Analysis of English skill obstacles of electrical engineering students of Politeknik Negeri Manado

Maya Munaiseche¹ Grace Pontoh² Decire Wagiu³

Politeknik Negeri Manado^{1,2,3} email: maya.ernie2070@gmail.com¹

Abstract - Speaking English allows a crucial problem for local students in electrical engineering. The observation shows that their specific skills are unusually limited. Though they want to get to increase the outcome processes. Development of technology communication naturally supposed to typical force them up develop specific skills of English effectively. This study focuses on a student who constantly provides unique obstacles. The purpose of this study was analyzing the English skills obstacles in Electrical Engineering. The data source is selected as the population was 25 students from the class of electrical engineering agreed to participate in this study. Using qualitative data analysis methods supported by research instruments used to anxiety with questionnaires adapted from Horwitz's Foreign Language Anxiety Scale (FLAS). Four questions from 20 instruments were then analyzed by using Likert scale 1-5. Using the communicative approach and role-plays techniques to practice rapidly by giving a text conversation offer 3, 7 and 10 dialogues. Matched of Classroom Action Research (CAR) that consists of planning, acting, observing and reflecting with two-cycles repeatedly. The Likert analysis indicates that the participants never did practice rapidly, they have a high anxiety level 65% and better than the other 35%. Whereas the participant who has a high anxiety level always felt difficult to speak, fear of evaluation, and to lose confidence, nervous to speak. The results are 65% lack of confidence, 64% panic, 63.2% slow and 53% difficult to memorize.

Keywords: English skill, learning obstacles, foreign language learning

1. Introduction

Difficulty in learning the English-language (L2) until today still experienced by many students, especially those in college. The observations indicate that the initial capital (intakes) L2 they are very low. In fact, the quality of input will affect both the process and outcomes of learning. Quality intakes PT is the output of education in universities in the era of globalization because communication had felt closer (Hermawati, 2010). English is the language most familiar to communicate, but it was difficult for some students in course Electrical engineering. A crucial problem of their speaking is the ability to listen to the information, to understand what is being said by others. The main problem as above consists of an understanding of the speaker's accent or pronunciation, grammar, and vocabulary, as well as the understanding of its meaning.

Communication skills comprise receptive skills and productive skills. Listening and reading, as commonly defined, are receptive skills while speaking and writing are productive skills. Receptive skills, mostly and formally discussed, are those in which students receive and process the information but do not need to produce a language to do this, while productive skills require the production, for instance, a speech (Harmer, 2007: 246). Though entering the digital era, all learning in any field is heavily influenced by internet media, web, multimedia with various terms and symbols in English. This is meant to make easy access to the learner in a second language / foreign via electronic communication media both audio and visual. It will even give them a greater opportunity for the learner to interact with the foreign language studied. It is expected to learn English L2, students can utter words, phrases, sentences correctly, and proper speech produced by speakers of English is the highest goal (Grace, Munaiseche, and Putung, 2016).

The researchers consider it necessary to conduct research in an effort to determine the constraints of students in speaking English. This research was conducted during the process of teaching and learning activities in the classroom, with a communicative approach and role-play technique. Researchers identified obstacles in English on internal factors, namely: behavior/attitudes of students in the English language on the issue of "How to analyze the constraints Speak English Electrical engineering students and the factors that influence the constraints English on Students. Speaking in public likes it or not is something that must be done by someone with the students. However, several obstacles that often occur when doing public speaking (Muljanto, 2014).

English skill obstacles are speaking in category 1) namely nervous (excessive anxiety), not sure or lack of confidence, fear, traumatic, afraid assessed/judged perfectionist, less preparation, stress, and blank. Some of the underlying reasons are not confident in the nature of the physical symptoms are rapid heart rate, trembling knees, quivering voice, the heat wave, nausea, stomach cramps, hyperventilation or difficulty breathing, watery eyes or a runny nose. Speaking constraints on category 2: a sense of inadequacy, a sense of loss of control, a sense of helplessness, shame and panic.

Some of the students' perceptions that the main constraint of public speaking mainly in English is on its linguistic factors or at the level of languages such as sound (phonic level), which affects the level of understanding of words (lexical level). Instruction delivered hard for opponents to speak because of a lack of control grammar. Perception lecturer "...Electrical Engineering Students have low motivation because they assume that taught English language materials not related to their field of study that cannot support academic success... (Grace and Munaiseche, 2017). "... The same thing is expressed by Witt, et al. (2008) that anxiety causes distress makes them doubt that they will successfully convey meaning clearly. This causes the

students with a low English-speaking ability is increasingly anxious and depressed because they feel always behind and less able to follow the lessons... "(Joni and Dharmayanti, 2017). The target to be achieved in this research is to analyze the constraints in English and identify factors that affect the student in Electrical Engineering.

2. Method

The research design did qualitative and quantitative methods, and using a Classroom Action Research (CAR) with 2 cycles repeatedly adopted from Kemmis & McTaggart is designed into four steps. Kemmis and Taggart state that the research is initiated by planning for action. Then the plan is executed as an action in the classroom and the action is then observed.

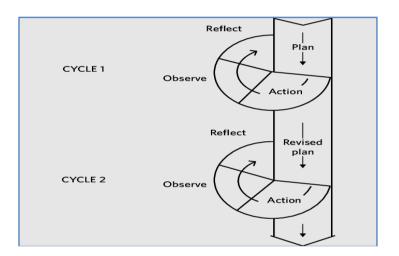


Figure 1 Cycles of the research Kemmis and McTaggart model (1988: 11—14, cited in Burns 2010)

The data is obtained during the action, First, identify with a classroom-related question that would like to research. Second, be sure that the student is under a lack of confidence, panic, slow and difficult to memorize in learning English. Third, choose a model design exactly that would be the problem of speaking to every student which is a problem of speaking English. Fourth, collected data from participants which answered questionnaires, and the observations. Fifth, data collecting has been analyzed and it's for determining a conclusion.

The participants are 25 students who study at an electrical engineering department to identification students' attitudes and opinions toward speaking skills. The methodology has been applying through Action Research Cycle two-stage investigation. They are given a theme conversation in groups, with one a group consists of 2-3 people. This activity takes place in one face in each class. They are given each time 12-15 minutes for speaking repeatedly in front of the class.

The first stage observation of their English in order to check speaking skills practices and analyses the behavior of individuals in speaking was carried out in the classroom 3.7 and 10 dialogues. During the observation, we found obstacles a great part of each lesson happened on the physical inner is afraid, nervous, panic because of unusually practice.

The subsequent stage identifies English factors of anxiety that often arises before, during and after the activity take place is linguistic factors: Pronunciation, Accuracy, Intonation, and Fluency.

Next, complete the questionnaire, the perception of participants is about obstacles to speak using the Likers scale. After collecting some data, the researcher analyzed each answer from the respondents by using the Foreign Language Anxiety Scale (FLCAS) question, scoring using the Likert scale. Adopted by Horwitz with 20 questions to discover the error, rating score using the Likert scale with 1-5 points.

Based on selected questions related to data collection constraints analysis English distributed to 25 respondents then recapitulated. From 25 respondents obtained using the calculation data Likert scale to measure English language constraints.

Respondents answered: Strongly Disagree—1—2—3—4—5—Strongly Agree. Based on the item, the respondent will choose a number from 1 to 5 using the criteria below:

1. Strongly Disagree, 2. Disagree, 3. Undecided, 4. Agree 5. Strongly Agree.

	Scoring					
Statement	Strongly Agree Agree		Undecided Disagree		Strongly Disagree	
Positive	1	2	3	4	5	
Negative	5	4	3	2	1	

Table 1 Likert's Scoring Table

TD 11 A	O .:	· •	C C 1	
Table 7	(hiestionn	iaire Item	ic of Sheak	cing Anxiety
1 4010 2	Oucsuoiii.	iano nten	is or opcar	mig Analety

No	Statement	5	4	3	2	1
		SA	A	UD	D	SD
1	I really panic when the lecturer appointed me suddenly to speak English in daily activities in front of the class.					
2	I find it difficult to memorize English for conversation because I was not good at grammar and not interested in learning English					
3	I was very nervous when I got the opportunity for a conversation with my friend in the class because of speaking English activities unusual practice did its					
4	I was always shy to speak English because I have lost confidence fear of being wrong and often ridiculed by my friend.					

3. Results and Discussion

Based on data from 20 questions selected 14 items that match the title of the study. The Likert analysis indicates that the students never did practice rapidly, they have a high anxiety level. The participant has a high anxiety level always felt difficult to speak, fear of evaluation, and having anxiety as the factors that caused them to lose confidence in good speaking. Based on selected questions related to data collection constraints analysis English allocated to 25 respondents then recapitulated. From 25 respondents obtained using the calculation data

Likert's scale to measure English language constraints. Respondents answered: 1. Strongly Disagree, 2. Disagree, 3. Undecided, 4. Agree 5. Strongly Agree. Based on data from 20 questions selected 14 items that match the title of the study.

Table 3 Students' Perception

Answered	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
	1	2	3	4	5
very panic		11	8	6	
difficult to		1	1	12	11
memorize					
slow	1	7	12	5	
have a confidence	3	2	12	8	

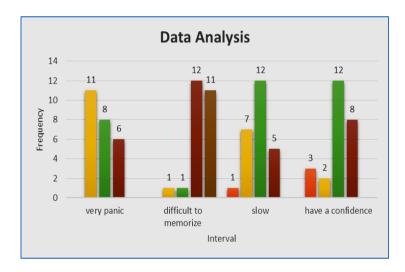


Figure 2 Data Analysis

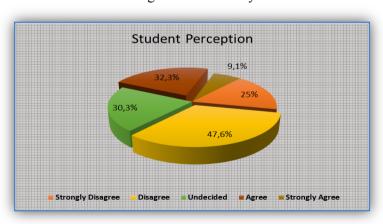


Figure 3 Students' Perception

Formula: T x Pn

T = Total number of respondents who voted

Pn = Likert score, score selection

All results are:

- 65.6% have a Speaking Anxiety (Statement Negative)
- 35.4 % have self-confidence (statement Positive)

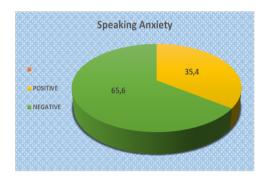


Figure 4 Speaking Anxiety

There are four types of character in which the students tend to have lack self-confidence. They seldom listening to music, playing games, watching movies or YouTube and use applications that drive them speak English much. Based questions in the questionnaires obtained 65% (negative) of respondents have a level of anxiety in English.

Questionnaire data showed that type of students has the ability to speak English better it turns out they have a frequency of listening to music, playing games, watching YouTube and a lot of learning to speak English on the internet applications than students never do anything like that. Perception of students in response to the questions 35% (positive) of respondents better in the speaking English language.

Implementation of the second cycle, the researcher conducted a strategy learning with role-playing in which this learning more interesting way to form small groups (small group) and students should help each other by means of shifts said. We have been discussed the study above, here are some steps to bring the confidence of a student to communicate using the English language.

- How to overcome the difficulties of English always have the basic study the theory of speech organs (phonetic theory) or phonology. By utilizing a phonetic transcript of pronunciation, students can avoid errors caused by the attitude of the students that only based on spelling.
- To overcome the problems associated with the properties of sound that are interconnected to one another. These issues include the use of duration, pressure, and precise intonation. Students need to know the sound of English
- Then do the exercises over and over, memorizing every word hard and learn to communicate with friends in a short form for a smooth dialogue. And apply the learning methods as needed.
- Acquire new language skills as expected namely English Fluency.

4. Conclusion

Once identified by repeatedly speaking test with 3.7 to 10 dialogue, it is concluded that constraint speaking skills in English for electrical engineering students do not have a strong foundation, so the factor of anxiety as much as 65% and better than the other 35%. The results showed that there are four constraints obtained on the basis of data collection are a type of panic: 64%, it is difficult to memorize: 53%, slow: 63.2% and 65.6% have a self-confidence. It affects the quality of the student self-learning process and outcomes and affects their performance.

Based on the conclusions suggest lecturers and universities should improve student learning motivation with L2 learning in accordance with the needs analysis and choose the appropriate method. Learning is focused on practice more and follows the development of new models of learning and innovative for Higher Education is the output of education in Higher Education (PT), particularly the era of globalization, it should have the best graduates can compete in the industrialized world such as the English language skills.

Acknowledgments

This research was supported / partially supported by [Sentrinov Bali 2018, Politeknik Negeri Manado, P3M Polimdo]. We thank for Ir. Notje Slat MT, as a Director of Politeknik Negeri Manado. Dr. Tineke Saroinsong SST, M. Eng. The head centre of P3M Politeknik Negeri Manado supporting and provide insight and expertise that greatly assisted this research.

References

- Grace, HP., Munaiseche, M., Putung, Y. (2016). *Teaching Materials English for Informatics based on Multimedia in Manado State Polytechnic* [jurnal] *International Journal of Computer Applications*.
- Grace, HP. and Munaiseche, M. (2017) Pembelajaran Bahasa Inggris ESP Untuk Keterampilan Menulis Jurnal *Industrial Research Workshop and National Seminar* (IRWIN) Politeknik Negeri Bandung.
- Febriyanti, GAAA., Dewi, NKSL., & Dewi, IGAAIRC. (2018). Using self-assessment to assess rural young learners' writing skills in English foreign language classroom. *Journal of Applied Studies in Language*, 2(2), 109-115. doi:10.31940/jasl.v2i2.1065.
- Gibbs, G. & Habeshaw, T. (1989). Preparing to Teach: An Introduction to Effective Teaching in Higher Education. Technical and Educational Services, Ltd., Bristol, 2, 37.
- Harmer, J. (2003). University Listening: English Teaching Professional. Issue 26, 29, 30.
- Hermayawati. (2010). Analisis Kesulitan Belajar Bahasa Inggris Mahasiswa Jurnal Sosio-
- http://www.bppk.kemenkeu.go.id/publikasi/artikel/168-artikel-pengembangan-sdm/19844-mengatasirasa-takut-dan-tidak-percaya-diri-dalam-public-speaking (http://swaragama.com/stc/?p=45). Humaniora.
- Iriance, I. (2018). Improving speaking ability of the students of SMK Kelautan dan Perikanan Negeri 12 Medan Labuhan by implementing role play technique. *Journal of Applied Studies in Language*, 2(1), 88-95. doi:10.31940/jasl.v2i1.892.
- Joni, DAAW. & Wirastuti, IGAP. (2018). Self-efficacy effect on basic level learners in speaking activities. *Journal of Applied Studies in Language*, 2(1), 1-9. doi:10.31940/jasl.v2i1.808.
- Joni, DAAW. & Dharmayanti, PAP. (2017). Pengaruh Anxiety dalam Speaking Activities, Jurnal Bakti Saraswati Vol. 05 No. 02.p.129 September 2016.
- Kurnia, YR. & Erawati, NLE. (2018). Teaching reading in junior high school. *Journal of Applied Studies in Language*, 2(2), 102-108. doi:10.31940/jasl.v2i2.1064.

- Lastari, NKH. & Saraswati, PRTAKH. (2018). The use of mind mapping to improve writing skill of the eighth grade students of junior high school. *Journal of Applied Studies in Language*, 2(2), 144-150. doi:10.31940/jasl.v2i2.1057.
- Merawati, J. (2017). Learners' models enhance the development of learners' reading and thinking strategies. *Journal of Applied Studies in Language*, 1(1), 1-6. doi:10.31940/jasl.v1i1.654.
- Muljanto, M.A. (2014). Mengatasi Rasa Takut dan Tidak Percaya Diri dalam Public Speaking.
- Pontoh, GH., Munaiseche, M, Yoice, P. (2016). Teaching Materials English for Informatics based on Multimedia in Manado State Polytechnic [jurnal] International Journal of Computer Applications.
- Pontoh, GH., Munaiseche, M., Christo, RP. (2017). Pembelajaran Bahasa Inggris ESP Untuk Keterampilan Menulis Jurnal Industrial Research Workshop and National Seminar (IRWIN) Politeknik Negeri Bandung.
- Rakhmawati, F. & Nirmalawati, W. (2017). Grammar teaching at pre-service training program in Kampung Inggris (a case study on mastering system program). *Journal of Applied Studies in Language*, 1(1), 7-14. doi:10.31940/jasl.v1i1.655.
- Richards, JC. & Rodgers, T. (1986). Approaches and Methods in Language Teaching. NY: Cambridge University Press.
- Subiyanto, P., Suciani, NK, Aryana, IN., Sukerti, GNA., & Sitawati, AAR. (2018). Learning and growing: an alternative strategy to teach English. *Journal of Applied Studies in Language*, 2(2), 170-175. doi:10.31940/jasl.v2i2.1080.