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The impact of e-Learning utilization on students' learning achievement in Basic of English grammar course

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#### **KEYWORDS**

e-learning grammar learning achievement ABSTRACT This research aims to find out the impact of using e-Learning on students' learning achievement and discover the perspective of students on using e-Learning in basic English grammar course UIN Alauddin Makassar. The population of this research consisted of 106 students, of which 25 were taken from the English education department 1 and 2 as experimental group and 25 students from English education department 3 and 4 as controlled group. The method that was used in this research was quasi-experimental, pre-test, post-test controlled group design. The research result indicated that there was a difference between the students' post-test in the experimental group and the controlled group in basic English grammar courses. It could be seen from the t-test that the value of the t-test obtained sig.  $0.01 \le 0.05$ . It meant that there were significant differences between the two groups. From the results of the data analysis of students' responses, it was found that it was positive for e-learning because of the percentage of students who scored 80%. From the results of the questionnaire, it was found that most of the students were interested, motivated and agreed to use e-learning in studying grammar. Based on the finding and discussion of the research, the researcher recommended that there was an impact on Students learning achievement and an improvement in students ability on the Basic of English Grammar Course after using e-Learning. In Addition, students are also interested, motivated, and agreed to use e-Learning in studying grammar.

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# 1. INTRODUCTION

At this age, many people all around the world spend their time studying English. English becomes the main focus for learning a new language. However, studying English must encounter vocabulary, pronunciation, and grammar as a component of language. Grammar as a component of language is essential for learners. It is because, without grammar, it is difficult to create text and meaning. Grammar is the element of the language that is needed for mastering an effective and appropriate language. It makes students know how to express ideas and feelings. Grammar is the rules in a language for changing the form of the word and joining them into the sentence" furthermore Grammar is partly the study of what forms (or structures) are possible in the Language (Scott, 1999). Thus a grammar is a description of the rules that affect how a language sentence is formed. Therefore as rules and forms (or structure), grammar is important for English learners

Although studying English encourages one to understand how to use grammar. However, Many Students are not interested in studying grammar. They do not give a positive response. They encounter some difficulties when learning grammar. Students who do not understand grammar will face difficulty not only in speaking but also in writing. In other words, missing grammar makes students un-

able to organize and combine sentences correctly. Most students in the English education department clarify that studying grammar is difficult, particularly for beginner students who study basic English grammar. Therefore, they do not obtain good learning achievement commonly, and they feel difficulty in speaking and writing. The lack of sources of learning and the limitation of instruction are reputed as the causes that lead to the lack of interest and the lack of students' response therefore the students will be passive and it will result in students learning achievement. As the main component in education, students need to obtain good learning achievement. Thus, the educator has to find an alternative to make students more interested. Using elearning is one alternative. E-Learning is part of ICT. ICT itself refers to Information technologies and communication that provide access to information through telecommunications (Pratt, 2019).

Since the beginning of this information age, using elearning has become popular. As a result, people begin to seek what e-learning is and how to use it. Horton stated that e-Learning is any utilization of using Internet and web technologies to create a learning experience (Horton & William, 2003). E-learning has become one of the media that is developed by many people, particularly in education. The developers who create e-Learning commonly form institutes, groups as well as individuals. According to Dar-

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mawan, E-learning is the new way in teaching and learning process (Darmawan & Deni, 2014). Therefore, it is essential to know e-Learning and how to maximise this learning management system

It is well known that the development of Instructional media brings many developments in the learning process. E-learning as a media that is developed is the form of innovation that has contributed to changing the learning process using a learning management system. One of the learning management systems is Moodle that is well known as free, open-source, and enables to create powerful, flexible, and engaging online learning experiences (Rice & William, 2015).

Based on the background above, the researcher intends to conduct research to know and examine carefully in quantitative research by title, "The Impact of Using E-Learning on Students Learning Achievement in Basic of English Grammar Course at The First Semester English Education Department UIN Alauddin Makassar."

### 2. LITERATURE REVIEW

Recently the development of Information and Communication Technology (ICT) has been rapidly increasing; the necessity for a concept and mechanisms of learning (education) based IT becomes inevitable. The concept was then known as e-Learning, bringing the influence of the conventional education transformation process into digital form, both contents and the system. It leads to the usage of ICT in the learning process.

Some researchers have done their studies by using e-Learning media in teaching. The utilisation of computer technology was effective and had many advantages (Alsied & Pathan, 2013). The students were interested in using a computer with a connection to the internet. It was giving them benefits with all the materials on websites.

E-Learning tools can tremendously improve the learning process and earn learning in a very easy hassle-free environment (Patel et al., 2014). Another major benefit of elearning is that it can make learning always ON. E-Learning is not restricted to any place and environment.

In other cases, E-learning is effective to educate the higher educational institutions in Indonesia (Kuntoro & Al Hawamdeh, 2003). That can be applied in higher education as alternative educational institutions in Indonesia. Furthermore, e-learning can catch the attention of even a passive learner (Khan, 2016) while ascertaining the effectiveness of e-learning in general.

Another research also proved college students' acceptance of e-learning technology to facilitate their learning (Liu, 2013). Additionally, social influence and facilitating conditions were considered supplemental factors influencing their acceptance of Moodle.

From the information above, the researcher can conclude that e-Learning Media could be effective and has an impact on student learning achievement. It could happen with e-Learning that has been supported by good ICT. Such as the computer that was used has good performance and the internet that was used is good.

#### 2.1 E-Learning

E-learning consists of two words, 'e (electronic) and learning. It means e-learning is learning by using electronic components, especially computers. Using computers and new

technologies has become a crucial part of learning as well as teaching that e-learning became a new concept in learning. E-learning makes use of internet applications that can connect educators and learners. E-Learning is also known as any utilisation or use of the Internet and web technologies to create a learning experience. In addition, e-learning is the wide use of internet technology in learning which is based on three criteria (Yaumi, 2019). They are networking, distribution by computer, and focus on learning widely. E-Learning can be seen as an innovative approach to be used as a medium to deliver good design, user-centred, interactive learning environment, and as having a wide range of easiness for anyone, anywhere, and anytime by utilising a variety of attributes and sources of digital technology with other forms of matter and learning materials appropriate to apply in a learning environment that is open, flexible, and distributed.

E-Learning is learning to use ICT to transform a learning process between educators and learners. The main objective is the use of these technologies to improve efficiency and effectiveness, transparency, and accountability of learning. In addition, e-Learning must also have professionals help ease the content online. From the description, it is clear that E-Learning uses information and communication technology as a tool; to improve the efficiency, effectiveness, transparency, accountability, and convenience of learning; the object is better service-learning, engaging, interactive, and attractive. The expected result is an increase in academic achievement and proficiency of learners as well as reducing the cost, time, and energy of the learning process.

### 2.2 Students Learning Achievement

Students' learning achievement can be defined as the result that was achieved within a certain period by students after the learning process (Ibrahim, 2012). Students' learning achievement is the proof of their ability or their achievement in learning. Students Learning Achievement in learning load is three elementary aspects or domains that are cognitive, affective, and psychomotor. This domain has separate characteristics which can be measured in the course of cognitive study, namely: knowledge, understanding of, application, analysis, evaluation, and synthesis. Effective domain namely: accepting, answering to, assessing, organisation and form character, While psychomotor distinguished as follows: imitating, compiling, conducting. To the procedure, they are putting across and precisely, and conducting action naturally.

Students' learning achievement is marked with the existence of behaviour change that happens in students where interaction in individuals brings a change in character, action, deed, and behaviour. Environmental as the element which functions as an environment learning place one remains and has interaction. Therefore, they learn by themselves within these environments. Basic English grammar course is the course in an English education department that focuses on studying grammar at the basic level. In the Basic English grammar course, it has to study the basics of grammar in English that includes the study of expressing a statement or a question. Grammar is partly the study of what forms (or structures) are possible in the Language. Grammar is strongly essential in the English language. It is believed that the one who wants to know English has to study Grammar. Grammar is a very old field of study. Grammar is always related to how to make a sentence that is a group word expressing a statement, question (Bull, 2008) in Basic English grammar. Many materials must be learned, such as components of sentences and parts of speech, including Verb, Noun, Pronoun, Adjective, Adverb, Preposition, And Conjunction.

### 3. METHOD

This research was a quasi-experimental design (the Pre-Test-Post-Test Control Group). It was used pre-test and post-test design in both experimental and controlled classes. This research would be aimed to find is there any impact after using e-Learning Media on students learning achievement in basic English grammar. The treatment would be conducted after the pre-test. The data would be analysed quantitatively, where some instruments will be used to measure variables and employ multiple statistical procedures (Creswell, 2011).

Variable research is an attribute or value of people, objects, or activities that have a certain variation defined by researchers to learn and then draw the conclusion (Sugiyono, 2010). In the experimental research, in addition, the variable refers to the indication that shows variety in type and level. two variables would be manipulated by the researcher. They were independent variables (X) and dependent variables (Y).

- The independent variable in this research is using e-Learning.
- The dependent variable is Students learning achievement in the Basic English Grammar Course.

The population of this research was taken from the first semester English Education Department UIN Alauddin Makassar. The total population is about 106 students. In other words, the Population of this research is overall Students in the English Education Department First semester UIN Alauddin Makassar.

This research used a nonprobability sampling technique by using purposive sampling. The sample of this research was chosen with criteria. The criteria of this sampling technique were that the sample had a laptop or Notebook and had to understand IT. Therefore, all students who fulfilled the criteria were a sample of this research. The sample of this research was the first Semester English Education Department, UIN Alauddin Makassar. To choose the sample the researcher asked the students of English education departments 1 and 2 directly by using criteria in this sampling technique. After the researcher asked the students, the researcher found out there were 25 students who were to be a sample in this research from the English education department 1 and 2. And after finding the sample that fulfilled the criteria, the researcher took 25 students from students of English education departments 3 and 4 as a controlled group. The instrument of this research was a grammar test and questionnaire. For grammar tests, it was used in Pre-test and Post-test.

Regarded the research method and design mentioned previously, in collecting the data, the researcher collected in the following procedure:

#### 3.1 Pretest

The pretest was administered on the first day of the first meeting. This test was applied to measure the students' learning achievement before treatment.

#### 3.2 Treatment

Treatment is the way to improve students' skill learning achievement in grammar by using e-Learning Media. After giving the pre-test, the students taught by using e-Learning Media. The treatments take place within four meetings, and it takes 90 minutes for each class.

### 3.3 Post-test

The post-test was used after giving treatment to the students. The test was the same as the pre-test before but in the post-test, the test was using e-Learning Media. In this post-test, the researcher saw the impact of the student after being given treatment.

# 3.4 Students' Responses

Students 'responses to using e-Learning media is a concern, internal process information or action in the form of interest and participation from current students participated in the study. The response focuses on a response to the problems that exist in the discussion of a particular topic. The response is also a response that can train students to be more daring in expressing opinions. Students' response to e-Learning was measured after the learning process was completed. The response can be measured from the joy, interest, and enthusiasm of students when they use e-Learning. It is measured by using a questionnaire.

Furthermore, the researcher collected the data from the students and analyzed the result of the students' test and questionnaire by using descriptive and inferential analysis to understand the description of the data and to make decisions or judgments about the value of data (Neil & Carol, 2012).

# 4. RESULT & DISCUSSION

# 4.1 Findings

The percentage of a score of a controlled group class in pretest from 25 students, none of the students got very good scores. In the fair category, it has (24%) by frequency 6 students, In poor category, it has (64%) by frequency 16 students, and the last in a very poor category it has (12%) by frequency 3 students. Based on data, it can be concluded that the score of the controlled class was low—the distribution of frequency and percentage of control class score in post–test.

The percentage of a score of a controlled group class in post-test from 25 students. In very high category it has (8%) by frequency 2 students, In good category, it has (28%) by frequency 7 students, and then in a fair category, it has (44%) by frequency 11 students and the last in poor category (20%) by frequency 5 students.

The percentage of the score of the experimental group class in pre-test from 25 students, the student got a very good score. In the fair category, it has (44%) by frequency 11 students, In poor category, it has (48%) by frequency 12 students, and the last in a very poor category it has (8%) by frequency 2 students. Based on data, it can be concluded that the score of the experimental class was low.

The percentage of the score of the experimental group in post-test from 25 students. In the very good category, it has (28%) by frequency 7 students, In the good category,

it has (52%) by frequency 13 students, and the last in a fair category it has (20%) by frequency 5 students.

### 4.1.1 Descriptive Statistics Analysis

TABLE 1. Data Distribution of Controlled Class and Experiment Class

		Р	retest	Posttest		
No	Statistics	Control	Experiment	Control	Experiment	
1	N	25	25	25	25	
2	Mean	59.16	61.12	73.80	83.48	
3	SD	8.664	7.949	9.946	9.557	

The Table 1 shows that the mean score of the controlled class in the pre-test was (59.16) and the standard deviation of the controlled class was (8.664), and also maximum and minimum scores were (73 and 40). The mean score of the experimental class in the pre-test was (61.12). Its standard deviation was (7.949), and the maximum and minimum scores were (73 and 40) While the mean score of the controlled class in post-test was (73.80). The standard deviation of the controlled class was (9.946), and maximum and minimum scores were (93 and 60). The mean score of the experimental class in post-test was (83.48). Its standard deviation was (9.557), and maximum and minimum scores were (100 and 67). It can be concluded from both of the tests; the experimental class obtained a greater mean score in the post-test than the control class.

### 4.1.2 Lilliefors Significance Correction

Normality test was the requirements analysis test before hypothesis testing. A normality test was performed to determine whether the data from the two groups of samples was normal distribution or not normal distribution. The data were normally distributed is if the sig.  $\leq$  0.05, were not normally distributed if the sig.  $\geq$  0.05 mean the data were normally distributed.

Based on the tests of normality, the Kolmogorov-Smirnov significance has 094 and 099. And Shapiro-Wilk had significance .118 and .064. From the analysis above it could conclude that data were normally distributed because it was greater than 0.05.

The homogeneity test was the requirements analysis test before hypothesis testing. A homogeneity test was performed to determine whether the data from the two groups of samples were the same variance. The data had the same variance if the sig.  $\geq$  0.05. And the data did not have the same variance if the sig  $\leq$  0.05.

Based on the homogeneity test above. It found that Levene's test for equality of variances significance had 910. From the analysis above it could be concluded the data had the same variances because it was an amount of sig. > 0.05.

Hypothesis testing was the test to determine the differences between the students' learning achievement by using

e-learning in the experimental group. Hypothesis testing to compare the posttest results of the two groups was one of the requirements to determine whether there was an impact to improve student learning achievement by using elearning in the English Education department. The criteria for the t-test was If the significant value was.  $\geq 0.05$ , then H0 data was accepted if the significant value was.  $<\!0.05$  then H0 data was not accepted.

Based on the Independent Samples T-Test, the analysis results obtained in this study was a sig.  $0.01 \le 0.05$  it meant that H0 was rejected and the alternative hypothesis Ha was accepted, in other words using e-learning has an impact to improve students' learning achievement in the English Education Department.

From the results of the data analysis of student responses, it found minimum (1), maximum (25), Sum (204), mean (20.40), Std. Deviation (9.709) while the valid per cent was 80.0 (Table 2. It could be said it got positive responses for e-learning because the percentage of students answered was 80%. Thus, using e-learning-can be categorized to help students to understand grammar. By using e-learning, students might be more motivated to learn grammar. However, although e-learning has helped students to be more enthusiastic in learning grammar, students still need a teacher at each learning takes place. The teacher's role was a very important direction, guiding students. Teachers could help students to solve problems that were problems that would be difficult to complete by the students.

### 4.2 Discussion

The results of data analysis showed that using E-learning has managed to increase the students learning achievement it could be seen from the improvement of learning achievement from pretest to post-test, the data analysis obtained a mean score of 61.12 in the pretest of experimental class that thing this demonstrates the ability of beginning students about the material being tested is still very low.

In general, students particularly had not understood verb materials very well when working pretest just guessing the answers on each question given that the results were still very low and therefore it would need more treatment should be done, to improve student learning achievement. The results of post-test students after learning to be treated with e-learning had a mean score of 83.48. This result was a very significant improvement.

While the results in the controlled class had a mean score of 59.16 and the experimental class had a mean of 61.12 in pretest results. The results of the posttest in controlled class in Basic of English grammar course had a mean of 73.80 that indicated an increase compared to the pretest, while The results of the posttest in experimental class were given after the students treated learning by E-learning in Basic of English grammar course had mean 83.48.

Based on the results of hypothesis testing using t-test conducted by researchers at a significant level a = 0.05 (95) where H0 There is not an impact on Students learn-

**TABLE 2.** Descriptive Statistics

	N	Mininimum	Maximum	Sum	Mean	SD
Questionnaire	10	1	25	204	20.40	9.709

ing achievement on Basic of English Grammar Course by using e-Learning Media Ha There is an impact on Students learning achievement on Basic of English Grammar Course by using e-Learning Media. As for the results obtained, sig.  $0.01 \leq 0.05$  It meant H0 was rejected, and Ha was accepted. It could be concluded that There was an impact on Students learning achievement in the Basic of English Grammar Course by using e-Learning.

In the last analysis, based on the result of this research, which shows the students' scores were much higher after the treatment in experimental class, using e-Learning, in other words, the use of e-Learning was surely beneficial to improve the students' grammar ability in basic English grammar course.

The questionnaire was applied to know students' responses after joining the class that used e-learning. Here, the experimental group was the respondents who were given a questionnaire to know their responses about using e-learning in basic English grammar courses. Twenty-five (25) students in the experimental group took part in this instrument.

This questionnaire used the Guttmann scale that required clear answers from each respondent. It contained 10 numerals that were answered by students. From the answers of students, it could be identified that most of the students gave good responses, particularly for questions number one to six and eight to nine. However, numbers seven and ten did not have good responses for number seven only 1 student answered yes, then for number ten, 3 students answered yes.

The data analysis of student responses could be inferred as positive responses for e-learning because the percentage of students who scored 80% is more than 50%. Thus, using e-learning could help students to understand grammar even though e-learning could help students in learning grammar. The researcher also found that students still need a teacher. As the facilitator and guide in the learning and teaching process.

While the use of e-Learning in the learning and teaching process was relevant with constructivism theory and e-Learning theory where constructivism theory emphasized individual experiences and for e-Learning theory that emphasized self-regulated learning, interaction and communication, and distance learning in the teaching-learning process.

This research was in line with some previous related findings. First, Aldila Siddiq Hastomo in her research, The Effectiveness of E-Learning Instructional Media On Student Achievement In Islamic Education at SMA Negeri 1 Yogyakarta found that the implementation of e-Learning media is significantly effective in teaching Islamic education. The students were excited to study using e-Learning. It could be observed with the increase of students' achievement In Islamic Education courses.

Another research that also in line with this research was Safia Mujtaba Alsied (2013) in her Research The Use of Computer Technology in English Foreign Language Classroom Advantages and Implication in Libya found that using computer technology had a positive impact and have many advantages, such as the objective of teaching foreign language like English could be easier to achieve.

### 5. CONCLUSION

Teaching grammar by using e-learning at the first semester English education department UIN Alauddin Makassar had a significant impact. It could be seen by the result of the Hypothesis test or t-test. For the students' responses, it could be said to be a positive response for e-learning because the percentage of students who scored 80% from 25 respondents from the experimental group. It could be categorised using e-learning to help students in understanding grammar.

E-learning Media in teaching English, specifically in teaching grammar, should be considered in future teaching and learning. Using e-learning Media could help in creating extensive learning resources (open source), interactive media, and learning based on what students want. It could be an alternative to enhance the teaching and learning process and then to Support the development of technology in the University environment. It also could be a shield to face the competition in this communication era. This research still has a lack. Therefore, the next researcher was expected to deepen and develop this media.

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