write BOT name already made so participant educate can see material to be taught.

Telegram sends messages faster because it is cloud-based. Smaller application size Telegram version v3.31 for Android, which was released on November 25, 2015, has a size of 16.00MB (16,775,108 bytes). Telegrams can be accessed from various devices simultaneously including smartphones, tablets, computers, laptops, and others simultaneously. Telegram allows us to share photos, videos, files (doc, zip, and mp3) with a maximum size of 1.5 GB per file. Telegram bots can be used as an alternative to create and develop practical (online) based learning media. So, it can be concluded that Telegram is an internet media application that has many advantages, is practical, fast access, efficient, and can be used by both educators and students in online learning. (Fitriansyah and Aryadillah 2020) [10]

Setiaji utilize Telegram robots as media that allows it to be sent real academic information - time and regular. In his research, the Telegram robot used to send information such as: profile TF UII, upcoming events, and schedule. [8]

The Telegram robot has been developed by Sastrawangsa as a medium for automating services and information called Smart Campus. The research that has been carried out shows that there are 3 categories of services provided as prototypes, namely academic services, financial services, and general services. The aim of the research is to maximize services by automating student services using the Smart Campus concept. [9]

Based on background behind the writer do study with title " development of learning media telegram based on the eye studying exhibition"

1.1. Learning Media

The media really is role important in the learning process, p This due to the media as tool or intermediary for convey or distribute material to be taught by educators to participant educate. According to Gerlach & Ely in (Arsyad, 2016) said that the media when understood broadly speaking _ is human, material or constructive incident _ conditions that make student capable obtain knowledge, skills and attitudes. [4]

According to Munadi (2013) learning media capable transmit and distribute message from source in a manner planned so that created environment conducive learning

_ Where recipient can do the learning process in a manner efficient and effective. Can concluded that learning media role important For convey messages and information and can increase effectiveness learning, so participant educate will feel learning the more fun and interesting interest For learn. [5]

1.2 Telegrams

Telegram according Fahana, J., Umar, R., and Ridho , F. (2017) are A service message popular based on open-source platform built by Russian Pavel Durox in 2013. Telegram uses cloud-based applications and systems encryption that provides end to end encryption, self-destruction messages, and multidata center infrastructure. Convenience access given telegram can _ walk approached all platforms deliver convenience for administrators for build system notification with utilise Open Application facility Programing Interface (API) provided by Telegram via bots that can used For send message in a manner automatic. [6]

Whereas the meaning of telegram according to Ardika, MN, Piarsa, N, and Sasmita, A. (2018) are application cloud based so delivery message Far faster. Telegram applications can be accessed via the web and sync they Lots faster Because cloud based. Telegram got accessed via the web, so make it easy for user If they forget bringing a smartphone. Telegram feature capable send files with 1.5gb max and have capable bots _ relieve work user and can used For playing games. [7]

1.3 Response student

There are several underlying theories _ exists response students, including:

1. Theory Behavior
2. Theory Study social
3. Theory Study cognitive
4. Theory Study constructivist
5. Theory Study motivation

2. METHOD

On research this, the method used is Research and Development (R&D) methods. According to Sugiyono (2010:409) divides in steps research and development to a 10 stage as following: (1) identification problem, (2) collection information, (3) Product Design, (4) Design Validation, (5) Design Improvement, (6) Trial Products, (7) Revision Product, (8) Trial Usage, (9) Revision Final Product, and (10) Production Bulk. Here in figure 2 is description short from each stage.

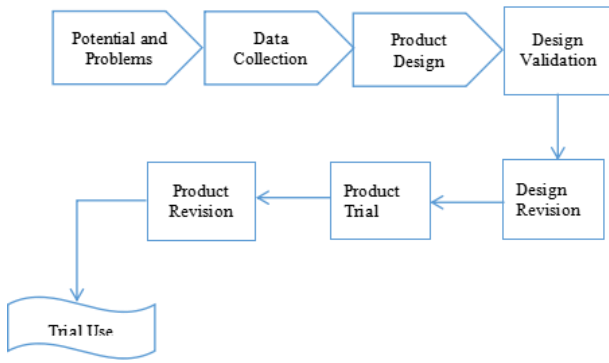


Figure 1 Research Design

On the development of Telegram media for fashion design student for study This researcher No use whole from the steps of the Research and Development (R&D) development model from Borg and Gall because customized with characteristics studied. Researcher only using 8 steps plan development.

2.1 Stage Implementation

2.1.1. Research Subject

Subject research on development involves composed expert _ above: (1) Learning Media Expert, (2) Expert Material. Subject for trial _ group small several 30 students and trials group big a total of 60 2018 Bachelor of Fashion Education students.

2.1.2 Research Time

Study will be going on during three stages, stage 1 introduction, analysis needs, studies theory and development product beginning held start month March to May 2021. Phase 2 trial experts and trials product held month June 2021. Phase 3 trials product, implementation experiment will be going on for 3 months, starting July to September 2021.

2.2 Data Collection Techniques

This research_using sheet data collection techniques validation for media expert, expert material, and response student. Then use trial questionnaire _ For student.

2.3 Data Analysis Techniques

Data analysis techniques in research This use percentage data analysis for validation test expert use scale linkert 1-5 then in the analysis with formula following.

$$\text{Percentage(\%)} = \frac{\text{total score resulting from data collection}}{\text{criteria score}} \times 100\%$$

Table 1. Analysis Criteria

| Criterion | Average Score | Interpretation |
|-----------|---------------|--------------------------|
| 1%-20% | | Very Less |
| 21%-40% | | Less |
| 41%-60% | | Enough |
| 61%-80% | | Strong / Decent |
| 81%-100% | | Very Strong /Very Decent |

Whereas For analysis questionnaire from trials _ participant educate use scale gutman with answer " yes " score 1 and answer " no " score 2. Formula analysis of the indicators used is as follows.

$$K = \frac{F}{N} \times 100\%$$

Information:

- K : Percentage
- F : Total Answer Respondents
- N : Highest score in questionnaire

Whereas For count in a manner whole, using formula:

$$P = \frac{\sum K \times \sum N}{\sum F \times \sum N} \times 100\%$$

Description:

- Q : Percentage effectiveness
- ∑ K : Total Answer Respondents
- ∑ N : Total Respondents
- ∑ F : The highest score in the questionnaire

3. RESEARCH RESULTS

On research This generated an instructional Media Telegram based for eye studying exhibition. The results of the study also present description results validation form media validation, lesson plans, questions, questionnaires response, as well results research that has been done.

3.1. Telegram application

Telegram application is A tool learning for eye studying fashion show exhibition __ State University of Malang. Appearance application Telegram is as follows.

3.1.1. Main View

On the page the main educator will start compiling material that will be input on the telegram bot application.

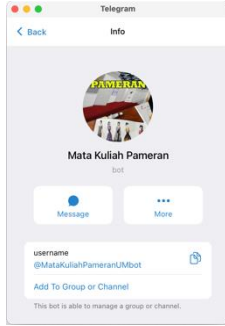


Figure 2. Display main.

On view main application this telegram learning containing picture profile, then username, icon start chat and more.

3.1.2. Inside main page _ application

This page Can accessed moment pressing the chat icon on the page early.

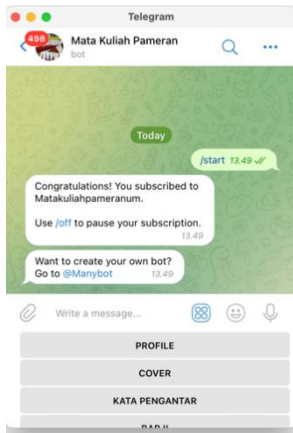


Figure 3. Main page in application

On the page This there is a chat menu, then menu column "more" points three above. And the search bar, as well as several sub menus, in this menu student Can send quickly chat or share other files.

3.1.3. Sub menu bar

On this submenu there are several stuffing materials related with material eye studying exhibition like profile, cover, chapters 1-3, then material.



Figure 4. Typing pressing a sub menu

3.1.4. Instant view

This feature Can used moment We choose a sub menu, for example in the sub menu chapter 2, then will appears chat and then there is the sentence " instant view" after being clicked will do more view big.

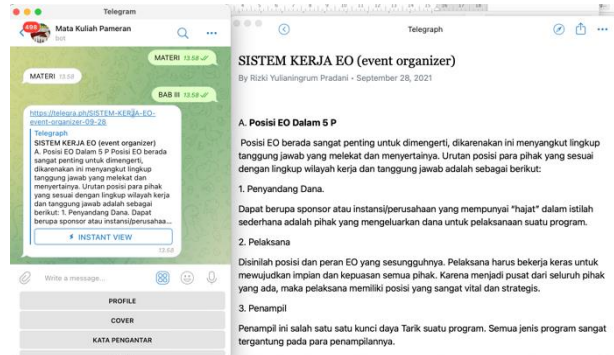


Figure 5. Instant view display

3.1.5. Material upload menu

On this menu, participant educate can send various file types like videos, document files, photos, then polls, and locations.

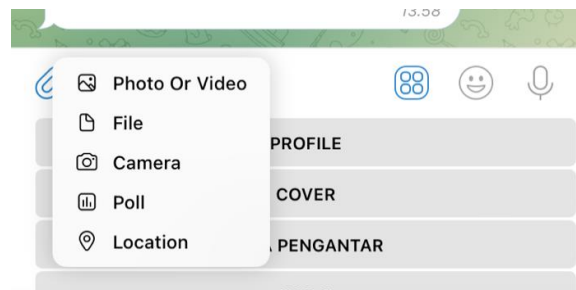


Figure 6. Material upload menu

4. RESULTS OF DATA ANALYSIS

Study carried out in the fashion design department of Malang State University on the eyes studying exhibition. Obtained data covers results learn and respond Shiva as following:

4.1. Learning Outcomes Participant educate.

Study results student used for measure influence use of learning media eye studying exhibition Telegram based. For measure results Study this, student given 20 questions pretest and after That student given learning media eye studying exhibition telegram based, after That student given another 20 questions post-test. From the research conducted, obtained results Study student without using media in class A with an average of 61.93. Whereas results Study student with using media in class B got an average of 94.03. After compared to results average value between pretest and posttest, got concluded that there is enhancement results Study student after use instructional Media Telegram based.

4.2. Response Results

From the research conducted, the results response student on learning media telegram based shows a total score of 1329 of total responses. favorable and response unfavorable. Percentage response student after using learning media telegram based is 89%. With thereby refers to the criteria category existing response, can _ categorized as as very positive. With such is the learning media telegram based is very effective in help student Study independent.

5. CLOSING

Development of learning media-based telegram that can be made accordingly need students and lecturers with use @MataKuliahPameranUMbot facility. Inside the bot are accompanied by loading tabs material, exercise, evaluation, for now influence from telegram social media development against results Study student attire at the State University of Malang. In the materials menu containing about material the material to be taught to the eye studying exhibition. In the training menu containing exercise matter to be become trials student. In the evaluation menu will contain posttest used _ For student test results and will compare to with pretest already _ done before.

Based on the validity test by the three expert validators on learning media telegram based on the eye studying exhibition obtained percentage by 95%. Thereby can concluded that learning media Telegram based login to in very valid criteria used for helping the learning process student.

There is difference in results for Study student between tests after using learning media telegram based with No using learning media Telegram based. This is proven _ with the average value and percentage graduation using learning media _ of 94.03% meanwhile moment before using learning media telegram- based by 61.93%. from such can showing that the average value after using learning media more telegram based Good than before using learning media Telegram based. So that can conclude that test after using learning media effective telegram based for increase results Study student than No using learning media telegram based and can measure ability think cognitive student.

The response shown by students who have using learning media Telegram based _ as a medium of assistance for do task eye studying exhibition in the very worthy category with percentage by 89% with thereby can concluded learning media this telegram based is very decent as supporting the learning process in the eye studying exhibition in the department attire at the State University of Malang.

Based on results research that has done, then some of the following suggestions can made consideration for study development furthermore:

Results 1 validation Plan Device Learning that has assessed by the obtaining validator mark Lowest compared to another validation. Expected For furthermore Plan Device Learning can repaired and very complete from in terms of learning models and materials. Video processing techniques are explained into learning media Telegram based. _

this medium should develop Again like can use PHP in make telegram bot to earn more design _ easy understandable and more Lots possible features _ used on telegrams.

REFERENCES

- [1] D. Dewantara, M. Wati, S. Mahtari, and S. Haryandi. Blended learning to improve learning outcomes in digital electronics courses. in 1st South Borneo International Conference on Sport Science and Education (SBIC SSE 2019) , 2020 , pp. 188–190.
- [2] YA Al-Furqansyah, H. Yuliani, and NI Syar. A Need Analysis for the Development of Telegram-Based E-Learning Media on the Subject of Newton's Law in Middle School. J. Ilm. Educator. Fis. , vol. 5, no. 1, p. 62, 2021, doi: 10.20527/jipf.v5i1.2718.
- [3] T. Wrahatnolo, SC Wibawa, L. Anifah, IGPA Buditjahjanto, and W. Yustanti. Developing vocational synthetic video motion learning using motor sliders. in IOP Conference Series: Materials Science and Engineering , 2018, vol. 434, no. 1, p. 12269.

- [4] A. Arsyad. Learning Media, Revised Edition, Jakarta: PT. Raja Graf. Perseda , 2013.
- [5] Y. Munadi. Learning Media. Jakarta: Reference. GP press group, 2013.
- [6] J. Fahana, R. Umar, and F. Ridho. Utilization of Telegram as an Attack Notification for Network Forensic Purposes. Query J. Inf. syst. , vol. 1, no. 2, 2017.
- [7] N. M. Ardika, N. Piarsa, and A. Sasmita. Integration of telegram bots with facial recognition as a smart home feature. Int. J. Computer. Applications , 2018, vol. 975, p. 8887.
- [8] H. Setiaji and I. V Paputungan. Design of Telegram Bots for Campus Information Sharing Design of Telegram Bots for Campus Information Sharing. 2018
- [9] G. Sastrawangsa. Pemanfaatan Telegram Bot Untuk Automatisasi Layanan Dan Informasi Mahasiswa Dalam Konsep Smart Campus. Konf. Nas. Sist. Inform. 2017, pp. 772– 776.
- [10] Fitriansyah, Fifit, and Aryadillah. Penggunaan Telegram Sebagai Media Komunikasi Dalam Pembelajaran Online. Cakrawala Jurnal Humaniora Bina Sarana Informatika 2(2), 2022.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

