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THE USE INFLUENCE OF INFORMATION AND OMMUNICATION TECHNOLOGY (ICT) LEARNING MEDIA ON STUDENTS LEARNING ACTIVENESS IN CLASS V SDN PANNARA MAKASSAR CITY

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Rahma Ashari Hamzah
rahmaasharihamzah.dty@uim-makassar.ac.id
PGSD, FKIP, Universitas Islam Makassar
*Corresponding Author

Abstract: This study used a quantitative approach with the type of research True-Experimental Design with Pretest-Posttest Control Group Design. The purpose of this study was to determine the effect and description on students learning activeness before and after the use of information and communication technology (ICT) learning media in SDN Pannara Makassar. Data collection techniques used observation sheets (observations), questionnaires, and documentation. The population is all fifth-grade students of SDN Pannara Makassar. The sampling technique used is the total sampling technique. The data analysis technique used is descriptive analysis and inferential analysis. The results showed that the use of Information and Communication Technology (ICT) learning media was implemented well. Based on the results and implementation of students learning activeness before using Information and Communication Technology (ICT) learning media (pretest) in the experimental group in low category 24.00%, medium category 20.00%, high category 56.00%, and in very high category 24.00% and control group in the low category was 32.00%, the medium category was 40.00%, the high category was 28.00%, and the very high category was 24.00%. After being treated with the use of Information and Communication Technology (ICT) learning media, there was an increase in students learning activeness in the experimental group with low 0.00%, medium 12.00%, high 32.00%, and very high 56.00% categories. While the control group is in the low category of 0.00%, medium 20.00%, high 56.00%, and very high 24.00%. From these acquisitions, the use of Information and Communication Technology (ICT) learning media affects students learning activeness of SDN Pannara Makassar.

Keywords: learning media, ICT, student learning activeness.

INTRODUCTION

Education is an important part of a country, the future of the nation and state depends on education that gives birth to quality successors. The act No. 20 of 2003 article 3 concerning the National Education System (Sanjaya, 2007: 63), namely the development of the potential of students to become human beings who believe and are

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devoted to God Almighty, have a noble character, are healthy, knowledgeable, capable, creative, independent and become a democratic and responsible citizens.

To achieve this goal, various innovations and teacher creativity are needed in designing learning processes that attract students. Interesting learning is expected to increase student activeness in participating in learning to achieve the desired results. Losanov (A'la, 2010:48) "learning or teaching process is a complex phenomenon. Everything means, every word, thought, action, and the extent to which you change the environment and the design of the teaching to the extent that the design of the learning process goes.

(Dimyati & Mujiono, 2006:46) stated that "in the learning process, there are four important components that influence the success of student learning, namely: a) learning materials; b) learning atmosphere; c) media and learning resources; and the teacher as the subject of learning". These components are very important in influencing the learning process. If one of the components can not support the success of learning can not be optimal. The learning atmosphere must be designed so that children can enjoy a comfortable and fun learning atmosphere.

The increasingly advanced Information and Communication Technology (ICT) is expected to help teachers to facilitate their duties in delivering lessons. Information and Communication Technology (ICT) as part of Science and Technology (IPTEK) in general are all technologies related to the retrieval, collection, processing, storage, dissemination, and presentation of information (Budiana et al: 2015). Information and Communication Technology (ICT) can be used by teachers to design interesting learning media so that students can be more active in learning. However, for this to be implemented, teachers must improve their ability to adopt the technology. The use of technology-based learning media is not easy. In using the media, you must pay attention to several techniques so that the media used can be utilized to the maximum and does not deviate from the learning objectives(Zabir, 2018). Media in the teaching and learning process is a tool to achieve goals. Learning media(Arief Sadiman, 2008: 7) is anything that can be used to distribute messages from the sender to the recipient of the message. Furthermore, DePorter's opinion regarding learning media (2005:70) says that aids are objects that can be used to represent an idea and aids can help visually and kinesthetically the process of student understanding of the subject matter.

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Lantip and Rianto (2011:4) information technology is defined as science in the field of computer-based information and its development is very rapid. Information technology is a means and infrastructure (hardware, software, user) systems and methods for obtaining, transmitting, processing, interpreting, storing, organizing, and using data meaningfully. (Bambang Warsita 2008:135). (Hamzah B. Uno and Nina Lamatenggo, 2011: 57) also stated that information technology is a technology used to process data. Then, (Huda, 2020) Information and Communication Technology (ICT) is a medium that can be used to distribute messages from the sender to the recipient so that it can stimulate the thoughts, feelings, and interests, and attention of students so that the learning process in the classroom occurs. Furthermore, (Zakiah & Hilman, 2018) Information and Communication Technology (ICT) includes two aspects, namely Information Technology (IT) which includes everything related to processes, use as a tool, manipulation, and information management. Communication Technology (TK) is everything related to the use of tools to process and transfer data from one device to another. Whereas,(Alfatru, 2010: 5), activeness is "an activity or everything that is done or activities that occur both physical and non-physical".

The learning activeness can be seen in student activities during the learning process. If students are already involved in the learning process, then students will feel a pleasant learning atmosphere so that learning outcomes can be maximized. (Djamarah, 2006: 27) "activity can be said as an activity or a person's busyness or using energy, thoughts, to achieve certain goals, all of which is to achieve optimal abilities".

One of the learning problems found in the school that is the object of the author's research is the provision of conventional material in this case the learning tools that are given are less stimulating the active role of students in learning. This is what causes students to be less active in learning which results in the low interest of students in learning.

Based on results of previous studies that are relevant to the research that the researcher will carry out. The research related to this research is (Yusri, 2016) ”The Use Influence of Information and Communication Technology (ICT) Media with the Achievement of Learning English for Class X Students at SMAN I Dekai, Yahukim Regency" indicated that the use of Information and Communication Technology (ICT) media have a good impact on students' English learning achievement. The level of

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achievement in learning English for class X students at SMAN I Dekai, Yahukimo Regency is in the high category. Another relevant research is, (Arfiyunanda, 2017) "The Influence of ICT Advice on Students' Learning Motivation in ICT Learning" The results obtained indicate that the results of the study state that using ICT facilities in learning can encourage student learning motivation in ICT subjects at SMK Yasemi Karangrayung.

Therefore, the authors are interested in taking the research title "The Use Influence of Information and Communication Technology (ICT) Learning Media on Students Learning Activeness in Class V SDN Pannara Makassar City". The purpose of this research is This study aims to determine the effect and description of student learning activeness before and after the use of information and communication technology (ICT) learning media in Pannara Makassar Elementary School. By raising this title, the author hopes to help teachers present Information and Communication Technology learning media to increase student learning activeness.

METHOD

This type of research is experimental research, using True-Experimental Design which aims to determine the use of Information and Communication Technology (ICT) learning media on the activity of fifth-grade students at Pannara State Elementary School, Makassar City. The population in this study were fifth-grade students of SDN Pannara Makassar City in the odd semester of the 2020/2021 academic year. The population of this study was 50 students, with the number of samples for each group being 25 students. The sample in this study was taken using the total sampling technique (total sampling).

Data collection techniques and research instruments used in this study were students learning activeness questionnaires and observation. The questionnaire was filled out twice, namely pretest and posttest. Data analysis techniques include descriptive statistical analysis and inferential analysis. This analysis begins with a test of analytical requirements, namely the normality test of the data, the homogeneity of the data, and the hypothesis test (t-test).

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RESULTS

Overview of Student Learning Activeness at Pannara State Elementary School, Makassar City

Student learning activity was measured using an instrument in the form of a questionnaire totaling 20 items. Student learning activeness questionnaire sheets are arranged in the form of a choice test that is checked (√) by students, which consists of a list of 12 positive questions and a list of 8 negative questions which were developed from indicators of student learning activeness which include: visual activities, oral activities, listening activities, writing activities, mental activities, and emotional activities.

The following table describes student learning activity before and after treatment:

Table 1 Overview of Student Learning Activeness Before and After Treatment

Control Group				interval	Category	Experimental Group			
Pretest		*Posttest*				*Pretest*		*Posttest*	
f	%	*f*	%			*F*	%	*f*	%
0	0	6	24.00	85 – 100	Very high	0	0	14	56.00
7	28.00	14	56.00	69 – 84	High	6	24.00	8	32.00
10	40.00	5	20.00	53 – 68	Medium	13	52.00	3	12.00
8	32.00	0	0	37 – 52	Low	6	24.00	0	0
0	0	0	0	20 - 36	Very low	0	0	0	0
25	**100**	**25**	**100**	**Amount**		**25**	**100**	**25**	**100**

Source:

a. Description of Student Learning Activeness Questionnaire Before being given ICT Learning Media Treatment

Table 1 above shows that in the control group before being given conventional (traditional) learning treatment by the researcher, the activeness learning of students at SDN Pannara Makassar City was 8 students in the low category with a percentage of 32.00%, in the medium category as many as 10 students with a percentage 40.00%, and the high category as many as 7 students with a percentage of 28.00%.

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The results of the questionnaire (pretest) in the experimental group before being given treatment with the use of ICT learning media by researchers, the activeness learning of students at SDN Pannara Makassar City was 6 students in the low category with a percentage of 24.00%, in the medium category as many as 13 students with a percentage of 52.00 %, and the high category as many as 6 students with a percentage of 24,00%.

Pretest was carried out in the experimental group and in the control group to determine the students' initial learning activeness towards learning. Based on the analysis results of the pretest value data, it was shown that the experimental group and the control group had early learning activeness that was not significantly different. The pretest results of both classes are in the medium category. This shows that the initial learning activeness of students in the experimental group and the control group before taking part in learning is still low.

b. Description of Student Learning Activeness Questionnaire After being given ICT Learning Media Treatment

Questionnaire or student learning activeness questionnaire for the posttest is the same as the pretest. This is so that there is no bias between the posttest and pretest.

Based on table 1, shows that in the control group after being given conventional (traditional) learning treatment by the researcher, the learning activeness of students at SDN Pannara Makassar City was 5 students in the medium category with a percentage of 20.00%, in the high category as many as 14 students with a percentage of 56, 00%, and in the very high category as many as 6 students with a percentage of 24,00%. Then students who are in the low category, with an interval of 37–52 are no longer there.

After being treated by the researcher, student learning activeness had a greater increase in the experimental group than the control group where as many as 3 students were in the medium category with a percentage of 12.00%, in the high category as many as 8 students with a percentage of 32.00%, and the very category

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as many as 14 students with a percentage of 56.00%. Then students who are in the low category, namely with an interval of 37–52 are no longer there.

This shows that the level of students learning activeness in the experimental group experienced a large increase when compared to the pretest. The low students learning activeness in the control group was due to the lack of precise selection of the learning model used to increase student learning activeness.

The posttest results of students in the experimental group had a greater increase, from the moderate category and then increased to the very high category. The high posttest score of students occurs due to the learning model used, that is the use of ICT learning media which can increase student learning activeness in learning. This is because there is fun learning where there is an interaction between the teacher and students that is established well. When the teacher applies ICT learning media, students follow it well.

Based on the average (mean value) of the experimental group and the control group, a difference of 5.64 (83.12 - 77.48 = 5.64) was obtained, with the experimental group having a higher mean value than the control group. The mean difference indicates that learning using ICT learning media affects increasing student learning activeness.

Based on the description above, it can be concluded that student learning activeness in the experimental group is higher than in the control group. When viewed from the average pretest the control group and the experimental group have almost the same value, but the average posttest results show that the use of ICT learning media in the experimental group is better than the implementation of conventional (traditional) learning in the control group. This indicates that the use of ICT learning media has a better effect on increasing student learning activeness in class V compared to the application of conventional learning in the control group.

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DISCUSSION

The Influence of ICT Learning Media on Student Learning Activeness at Pannara State Elementary School Makassar City

Based on the results of calculations using the t-test (independent samples test) with the help of SPSS version 20 with a significant level of 5% or 0.05, two outputs are obtained that the value of the results of hypothesis testing on posttest data is t_{count} = 2,298 and *p-value (sig. 2-tailed)*=0.026.

Summary of test calculation results-*t* by comparing the values of t_{count} with the following:t_{table}

Table 2 Summary of Results T-Test Calculation by Comparing Between Values t_{count} with t_{table}

No.	Compared group	Mark t_{count}	Value (0.05)t_{table}	Description
1.	*Posttest* experimental group with the control group	2,298	1,708	Significant

Based on table 2 above, shows that the t-test calculation shows the results of calculations about the difference in learning activeness between the two learnings as a whole that t_{count} = 2.298 > t_{table}= 1.708 at a significant level of 0.05, thus H0 is rejected and H1 is accepted, meaning that there is an effect of using ICT media on student learning activeness.

The summary of the results of t-test calculation by comparing the p-value/ (Sig.2-tailed) with a significance of 0.05 is as follows:

Table 3 Summary of results t-test calculation by comparing the p-value/(Sig.2-tailed) with a significant 0.05

No.	Compared group	*p-value/ (Sig.2-tailed)*	Significant	Description
1.	Posttest experimental group with the control group	0.026	0.05	Significant

Based on table 3 above, shows that the t-test calculation shows the calculation results that $p - value/(Sig.2 - tailed)$ = 0.026 <0.05, thus H0 is rejected and H1 is

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accepted, meaning that there is an influence of ICT learning media on student learning activeness.

The results of the t-test calculation above can be concluded that there is a significant difference in the effect between the experimental group that is given the treatment of ICT learning media and the control group that is not given the treatment of ICT learning media but used conventional learning on student learning activeness. Therefore, student learning activeness who were given the treatment of ICT learning media was significantly better than those given conventional learning. This means that the overall research hypothesis is that student learning activeness who are given ICT learning media is higher than the group of students who are given conventional learning. Learning media is one of the things that makes it easier for a teacher to deliver learning material. The word media comes from the Latin medius which means 'middle', 'intermediary', or 'introduction'. In Arabic, the media is an intermediary or introductory message from the sender to the recipient of the message (Arsyad, 2016). Media is an aspect that greatly influences the achievement of the learning process that can stimulate students and teachers when delivering learning materials (Syafei, 2013).

Level of Student Learning Activeness in Elementary School

The results of the questionnaire (pretest) in the experimental group before being given treatment by researchers, students learning activeness at SDN Pannara Makassar City as many as 6 students were in the low category with a percentage of 24.00%, in the medium category as many as 13 students with a percentage of 52.00%, and high category as many as 6 students with a percentage of 24,00%. While the results of the questionnaire (pretest) in the control group before being given conventional (traditional) learning treatment by the researcher, students learning activeness at SDN Pannara Makassar City as many as 8 students were in the low category with a percentage of 32.00%, in the medium category as many as 10 students with a percentage of 40 0.00%, and the high category as many as 7 students with a percentage of 28.00%.

Pretest was carried out in the experimental group and in the control group to determine the students' initial learning activeness towards learning. Based on the analysis result of the pretest value data, it was shown that the experimental group and the control group had early learning activeness that was not significantly different. The

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pretest results of both classes are in the medium category. This shows that the initial students' learning activeness in the experimental group and the control group before taking part in learning is still low.

The questionnaire results (posttest) in the control group after being given conventional (traditional) learning treatment by the researcher, students learning activeness at SDN Pannara Makassar City as many as 5 students were in the medium category with a percentage of 20.00%, in the high category as many as 14 students with a percentage of 56, 00%, and in the very high category as many as 6 students with a percentage of 24,00%. Then students who are in the low category, with an interval of 37–52 are no longer there.

After being treated by the researcher, students learning activeness had a greater increase in the experimental group than the control group whereas many as 3 students were in the medium category with a percentage of 12.00%, in the high category as many as 8 students with a percentage of 32.00%, and the very category as many as 14 students with a percentage of 56.00%. Then students who are in the low category, namely with an interval of 37–52 are no longer there.

The cause of the high increase in students learning activeness in the experimental group is because students always ask the teacher if there is the material that has not been understood, students discuss the material studied with their friends, students can express their opinions, and students seek information about the material provided by the teacher so that there is a significant increase of students learning activeness in the experimental group.

This is in line with the opinion (Sudjana, 2009: 72) which suggested students activeness in the learning process can be seen in:

a) Participate in carrying out their learning tasks.
b) Engage in problem-solving.
c) Ask other students or the teacher if they do not understand the problem they are facing.
d) Trying to find the various information needed to solve the problem.
e) Train themselves in solving problems.
f) Assess their abilities and the results obtained.

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Based on the description above, it can be concluded that students learning activeness in the experimental group is higher than the control group. This indicates that the use of ICT learning media has a better effect on increasing students learning activeness in class V compared to the application of conventional learning in the control group.

Based on the results of calculations using the t-test (independent samples test) with the help of SPSS version 20 with a significant level of 5% or 0.05, two outputs are obtained that the value of the results of hypothesis testing on posttest data is t_count= 2,298 and p-value (sig. 2-tailed)= 0.026, it can be concluded that there is a significant difference in the effect between the experimental group given the treatment of ICT learning media and the control group which was not given the treatment of ICT learning media but using conventional learning on students learning activeness. Therefore, students learning activeness who are given treatment using ICT learning media are significantly better than those given conventional learning.

Based on the description above, the use of ICT learning media can be applied to increase the learning activeness of fifth-grade students at Pannara State Elementary School, Makassar City.

CONCLUSION

Student learning activeness in learning in class V SDN Pannara Makassar City before the use of ICT learning media was in the medium category, both in the experimental group and in the control group. There was an increase in students learning activeness in the experimental group which was in the very high category after the use of ICT learning media while the control group was in the high category. The use of ICT learning media has a positive effect on students learning activeness in class V SDN Pannara Makassar City.

REFERENCES

A'la Miftahul. 2010. *Quantum Teaching (Buku Pintar dan Praktis).* Yogjakarta: Diva Press.

Alfatru, Nawawi. 2010. *Keaktifan Belajar*. (Online) Vol. 3 No. 3 (http: // nawawielfatru. blogspot. com / 2010/ 07/keaktifan belajar. html#comments).

ISSN 2579-6461 (Online) ISSN 2460-6324 (Print)
DOI: https://doi.org/10.29407/jpdn.v7i2.16927

Arif S. Sadiman, dkk. 2008. *Media Pendidikan*. Jakarta: PT Raja Grafindo Persada.

Arfiyunanda. 2017. *Pengaruh Saran TIK Terhadap Motivasi Belajar Siswa dalam PembelajaranTIK"*https://repository.uksw.edu/bitstream/123456789/13933/1/T1_702011035_Full%20text.pdf

Arsyad, Azhar. 2016. *Media Pembelajaran*. Jakarta: PT Grafindo Persada.

Budiana, Sjafirah, dan Bakti. 2015. "Pemanfaatan Teknologi Informasi dan Komunikasi dalam Pembelajaran bagi para Guru SMPN 2 Kawali Desa Citeureup Kabupaten Ciamis", *Jurnal Aplikasi Ipteks untuk Masyarakat*, Vol. 4 No. 1, hlm. 59-60.

DePorter, Bobbi. (2005). *Quantum Teaching and Learning*. Diterjemahkan oleh Ary Nilandari. Bandung: Kaifa.

Dimyati & Mujiono. 2006. *Belajar dan Pembelajaran*. Jakarta: Rineka Cipta.

Djamarah & Syaiful Bahri. 2006. *Guru dan Anak Didik dalam Interaksi Edukatif.* Jakarta: Rineka Cipta.

Hamzah B. Uno & Nina Lamatenggo. (2011). *Teknologi Komunikasi & Informasi Pembelajaran.* Jakarta: Bumi Aksara.

Irkham, Abdaul Huda. 2020. "perkembangan Teknologi Informasi dan Komunikasi (TIK) Terhadap Kualitas Pembelajaran di Sekolah Dasar*"*. *Jurnal Pendidikan dan Konseling*, Vol.2 No. 1, hlm. 3.

Prasojo, Lantip Diat dan Riyanto. 2011. *Teknologi Informasi Pendidikan*. Yogyakarta: Gava Media.

Sanjaya, Wina. 2007. *Strategi Pembelajaran Berorientasi Standar Proses Pendidikan*. Jakarta: Kencana.

Suci, Zakiah dan Irfan, Hilman. *2018.* "Penggunaan TIK Sebagai Sumber dan Media Pembelajaran Inovatif di Sekolah Dasar*"*. *Jurnal Og Primay Education*, Vol.2 No. 2, hlm. 49.

Sudjana. 2009. *Penilaian Hasil Proses Belajar Mengajar*. Bandung: Remaja Rosdakarya.

Safei, Muhammad. 2013. *Teknologi Pembelajaran Berbasis TIK*. Cet. 1; Makassar: Alauuddin University Pers.

Undang-Undang Republik Indonesia Nomor 20 tahun 2003 tentang Sistem Pendidikan Nasional. Jakarta: Dharma Bhakti

ISSN 2579-6461 (Online) ISSN 2460-6324 (Print)
DOI: https://doi.org/10.29407/jpdn.v7i2.16927

Warsita, Bambang. (2008) *Teknologi Pembelajaran: Landasan &Aplikasinya*. Jakarta: Rineka.

Yusri. 2016. *Pengaruh Penggunaan Media Teknologi Informasi dan Komunikasi (TIK) dengan Prestasi Belajar Bahasa Inggris Peserta Didik Kelas X di SMAN I Dekai Kabupaten Yahukim"* (Jurnal Ilmiah ILKOM Volume 8 Nomor 1 (April 2016)

Zabir, Ashari. (2018). Pengaruh Pemanfaatan Teknologi Pembelajaran Terhadap Motivasi Belajar Siswa SMPN 1 Lanrisang Kabupaten Pinrang. *http://eprints.unm.ac.id/9823/1/Jurnal%20azhari.pdf*