

TELEGRAM BOTT BASED LEARNING MODEL

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Abstract

The objective of the study is to develop a learning media design based on Telegram Bot that can Upgrade the results of study students. Progress knowledge has brought change to the worth of education. Moment this many learning methods and models that can be used by the teacher, but fact problem is a lack of learning media no there is ingredients practice and participants educate not enough focus the in the study so which results in results study student no maximum. A subject study from a study that is Special High School students sportsman Method research used _ is method development of Research and Development (R&D). Instrument evaluation from development media earns mark eligibility 78% of expert Theory with valid category and 75.76% of media expert with category quite valid. Based on the t-test results of the results study students showed $t_{count} 38,012 > t_{table} 2.042$ and value the signification that can be obtained i.e. $0.00 < 0.05$, p the showing that there are different results significant learning. _ And the N-Gain test score of 63% with category enough effective. That thing proves sufficient media usage effective for Upgrade results study student.

Keywords: Learning Outcomes School _ High School, Telegram Bot, Learning Media Interactive

Education has an important role in the development of a nation and state. The educational progress of a country can be used as an indicator of how far the country's progress is. Therefore, improving the quality and quantity of human resources is very important. In accordance with Article 4 paragraph 4 of Law Number 20 of 2003 concerning the National Education System, the Indonesian government seeks to improve the quality of education by providing an example of building the will of students and developing their creativity while in education.

Article 3 of the National Education System Law outlines the objectives of education. Objective education includes providing high-quality supervision in education so that students can have a better understanding of all elements of life and develop into civilized and respectable individuals.

The purpose of education can be realized by improving the quality of human resources involved in the field of education, namely teachers as the spearhead of the implementation of education in schools. Professional teachers are teachers who always evaluate the results of their teaching. Likewise with learning tools. Teachers can evaluate themselves to what extent the learning tools that have been designed are applied in the classroom. This evaluation is important to continuously improve the professionalism of a teacher. Evaluation activities can be started by comparing various activities in class, strategies, methods or even learning steps with the data in the learning device.

Make activity fun learning and innovative, teachers can increase the potential and learning activities of students. This is a very important task for a teacher as a motor driving the learning process. In learning, the main task of a teacher is to teach, educate and train students in achieve optimal cognitive, affective and psychomotor intelligence according to with compe

Arsyad, (20 11), "The word media comes from Latin and is the plural form of the word medium which literally means intermediary or introduction . Learning media or educational media is a message channel while the recipients of the message are students and even the teacher himself. A message is poured by a teacher or other source into communication symbols, both verbal symbols and non-verbal

or visual symbols. In the process of delivering the message, the teacher as a facilitator can use learning media.

The results of interviews with several teachers who are members of the Subject Teacher Consultation (MGMP) and from the needs analysis that has been carried out in 5 (five) public high schools in Samarinda, the researchers obtained data that in the learning process teachers still often encounter obstacles, among others; (1) Lack of media that supports learning materials, (2) teaching aids that sometimes do not exist, (3) less package books, (4) students are less enthusiastic in participating in lessons so that student activity becomes less. From this problem, if it is allowed to continue, it is feared that it will affect the achievement of participants' learning outcomes educate. It is different with the problem at SMAN Special Athlete (SKOI), SKOI students who are generally athletes make them often have to go to school because they have to compete in out of town. This makes them often left behind in lessons. From these problems will greatly affect their learning achievement.

In connection with what is described above, to improve the learning process which is expected to achieve good learning outcomes, a media is needed interesting to grow motivation, interest, and activate students in the process of learning activities in the classroom and the media can also be used both at school and outside of school so that it can be accessed easily by students who are not following the learning process in the classroom.

One alternative to overcome the problem above is by using the interactive learning media Bot Telegram. Telegram bot is one of the features provided _ though Telegram app, from our Telegram Bot, could build and create a robot that contains the commands we want. View from the functions and features of the bot it is very possible for developing a learning media interactive Telegram Bot based, pg it's also appropriate with the resulting study Alifyan (2016) who said that the telegram bot learning media is highly accepted by teachers and students. Setya (2018) also concludes that students strongly agree when Telegram Bot is used as a learning medium.

The word media comes from the Latin " medius ". This by Harian means "intermediary ", " middle " or " introduction " (Arsyad , 2011). Whereas sapriyah (2019) states that "the media is " all that can be used for sender message from sender to the receiver until could trigger thoughts, attention and interest student so the learning process could walk. Gerlach & Ely (1971) explain that the media generally is materials, people, and events that can make students get skills, knowledge, and attitudes.

Based on a number of definitions of the media, then could conclude that the media is not only could in the form of an object but also can in the form of activities that can trigger students in the process of understanding something material. Ardiani (2009) says that the media are grouped Becomes a number of type, that is ;

1. Visual Media
 - a. Media that is not projected: posters, graphics charts, pictures
 - b. Projected media: slide, film *stripe* projection *overheads*.
2. Audio Media: radio and audio cassette
3. Audio-Visual Media
 - a. Video Media: VCD
 - b. Computer Media: Video files

Learning Media

Learning media is something useful tool _ for conveying messages in the learning process. Learning is a communication process Among participant students, educators, and teaching materials (Setya , 2018). According to Simamora (2009) communication, no one will walk without the presence of the media as a means ns delivering the message.

Daryanto (2013) suggests that learning media has 6 benefits, namely: 1) clarifying order not to verbalize. 2) Overcoming limitations of time, space, energy, and power senses, 3) bringing excitement

to learn, 4) Enable students to study and independently) give the same stimulus experience and bring out the same perception. 6) Learning process contains five components of communication namely teacher, material learning media, students, and goals learning.

Telegram Messenger

A telegram is messaging software that was taught in 2013, basically function main from Telegram is to send safety messages. _ Features of Telegram allow users to share various file formats such as doc, pdf, video, compress, and ed files using zip and rar . one _ of the features that Telegram provides is Bots. Bots come from the word robot. Bots on telegram can be programmed to act in accordance with instructions given _ With the existence of a Telegram Bot, Telegram is very possible for use as a learning medium. as results study Alifyan (2016) says that the Telegram Bot learning media is highly accepted by students and teachers.

Learning Outcomes

Learning Outcomes is evaluation education to development and progress study student reviewed from contained value _ in materials and curriculum presented _ to students (Shafi'I, 2018). Whereas according to Samara (2016) results in a study are all effects that can be made indicator mark application as a learning strategy. Evaluation results study meant for monitor progress results study student in relation with acquisition studied material _ with goals that have been set.

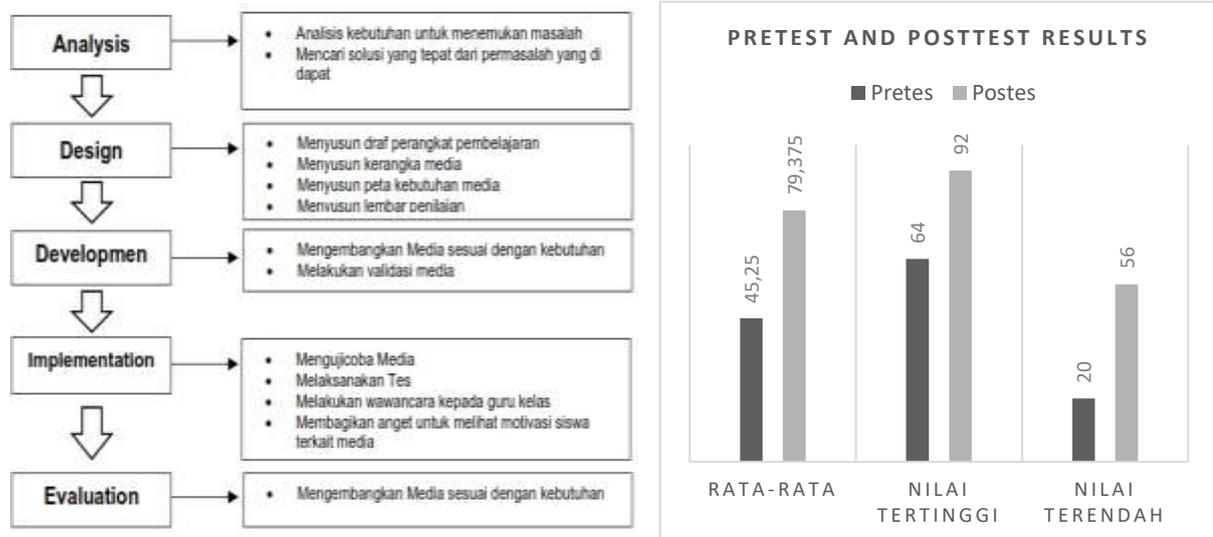
Sanjaya (2009) says the results study grouped be three realms, namely :

1. realm cognitive, related to the ability to think intellectual as well as the ability remember
2. realm effective, related to attitudes, appreciation, and values.
3. realm psychomotor, including Act behavior that uses muscles and nerves

METHOD

Study this use method *Research and Development (R&D)* and adapting the ADDIE model (*Analysis, Design, Development or Production, Implementation or Delivery and Evaluations*). According to Shelton (2008) ADDIE model is a design model learning general that provides the process systematic for developing Theory learning that can be used well for learning stare advanced classrooms and online learning. The following description from stages studies ADDIE model development.

Figure 1. Stages study ADDIE model development



Subject study this is Class XI high school students in Samarinda . Whereas object in study this is a Telegram Bot learning media for student class XI. Data collection is carried out in odd semesters year lesson 2021/2022, through instrument sheet validation expert materials , learning media experts , and results study student (field cognitive). Result data research obtained _ will started with perform normality test , p the taken as condition for further test to the hypothetical data . Normality test refers to sig. 0.05 ($p > 0.05$). Next the data will be analyzed with t-test (independent Samples t Test), at level significant 0.05 with level 95% confidence . After that for see how much big enhancement results study student so next with the gain test. All test processes, carried out with SPSS 25 for Windows program help.

DISCUSSION

Data obtained from study this is the result data study cognitive students . Data obtained from results pretest and posttest with use online test in the form of question choice double .

Description of Pretest and Posttest Data

Result data description pretest and posttest shown in figure 2.

Figure 2. Pretest and Posttest Data on Learning Outcomes Cognitive

Normality Test

Following the results of the data normality test using spss 25

Table 1. Normality Test Results

	Statistics	df	Sig.
Pretest	.138	32	.123
Posttest	.153	32	.056

Source :

Based on the normality test in table 21 obtained results pretest score with mark significance of 0.123 and post-test of 0.056 which are both value > 0.05 . by because it 's assumed or condition normality already fulfilled or it can be said that the data generated normal distribution

t-test

Before paired t-test was performed eat more formerly done formulation hypothesis .

Ho : no there is difference results study via Telegram Bot learning media

Ha : there difference results study via Telegram Bot learning media

Based on data from t-test results, known mark $t_{count} 38,012 > t_{table} 2.042$ and value the signification that can be obtained ie $0.00 < 0.05$. This means that Ho is rejected and Ha is accepted with ability test results initial and ability test results show ending _ difference results study to direction positive through Telegram Bot learning media.

N-Gain Test

Next n-gain test results with use spss 25.

Table 2. N-Gain . Test Results

	Descriptives	Statistics	Std. Error
mean		63.4335	2.08063
	Lower Bound	59.1901	

95% Confidence Interval for Mean	Upper Bound	67.6770	
5% Trimmed Mean		63.8413	
median		64.2857	
Variance		138,528	
Std. Deviation		11.76979	
Minimum		33.33	
Maximum		81.82	
Range		48.48	
Interquartile Range		12.98	
Skewness		-197	.414
Kurtosis		.108	.809

From table 2. can seen that the average n-gain score is of 63.4335 or 63% including category enough effective , with the N-gain score is a minimum of 33.33% and a maximum of 81.82%. From value that , then could interpreted the use of Telegram Bot learning media is enough effective for Upgrade results study participant educate .

Research results this support results study maknuni (2020) that learning media via the internet can Upgrade performance study participant educate , and opinion Alifyan (2016) who says that the Telegram Bot can accepted with good by students so that could Upgrade results study . Enhancement results study student no free from The advantages possessed by the Telegram Bot learning media are: could used where only and when just through computer as well as smartphones. in line with opinion Subiyantoro (2020) who says that the Telegram Bot learning media has excess could accessed on mobile devices with Android , IOS and Windows phone operational systems . Behind the advantages it has , the Telegram Bot learning media also has disadvantages , such as limitations the color in the text, the menu column is not can given color , character letter no could replaced , and the writing is not can be right aligned left .

Based on results research , then the suggestions that can be given namely : (1) Research results this could used as biology teacher reference in the learning process . (2) result study this could made references and materials information for teachers in making learning media Biology or for study next .

CONCLUSION

The design of learning media development for Telegram Bot is a product that can be used as an alternative for teachers in the digital or online learning process.

Based on the results of the validation carried out by material experts and media experts, the Telegram Bot learning media that has been developed is declared suitable for use in the learning process, this is shown by the validation results which obtained a feasibility percentage of 78% by the material expert validator, which means that according to this validator's assessment classified as valid and feasible to use in the learning process. Likewise, the feasibility by media experts obtained a feasibility percentage of 75.76%, which means that according to the validator this is quite valid so that it is suitable for use in the learning process.

Based on students' responses to the use of learning media, it can be concluded that the Telegram Bot learning media that has been developed is quite effective in improving students' learning outcomes and motivation, it can be seen from the results of the t-test calculation and the results of the student motivation questionnaires that have been distributed. . The results of the t-test calculation show $t_{count} 38.012 > t_{table} 2.042$ and the significance value obtained is $0.00 < 0.05$, it shows that there are significant

differences in learning outcomes and the N-gain test results are 63% which are categorized as sufficient. effective.

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