

Correlation Between Vocabulary Achievement of Computer Engineering Network (TKJ) Students and Their Learning Habit Using Computer at SMKN 1 Pulubala

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ABSTRACT

The objective of this research is to obtain the empirical data about the correlation between vocabulary achievement of Computer Engineering Network (TKJ) students and their learning habit using computer at SMKN 1 Pulubala. This research used correlation method and quantitative descriptive design to measure the correlation. Analysis of the data used in this research is correlation analysis that processed with SPSS 25.0. This research was conducted to 67 Computer Engineering Network (TKJ) students at SMKN 1 Pulubala. After doing the research, the researcher concluded that there is a correlation between vocabulary achievement of Computer Engineering Network (TKJ) students and their learning habit using computer. It can be seen through the result of the correlation calculate using SPSS show a value of 0.507. Based on the interpretation of the correlation result, it can be concluded that correlation between vocabulary achievement of Computer Engineering Network (TKJ) students and their learning habit using computer has medium correlation. The researcher has also measured the influence of correlation between vocabulary achievement of Computer Engineering Network (TKJ) students and their learning habit using computer found 91.04% in the frequency of learning habit and 80.59% in verb.

Keywords: vocabulary, learning habit, correlation

INTRODUCTION

The role of language is important in human life. As a tool of communication, language is used to provide information, convey opinion, and express human feelings. There are various languages in the world. One of them is English. English is an international language that people from different countries used to communicate with each other. In Indonesia, English has been designed as one of the compulsory subjects. Based on the Degree of Education and Culture No.096/1967, English is a compulsory subject in Senior and Junior High School. At the university level, English is taught by government regulation No.19/2005. Despite being taught from an early age, there are still many students who have experienced difficulties in learning English. Some students said they found it difficult in writing or spell words, remember the meaning of words, various grammatical forms, and unfamiliar vocabulary. From these difficulties, it can be concluded that vocabulary is a general student's difficulty in learning English.

Vocabulary is a part of English and determining component of English skills. Renandya and Richard (2002) said that vocabulary is important in English as the level of students' proficiency in speaking, listening, reading, and writing. Therefore, students must have vocabulary achievement to support their English skills. Students will easier to understand the contents of listening, reading, writing, and speaking in English if they have vocabulary achievement. Vocabulary achievement is a result of memorizing and understanding the vocabulary. Travers (1970) stated that achievement is the result of an individual has learned from some educational experience. Student vocabulary achievement can be obtained by learning vocabulary using a translation dictionary, reading English books, or watching English using Indonesian subtitles. As a result, students can easy to memorizing and understand the meaning of vocabulary.

In line with that, vocabulary achievement of Computer Engineering Network (TKJ) students is obtained from their habit of learning using computer. The role of English as a language program in the computer is a supporting factor for Computer Engineering Network (TKJ) students in learning vocabulary. Based on the researchers experience as Computer Engineering Network (TKJ) students at Vocational school ago, the habit of using computer in the daily learning process made easier to learn vocabulary. English instruction on the computer make students easier to accept and memorize vocabulary. This happens because in special subject majoring of Computer Engineering Network (TKJ) students directly practice using computer. They use the computer to set databases, set troubleshoot networks, install computer programming, and to set the hardware of computer devices which the instructions use English. Based on that reasons, the researcher formulated the research problem as the following “Is there any correlation between vocabulary achievement of Computer Engineering Network (TKJ) students and their learning habit using computer at SMKN 1 Pulubala?”

LITERATURE REVIEW ACHIEVEMENT

Achievement is a result obtained from doing an activity or deed. Achievements are usually obtained by someone when they succeed in doing something. Achievement is also the result of completing and achieving something. The achievement also can be in the form of results obtained when someone learns something. Travers (1970) stated that achievement is the result obtained by individuals from several educational experiences. Learning outcomes are not a mastery of the results of the exercise but a behavior change. Success in learning can be measured by how much one can learn to practice something learned in everyday life. Learning achievement can also be interpreted as the result of a symbol of an effort given in certain forms, numbers, or sentences that describe the results achieved. Based on some of the material discussed, the researcher concludes that Achievement is a result obtained when doing something. In students, the achievement is usually obtained as a result of learning something. A result is a result that shows what the student has achieved.

VOCABULARY

Vocabulary is important that supports English language skills. Hornby (2010) stated that vocabulary is a list of words that people know and use to communicate. Without mastering it, people will get some difficulties in developing language skills. Vocabulary is also more than grammar for communication purposes. Wallace (1982) stated that learning vocabulary is a complex process that requires the ability to recognize, remember and pronounce the word correctly. That means learning vocabulary is not only memorizing the list of words but also understanding the meaning. From that definition, the researcher concluded that vocabulary is a complex process to support English language skills. It will help to have the ability to speak, listen, read, and write. Vocabulary is very important for foreign language learners. Without mastering it, of course, foreign language learners will get some difficulties in their language skills.

KINDS OF VOCABULARY

Vocabulary is recognized from the group of letters that stand for or represent built a word. Haycraft (1978) divided vocabulary into two parts. The first is active vocabulary. It is the word that students can understand, pronounce correctly, and uses constructively in speaking and writing. The second is passive vocabulary. It is a word that students recognize and understand when they occur in context.

PURPOSE OF VOCABULARY

Learning vocabulary gives advantages for students to improve their reading, speaking, listening, and writing. This happens because learning vocabulary is not only remembering the word but also the ability to use and pronounce each word. In line with that, Montgomery (2007) stated that reading vocabulary, speaking vocabulary, listening vocabulary, and writing vocabulary are some functions of vocabulary that will help students in their English learning process. Vocabulary gives advantages for the students to read and understand when reading English text, understand English stories, English textbooks, poetry, and other reading English text materials. For example, students will easily understand the context of the story text in the English novel they are reading if they understand the meaning of each word.

Speaking vocabulary is a list of words that students use to speak English. Speaking vocabulary is the ability possessed by a person in speaking English. Therefore, if someone has extensive vocabulary knowledge, it will be easy to speak, dialogue, make speeches or communicate in English. Listening vocabulary refers to the words we hear and understand. Since we are still in the womb, we can already hear sounds at the age of sixteen weeks. Until adulthood, based on studies, we can hear and understand nearly 50,000 words. In English, listening vocabulary is vocabulary that is heard from a sound source. For example through news reports, English songs, and listening to English movies. Every word that is heard is called the knowledge advantage of vocabulary listening. Writing vocabulary is the words students use when they express their ideas or thoughts. Writing vocabulary makes it easy for someone to express what they want to tell. For example, in writing poetry, rhymes, short stories, novels, or speech texts. Writing vocabulary can describe a person's ability to explain something in written English.

From that discussion, the researcher concluded that vocabulary achievement is an important factor that supports student English ability. Vocabulary achievement will help students in their English learning process. Students can write their own opinion or thoughts in English. They will find it easy to speak and understand the content in English reading text because they have a lot of vocabulary knowledge.

VOCABULARY FOR COMPUTER ENGINEERING NETWORK (TKJ) STUDENTS

As the basic factor to understand language programs on the computer, Computer Engineering Network (TKJ) students should have a lot of vocabulary knowledge. English as a language program determines whether students can operate computers. Pudyastuti and Palandi (2014) state that the English language for Computer Engineering Network students is not only just knowledge but also the basic factor in understanding the instruction in the computer. In conclusion, vocabulary achievement has an important role in influencing students' ability to operate computers. The students will not be comfortable and will tend to have difficulty operating the computer if they do not understand the instructions in English.

The instructions on the computer almost all use English. Although in operating a computer several applications or commands can be set using Indonesian, in the world of Engineering, almost all activities are carried out using computers and the instructions mostly use English vocabulary. This can be seen through the process of installing a computer operating system, where all commands are in English so that if engineering students do not understand the command in English, they will have difficulty installing it, or the installation process they are doing will fail. There are the following instructions use English vocabulary on the computer that engineering students find in their learning process, Set up windows in installing Windows 7, Partition Disk Menu in Linux Debian and Web Programming.

LEARNING HABIT

People in the world certainly has a variety of activity that they do in daily life. The activity can be a good habit and a bad habit. Habit is a result of repetition from some activity and experience. Habit is usually done continuously by a person so that it becomes a characteristic. This is in line with what Covey (1997) said, habit is something that is done not drastically but gradually, repeatedly, and continuously.

Habit is an action that we do humans automatically without thinking first. This is what is commonly called habit. Applying habits in daily life will produce a positive result because excellence is not an act, it is necessary to repeat the activities that are preferred to become habits. When we see students who choose to work diligently without words, we can be amazed.

In American Psychological Association (2020), habits are routines of behavior that are repeated regularly and tend to occur subconsciously about them. From that definition, it can be drawn the brief inference that habit is a repetitive action or repetition activity that people doing it automatically, regularly, and unconsciously. The learners do something continuously and repeatedly and this activity is used as a way in learning something to improve their achievement. In short, habitually learning by using habit. The researcher concluded that a learning habit is an activity of learning something that students do repeatedly and continuously. This research will focus on the learning habit of Computer Engineering Network (TKJ) students in using computers.

FACTORS GROW OF LEARNING HABIT

Factors growth of habit is a factor that gives the effects in person habit. Dubray (1910) formulated five factors dealing with the growth of habit. There are Number of repetitions, Frequency, The interest has taken in actions, Desire to success, Resulting in pleasure or feeling of success which becomes associated with the idea of the actions. The following is an explanation of the five factors that influence the growth of study habits.

Number repetition is the number of repetitions of an activity carried out by someone. The number of repetitions is very influential on the growth of habit in activity by someone. When someone routinely repeats an activity or deed within a certain period, of course, it will present a habit so that it becomes a habit. For example, Alex practice Installation Linux Debian for 2 times a day. The number of repetitions in a person's learning habit is certainly determined by the length of time it takes to learn something.

Frequency is the length of time spent doing an activity. A person has a certain period when doing something. For example, Jully usually listening the music in her computer for 1 hour. The time they spend doing an activity on that frequency. The frequency of study by students greatly affects their study habits. For example, in a day a student usually spends 1-hour learning mathematics. If it is carried out regularly and repeatedly, the results will make students accustomed to doing these learning habits by the period that has been accustomed.

In carrying out an activity or an action, of course, feelings of interest will be needed. A person's things will certainly be a determinant of whether they want to do an act, job, or activity that they like. Even so, if a person does not feel interested in something he does or does, then of course he will not repeat the activity or work.

The feeling of success provides an impetus for a person to be able to do more in doing an activity or deed. Doing something, of course, takes hope or a dream. This hope or dream can be anything, such as the desire to succeed, become a star, or become famous. The desire to succeed affects increasing the ratio of students' study habits. The drive for success will have a good influence on an activity being carried out. For example, Jully wants to be a great programmer so she is always to practice set up database every day.

Based on some factors above, it can be concluded a habit can grow if someone conducted something in strength repetition, a long interval of time, interest in actions, interested in something, feelings of interest and the result of the actions. In this research, the researcher will focus on two indicators of learning habits. There are frequency and number of repetitions.

METHOD

This research used the correlation method to measure the correlation between vocabulary achievement of Computer Engineering Network (TKJ) students and their learning habits using computers. Correlation research is used to provide information about the strong relationship of variables. According to Nunan (1992), correlation research is used to measure the strength of variables. The strange can range from -1.00 to +1.00. A perfect positive correlation would result in a score of +1 and a perfect negative correlation would result in a score of -1.

A descriptive quantitative research was used to explain the correlation between vocabulary achievement of Computer Engineering Network (TKJ) students and their learning habits using computers. As said by Bungin (2015), quantitative descriptive

research is a method used to explain or describe phenomena, conditions, situations, or various variables whose results are obtained through interviews or observations.

This research was conducted at SMKN 1 Pulubala. The location is on Jl. Runi Hemeto, Desa Molalahu, Kec. Pulubala. SMKN 1 Pulubala has 6 Majors. There are Agriculture, Forest Conservation, Agricultural Product Cultivation, Farm, Business and Marketing, Automotive, and Computer Engineering Network (TKJ). Participant of this research is all of Computer Engineering Network (TKJ) students at SMKN 1 Pulubala.

TABLE 1. PARTICIPANT OF RESEARCH

Class	Students	Percentage (%)
X	20	30%
XI	27	40%
XII	20	30%
Total	67	100%

A research variable is something that has been determined by a researcher to obtain the information that can be developed into a conclusion. There are the following variable of this research, Computer Engineering Network (TKJ) students habit of learning using computers as X Variable and Computer Engineering Network (TKJ) students vocabulary achievement Y variable.

In this research, the researcher used two instruments to collect the data:

TABLE 2. INSTRUMENT OF QUESTIONNAIRE

Indicator of Questionnaire	Item of Question	Percentage (%)
Frequency of learning habit learning	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	50 %
Number repetition of habit learning	11, 12, 13, 14, 15, 16, 17, 18, 19, 20	50%
Total	20	100 %

TABLE 3. INSTRUMENT OF TEST

Indicator of Test	Item of Question	Percentage (%)
Noun	1, 2, 3, 4, 5	25 %
Verb	6, 7, 8, 9, 10	25%
Adverb	11, 12, 13, 14, 15	25%
Adjective	16, 17, 18, 19, 20	25%
Total	20	100%

Validity test is used to measure the level of validity or validity result of an instrument. An instrument is said to be valid if it has high validity. In addition, according to Sugiyono (2010) validity is the degree of accuracy between the data that

occurs in the object of research and the power that can be reported by researchers. Research requires a standard of reliability. It aims to provide consistent measurements and results of research. Arikunto (2006) explained that research requires a consistent reliable standard. Measurement of validity and reliability in this research uses the Corrected Item-Total Correlation formula using SPSS for Windows Series 25.0.

RESULTS & DISCUSSION

RESULTS

Based on the 20 questions that has been given, the questionnaire consists of 10 questions containing indicators of habit, namely frequency of learning habit and 10 questions containing the number repetitions of learning habit. After doing the research, the researcher found that the frequency of learning habit showed a value of 91.04% and 85.07% for the number of repetitions. This data was obtained from the results of calculations score of questionnaire that given to all research participants, they are 67 Computer Engineering Network (TKJ) students.

Based on the 20 questions on the test that has been given, it consists of 5 questions that containing Noun, 5 questions in Verb, 5 questions in Adverb and also 5 questions in Adjective. After doing the research, the researcher found that the data showed that Noun has a value of 68.65%, Verb 80.59%, Adverb 56.71%, and Adjective 35.82 %. This data was obtained from the results calculations score of tests given to all research participants, they are 67 Computer Engineering Network (TKJ) students.

VALIDATION AND RELIABILITY OF QUESTIONNAIRE AND TEST

The validation value analyzed is the value obtained from the 20 questions of Questionnaire and Test that has been distributed to 67 Computer Engineering Network (TKJ) students. The validation value is obtain from the formula $df = N-2$ which means $67-2=65$. Based on the r table which has 5 % significance, the validation value has found 0.244. After testing the validity analysis using SPSS Computer for Windows Series 25.0, the result show that all r value of 20 questions of test are valid. The result also shows that the questionnaire and test has r value $>$ r table. Therefore, the researcher concluded that questionnaire and test is valid and can be accepted. The result of reliability also showed a significant value. It can be seen from the result of reliability test using SPSS Computer for Windows Series 25.0 present a value of 0.625.

CORRELATION BETWEEN VOCABULARY ACHIEVEMENT OF COMPUTER ENGINEERING NETWORK (TKJ) AND THEIR LEARNING HABIT USING COMPUTERS

		Questionnaire	Test
Habit Learning	Pearson	1	.507
	Correlation		
	Sig. (2-tailed)		.000
	N	20	20
Vocabulary Achievement	Pearson	.507**	1
	Correlation		
	Sig. (2-tailed)	.000	
	N	20	20

Based on the result of correlation above, it can be seen that between questionnaire and test has the significant result 0.507. Based on degree of freedom was found that $df = N - nr$, $N=67$, $nr=2$ ($67-2=65$). It could be presented r table = 0.244, then **0.507 > 0.244** The criteria of the correlation if r value > r count. It can be concluded that *there is a correlation* between vocabulary achievement Computer Engineering Network (TKJ) and their habit learning using computer at SMKN 1 Pulubala and the hypotheses was accepted.

DISCUSSION

Based on research findings, Verb show a value of 80.59% and higher than Noun 68.65%, Adverb 56.71%, and Adjective 35.82 %. After getting these results, the researcher concluded that Verb is a type of vocabulary whose frequency of use is seen more often, and observed so that students become accustomed to it. Verb is the type of vocabulary that is most mastered by Computer Network Engineering (TKJ) students because they are used to finding it in their learning habit using computer. For example, students usually find many instructions in English when carrying out the installation process, troubleshooting settings or creating a web network. They are used to finding lots of instructions in the verb form continuously during their learning period. They are familiar with verb from class X to class XII repeatedly. Doing an activity continuously and repeatedly will certainly make it a habit. This is in line with Covey (1997) said that habit is something that is done not drastically but gradually, repeatedly and continuously.

The results found that Verb had more influence on the vocabulary achievement of students in Computer Network Engineering (TKJ), so the researchers decided to measure the correlation value between the two variables. In this case, the researcher classifies variable X as the vocabulary achievement of Computer Network Engineering (TKJ) students and variable Y as Computer Network Engineering (TKJ) student learning habits using computers. After calculating the two variables, the researcher found that the correlation value between the two variables was 0.507. This value has been calculated based on the Correlation Product Moment formula and is also proven by a value that has been tested use SPSS Windows 25.0.

Based on the research and calculations that have been done, it can be seen that students' learning habits using computers affect their vocabulary achievement. Relevant to research conducted by Dahniar (2018) which concluded that the Correlation Between Students Habit in Watching English Movie and Vocabulary Mastery was 0.766. This is influenced by the high frequency of habits in watching English Movies which was found after conducting research. Fitria and Syahrul (2021) also states that the correlation between reading habits and students' vocabulary mastery has a high correlation, which is found to be 0.801. The high correlation value was influenced by the high reading habits of the students, so that the results of their vocabulary mastery also showed a significant value.

The results of the correlation values show medium values. This is obtained through a correlation table which explain that if the measurement results of two or more variables show a value of 0.507, the correlation results are classified as medium. The researcher found the medium correlation because based on the result of students vocabulary achievement test, the researcher found most of students has relatively low score. Students in the XII grade has high score in vocabulary achievement test than students in the X grade. The researcher found that the results of the correlation between vocabulary achievement of the Computer Network Engineering (TKJ) students and their learning habit using computer were influenced by participant of research.

In this research, the participants consisted of grades X, XI and XII which had different frequency and number of repetitions in their learning habit using computer. The existence of the frequency and number of repetitions in the use of computer that are different in each class affects to their vocabulary achievement. Therefore, the researcher concluded that the difference frequency of learning habit using computer of all participants in this researcher affected their vocabulary achievement.

This is related to Fauzi (2022) who states that the number of student learning frequencies will affect the learning outcomes obtained. The researcher concluded that if students has more frequency in habit learning vocabulary, they will get more knowledge in vocabulary. It also relate to Computer Engineering Network (TKJ) students, if they has same frequency in learning habit using computer they will get the highly score in vocabulary achievement test. As a result, this research has high correlation value.

CONCLUSION

Based on the description of the data that discussion in the previous chapter, the researcher concluded that the significant result of correlation between Computer Engineering Network (TKJ) students habit learning using computers and their vocabulary achievement has 0.507. It can be seen by the distribution of r table where value of $N = 67$ participant has r value 0.244. In this research, the value of correlation product moment is bigger than r table (**0.507 > 0.244**). It means that there is a correlation between vocabulary achievement of Computer Engineering Network (TKJ) students and their habit learning using computers. With the correlation category is

medium. So, the researcher concluded that alternative hypothesis of this research is accepted. The researcher has also measured the influence of Engineering students' habit learning on their vocabulary achievement and found 91.04% results for the frequency of habit learning and 80.59% for verbs. Therefore, the researcher concluded that Engineering students' habit of learning using computers had a moderate relationship or gave influence on their vocabulary achievement. The most influencing factor is the frequency of habit learning of Computer Engineering Network (TKJ) students in using a computer and their mastery of verbs.

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