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# THE INFLUENCE OF CONTEXTUAL TEACHING AND LEARNING (CTL) AND COMPUTER ASSISTED LANGUAGE LEARNING TOWARD STUDENTS' ACHIEVEMENT IN ENGLISH

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**ABSTRACT**

This research aims to know the influence of Contextual Teaching and Learning (CTL) and Computer Assisted Language Learning (CALL) toward students achievement in English in grade X SMA Negeri 9 Manado. The research design used is a Simple Randomized Design.

The population in this research is the whole grade X odd semester and 90 samples taken those students who are divided into 3 classes and each class of 30 students. Data collection is done by giving the Post-test, then the data model using analysis of variance (ANAVA) one way. The result of this research shows that the influence of the variable bound against free is calculated by using the coefficient of determination $R^2 = 64,77\%$. The average results of the students' achievement in English taught using Contextual Teaching and Learning is significantly higher than the group taught using Computer Assisted Language Learning that is $t_0 (A_1-A_2) = 5.99$ t-> tables = 1.98, the average results of students' achievement in English taught using Contextual Teaching and Learning is higher than the results of students' achievement in English taught using conventional Learning method that is $t_0 (A_1-A_3) = 12,64 > t_{table} = 2.63$ , and the average results of students achievement in English using Computer Assisted Language Learning (CALL) is higher than the results of the students achievement using Conventional Learning Method i.e. $t_0 (A_2-A_3) = 6.64 > t_{table} = 2.63$.

**KEYWORDS:** Contextual Teaching and Learning, Computer Assisted Language Learning.

## INTRODUCTION

Nowadays, the digital technology has become an important and useful English learning tool. Indeed, the new digital technology has given great influence to the development of English Foreign Language classroom, however many of the English teachers in Manado do not fully realize the advantage of this digital technology and many of the teachers almost never used this digital technology in their classroom. Some teachers tend to use technology in inconsistent way due to the lack of appropriate training and their unfamiliarity with the technology. Additionally, findings of the study further strengthen established evidence of the usefulness of computer-based English learning for developing the basic skills including listening (Gruba, 2004), reading (Lee, 1998), and writing (Wang, 2008). Technology is proven to be effective in promoting English learning, including enlargement of vocabulary size, pronunciation correction, and reading comprehension. (Cunningham,D.1998). In addition to language skills, Students' use of written language for personal expression and enjoyment increased throughout the computer media communication (CMC) activities. When students are not familiar with a computer mediated communication (CMC) environment and their peers, they use formal language to keep their distance from their peers and the communication environment. When they accustom themselves to a CMC environment and know their peers well, they would use informal language as they do in casual face-to-face communications. Zha, Kelly, Park, & Fitzgerald, (2006).

As advancing technology has become accessible for teachers and students and has been integrated into English Foreign Language Learner learning and teaching, researchers' interest in the relationship between technology and foreign languages has grown stronger since the 1990s and 2000s. For this reason, it can be said that learning via the Internet is an alternative way of learning English. Web-based technologies and powerful Internet connections provide various new possibilities for the development of educational technology (Jones, 2002; Cabada et al., 2009; Yazdanpanah, Sahragard & Rahimi, 2010).

Studies regarding computer-assisted language learning (CALL) have suggested that computer technologies indeed facilitate processes beneficial to second language learning (Cunningham, 1998; Teeler & Gray, 2000). In addition to language skills, students' communicative competence is also strengthened through computer-based instruction (Zha, Kelly, Park, & Fitzgerald, 2006). Furthermore, ICT Learning media a suitable environment for students to take charge of their own learning. Even with the confirmed benefits of computer-based

learning, there are limitations of the technology can still need to be tackled. Jolliffe, Jonathan, and Stevens (2001) summarized that the disadvantages of utilizing online learning have for the most part to do with technical limitations associated with computers and the Internet itself. Furthermore,Computer-based activities should be integrated in the lessons by taking the students' needs into account, and not only strictly based on the syllabus and examinations. Creating a broader learning environment with computer, such as connecting the students with outside world, may give students a great prospect of using the language in authentic situation. (Abubakar,2007).

On the other hand, educators and policy makers agree that technology needs to be effectively integrated into education at all levels of our schools, colleges, and university systems. It seems obvious now that the use of computers in education is an inevitable experience.Educators are now confronted with determining how to incorporate technology as a teaching tool (Putnam and Leach, 2001). Teachers and students are expected to develop their computer literacy and use technology for teaching and learning reading and writing. Thus, teachers have started to think of the effectiveness of technology and how it might support and enhance student learning (Ismail et al, 2012) Teaching students to program computers by letting them practice on real computers is a step in the right direction, but there is more to contextual teaching than just letting students practice on the same equipment they might encounter in the real world. First, they must be made aware of how the work they are doing relies on skills they already have (reading, writing, logic, etc.). In order to make the teaching and learning process more meaningful and contextual, Contextual Teahing and learning approach can provide opportunity for students to communicate their ideas and thought. According to Berns and Erickson, "contextual teaching and learning helps students connect the content they are learning to the life contexts in which that content could be used. Contextual teaching and learning represents a concept that involves connecting the content, the student's learning, with the context in which the content will be used. Connecting content with context is important to bring meaning to the learning process. For that connection to take place, a variety of contextual teaching approaches may be used (Putnam, 2000). Contextual or contextual approach to teaching and learning (CTL) is a way of learning that is able to help teachers to connect between the material being taught with the State of the environment, so that teachers can make students better understand what is being studied. There are several definitions about contextual learning, including: 1) according to Elaine b. Johnson (2002) contextual learning is a system that stimulates the brain to compose the embody patterns of

meaning. Elaine says that contextual learning is a learning system that matches the brain that generates meaning by linking academic charges with the context of the everyday life of students; 2) according to Nurhadi (2002) contextual learning is learning concepts that can help teachers connect between the material she teaches in the real-world situations with students and encourage students to make connections between knowledge assets with its application in their lives as members of the family and the community. It means that teachers should find ways of introducing content contextually to help students connect what they are already know to what they are expected to learn and to construct new knowledge from the analysis and synthesis of this learning process. The video modeling with narration condition was associated with a more rapid skill acquisition, making it a more efficient intervention.

In Manado particulary in some senior High Schools the English teaching emphasize on the textbook oriented and excersises on students worksheet, besides memorizing and imitating the sentences, spoken dialogue, an understanding of the structure of the languages learnt rather than a context.The observations had already been conducted in SMA Negeri 9 Manado via interview and it is found out that the English Language teahing and learning put more emphasis on the comprehension of the text or text oriented and the structure of the language. Exercises is often performed only on accomplishing the multiple choice test or question and answer test for the national final examination (UAN) in addition the way delivery of teachers about material that is only based on the understanding of language structure alone is not associated with a real life experienced by students. All the factors will greatly affect the results of the students' achievement.

Conventional method is teacher-centered, so almost the entire activity of learning activities conducted by the teachers themselves without involving the students to be active in the process of learning activities. The Conventional method in question is learning by using the usual methods performed by the teacher that is giving the material through lectures, exercises a matter then the giving task. The lecture is a form of interaction through information and oral attention from the teacher to the learner (Sagala, 2003). Lecturer of dominating the whole activity, are only listeners pay attention to and make notes as necessary.Learning in school is very necessary guidance from teachers to understand the learning objectives to be accomplished during the learning process takes place. The learning process does not mean everything should be centered on the teacher without having to involve the students. Teachers should be able to choose a model or method that is suitable for use on the material

to be taught. It is intended in order any materials given by the teacher can optimally be understood by students and improve learning outcomes of students.

In addition, thinks writes words is the physical behavior of thinking the word, phrase, or sentence then writing it on a $3 \times 5$ card or mobile phone note while walking, or when entering it on the computer. If I have a computer breakdown, or am camping or hiking and write by hand, it is the act of writing the word. (Calkin,2018) Computer learning media is media that can be easily used by teachers to teach the material available to students. Development of existing technologies require that teachers have to be creative in teaching, by leveraging existing technologies teachers can more easily to deliver the material to students and also could further save time in teaching. Teachers can directly display the things that need to be learned by students and teachers also can display some animation that relates to the material that is being taught. The relationship between technology and EFL learning and teaching is a significant research area. Teachers are advised to vary their methods, techniques and ways of teaching, according to their students' needs and interests. They are also advised to use the computerized method more intensively.(Abdallah Abu Naba,2009) and more frequently. Studies regarding computer-assisted language learning (ICT Learning Media) have suggested that computer technologies indeed facilitate processes beneficial to second language learning (Cunningham, 1998; Teeler & Gray, 2000). In addition to language skills, students' communicative competence is also strengthened through computer-based instruction (Zha, Kelly, Park, & Fitzgerald, 2006). With the development of Computer systems and Internet many things become easier than the past. Even during the lesson students can find different examples than the teachers present and can strengthen their practice in language. They have the chance to learn the language in an authentic way. Kayaalti, (2018 ). As aforementioned, it can be said that web-based learning or online learning is one of the major applications of the Internet. Most importantly, for both instructors and learners, computers technologies offer more flexibility and varieties and make online learning versatile and flexible as well. Internet technology also has great potential to positively affect students' learning outcome in the language learning process. Nowadays, in the booming of educational technology and the proliferation of software programs and materials,teachers and students are expected to develop their computer literacy and use technology for teaching and learning reading and writing. Thus, teachers have started to think of the effectiveness of technology and how it might support and enhance student learning.Teachers are the key figures in any changes, so it is very important to examine their perceptions and attitudes in order to offer them the

appropriate assistance and guarantee the success of any innovation in education (Ertmer et al., 2010). Holding positive attitudes is very important for the integration of technology in teaching and learning literacy Fang, (2010).The media is an intermediary or an introductory message from the sender to the recipient of the message. Association of Education and Communication Technology (AECT) give restrictions on the media as all forms and channels used to deliver the message or information (Arsyad, 2011).

Based on some notion of which has been described about the media, then it can be inferred that the media is a tool that can be used to help students in stimulating ability and their understanding at the time of learning so that students can easily accept and understand the message or information given by the teacher. The media proved enable to increase student interest in learning and help students understand the material being taught. The main function of the media learning is a teaching tool that also affect the climate, the conditions, and a learning environment that is styled and created by teachers (Arsyad, 2011). According to Daryanto (2010) that the media in general had a usefulness, among other things: 1) Clarify messages so as not to be too verbalistis; 2) Overcome the limitations of space, time and personnel resources of the senses; 3) pose a passion to learn, more direct interaction between pupils with learning resources; 4) Lets children learn independently in accordance with the talent and ability of visual, auditory and kinestetiknya; 5) Gives the same stimuli, equating the experience and gives rise to the perception of the same; 6) contains five learning components of communication, teachers (Communicator), learning materials, learning, student media (komunikan), and the learning objectives. So learning media is anything that can be used to transmit messages (learning materials), so as to stimulate attention, interests, thoughts, and feelings of students in learning activities to achieve the learning objectives The Conventional method is still widely used by teachers to teach.

Based on the study of the theory and frame of mind that has been described in the previous section then the hypothesis is obtained, namely:

1. There is an influence of the contextual teaching and learning approach (CTL), Computer Assisted Language Learning and Conventional method against students achievement in English.
2. There is difference of students English achievement that taught using a contextual approach (CTL) with Computer Assisted Language Learning (CALL).

3. There is difference of students English achievement that taught using a contextual approach (CTL) with the Conventional method.

4. There is difference of students English achievement that taught using Computer Assisted Language Learning (CALL) and students English achievement taught using Conventional method.

**RESEARCH METHODOLOGY**

The research method used was experimental research. The design of the research or design used is a Simple Randomized Design. the research undertaken at SMA Negeri 9 Manado is supported by infrastructure that is highly conducive to carry out learning activities such as the existence of a field Sport, laboratories and computer rooms, a library and a Hall. Supported also by learning media such as computers, LCD, learning books and also tools used in laboratories.

Time research was done on September 2 until November 27, 2017, the odd semester year 2016/2017. The population in this research is all grade X semester I SMA Negeri 9 Manado 2016/2017. Sampling in this study conducted in random sampling techniques, i.e. by taking 90 students from 215 students. 90 students is divided into 3 classes and each class consists of 30 students where 1 class for treatment using a contextual approach, 1 class for treatment with the use of CALL, 1 class for treatment using conventional learning model.

Contextual Approach (CTL) is the learning that can help teachers to link the material that teachers taught to students in the context of everyday life can even help students understand the material they receive from teachers so that students can apply these materials in their daily lives.

Computer Assisted Language Learning is a tool that can be used to help students in stimulating students ' abilities, motivating and understanding at the time of learning so that students can easily receive the message or information given by the teacher.

Conventional method is learning that require students to listen to the modeling of the teacher and mimic her as a modeL. Lots of pattern driIls may foIlow this process as the main aim of the method is to make learners capture the grammar of the languag therefore Conventional learning method is also important in learrning English.

Learning is a process of change experienced by someone either a change in attitude as well as a growing way of thinking changes continuously as time goes by. The results of the study in question is a score achieved by students after getting treatment with the contextual approach (CTL), the Computer Assisted Language Learning and Conventional method. Student is given a question to measure the level of ability owned by every student after getting treatment. The instruments used in this research is in the form of test. To the tests given in the form of reserved essay. First test made done Test Panelists and a test to see the validity and relliability of such tests. Test grains reserved function to find out if the instrument is decent use for research or not.

**Test Panelists**

For the panelists in this study were taken 20 panelists consisting of 7 lecturers had the title of doctor, 3 English language teachers of SMA Negeri 9 Manado and 10 students of the semester VII English Education Department, UNIMA. Data obtained from testing were then analyzed statistically ICT Learning media to get the value of the reliability instruments. After the calculation is done manually and with the aid of Microsoft Excel) obtained a summary of the data in table 3.2 as follows:

**Table 3.2: The Results of panelists test for the instrument of achievement.**

| The number of the problems | Panelists | r- count ($r_c$) | r- table ($r_t$) | Results |
|---|---|---|---|---|
| 11 | 20 | 0,87 | 0,444 | $r_c > r_t$ |

From Table 3.2 above, by the number of reserved grain and 11 observer totalling 20 people obtained $r_{table} = 0.444$, having done the calculation of earned value reliabelitas instrument for panelists 0.87 so the value of the instrument is larger than reliabelitas 0.444 then the instrument already considered worthy to be tested.

Testing the validity of grain tests were conducted by calculating the correlation between the score of grains with a score total. The instrument is composed of shaped description is a score continuum, grain.

Next look for the r-$_{table}$ for $\alpha = 5\%$ and n = 20 and with the following criteria: $r_{count} > r_{table}$ means valid, or if $r \leq r_{table}$ meaning count is not valid. Calculation of validity and reliability is done manually and with the aid of Microsoft Excel for data validity of the test results is a matter of learning the grain that would be used on a class that using the approach of CTL, using computer-based learning media ICT, and the Conventional method.

Results of tests for the validity of the test results is a matter of learning the grain, the test results are obtained as follows: with $\alpha = 0.05$ and $n = 20$ $r_{table} = 0.444$ obtained and respective r bis with 9 rounds reserved valid i.e. value above r $_{table}$ 0.444 r $_{bis}$ and 2 butir questions invalid value i.e. $r_{bis}$ under value $r_{table} = 0.444$ on grains of reserved numbers 7 and 8. After testing the validity of the second time to 9 grains of matter and found all reserved valid or all matter has significant biserial correlation with the total test score.

Based on the results obtained on the validity of the test a second time, then the reserved grain 9 can be used to measure the results of the study.

**Reliability Grain Problem**

After testing the validity then the next will be calculated coefficient of reliability. Coefficient reliabelity the instrument using the Alpha Coefficient Formula Calculations Cronbah reliability granules reserved based on the value of the coefficient of the validity of the grains reserved 9 valid number. For a concise data can be seen in the following table:

**Table 3.3: Reliability Test Results of Grains of Matter.**

| The number of the problems | Respondent | $r_{ii}$ |
|---|---|---|
| 9 | 20 | 0,80 |

From the Table 3.3. The test results reliability grains about, reliability coefficients obtained with tests the number of reserved 9 rounds was 0.80 next instrument learning outcomes that matter has been tested reliability given as test results of learning in 3 classes of research i.e. a class using a CTL approach, using Computer Assisted Language Learning and Conventional method.

**3.2. Techniques of analyzing the data**

**3.2.1. Test For Normality**

The purpose of this normality test to find out if the distribution of the selected sample comes from a normal population distribution or not normal. Test of normality of the data is done through statistical approach to test Liliefors with significant levels of respondents 30 $\alpha = 0.05$ (Kadir, 2010): $T = | F (Z) - S (z) |$

The hypothesis to be tested

$H_0$: data derived from a population of Gaussian.

H1: data are derived from the population of the Gaussian is not normal.

Testing criteria: accept $H_0$ if $L_0 <$ Ltable and reject $H_0$ if $L_0 >$ Ltabel.

Its Homogenity Test

On its homogenity test using the test formula-Bartlett. Test-Bartlett test is its homogenity of variance that consist of three or more of the variance.

**Homogenity Test**

In the homogenity test using the test formula *-Bartlett*. Test-*Bartlett* is variance test homogenity that consists of three or more variance:

$$S^2_{gabungan} = \frac{\sum(n_i-1)s_i^2}{\sum(n_i-1)}$$

with Significant Extent $\alpha = 0,05.$ Hipothesys to be tested

$H_0 = \sigma_1{}^2 = \sigma_2{}^2 = \sigma_3{}^2$

$H_1 =$ not $H_0$

Accept $H_0$ because $X_{count} < X_{table}$ and reject $H_0$ if X count $> X_{table}$

**Statistical Hypothesis Test**

Test the hypothesis in this study was the F-test in analysis of variance (ANOVA), namely one way analysis of variance (Kadir, 2010).

**Search for Fcount in ways**

Calculate the sum of square (JK) some sources variance, namely: Total (T), Between (A) and in (D).

Determine the degrees of freedom (db) each source of variance Db (T) = nt-1 db (A) = na-1 db (D) = nt – na determines the average number of squares (RJK)

$$RJK (A) = (JK (A))/(db (A)), \text{ and } RJK (D) = (JK (D))/(db (D))$$

**To find the way: i.e., Fcount**

$F_{count} = (RJK (A))/(RJK (D))$ if $F_{count} >$ Ft at a significant level with selected db numerator is db (A) db and the denominator is a db (D) then the Ho is rejected. So there is a difference between the average parameters of the groups tested, preferably to Fo Ft, meaning Ho accepted or not there is a difference the average parameters of the groups tested or mean the same.

**Tabel 3.4: Arrangement of Tables Anava**

| The Source of the Variance | JK | Db | RJK | $F_{count}$ | $F_t$ | |
|---|---|---|---|---|---|---|
| Between | JK(A) | $n_a - 1$ | RJK(A) | $F_{count}$ $= \dfrac{RJK(A)}{RJK(D)}$ | $\alpha = 0,05$ | $\alpha = 0,01$ |
| Na | JK(D) | $n_t - n_a$ | RJK(D) | | | |
| Total | JK(T) | $n_t - 1$ | - | | | |

Advanced t-test to find out which dunnet among two groups of samples differ significantly (Kadir, 2010).

$$t(A_1 - A_2) = \frac{\overline{Y_1} - \overline{Y_2}}{\sqrt{RJK(D)(\frac{1}{n_1} + \frac{1}{n_2})}}$$

**3.2.4.The statistical Hypothesis**

$\mu_1$ = the average results of language-learning English Group of students who were given the treatment with Contextual approach to Teaching and Learning (CTL).

$\mu_2$ = the average results English language learning groups of students who were given preferential treatment by the media of computer Assisted Language Learning.

$\mu_3$ = the average results of language-learning English Group of students who were given preferential treatment by the Conventional method to test the hypothesis of the research on the use of the t-test statistics as a criterion dunnet hypothesis testing: Reject $H_0$ if t > tα witch α = 0.05.

(i) Ho: $\mu_1 \leq \mu_2$     (ii)    Ho : $\mu_1 \leq \mu_3$     (iii)    Ho: $\mu_2 \leq \mu_3$

    $H_1 : \mu_1 > \mu_2$          $H_1 : \mu_1 > \mu_3$         $H_1 : \mu_2 > \mu_3$

(i) The average of the results of the Group's English language learning taught by using a contextual approach is significantly higher than the group being taught with the use of computer Assisted Language Learning, ICT media.

(ii) The average of the results of the Group's English language learning taught by using a contextual approach is significantly higher than in the Group taught by the Conventional method.

(iii)the average of the results of the Group's English language learning taught by using a computerAssisted Language Learning, ICT media is significantly higher than the group that taught with Conventional method.

## THE RESULTS AND THE DISCUSSION

A descriptive analysis of the results of the data class that is on the third postest two classes of experimental and one control class.

The results of the experimental class for the postest statistics which are taught by using the approach minimum value indicates the CTL 72 and 99 maximum value so that the data range is 99-72 = 27. Next to the data presented in the tables of distribution of frequencies with intervals. Using the rules of Strugess are: 1 + (3.3) Log n (Alwi, 2003), and thus gained 5.87 and rounded up the long grade 6, the interval 4.5 rounded up 5 with average value of 87.1, Deviation Standard 8.82 and multiform 77.88. Frequency table data postest class taught by using CTL approach.

The frequency distribution for the posttest results class CTL approach there is 16.67% of students scored below average, 26.67% of students scored an average of 56.66% of students, and gain value in the rat a.

The results statistics for classes taught by postest by using computer Assisted Language learning, showed a minimum value and a maximum value of 58 87 so that the data range is 87-58 = 29. Next to the data presented in tables frequency distribution with the interval using Strugess rules are: 1 + (3.3) Log n (Alwi, 2003), and thus gained 5.87 and rounded 6, length of the class intervals of 5 with rounded 4.8 average rating 72.5, Deviation Standard 10.09 and multiform 101.98.

The statistics result of postest from the classes taught using Conventional method. It shows the minimum value and the maximum value is 73 44 so that the data range is 73-44 = 29. Next to the data presented in tables frequency distribution with the interval using Strugess rules are: 1 + (3.3) Log n (Alwi, 2003), and thus gained 5.87 and 6 rounded, rounded up 4.83 interval class length 5 with an average rating of 54.33, By way of standard 9.03 and multiform 86.64. Frequency table data posttest class taught by using the Conventional method.

The score for the class that was taught by using the Conventional method 40% of students who scored below the average, 30% of students who scored below the median − median whereas 30% of students scored above average. First performed test normality and its homogeneity of variance test prior to testing the hypothesis. Analysis of data the results of the

study (postest) against three classes, namely class research approaches, the media class CTL computer-based learning, ICT, and conventional class, done to know the normalcy and the uniformity of the data as a condition for experiment against three classes taken at random. Test of normality and its homogeneity of variance test and hypothesis testing are: Test of normality of the data in this study using test Lilliefors with the aim to find out whether data obtained Gaussian. Testing normality made against three classes of research i.e. classes that are taught by using CTL approach class taught by using Computer Assisted Language Learning, as well as classes that are taught by using the method of Conventional method.

Normality Test classes that are taught by using a Contextual approach to Teaching and Learning (CTL).

Normality test classes that are taught by using CTL approach calculated manually with the help of Microsoft Exel. The value of L-α levels on table = 0.05 and n = 30 0.161760729 is 16).

**Tabel 4.5: The result Normality test class taught by using CTL.**

| No | Value Lo | Value Lt | Conclusion |
|----|----------|----------|------------|
| 1 | 0,115571113 | 0,161760729 | NORMAL |

From table 4.5 above, the value obtained in the tests of normality that data results postest class taught by using the approach of CTL, obtaining the value of $L_0$ (value lillyfors) L-value table < (critical value L on lillyfors test table) on a real level α = 0.05 to 30 respondents. Thus H0 are accepted. So based on the values obtained can be concluded that the sample data results studied English using approaches derived from CTL Gaussian populations.

Normality Test classes that are taught by using Computer Assisted Language learning Normality test classes that are taught by using a computer-based learning, ICT media manually with the help of Microsoft Exel. The value of L-α levels on table = 0.05 and n = 30 is 0.161760729.

**Tabel 4.6: Data of the result of Normality Test class taught by Computer Assisted Language Learning.**

| No | Value Lo | Value Lt | Conclusion |
|----|----------|----------|------------|
| 1 | 0,150977345 | 0,161760729 | NORMAL |

From table 4.6 above, the value obtained in the tests of normality that data results postest class taught by using a computer assisted language learning , earned value L0 (value lillyfors) L-value table < (critical value Ltabel test lillyfors) on the real extent of α = 0.05 to 30 respondents. So based on the values obtained can be concluded that the sample data results English language learning with the use of computer assisted language learning comes from Gaussian populations.

Normality Test classes that are taught by using the Conventional method Testing normality class taught by using the Conventional method manually with the help of Microsoft Exel. The value of L-α levels on table = 0.05 and n = 30 is 0.161760729.

**Tabel 4.7: Frequency distribution Study Results Score Class Conventional method Test Results Data Normality Class Taught by using the Conventional method.**

| No | Value Lo | Value Lt | Conclusion |
|----|----------|----------|------------|
| 1 | 0,128885829 | 0,161760729 | NORMAL |

Table 4.7 above, the value obtained in the tests of normality that data results postest class taught by using the Conventional method, obtain the value of $L_0$ (value lillyfors) L-value table < (critical value L on lillyfors test table) on a real level α = 0.05 to 30 respondents. Thus H0 are accepted. So based on the values obtained can be concluded that the sample data results English language learning Conventional method derived from Gaussian populations. Its Homogeneity Test.

Test-Bartlett is its homogeneity test was used in the third grade with calculations using Microsoft excel help. Test-Bartlett test is its homogeneity of variance that consist of three or more of the variance.

With the significant extent $\alpha = 0,05$. The hypothesis to be tested:

$H_0 = \sigma_1{}^2 = \sigma_2{}^2 = \sigma_3{}^2$

$H_1 = $ not $H_0$

**Table 4.8: Table Test-*Bartlett*.**

| Sampel | Dk | 1/dk | $S_i^2$ | log $S^2$ | (dk) log $S^2$ |
|--------|----|------|---------|-----------|-----------------|
| CTL | 29 | 0,0345 | 77,8800 | 1,8914 | 54,8514 |
| Computer assisted language learning | 29 | 0,0345 | 101,9800 | 2,0085 | 58,2469 |
| Conventional method | 29 | 0,0345 | 86,6400 | 1,9377 | 56,1938 |
| Total | 87 | 0,1034 | 266,5000 | 5,8377 | 169,2921 |

**Table 4.9: The Results of the Calculation of the Third Group Of Its Homogenity.**

|  | Dk | $\alpha = 0.05$ | $\alpha = 0.01$ |
|---|---|---|---|
| $X^2_{Tabel}$ |  | 5,991 | 9.210 |
| $X^2_{Hitung}$ | 2 | 0,54 | 0,54 |
| $X^2_{Hit} < X^2_{Tabel}$ |  | Homogen | |

The results obtained from a test calculation-Bartlett acquired: $X_{count} =$ and $X_{table} = 0.54$ 5,991 at significant levels $\alpha = 0.05$. Because the calculation result $X_{count} < X_{table}$ means can not be rejected H0 and H1. From the results obtained then it can be inferred that the three groups have the same variance or homogeneous.

**Hypothesis Testing**

For testing the hypothesis in this study using one way analysis of variance (One-way Analysis of Varianve). Analysis of variance was used to test the hypothesis that States the difference on average more than two groups of samples. Analysis of variance is aiming to find out the influence of CTL approach, Computer Assisted language learning and the Conventional method against the learning outcomes of students. After the test results obtained through the analysis of variance, then do the test IE advanced test-t dunnet to know the average difference in student learning outcomes that are taught by the three models of learning. The following is a summary of construction of ANAVA table:

**Tabel 4.10: Construction of the summary table of Anava.**

| Sumber Varians | JK | Db | RJK | F-Hitung | F-Tabel | |
|---|---|---|---|---|---|---|
|  |  |  |  |  | $\alpha = 0,05$ | $\alpha = 0,01$ |
| Antar | 14211,1 | 2 | 7105,54 |  |  |  |
| Dalam | 7728,87 | 87 | 88,8375 | 79,983572 | 3,1013 | 4,85777 |
| Total | 21940 | 89 | - |  |  |  |

The results obtained by looking at the table above, the value of Fcount is greater, then Ho denied and it can be concluded that there is a difference in average yield significant English language learning. To determine the influence of the great free variables against variable can be calculated using the coefficient of determination $R^2 = (JK (A))/(JK (T))$.

From the results obtained learning factors can account for 64.77% variation in the results of the study of English.

For statistical hypothesis

$\mu_1$ = the average results of language-learning English Group of students who were given the treatment approaches of CTL.

$\mu_2$ = the average results English language learning groups of students who were given preferential treatment by the media of computer assisted language learning.

$\mu_3$ = the average results of language-learning English Group of students who were given preferential treatment by the Conventional method.

The hypothesis to be tested was

(i) $H_0 = \mu_1 \leq \mu_2$ \qquad (ii) $H_0 = \mu_1 \leq \mu_3$ \qquad (iii) $H_0 = \mu_2 \leq \mu_3$

$H_1 = \mu_1 > \mu_2$ \qquad\quad $H_1 = \mu_1 > \mu_3$ \qquad\quad $H_1 = \mu_2 > \mu_3$

(i) to (A1-A2) = 5.99 t-> $_{tables}$ = 1.987 at α = 0.05 thus results average English language learning groups are taught with the approach of the CTL is higher compared to the results of the Group's English language learning taught by computer assisted language learning

(ii) to (A1-A3) = 12.64 > $t_{table}$ = 1.987 at α = 0.05 thus results average English language learning groups are taught by using the approach higher than CTL results studied English group was taught with a method of conventional method.

(iii) to (A2-A3) = 6.64 > α $t_{table}$ = 1.987 at α = 0.05 thus results average English language learning groups that taught with computer assisted language learning, ICT media is higher than with the result of English language learning group taught by the Conventional method.

**Table 4.11: Summary of test results-t Dunnet.**

| | $t_{-count}$ | $t_{-table}$ | | Criteria |
| --- | --- | --- | --- | --- |
| | | ($\alpha$ =0,05 : 87) | ($\alpha$=0,01: 87) | |
| $t_0(A_1 - A_2)$ | 5,99 | | | |
| $t_0(A_1 - A_3)$ | 12,64 | 1,987 | 2,633 | $t_{-count} > t_{-table}$ |
| $t_0(A_2 - A_3)$ | 6,64 | | | |

**DISCUSSION OF RESEARCH RESULTS**

The implementation of this research aims to know the influence of the third class that uses three different learning models by looking at the results of the study obtained in high school students especially in Manado city. This research uses a model of treatment in three classes that cover the treatment of CTL approach, Computer assisted language learning (CALL) and

Conventional method. Based on the treatment provided and analyzed the results of English language-learning gained from this research then the magnitude of the influence of the third class into objects of research i.e. of 64.77%.

The average results of the Group of English language learning taught by using the approach of CTL is higher compared to the results of the Group of English language learning taught by the computer assisted language learning i.e. amounting to 5.99. The average results of the Group of English language learning taught by using the approach of CTL is higher compared to the results of the Group of English language learning taught by the Conventional method i.e. of 12.64. The average results of the Group of English language learning taught by computer assisted langauge learning is higher compared to the results of students achievement in English taught using Conventional method i.e. amounted to 6.64.

Contextual approach to Teaching and Learning (CTL) is seen more appropriate learning materials use in improving students skill and competence.Through CTL students can directly apply the material that has been received with real-life experience, students will easily understand the material and can directly apply in a real contexttual situation. (Supardi, 2011:101-121). Explain the increase in the quality of education is done through process improvement efforts of learning using a variety of learning methods and assessment.

The results obtained on the classes that use a CTL approach show that the approach is able to improve the results the CTL English language learning , this is also in line with an understanding of some of the experts on the approach to the understanding of them from CTL Elaine b. Johnson (Rusman, 2011) who says learning contextual is a system that stimulates the brain to compose the embody patterns of meaning. Elaine says that contextual learning is a learning system that matches the brain that generates meaning by linking academic charges with the context of the everyday life of students. with computer language learning, higher compared to the results of the Group's English language learning taught by the Conventional method i.e. amounted to 6.64.

**CONCLUSION**

Having conducted the research, the researcher comes into conclusion that The average results of students achievement taught using Contextual Teaching and Learning (CTL ) is higher than the results of students achievement taught using Computer Assisted Language Learning(CALL) ICT media namely $t_0$ (A1-A2) = 5.99 > t-$_{table}$ = 1.987.

The average results of students achievement taught by using CTL's approach is higher than the results of the students achievement taught by Conventional method that is t0 (A1-A3) = 12.64 > t-$_{table}$ = 1.987.

The average result of students achievement taught by computer assisted language learning, ICT media is higher than the results of the students achievement taught by the Conventional method that is to (A2-A3) = 6.64 > a t-$_{table}$ = 1.987.

**REFERENCES**

1. Gruba, P. *Understanding Digitized Second Language Videotext*. Computer Assisted Language Learning, 2004; 17(1): 51-82.

2. Lee, K., English Teachers' Barriers to the Use of Computer-assisted Language Learning. *The Internet TESL Journal,* 2000; 6(12). Retrieved December 10, 2011, from http://iteslj.org/Articles/Lee-CALLbarriers.html.

3. Wang, T., & Li, L. Y., Understanding international postgraduate research students' challenges and pedagogical needs in thesis writing. *International Journal of Pedagogies and Learning,* 2008; 4(3): 88-96.

4. Cunningham, D., 25 Years of technology in language teaching. A personal experience *Journal of the Australian Federation of Modern Language Teachers " Association*, 1998; 33(1): 4-7.

5. Teeler, D., Gray, P., *How to use the Internet in ELT.* London, UK: Longman, 2000.

6. Zha, S., Kelly, P., Park, M.K., & Fitzgerald, G., An Investigation of Communicative Competence of ESL Students Using Electronic Discussion Boards. *Journal of Research on Technology in Education,* 2006; 38(3): 361-363.

7. Jones, S., The internet goes to college : *How students are living in the futurin the today's technology retrieved*, September 30. 2011 from http//www.enc.ed.gov/PDFS/ED 472.669pdf.

8. Cabada, R., Estrada, M., Sanchez, L., Sandoval, G., Velazquez, J., & Barrientos, J., Modeling student's learning styles in web 2.0 learning systems. *World Journal on Educational Technology*, 2009; 1(2): 75-88.

9. Jolyfe A. Ritter.J.E Stevens D, *The Online learning handbook developing and using web-based learning*. London U.K. Kogum Page Limited, 2001.

10. Abu Bakar Nadzrah, *English Language Activities In Computer-Based Learning Environment: A Case Study In ESL Malaysian Classroom*. *GEMA Online Journal of Language Studies,* 2007; 7(1).

11. Ismail, et al Employing Reading and Writing Computer-Based Instruction in English as aSecond Language in Elementary Schools Sadiq Abdulwahed Ahmed Ismail *International Journal of Business and Social Science,* 2017; 3(12).

12. Berns Robert and Erickson Patricia, *Contextual Teaching and Learning : Preparing Students for the New Economy. The Highlight Zone:* Research @ No 5 Washington D.C., 2001.

13. Putnam, A.R and Lynn Leach, *Contextual Teaching with Computer-Assisted Instruction Department of Workforce Education and Development 212 Pulliam* Hall Southern Illinois University at Carbondale, 2001.

14. Johnson, b Elaine, *Contextual Teaching and Learning*: What it is and Why it is here to say. California : Corwin Press. Inc Sage Publication Company, 2002.

15. Sanjaya, Wina., *Strategi Pembelajaran Berorientasi Standar Proses pendidikan*. Bandung. Kencana, 2006.

16. Calkin, A.B., Writing on writing. *International Journal of Educational Research* Calkin Consulting Center, Gustavus, AK, United States journal homepage: www.elsevier.com/locate/ijedures., 2018; 87: 133-134.

17. Abu Naba'h Abdallah, Jebreen Hussain1, Aieman Al-Omari2, and Sadeq Shdeifat1*The Effect of Computer Assisted Language Learning in Teaching English Grammar on the Achievement of Secondary Students in Jordan. The International Arab Journal of Information Technology,* October 2009; 6(4): 431.

18. Ertmer, P.A, and Ottenbreit-Leftwich, A.T., Teacher technology change: How knowledge, confidence, beliefs, and culture intersect. *Journal of Research on Technology in Education,* 2010; 42(3): 255-284.

19. Fang, Y., Perceptions of the Computer-Assisted Writing Program among EFL College Learners.*Educational Technology and Society*, 2010; 13(3): 246–256.

20. Arsyad, A., *Media Pembelajaran*. Jakarta: PT Raja Grafindo Persada, 2011.

21. Daryanto, *Media Pembelajaran Peranannya Sangat Penting Dalam Mencapai Tujuan Pembelajaran*.Yogyakarta: Gava Media, 2010.

22. Supardi, Pengaruh Frekuensi Penilaian Fomatif dan Kemandirian Belajar Terhadap Hasil Belajar Kalkulus dengan Mengontrol Kemampuan Awal Mahasiswa. *Jurnal Evaluasi Pendidikan PPS Universitas Negeri Jakarta, Maret,* 2011; 2(1): 101-121.