

## **Effect of E-Learning and Educational Information Systems on the Learning Interest of Islamic Elementary School Children**

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### **Abstract**

The research objective in this study was to determine the effect of Web-Based E-Learning on the learning interest of elementary school children in 2021. Electronic learning or commonly referred to as e-learning (electronic learning) is a learning system utilizing electronic media as a tool to assist learning activities. E-learning itself is a form of distance learning concept. The form of e-learning itself is quite broad, a portal that contains scientific information can already be said to be an e-learning site. The design in this study is Experimental Design. This design has a control group, but does not fully function to control the external variables that affect the implementation of the experiment. The population in this study were Islamic elementary school students. The sample in this study were 46 Islamic elementary school students. Based on the results of the research and the results of data analysis that has been done, it can be concluded that there is an effect of web-based e-learning on the learning interest of Islamic elementary school children.

Keywords: E-learning, Learning Interest, Islamic Schools, Education Information system

### **Introduction**

The 4.0 industrial revolution in education, education must be able to respond by carrying out reforms, especially Islamic universities so that they are not left behind with western education by organizing E-Learning-based education, E-Book E-Journal and Islamic Education Information Systems which are forms of education. Today's educational products that prioritize information technology. Education is an effort that must be built and planned to realize an effective learning and learning process so that students become active in developing their potential, intelligence, good morals, religion, as well as the people of the nation and state. The concept of teaching and learning still has meaning as an interaction between lecturers and students through a meeting that occurs in the classroom. The teacher or lecturer plays a very dominant role in the lecture hall. In fact, effective learning should be very focused on the characteristics of the learning (process). The development of the learning process through information and communication technology which introduces the use of electronic media such as computers in disseminating information. At this time in the era of globalization of education, it is very important to realize progress and also technological developments that greatly affect the world of education. In the field of education, the development of ICT has triggered the development of e-Learning. E-Learning or electronic learning is a concept in the learning process using ICT, especially using Internet-based media. The term E-Learning itself has the same meaning with several other terms such as on-line learning, virtual classrooms and virtual learning. Learning through this media does not take too long to become proficient in it, or just to be able to do e-learning electronic learning itself, and e-learning does not require a large or large space like learning in class, e-learning that is an internet media technology that has shortened the distance. The development of information and

communication technology (ICT) which produces the internet with web-based learning is a learning activity that utilizes web media (websites) that can be accessed via the internet network. Web-based learning is one type of application of electronic learning (e-learning). One of the advanced technologies today is in the form of electronic communication tools including mobile phones, laptops, tablets and others (gadgets).

Entering the technological era, anyone must be able to understand, master, or at least know it. It is better if someone no longer adheres to the term clueless (stuttering technology) if you don't want to be left behind, because currently all human activities are related to technology. The world of education is also struggling with technology by applying the e-learning method to its teaching system. Electronic learning system or e-learning (English: Electronic learning abbreviated as E-learning) is a new way of teaching and learning. E-learning is the basis and logical consequence of the development of information and communication technology. With e-learning, school teaching and learning methods utilize technology through electronic media such as computers, laptops, netbooks, or smartphones with internet or other networks. This involves the role of teachers and students, even parents of students, to be active. For example, schools no longer require to buy textbooks as handbooks for teaching and learning activities. Parents of students are only given information on the titles of books they need, along with the authors and publishers. Parents of students are required to be active, look for these books themselves by being allowed to buy books at bookstores or just uploading (downloading) electronic school books (BSE) on the internet.

E-learning does not only apply to on-line learning methods, but can also be applied off-line, such as learning in class using a projector or watching DVD movies to learn something about some actual events such as earthquake, tsunami, and so on. Various technologies and applications are created in an effort to support the operational activities of human life and organizations, including teaching and learning activities. The web is a technology that is currently being developed in the global era. In the past, the web was used as a delivery of information and promotion through a PC (Private Computer). Slowly now, the web has become a supporting process for all aspects of life, including as a medium of learning. Devices for accessing websites are also not limited to PCs but can also be accessed via gadgets such as smartphones, PCs and laptops. The more developing the web, the more variety of learning media. In every learning process, there are several elements that need to be considered in carrying out teaching and learning activities, one of which is Learning Motivation. According to Muhammad (2016) Motivation is a change in energy within a person characterized by the drive that comes from a person to achieve goals. Student motivation is said to be high if students are diligent in facing tasks, resilient in facing difficulties, and have an interest in activities. learn how to teach In elementary schools, especially in grade 5, one obstacle is still encountered in the mathematics learning process, namely students' low learning motivation. This is indicated by the completion of the teacher's postponed assignment. In addition, students prefer simple tasks. Students have not shown appreciation in learning mathematics which is shown by their behavior which is still chatting outside the learning material. Students also feel happy when the teacher is not present in class.

According to Rahmatia (2017) explains that e-learning is learning that uses electronic services as a tool. Electronic learning or commonly referred to as e-learning (electronic learning) is a learning system utilizing electronic media as a tool to assist learning activities. E-learning itself is a form of Distance Learning concept. The form of e-learning itself is quite broad, a portal containing scientific information can already be said to be an e-learning site. Elearning or Internet enabled learning combines teaching methods and technology as a means of learning. E-learning is an effective learning process that is produced by combining digital material delivery consisting of support and services in learning. Hartanto (2015) The term e-learning has a lot of meaning because of the various uses of e-learning today. Basically, e-learning has two types, namely synchronous and asynchronous. Synchronous means at the same time. The learning process occurs at the same time between educators and students. Babo (2016) explains that web-based learning is a teaching and learning process that is carried out by utilizing the internet network, so it is often called with e-learning. The internet is a network consisting of thousands and even millions of computers, including local networks, which are connected via channels (satellite, telephone, cable) and their coverage covers the entire world. The internet has many facilities that can be used in various fields, including in educational activities. Web-based learning or popularly known as web-based training (WBT) is a web

technology application in the world of learning for an educational process. In simple terms it can be said that all learning by utilizing internet technology and during the learning process is felt to occur by those who participate in this activity can be called web-based learning. Sari (2017) explains that although the use of web-based learning media has several benefits that can help achieve learning goals, there are still many schools that have not used web-based learning media to support learning activities in the classroom. Nurhasanah (2016) explains that interest in learning is an attitude of obedience to learning activities, both regarding the planning of study schedules and the initiative to do this effort seriously. Before we know the interest in learning, we must know the meaning of interest and learning. The word interest is etymologically derived from the English language "interest" which means liking, attention (the inclination of the heart to something), desire. So in the learning process students must have an interest or liking to take part in the learning activities that are taking place, because interest will encourage students to show concern, activity and participation in the learning that is taking place. Fauziah (2017) argues that student interest in learning is closely related to personality, motivation, expression and self-concept or identification, heredity and external or environmental influences.

In primary school education reading is very important. By reading we can get very important information, along with the times and technology we can get knowledge. Reading is a skill that must be quasi-early, by reading children can find out the areas they are interested in, but since children know Gagdet. Their curiosity increases what the tool is for. First, they may use to watch Youtube, they can recognize new things, whether bad or good. Both of them use it for social media and games, whether it's educational games or not. Third, take advantage of Internet Search Engines such as Google, Bing etc. Although it is also included in E-Learning. The use of search engines in students may be looking for information, pictures, songs and videos. When looking for information on the Internet over time they will realize that maybe the answers to LKS questions, textbooks, etc., are on the internet. According to a survey by researchers in the use of student technology, students are smartphone users (Android, Blackberry, and iPhone), students are ordinary mobile phone users, and students do not have digital communication devices. The most reason for using a smartphone is because it follows a life style. Triggered again by the presence of wireless local area network (WLAN / Wi-Fi) facilities that are free to use by students and teachers. Based on the above background, the research hypothesis is that there is an effect of Web-Based E-Learning on the learning interest of elementary school children.

## METHOD

The research method used is the experimental method. Sugiyono, (2009) explains that the experimental method is part of. quantitative methods that have their own characteristics, especially in the presence of a control group. This method was chosen to determine certain symptoms through the treatments applied to the experimental sample. The author intends to know about the influence of web-based e-learning on elementary school children's learning interest. Where researchers will examine students. After going through the lottery, 18 students were selected to be the control class and 18 students to become the experimental class to find out about the Effect of Web-Based E-Learning on the Learning Interest of Elementary School Children.

The design in this research is Quasi Experimental Design. This design has a control group, but does not fully function to control external variables that affect the implementation of the experiment (Sugiyono, 2009). Population is a generalization area consisting of: objects / subjects that have certain qualities and characteristics that are determined by the researcher to be studied and then draw conclusions. (Sugiyono, 2009). Meanwhile, Suwanto (2007) explains that research that uses the null hypothesis will always be related to the population and sample. The population in this study were students. The sample is part of the number and characteristics of the population. (Sugiyono, 2009). Meanwhile, Suwanto, (2007) explains that to get a sample that can represent the population, researchers need to pay attention to the following matters: understanding the characteristics and characteristics of the population, determining sample data and determining sampling techniques. In accordance with the above opinion, the sample in this study was 46 students. The data collection technique in this study is to use the test method in this study is a questionnaire test for students. The initial test was carried out with students given a questionnaire of 20 questions, both in the experimental class and in the control class. After this is done and finished, then students are given learning treatments about web-based e-learning for 6 meetings for the experimental class. The control class

was not given treatment. After a web-based e-learning treatment is carried out in the experimental class, students are given the same questionnaire questions as the initial test, both in the experimental class and in the control class.

After the final test is carried out, the results of the control class and experimental class will be known. After the test instrument is tested on students, it is necessary to test the validity and reliability of the questions to determine whether the instrument is valid or not. (1) The data collection instrument used in this study was the test questions used in the student interest questionnaire test. (2) The validity test is important before the instrument is used for research because the validity test shows the appropriateness of an instrument to be tested. Test the validity of the instrument in this study using the product moment correlation formula

Reliability test is used to determine the level of consistency of the questionnaire. In this test, researchers used internal reliability, because it was obtained by analyzing data from one test result. The scoring of the research instrument ranges from values 1-5, so how to find out the reliability in this study uses the Alpha Cronbach formula (Basuki, 2016),

The normality test aims to test whether the regression model, the dependent variable and the independent variable have a normal distribution or not. The normality test was carried out by the Kolmogorov-Smirnov method. The test criteria used a two-tailed test, namely by comparing the probability obtained by looking at the significance value at 0.05. If the sig value is greater than 5%, it can be concluded that the residual is spread normally, and if the sig value is less than 5%, then it is concluded that the residual spread is not normal. (Basuki, 2016)

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To calculate the homogeneity test, the Bartlett test formula is used at the significance level  $\alpha = 0.05$ . The test criteria used is if  $X^2_{count} < X^2_{table}$  at the significance level  $\alpha = 0.05$ , which means that the data distribution in the study is homogeneous. This technique is done by using statistical analysis which is done manually and to be more sure about the truth of the results obtained followed by statistical tests.

If  $x^2_{count} < x^2_{table}$ , then  $H_0$  is accepted, meaning that the sample variance is homogeneous. Conversely, if  $x^2_{count} > x^2_{table}$ , then  $H_0$  is rejected, meaning that the sample variance is not homogeneous.

To facilitate the calculations, researchers used the SPSS 20.0 for windows computer program. The homogeneity test steps are as follows: click Analyze, compare means then One way Anova enter the research value in the Dependent column and the class in the next factor on the option check Homogeneity of variance test, press continue to continue the command and end the command by clicking OK. The conditions for this test are: if probability or Asymp. Sig. (2-tailed) is greater than the level of significant ( $\alpha$ ), then the data is normally distributed. if the value is Sig. or significance or probability value  $> 0.05$ , the data have the same or homogeneous variants.

Hypothesis testing is used to determine whether the research hypothesis is accepted or rejected. The formula used to test the hypothesis in this study is the average difference test (independent t-test).

The results of  $t_{count}$  are then compared with  $t_{table}$  with a significance level of  $\alpha = 0.05$  with the following test criteria:  $H_0$  is accepted if  $t_{count} \leq t_{table}$ ,  $H_0$  is rejected if  $t_{count} > t_{table}$

## RESULTS

The description of the results of the analysis of mathematical communication data is treated according to the class which is divided into two, namely the control class and the experimental class. In the experimental class, a web-based e-learning model was given and the control class was not treated. The purpose of the normality test is to determine whether the data distribution of each research variable is normal or not. As for the research data that was tested for normality, it included the overall data for the experimental class and the control class. The conclusion of the normality test is that if the significance value is  $> 0.05$ , it is said to be normally distributed. In the initial test, the experimental class obtained a significant level = 0.765, which

means it is greater than 0.05 or  $0.765 > 0.05$ . means normally distributed. In the initial test, the control class obtained a significant level = 0.464, which means it is greater than 0.05 or  $0.464 > 0.05$ . means normally distributed. At the final test the experimental class obtained a significant level = 0.466 which means it is greater than 0.05 or  $0.466 > 0.05$ . means normally distributed. In the final test the experimental class obtained a significant level = 0.896 which means it is greater than 0.05 or  $0.896 > 0.05$ . means normally distributed. If the significance value  $> 0.05$ , then the data distribution is homogeneous. From the results of the homogeneity test, the significance value was obtained = 0.737. It means  $0.737 > 0.005$  So it can be concluded that this study has a homogeneous variance.

After carrying out the reliability test and the normality test of the research data, the requirements for the analysis were fulfilled. In order for hypothesis testing to be carried out properly, it must first be determined how to accept and reject the hypothesis. To test the hypothesis that there is an effect of web-based e-learning on elementary school children's learning interest, the t test is used. Based on the results of the calculation of the t test analysis in the experimental class, it can be seen that the value of  $t = 11.14$ . The results of this calculation were then consulted with t table = 2.10 for  $\alpha$  5% with  $dk = 17$ , if  $t_{count} = 11.14 > t_{table} = 2.10$ , which means there is an effect of web-based e-learning on learning interest in elementary school children. Whereas in the control class the results of the t test analysis calculation can be seen that the value of  $t = 10.43$ . The results of this calculation were then consulted with t table = 2.10 for  $\alpha$  5% with  $dk = 17$ , if  $t_{count} = 10.43 > t_{table} = 2.10$ .

## DISCUSSION

Traditional teaching methods are still less effective when compared to modern teaching methods. The e-learning system is expected not only to replace but also to be able to add traditional teaching methods and materials such as in-class discussions, books, CD-ROMs and non-internet computer training. To test the hypothesis that there is an effect of web-based e-learning on elementary school children's learning interest, the t test is used. Based on the results of the calculation of the t test analysis in the experimental class, it can be seen that the value of  $t = 11.14$ . The results of this calculation were then consulted with t table = 2.10 for  $\alpha$  5% with  $dk = 17$ , if  $t_{count} = 11.14 > t_{table} = 2.10$ , which means there is an effect of web-based e-learning on learning interest in elementary school children. Whereas in the control class the results of the t test analysis calculation can be seen that the value of  $t = 10.43$ . The results of this calculation were then consulted with t table = 2.10 for  $\alpha$  5% with  $dk = 17$ , if  $t_{count} = 10.43 > t_{table} = 2.10$ .

According to Rusman, et al. E-learning consists of two parts, namely e ' stands for 'electronica' and 'learning' which means 'learning'. So that e-learning means learning using the help of electronic devices such as computers or other devices. There are many types of electronic devices, but in e-learning it is more suitable to use the internet. According to Ali Mudlofir, et al e-learning is an information technology in education in the form of a virtual school where all teaching and learning processes are carried out virtually with material that can be downloaded by yourself. Ideally, good learning is what frees the learner to learn. In accordance with the above, students can easily download the material themselves and organize their own virtual learning. There are also many uses of terminology that have almost the same meaning as e-learning. Web-based learning, online learning, computer-based training / learning, distance learning, computer-aided instruction, and so on, are terms that are often used to replace e-learning. In practice, e-learning is often identified with distance education. In other words, distance education is the same as e-learning. The above opinion is in line with the opinion of Hamzah B. Uno. Distance education is a set of teaching methods in which teaching activities are carried out separately from learning activities. The separation can be in the form of physical distance and non-physical distance. Good learning is face-to-face learning and is supported by distance learning using the internet as a learning complement. Distance learning is characterized by the absence of direct face-to-face contact and communication is bridged with media such as television, computer, telephone, internet, radio, video and so on. There are many terminologies in the word e-learning, such as virtual classes, e-training, online learning, virtual learning, and others. However, one thing is clear, e-learning is a generic term for the use of electronic technology for learning.<sup>18</sup> There are many meanings but can be concluded by the use of electronic tools for learning in virtual classrooms using the internet. In addition to the above opinion, according to Rusman, WBE-based learning (Web-Based

Education) or sometimes called E-learning (electronic learning) is defined as a web technology application in learning to support the educational process and utilize the internet during the learning process. not only understood as learning using electronic tools such as computers and others, but more broadly than that, e-learning is a generic term for the use of electronic technology for learning. Based on this description, the researcher can conclude that e-learning are all training activities that use electronic media or information technology. E-learning is often identified with distance education that utilizes the internet during the learning process. Distance education is the same as e-learning. E-learning is a generic term for the utilization of electronic technology for learning.

The e-learning method can be applied to any school, not specifically for high-level schools such as universities, but starting from elementary schools, you can also use this learning system. Because the benefits of e-learning are clearly felt for the advancement of education in Indonesia. What are the benefits of e-learning? Perhaps, someone asked that. The benefits that will be described, take an example of the application of e-learning at early level schools (elementary schools, junior high schools, and public schools), including:

1. With e-learning, learning is more efficient in terms of time. Students no longer need to record lessons written by the teacher on the blackboard like in ancient times. Students can copy the lessons the teacher gives via flash or CD media. Or the teacher can also email the syllabus of the weekly material being studied. Directly, the teacher becomes lighter because there is no need to write material on the blackboard.
2. With e-learning, learning is more cost effective. Students are no longer required to have textbooks, because these handbooks can be obtained by uploading existing electronic school books. So students don't even need to carry heavy bags filled with textbooks. Likewise, teachers only need to open their laptop or netbook when teaching in class.
3. With e-learning, learning makes students active. Students who are accompanied by their parents become more active in finding the required textbooks themselves, doing school assignments such as clippings with the help of the internet.
4. With e-learning, learning becomes fun. Students are no longer bored learning in class by always sitting pretty. Learning can also be interspersed with watching films that remain in the corridors or learning themes. By balancing between the right and left brain, material acceptance to anyone will become easier. Students enjoy learning, teachers also find it easier to teach.

There are benefits, of course there are also disadvantages of e-learning, namely:

With e-learning, special funds are needed for electronic procurement for both students and private teachers, as well as schools. With e-learning, it requires human resource teachers who are qualified in terms of technology.

When compared to the two things above, it can be seen that there are more benefits of e-learning for teachers and students than the drawbacks. The existing shortcomings can be resolved so that education in Indonesia will be better. Here the government has an important role in the implementation of e-learning in education in Indonesia. First, the government provides a special budget for electronic procurement in schools that are included in the BOS budget (school operational assistance) and secondly, the government can also provide training for human resource teachers so that they have expertise in technology.

#### 1. Learning is more realistic and contextual

The benefits that can be felt by learning using E-learning media are that learning becomes more realistic and contextual. For example, in the use of projector and LCD media in learning, by using a projector, especially those connected to a computer, teachers can play videos as a more realistic and contextual form of learning. By using video as a learning medium students can better understand the concepts explained by the teacher because students can watch it directly through video shows. Unlike the case with conventional learning methods which are mostly only dominated by abstract concepts so that they may make

understanding of the subject matter less optimal. However, some learning materials are actually also suitable using conventional methods and some are more suitable for using learning with the application of E-learning. So it all depends on the needs, and using conventional methods and E-learning is very dependent on the capacity of a teacher in educating, so it can be concluded that teacher quality is a major factor in the success of learning.

## 2. The use of E-Learning media is very efficient and practical

The next benefit that can be felt by using E-Learning in learning is that it is more efficient and practical. If usually the teacher has to make learning media manually and it is likely that the learning media that is made will not last long.

So it is different if using electronic media, in addition to learning media it will be more durable and durable because it is stored in the form of files, besides that to use E-learning is easier and more practical. Only need to turn on a laptop or computer and connect it to a projector, students can immediately be shown the subject matter to be studied.

## 3. Using E-Learning can save costs

Furthermore, the benefits of E-Learning in learning are that it can save more operational costs in the learning process. With E-Learning media, teachers no longer need to bother making learning media, because several media are available in various digital forms and are widely available on the internet.

So teachers only need to googling on the internet to find learning media that is in accordance with the subject matter to be taught. Can you imagine not if every time you teach a teacher you have to make learning media, this will certainly drain a little of money and time.

## 4. E-Learning as a learning resource

In the past, learning resources were books, magazines and through direct learning activities in nature, but nowadays the existence of electronic media has changed student learning styles that were previously conventional towards a more effective and practical direction. Electronic media (E-learning) has various advantages over learning resources such as books, magazines, etc., namely through electronic media students can access the internet to search for subject matter from various sources so that students' knowledge will be richer. In addition, the ease of finding subject matter via the internet is a plus in itself.

## 5. Serves as a medium of learning

The benefits of electronic learning media (E-learning) for the next world of education is that with the existence of electronic learning media, learning will be more varied. So far, teachers can only explain theories or pictures about certain subject matter. However, with the existence of electronic learning media, subject matter that was previously only explained by the lecture method can be witnessed directly by the presence of the internet through video shows, for example via YouTube so that learning does not appear to be just a concept but can make learning concrete so that the student learning experience becomes more memorable.

## 6. Make students more sensitive to technological advances

Electronic learning media (E-learning) is evidence of the extraordinary progress of human civilization. The benefits of E-Learning for the world of education are that through electronic learning media (E-Learning) students will become more sensitive to technology so that they are not clueless (technology-savvy). However, if it is not used wisely and lack of guidance from teachers and parents, it will have a negative effect on students. So that students and teachers should be wiser in using electronic learning media

## 7. Online classes

In the past, to be able to take part in learning, you had to be in the classroom and make eye contact with the teacher, with the presence of electronic learning media (E-Learning), especially computers that can be used to access the internet, learning styles have experienced a little innovation.

E-learning stands for Electronic Learning, which is a new way of teaching and learning that uses electronic media, especially the internet, as a learning system. E-learning is the basis and logical consequence of the

development of information and communication technology. Jaya Kumar C. Koran (2002) e-learning as any teaching and learning that uses electronic circuits (LAN, WAN, or internet) to convey learning content, interaction, or guidance. Dong (in Kamarga, 2002) that e-learning is an asynchronous learning activity through computer electronic devices that obtain learning materials according to their needs. Rosenberg (2001) emphasizes that e-learning refers to the use of internet technology to deliver a series of solutions that can enhance knowledge and skills. Darin E. Hartley [Hartley, 2001] eLearning is a type of teaching and learning that allows teaching materials to be delivered to students using the Internet, Intranet or other computer network media. LearnFrame.Com in Glossary of eLearning Terms [Glossary, 2001] eLearning is an education system that uses electronic applications to support teaching and learning using Internet media, computer networks, and standalone computers. E-learning in a broad sense can include learning carried out in electronic media (internet), both formally and informally. For example, formal e-learning is learning with a curriculum, syllabus, subjects and tests that have been arranged and arranged based on a schedule agreed upon by the related parties (e-learning managers and the learners themselves). Learning like this usually has a high level of interaction and is required by companies for their employees or distance learning managed by universities and companies (usually consulting companies) that are engaged in providing e-learning services to the public. E-learning can also be done informally. with simpler interactions, for example through mailing lists, e-newsletters or personal websites, organizations and companies that want to disseminate certain services, programs, knowledge or skills to the wider community (usually free of charge).

#### Purpose and Benefits of E-Learning

The purpose of E-Learning is to increase the students' absorption of the material being taught, increase the active participation of students, improve their independent learning abilities, and improve the quality of learning materials. It is hoped that it can stimulate the growth of new students' innovations in accordance with their respective fields.

#### Benefits of E-Learning:

- E-learning provides flexibility in choosing the time and place to access lessons conducted from anywhere.
- E-learning provides opportunities for learners to independently take control of their learning success.
- Allows for learning interactions from anywhere and at any time.
- Reducing travel costs
- Reach students in a broad range
- There is an increase in student interaction with each other and with lecturers
- The formation of a learning community that interacts, gives and takes each other and is not limited to one location
- Improving the quality of lecturers because it is possible to gather information in a wider and even unlimited way
- E-learning that is developed properly will be effective in improving the quality of graduates and the quality of higher education.
- Teachers or lecturers will find it easier to update material and teaching models in accordance with the demands of scientific developments that occur, and can efficiently control the learning activities of their students
- Saves the overall cost of education (infrastructure, equipment, books)
- Covering a wider geographic area
- Train learners to be more independent in gaining knowledge

#### CONCLUSION

Based on the results of the research and the results of data analysis that has been done, it can be concluded that there is an effect of web-based e-learning on the learning interest of elementary school children. In the application of e-learning, educators and students have their respective roles. The quality of the use of e-learning which includes general elearning knowledge, the frequency of access and its use as a learning medium for teachers and students is quite good but still needs to be improved in order to achieve optimal



results. 2). E-learning learning has a significant influence on the learning motivation of teachers and students, but for learning outcomes and time to complete lessons the effect is not significant. Educators (teachers / lecturers / instructors or lecturers) have a role as facilitators and guides in learning activities, while students (students and students) have roles as knowledge constructors, independent learners, and problem solvers. The development of Information and Communication Technology (ICT) has influenced all existing aspects, such as economic, cultural, political, social, defense and security aspects, household chores and even the world of education. Seeing the important role of ICT in learning, in its implementation, many learning models have been developed to solve learning and learning problems. One such model is the Information and Communication Technology (ICT) -based learning model. The ICT learning model gave birth to terms such as web-based learning, online learning, distance learning, e-learning, e-books, and management information systems. The existence of e-learning, e-books, e-journals and management information systems in the education system has become a global issue today, the use of e-learning, e-books, e-journals and management information systems in the education system has become a new formulation in the world of education. . Because the existence of e-learning, e-books, e-journals and management information systems in the provision of education can have an impact on improving the quality of education significantly.

## REFERENCES

1. Aparicio, M., Bacao, F., & Oliveira, T. (2016). An e-learning theoretical framework. *An e-learning theoretical framework*, (1), 292-307.
2. Babo, MR. (2016). Pembelajaran Berbasis Web.
3. Ardi, A., Djati, S. P., Bernarto, I., Sudibjo, N., Yulianeu, A., Nanda, H. A., & Nanda, K. A. (2020a). The Relationship Between Digital Transformational Leadership Styles and Knowledge-Based Empowering Interaction for Increasing Organisational Innovativeness. *International Journal of Innovation, Creativity and Change*, 11(3), 259–277.
4. Ardi, A., Djati, S. P., Bernarto, I., Sudibjo, N., Yulianeu, A., Nanda, H. A., & Nanda, K. A. (2020b). The Secret to Enhancing Innovativeness in the Digital Industry. *International Journal of Innovation, Creativity and Change*, 12(12), 225–243.
5. Ellis, R. A., Ginns, P., & Piggott, L. (2009). E-learning in higher education: some key aspects and their relationship to approaches to study. *Higher Education Research & Development*, 28(3), 303–318.
6. Meilani, Y. F. C. P., Tan, J. D., Murwani, F. D., Bernarto, I., & Sudibjo, N. (2021). Motivating and retaining generation z faculty members in private universities. *Journal of Educational and Social Research*, 11(1), 245–255. <https://doi.org/10.36941/jesr-2021-0022>
7. Mulyadi, Sudibjo, N., & Bernarto, I. (2017). The Effect of Perceived Organizational Support, Work Engagement, and Job Satisfaction on Teacher's Performance at Xyz Middle and High School. *International Journal of Economic Research*, 14(13), 7–19.
8. Sudibjo, N., & Sutarji, T. (2020). The roles of job satisfaction, well-being, and emotional intelligence in enhancing the teachers' employee engagements. *Management Science Letters*, 10, 2477–2482. <https://doi.org/10.5267/j.msl.2020.4.002>
9. Sudibjo, N., & Suwarli, M. B. N. (2020). Job Embeddedness and Job Satisfaction as a Mediator between Work-Life Balance and Intention to Stay. *International Journal of Innovation, Creativity and Change*, 11(8), 311–331.
10. Wanasida, A. S., Bernarto, I., Sudibjo, N., & Pramono, R. (2021). Millennial Transformational Leadership on Organizational Performance in Indonesia Fishery Startup. *Journal of Asian Finance, Economics and Business*, 8(2), 555–562. <https://doi.org/10.13106/jafeb.2021.vol8.no2.0555>
11. Basuki, TA dan Prawoto, Nano. (2016). *“Analisis Regresi dalam Penelitian Ekonomi dan Bisnis”*. Jakarta : PT RajaGrafindo Persada.
12. Fauziah, Amni. (2017). Hubungan Antara Motivasi Belajar Dengan Minat Belajar Siswa Kelas Iv Sdn Poris Gaga 05 Kota Tangerang.
13. Garrison, D. R. (2011). *E-learning in the 21st century: A framework for research and practice*. Taylor & Francis.
14. Hartanto, Wiwin. (2015). Penggunaan E-Learning Sebagai Media Pembelajaran.

15. Nurhasanah, Siti. (2016). Minat Belajar Sebagai Determinan Hasil Belajar Siswa(Learning Interest as Determinant Student Learning Outcomes).
16. Muhammad Maryam. (2016). Pengaruh Motivasi Dalam Pembelajaran.
17. Rahmatia, Maya (2017). Pengaruh Media E-Learning Terhadap Hasil Belajar Matematika Siswa Kelas Iv Sdn 20 Banda Aceh.
18. Sari, HV. (2017). Pengembangan Media Pembelajaran Berbasis Web Untuk Mengukur Hasil Belajar Siswa Pada Mata Pelajaran Komputer Jaringan Dasar Program Keahlian Teknik Komputer Dan Jaringan.
19. Sudjana. (2003). "*Metode Statiska*". Bandung : Tarsito.
20. Paramythis, A., & Loidl-Reisinger, S. (2003). Adaptive learning environments and e-learning standards. In *Second european conference on e-learning* (Vol. 1, No. 2003, pp. 369-379).
21. Ruiz, J. G., Mintzer, M. J., & Leipzig, R. M. (2006). The impact of e-learning in medical education. *Academic medicine*, 81(3), 207-212.
22. Sugiyono. (2006). (Ruiz, J. G., Mintzer, M. J., & Leipzig, R. M. (2006). The impact of e-learning in medical education. *Academic medicine*, 81(3), 207-212.009). "*Metode Penelitian Kuantitatif Kualitatif dan RnD*". Bandung : ALFABETA,cv.
23. Suwanto, WA dan Slamet. (2007). "*Dasar-Dasar Metodologi Penelitian Kuantitatif*". Surakarta : UPT Penerbitan dan Percetakan UNS