

The Influence Of ICT-Based Learning Media Against The Results Of The Study (Class XI IPA SMA Negeri 1 Parungkuda Sukabumi District 2016)

Herwan

Abstract: The usage of information and communication technology in learning led to a significant change in the medium of instruction. ICT-based learning media has influenced every subjects including Islamic religious education lessons. The purpose of this research is to know the changes to the results of a study of treatment between classes of control and experimental class. Research method used in this study was quasi experimental nonequivalent control group design. After doing the t-test results obtained -13,166 not among 2,12 mean H_0 is rejected, meaning that there is the influence of ICT-based learning media towards the improvement of the learning outcomes of students with obtaining an average score of class reached 70,88% and total students who achieve over 80% of the KKM. This shows that there is a significant difference between the results of learning using ICT-based learning media compared to the conventional method without the use of the media.

Index Terms: ICT-based learning media, the results of the study

1 INTRODUCTION

Technological developments especially information and communication technologies (ICT) has affected all aspects of life including education. According to Miarso in Warsita [6]. the characteristics of the development of ICT, namely: 1) power load to collect, save, manipulasikan, and presents information on the rise; 2) speed of presentation information increased; 3) miniaturization of hardware; 4) diversity of choice information; 5) decreased the cost of obtaining information; 6) simply the use of information technology products; 7) distribution of information more quickly and broadly; and 8) problem solving and future predictions he made more precise. The development of the technology utilized world education in the national program of learning and solving problems learning. ICT in education is used as a more advanced learning. ICT-based education provides two advantages that community education is more appreciative and proactive in the maximization of existing potential education and give students in utilizing every existing potentials, obtained from sources that are not limited Deni, [2]. ICT used in Islamic studies as a means of communication in explaining a process that doesn't quite explain the Lecture course. Islamic religious education requires learning tools (media) to explain Islamic religious education lessons that are practical to students. How to overcome the practical explanation of using ICT in learning the Islamic religious education has a variety of advantages, namely as a viewer message in the form of media images, movies, sound. The media is anything that can be used to transmit a message from the sender to the receiver so that it can stimulate the mind, feelings, attention and interest as well as the attention of the student a way that learning process occurs. Arief s. et al, [1].

ICT-based learning media if it is reviewed based on the constructivism theory pioneered by Piaget, Vygotsky, and Brunner looked that knowledge and understanding will be acquired to do with personal experience and experimental activities Rusman, et al.: [4]. Learning Islamic religious education in General in class XI IPA I not optimal, is visible from the student learning outcomes on average achieve 65 and also value trend of students crowded if the start of the study. This need for granting media in order to increase student motivation and learning. ICT-based learning media presence important enough in the process of teaching and learning because of the vagueness in the activities of the material presented can be helped by presenting the media as intermediary. Complexity of the materials would be delivered to the students with the help of simplified encompasses media. The media can represent what is less able to recite teacher through words or sentences. Based on the description of research needs to be done about the use of ICT-based learning media against the Learning Outcomes of students of Class XI IPA SMA Negeri 1 Parungkuda. By doing such research is expected to be able to know how much influence the granting of ICT-based learning media against student learning outcomes and also gives the knowledge of ICT media in learning so that teachers do not stutter technology. Information and communication technology ICT abbreviated is part of science and technology. According to Natalie (2012) the term ICT (Information and Communication Technology) or among the Asian-language United Kingdom called Infocom. The importance of the use of ICT as a spreader of information utilized by the world of education. The use of ICT is used as a tranformasi knowledge to the learners. The development of the ICT impact on learners in utilizing the existing potential, which was not obtained from sources that are not limited. Deni, [2]. Information and Communication Technologies (ICT) are all the technical equipment to process and convey information. ICT covers two aspects, namely information technology and communication technology. Information technology encompasses all matters relating to the use of the process, as tools and information management. While communications technology is everything to do with the use of tools for processing the data transfer from the dam to the other.

- Herwan is currently pursuing doctor degree program in Islamic Education in Universitas Islam Negeri Sunan Gunung Djati Bandung, Indonesia, PH-6285814917151. E-mail: erwanazra@gmail.com

Therefore, information technology and communication technology are two concepts that are not separate. So a broad sense contains ICT i.e. all activities associated with the processing, management, transfer of information between the media. Rusli, [3]. Learning media is a dealer or a festive message liaison was created programmatically by a teacher or educator (Munadi, 2010). Teachers use learning media to facilitate teachers in delivering the message of learning to students in order to facilitate students in learning. The results of the study is a thorough change in behavior not just one aspect of the potential humanitarian. Thobroni, m. & Arif m., [5]. The link between media will affect the results of student learning. From the description on the background above, then it can be formulated problem "is the influence of ICT-based learning media against the learning outcomes of students of Class XI IPA SMA Negeri 1 Parungkuda?" This research is expected to have benefits in the field of education so that learning becomes active, creative and fun. The study also provides an alternative media information by leveraging technology as a medium of ICT in learning.

2. Research Methods

This research uses data the results of student learning as research data. The approach used, namely quantitative research and the kind of research that is a Quasi Experimental Design and design research is Nonequivalent Control Group Design. Prior to the implementation of learning both the control group and the experimental group in advance given the initial tests (pretest), and further given the material. After that at the end of instruction given reinforcement by providing material using ICT-based learning media treatment as media and learning resources and given the ultimate test (posttest), reserved in the pretest and posttest same implementation in the form of objective. Free variables in this study include: serving, mastery of the material, the development of media and bound variables in this study i.e. the increasing student learning outcomes.

3. Results and Discussion

The Z Score calculation based on SPSS pretest and posttest values obtained from both classes, between ± 1.96 mean H_0 received the second Gaussian group means.

Table 1. Its homogeneity Pretest and Posttest Grade XI IPA 1

Score Levene	df1	df2	Sig.
0.392	3	30	0.76

Table 2. Its homogeneity Pretest and Posttest Grade XI IPA 2

Score Levene	df1	df2	Sig.
2.315	3	30	0.096

Based on the results of the calculation of its homogeneity test using SPSS on a significant level of 5% obtained grades the significance of class X IPA 1 i.e. $0.760 > 0.05$ and value the significance of class X IPA 2 i.e. $0.096 > 0.05$. This shows that these two classes have the same variant or homogeneous.

4. Hypothesis Test.

Based on the analysis of t-test with a 5% significant level obtained results $t_{count} - 13.166$ not between ± 2.12 H_0 is rejected there means so that the influence of ICT-based learning media

against the results of student learning in the classroom experiments as well as the class of the control. After the analysis of the test t 5% significant level obtained t_{count} class control IE-8.426 not between ± 2.12 H_0 is rejected so it means berbsis learning media use ICT improves student learning outcomes grade control calculation of SPSS results learning experiment group and control group. After going through the test of the validity of a reliability problem, also through a test of its homogeneity and normality test. Based on the results of test calculations obtained SPSS normality unknown z score in class experiments and classroom control between ± 1.96 , so data is Gaussian. While its homogeneity test using SPSS note that significant levels of control class $0.096 > 0.05$ and at significant levels obtained experimental class 0.760 . This shows that these two classes have the same variant or homogeneous. After going through the test of its homogeneity and normality test, data were analyzed using paired samples t test procedures in SPSS. Obtained a value of t_{count} on the experimental classes are not on $IE-2.12 \pm 13.166$ then H_0 denied it means there is a macromedia flash media pemberiam influence towards the improvement of the results of the study, as well as on the class control retrieved-8.426 then H_0 denied that means there is influence the granting of media images against the increase in the results of the study. The granting of the learning media in teaching and learning to overcome difficulties in learning students and improve student learning outcomes. This looks at the t test results obtained namely inequality or changes the value of the acquisition of pretest and posttest students, if calculated then test t in the hypothesis H_0 is rejected and the H_a are received. After the test analysis with t that there is improvement of the learning outcomes against granting the media in both classes, namely class control and experimental classes.

5. Conclusion

After doing the test results obtained t 13.166 not between 2.12 \pm means H_0 is rejected, there is the influence of the use of ICT-based learning media to increased student learning results of class X 1 with the IPA Acquisition score average classroom reached 70.88% and total students who achieve the KKM i.e. more than 80%

Reference

- [1] Arif-S, Sadiman. et al. (2011) Media Pendidikan: Pengertian, Pengembangan dan Pemanfaatannya. Jakarta: Rajawali Press.
- [2] Darmawan, Deni. 2012. Teknologi Pembelajaran. Bandung: Remaja Rosdakarya
- [3] Rusli. 2009. information and communication technology in education. Jakarta: GP Press.
- [4] Rusman, d. k. And Cepi, R (2011). Technology-based learning, information and communication. Jakarta: Eagle Press.
- [5] Thobroni, M & Arif Mustofa. 2012. Belajar dan Pembelajaran Ar-ruzz Media. Yogyakarta.
- [6] Warsita, Bambang. (2008). Teknologi Pembelajaran. Landasan & Aplikasinya, Jakarta: Rineka Cipta.