ENHANCE SKILL FOREIGN LANGUAGE ON ELECTICAL ENGINEERING STUDENT BASED ON NEW METHOD

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ABSTRACT

This study aims to analyze whether there is an effect of computer-assisted learning methods on language skills for Electrical Engineering students University of Pembangunan Panca Budi, North Sumatera, Indonesia. This research is a comparative study that compares the effect of applying the same learning method, namely computer-assisted language learning techniques, to two different classes. The data encountered is the product of students' electrical engineering language skills. The assessment indicators are taken from language skill assessments according to the theory of Douglas H Brown (2001) and Simon (2005) and the average value of language skills is calculated.

Keywords: Language Skills (language), computer-assisted learning methods.

INTRODUCTION.

Learning English in Electrical Engineering includes four language skills namely language, speaking, reading, and writing. The four skills are integrated with the process of learning English and are language skills that must be mastered in learning English. The English language skills of students majoring in Electrical Engineering in the Electrical Engineering study program include learning material that is not studied enough because the learning process must be adjusted to the syllabus and semester learning plans.

This is due to study hours which are only 2 hours a week. Lack of study hours causes students to have less time to study and practice these language skills. And this research will raise the issue of one language skill, namely language skills. Brown (2001, p.247) revealed that "In classrooms, students always do more speaking than language. Language competencies universally "smaller" than speaking competence. This means that students often carry out speaking activities rather than language in class and speaking skills take precedence over language skills.

Given the importance of language skills for Electrical Engineering students, teaching staff must be able to deliver language lessons with appropriate learning models and media so that learning objectives can be achieved optimally. However, in reality, teaching language in class does not get enough portion in terms of quality and quantity, causing students' language skills to be low. Language is considered by students as a skill that is difficult to master and is considered less interesting.

This is not only due to teaching staff factors but can also be caused by the media used during learning. Media can help lecturers to make it easier to deliver the material.

One of the media that can support the language learning process is computer-assisted media. According to Newby et al. (2011, p.51), computers can act as lecturers and assistant. The role of the computer as a lecturer is that the computer can provide materials, evaluate student responses and provide feedback to students. Computers become very interactive,

individual, and very tolerant. While the role of the computer as an assistant is that computer can function as a tool for lecturers or students to carry out various activities, one of which is making multimedia material.

Dale explained that the results of student learning experiences were obtained through direct experience (concrete) then through imitation objects, until they arrived at verbal symbols (abstract). The higher to the top of the cone, the more abstract the medium for conveying the message. Direct experience (direct purposeful experience) will give the most meaningful impression to students because it involves the senses of sight, hearing, feeling, smell, and touch. Through this computer-assisted learning media, students not only hear or see, but can also do the exercises and questions given. So that in the end, students will easily understand the material presented in the learning media.

Thus, it can be concluded that computer assisted learning media plays an important role in the learning process. The use of computer-assisted media also aims to increase the efficiency and effectiveness of learning. The learning process can be delivered at the same time or at different times. In addition, the use of learning media can also increase student motivation while improving the quality of learning. This is in line with Arsyad's statement (2010, p.55) which states that "Computers have the ability to stimulate students to do exercises and carry out simulations because of the availability of animation, graphics, colors, and music which can add realism".

Cassette media is also linear and not interactive, so it seems monotonous and less interesting when used in learning. This becomes very ironic considering that the development of the times and current technology, where the infrastructure supporting the learning process is very varied and modern. Computers are a product of technological developments that should be utilized as a means of supporting the learning process. The availability of computers on campus has not been maximized and satisfactory, so students are expected to bring their own laptops with them.

The availability of computers on campus should be utilized optimally to overcome learning problems. Based on the problems faced by students and lecturers regarding the limited language learning media and the use of computers that have not been maximized, the researcher intends to develop a computer-assisted English learning media for language skills for semester B students of the 2016/2017 academic year, as an effort to improve quality. learning English and seeking to create human resources who can keep abreast of developments.

LITERATURE REVIEW.

2.1. Language Skill

Language skill is a language skill that needs to be mastered properly. This skill is an important indicator for student success, especially in learning English. By mastering language skills well, students can communicate their ideas, both in class and outside the classroom, especially with foreign speakers and also maintain good relations with others. Language skills are also a student-centered learning process, so students get the opportunity and facilities to build their own knowledge, through the learning system that is given to them.

Language skills are related to hearing and language. Subyantoro and Hartono (2003: 1) state that language is an event of capturing sensory stimulation of the five auditory senses that occurs when we are aware of these stimuli, while language is a language activity that is

carried out deliberately, fully. attention, to what is heard, meanwhile language to the understanding of what is heard, meanwhile language to the meaning is the same as language but in language the intensity of attention to what is listened to is even more emphasized. Anderson (in Tarigan 1994: 28), says that language is a big process of language, knowing, and interpreting verbal symbols.

*Language*is one of the language skills that must be mastered by students of Engineering English course. Language skills are a productive group of language skills because the language process occurs due to the process of expressing information and communication between the speaker himself (monologue) or with a speaking partner (dialogue) or in multidialogue (Harmer, 2003).

In relation to the notion of language, Ak gift (in Sutari, et al. 1998: 19) is a process that includes language to the sounds of language, identifying, interpreting, and reacting to the meaning contained therein.

In the Big Indonesian Dictionary (1994: 94), it is stated that language is language (paying attention to) both what is said or read by other people.

Based on some of the opinions above, the authors conclude that language is a process of language to verbal symbols with full attention, understanding, appreciation and interpretation to obtain information, capture content or messages and understand the meaning of communication that has been conveyed by the speaker through speech or orally.

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2.2. Changes in Learning Methods

If a person thinks that he is having fun when he is studying, then he will forget that he is learning and will automatically enjoy and get a lot of benefits (Burns, 1997). This expression is a phrase that is often forgotten by educators. The application of discipline in the wrong way, standard curriculum and so on which makes students not have their own choices will certainly make students feel they are having fun, because it is not in accordance with what they like.

Several learning methods that refer to natural learning and refer to individual uniqueness that need to be developed are collaborative learning, problem based learning, portfolio, team project, resource based learning. These methods emphasize things like teamwork, discussion, open answers, interactivity, doing real projects not just memorizing, and learning to learn, not just gaining knowledge and so on.

2.3. Identification of Valuation Methods

At this stage a number of objectives of the learning process are explored through various sources and stakeholders. Thus the learning objectives can be stated explicitly, so that the external forms can be easily measured (measurable) and observable. With detailed objectives and output forms, the strategy used to achieve the objectives can be determined. At this stage a number of assessment methods, both conventional and non-conventional, are studied and then selected according to the outputs to be measured. In learning English, output forms include students' language skills in understanding English reference texts assisted by computer media.

Based on the results of the previous stages, the assessment process was carried out, followed by processing the results of the assessment and preparing recommendations for improving the learning process and giving feedback to students. In more detail, this implementation stage is explained in the section relating to computer-assisted English learning strategies to improve language skills. Electrical engineering students study program in Electrical engineering in the 2016/2017 academic years.

METHODS OF IMPLEMENTING ACTIVITIES.

This type of research uses a quantitative research approach. Quantitative research is research conducted to solve problems (find answers) through a rigorous design (eg correlation, experimentation, and quantitative descriptive) to reach objective conclusions that aim to explain, summarize various conditions, situations, or variables that arise in society. Quantitative data were obtained from the results of the initial test (pre-test) and the final test (post-test). Both of these data were analyzed descriptively to determine students' language skills from the comparison of the results of the pre-test and post-test. Then analyzed the comparison of the value of the final test results between the two different classes.

There are two data collection instruments used in this study, namely:
1) assessment of language skills before the application of the game method and
2) assessment of language skills per individual after the implementation of the computer assisted learning method

Language skills before the application of the game or pre-test method are carried out by applying the following data collection procedures:

1. The lecturer gives the task of writing descriptive student study schedules from Monday to Friday using the simple present tense. Time 45 minutes.
2. The lecturer asked students to take an individual language test to come forward with the theme explaining the course schedule in the campus.
3. Lecturers observe and assess the results of students' language skills.

For language skills after the computer assisted learning method is used
, data collection instruments are as follows:

1. Students are divided into several groups. Each group consists of 5-6 people.
2. Each group is given a language task with the theme of telling your experience stories using the present perfect.
3. The lecturer presents the grammatical structure of the present perfect tenses into the question table.
4. Students are asked to write a table of questions and answers on paper.
5. The lecturer gives examples of dialogue present perfect tenses using computer media.

6. Students practice language skills with computer media with group members.
7. Students do a test of what they hear in front of the class forum.
8. The lecturer observes and gives an assessment.

RESULTS OF IMPLEMENTATION OF ACTIVITIES
5.1. Data Description

Based on the results of observations and assessments conducted on students majoring in civil engineering EL-2B/D at the Medan State Polytechnic when the initial and final tests were carried out, it was found that students had language skills as will be described as follows.

The initial test was carried out to determine the ability of students' language skills before carrying out the action. The initial test results are shown in the table below.

Table 1. EL-2B Student Initial Test Results (pre-test).

Name	Acquisition Score					Total	Conversion	Mark	% (Mark in percent)	Criteria Skills
	P1	I	P2	P	TM					
Afif	2	1	2	2	3	10	2.0	50	50%	C
Agnes	2	2	3	3	2	12	2.4	60	60%	C
Ahmad	3	1	3	2	4	13	2.6	65	65%	C
Azhari	2	1	4	2	4	13	2.6	65	65%	C
Bagas	1	2	1	3	1	8	1.6	40	40%	D
Danta	3	3	4	3	4	17	3.4	85	85%	A
Dolly	2	2	3	2	4	13	2.6	65	65%	C
Dwiki	4	2	3	3	4	16	3.2	80	80%	B
Fitria	2	2	2	2	3	11	2.2	55	55%	C
Gabriella	2	2	3	2	3	12	2.4	60	60%	C
Helena	3	3	2	3	4	15	3.0	75	75%	B
Jorgen	4	2	4	3	4	16	3.2	80	80%	B
Khairatih	2	3	2	3	4	14	2.8	70	70%	B

M. arifin	2	3	3	2	3	13	2.6	65	65%	C
Mango	3	2	2	3	3	13	2.6	65	65%	C
M. Sofyan	2	1	2	2	2	9	1.8	45	45%	D
M. Jihat	1	1	2	1	2	7	1.4	35	35%	E
Phonna	3	3	3	3	4	16	3.2	80	80%	B
Ragil	1	2	2	2	2	9	1.8	45	45%	D
Rendi	1	1	3	1	3	9	1.8	45	45%	D
Ronaldo	2	2	3	2	3	12	2.4	60	60%	C
Ronaldo	2	3	2	2	3	12	2.4	60	60%	C
Sastro	2	2	2	2	2	10	2.0	50	50%	D
Wendy	2	2	2	2	1	9	1.8	45	45%	D
Zepri	2	2	3	2	3	12	2.4	60	60%	C
Total Mark	62	25	73	65	84	339	67.8	1695	60.53%	C

5.2. Description of EL-2B Student Final Test Results

The final test was carried out to determine the ability of students' language skills after the treatment (treatment) of computer assisted learning techniques methods. The final test results are shown in the table below.

Table 2. EL 2B Student Final Test Results (post-test).

Name	Acquisition Score					Total	Conversion	Mark	% (Mark in percent)	Criteria Skills
	P1	Q	I	P2	TM					
Afif	3	2	3	3	2	13	2.6	65	65%	C
Agnes	3	2	4	3	2	14	2.8	70	70%	B
Ahmad	3	1	4	2	3	13	2.6	65	65%	C
Azhari	3	2	4	3	3	15	3.0	75	75%	B
Bagas	2	2	3	3	2	12	2.4	60	60%	C
Danta	4	3	4	3	4	18	3.6	90	90%	A
Dolly	3	2	3	2	3	13	2.6	65	65%	C
Dwiki	4	3	4	3	4	18	3.6	90	90%	A

Table 3. Distribution of Average Differences in Pre-test and Post-test of EL-2B Students of Medan State Polytechnic for Academic Year 2016/2017

No. subject (N)	Score		gains (d)	
	Initial Test (x)	Final Test (y)	yx	d2
1	50	65	15	225
2	60	70	10	100
3	65	65	0	0

4	65	75	10	100
5	40	60	20	400
6	85	90	5	25
7	65	65	0	0
8	80	90	10	100
9	55	65	10	100
10	60	65	5	25
11	75	75	0	0
12	80	85	5	25
13	70	70	0	0
14	65	75	10	100

The results of Paired Samples Correlations show the results of the correlation between the pre-test scores and the post-test results with a correlation coefficient of 0.921 with a significant value of 0.000 .

CONCLUSION
Based on the results of the discussion of quantitative experimental research that has been carried out by applying computer assisted learning methods in improving language skills in electrical engineering students in semester 2B/D of the 2016/2017 academic year, it can be concluded that:

1. The language skills of electrical engineering students in semester 2B before being given treatment (action) were in the less skill criteria as many as 9 students were in the fail criteria and 19 students were in the pass criteria, with an average pre-test score of 60.53, namely skills language at a fairly communicative level in mastering the material, in identifying types of words, sentences and utterances with a few errors in grammar and pronunciation.
2. The language skills of electrical engineering students in the 2D semester before being given treatment (action) were in the less skill criteria, as many as 8 students were in the failure criteria and 19 students were in the pass criteria, with an average pre-test score of 58.1, namely language skills at a fairly communicative level in mastering the material, in identifying the types of words, sentences and utterances with a few errors in grammar and pronunciation.

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