ENHANCING SPEAKING SKILL
THROUGH WASTE OF MACHINE'S SPARE PARTS

Yuliana Ningsih*[1], Kurnia Dwi Artika[2]
yuliananingsih@politala.ac.id, Author kurnia.2a@politala.ac.id

POLITEKNIK NEGERI TANAH LAUT

ABSTRACT

The study investigated whether the machine's spare parts' waste impacts teaching, especially enhancement the students' speaking skills, and describes how the waste of machine's spare parts influences the students' speaking skills. The study explored the waste of machine's spare parts, which has a negative impact on the environment, to create a learning media to enhance speaking skills to the students of Politeknik Negeri Tanah Laut, Mechanical Engineering majoring. Action research was implemented in two cycles, and the data were collected through observation, questionnaire, and speaking assessment. Pre-Test Testing, Cycle I Test, and Cycle II Test use the same speaking test used waste of the machine's spare parts by students. The data showed that the mean score of the Pre-test was 65,45, 70,1 in Cycle I, and 82 in Cycle II. Therefore, it can be concluded that the use of machine's spart waste can improve students' speaking skill. In addition, the finding also showed that it gives enhancement to students' participation and confidence in speaking English.

Keywords: waste of machine's spare part, speaking skill, learning media

A. INTRODUCTION

Using technology is a recent trend in higher education institutions, and at present many learning media have been used by teachers to simplify the learning process. Many use media technology to simplify the learning process; this situation makes students and teachers always dependent on technology; they will find it difficult if they are far from the media. Simultaneously, there are environmental problems currently, and there are no appropriate solutions to overcome them. Waste does not need to be destroyed, but instead, waste can be used to support the learning process without using expensive costs. Besides, it also increases the creativity of students based on environmental awareness. The performance assessment model is a model used to support the learning process, where students can come up with creative and innovative ideas in enhancing student creativity through the task of making learning media based on machine waste where the machine is something close to their knowledge.

Materials used for making creative learning media include waste shock motors, gears, spark plugs, air filters, and pistons. With a little creativity, used waste of spare parts that are usually found as junk can be made into items with artistic value and educational value. Low speaking proficiency among Students of Mechanical engineering (especially from Politeknik Negeri Tanah Laut) as learners can be attributable to a strong focus on accuracy and unsatisfying. (*Teaching Speaking: A Holistic Approach - Christine C. M. Goh, Anne Burns - Google Buku*, n.d.). Innovative teaching occurs, not because the approaches are new, but because teachers

and teacher educators have the courage and persistence to think creatively and to initiate or extend teaching strategies that are 'outside the box' in their context (*Creativity in Language Teaching: Perspectives from Research and Practice - Google Buku*, n.d.).

According to Tuan & Mai (2015), one of the factors that affecting students' speaking problems is self-confidence. Brown (2003) indicating that one can be called has linguistic competence if s/he can imitate a word or phrase or possibly a sentence (imitative), produce short stretches of oral language design to demonstrate competence in a narrow band of grammatical, phrasal, lexical, or phonological relationship. Such as prosodic elements-intonation, stress, rhythm, juncture, intensive ability (intensive), respond a concise conversation, standard greetings and small talk, simple requests and comments, and the like (responsive). Take all forms of either transactional language to share relevant information or interpersonal interactions to maintain social relationships (interactive), maintaining social relationships through the transmission of facts and information (interpersonal), creating oral development (monologue), including speeches, oral presentations, and storytelling.

Based on the explanation above, the author made the performance assessment model enhance speaking skills through a waste of machine spare parts, especially students of Mechanical Engineering. The purpose of this study is to enhance the English speaking skills of students of Mechanical Engineering Majoring of the Politeknik Negeri Tanah Laut by utilizing a waste of machine spare parts. Rachmania (2018) stated that Students will have a chance to win and develop qualifications such as leadership, teamwork, and skills for problem-solving. Therefore, it is necessary to improve these skills as part of learning about higher education. Many of these competencies are also created by constant peer and self-assessment practices. Speaking is a productive skill in oral mode. It is more complicated than it seems at first, like the other abilities, and requires more than just pronouncing terms. Speaking ability is regarded by many language learners as the test of learning a language. These learners describe fluency, even more than the ability to read, write, or understand oral language, as the ability to converse with others. They see speaking as the most critical ability they can learn, and they measure their success in terms of their spoken communication achievements (Bashir, Azeem & Dogar, 2011).

We stated that 'Speaking' and its function; Speaking involves a lot more than just using grammar and vocabulary accurately in speech. When we speak, we frequently have in mind the person we are speaking to and our wish to communicate our meaning successfully. We use interactive strategies to help us achieve this. These include using body languages such as gestures, eye contact, facial expression, and movement to put our message across more strongly and clearly, and functions such as clarifying our meaning …, asking for opinions …, agreeing … to keep the interaction (communication) going and check that is successful (Spratt et al., 2011).

A significant skill is to get a good and meaningful interaction with each speaker; this process sometimes involves communication, formal or informal dialogue, selling and buying conversation, or joking. Indeed, it needs more than confidence but how to communicate clearly by showing the right attitude, good face's expression, and good bodily gestures. One of the English skills elements is speaking skill, which refers to expressing the human's mind through sound or utterance, then it is called a productive skill (Muttaqin, 2019).

The instructional media applied in the classroom can be utilized from waste materials such as paper, plastic bottles, or living things such as plants or humans. In general, the application

of instructional media in the classroom carries a positive impact not only on the students but also on the teachers (Leoanak & Amalo, 2018).

To use the waste of machine spare parts as media for learning, students must make them. First, the projects were made according to their respective designs, either from motor shock, bolts, chains, air filters, in the form of miniature Banjar culture customs and medicinal plant media. There was even a spring simulation of the waste plate and motor shock, and then the project was made as attractive as possible and given an interesting name, and the project can also be used in other courses as learning media.

B. LITERATURE REVIEW
1. Speaking Skill
Many learners of languages consider the ability to communicate as an indicator of understanding a language. They regard speaking as the most valuable ability they can learn, and in terms of their achievements in spoken speech, they measure their success. Speaking requires three fields of knowledge: using the correct terms with the correct pronunciation in the correct order, knowing when message clarification is essential and when there is no need for accurate understanding, and understanding how to take into account which, in what circumstances, when, and for what reason, is speaking to whom (Hamidova & Ganiyeva, 2020). Thus, teachers or lecturers can help students by practicing real-life communication based on their environment with appropriate context, and they also use balanced activities.

Speaking as a form of speech is a method of oral communication. Speaking consists of the use in a language of lexical grammatical and pronunciation events to convey some concept (Usmonov, 2020). He also added that students have difficulty formulating speech skills at the outset; they need to be encouraged as much as possible to develop their speaking abilities on this occasion. It means getting some kind of input whenever they do a speaking task and as much as possible when they talk during any activity, even if speaking is not the primary focus. For this, there are several reasons:

    a. Any activity is tedious if the teacher does not discuss it. A speaking activity is like a writing activity - if you didn't correct their writing, the students would probably complain, so why should speaking be different?

    b. When they talk, your students should feel that they are not wasting time. Any input at this time gives them inspiration

    c. It shows how and where the students are learning and what they need to focus on.

    d. You should concentrate on and recycle the lexis or grammatical constructs you have been working on.

Based on the problems above it is need to conduct new implementation to develop students' speaking skill, that is utilization of waste.

2. Learning Media
A media is something we use when we want to communicate with people *indirectly,* rather than in person or by face-to-face contact, he also stated that something fundamental about the media, which forms the basis of the media education curriculum. Media education therefore aims to develop a broad-based competence, not just in relation to print, but also in these other symbolic systems of images and sounds. Media education, then, is the process of teaching and learning about media; media *literacy* is the outcome – the knowledge and skills learners acquire. Media education, therefore, is concerned with teaching, and learning about

the media. Educational media also provide versions or representations of the world; and, for that reason, media educators have often sought to challenge the instrumental use of media as 'teaching aids' (Buckingham, 2003).

Blackwel et al., (2020 cited in Frau-Meigs et al, 2020) also stated that most experts believe that media literacy/media education in the digital age is a vital resource and people's right. Providing this resource requires learning for a lifetime. It is about a rigorous and consistent educational plan. Clear federal, national and foreign media literacy policy structures as part of an overall democracy support strategy are prerequisites for progress. It involves concerted policy and productive cooperation between multiple stakeholders, including media companies and, most notably, with civil society.

Based on the explanation above, learning media can be applied as teaching aids. The utilization of waste can be used as a learning media. Many of the waste of machine's spare parts are made from waste in the environment. To maintain the environment's beauty from the rubbish in bolts, chains, shocks, bearings, and others can be used as a place for plants and decoration for Banjar culture.

Based on Government Regulation (PP No. 27 Tahun 2020 Tentang Pengelolaan Sampah Spesifik [JDIH BPK RI], 2020) concerning Specific Waste Management, article 43 (paragraph 1) stated that Recycling of waste is carried out by utilizing waste from mass activities into useful goods after going through the first processing process. The implementation to be carried out in compliance with Government Regulation No 27 of 2020 is to handle waste in creativity and innovation items by using waste machines that are turned into learning media for students of mechanical engineering that can be used to train students to speak English by demonstrating the process of creating works of art that they have made with them.

C. RESEARCH METHODOLOGY
This qualitative research used an Action Research (AR) method to conduct the study. Classroom action research typically involves using qualitative, interpretive modes of inquiry and data collection by teachers (often with help from academic partners) with a view to teachers making judgments about how to improve their practices (Kemmis et al., 2014). Another opinion comes from (McNiff & Whitehead, 2012), they said that action research is an inquiry form enabling practitioners to investigate and evaluate their work.

The respondents of this study are students of Mechanical Engineering. This study was conducted in Politeknik Negeri Tanah Laut, Mechanical Engineering majoring. The researcher used instruments such as an observation checklist, field notes, performance tests, questionnaires, and interviews to collect the data.

The speaking assessments conducted in the pre-test, post-test I and post-test II, and aspects of speaking skill that assessed value were vocabulary, grammar, fluency, and pronunciation with the criteria scaled from 1-20 (Maulany, 2013) as below:

Table 1. Score Range Speaking Skill

Categories	Score				
	1-4	5-8	9-12	13-16	16-20
Comprehension	Unable to comprehend the material so that unable to express/respond the questions correctly	Has great difficulty understanding what is said, often mis understands the Qs	Understands most of what is said at slower-than-normal speed with many repetitions	Understands nearly everything at normal speed, although occasional repetition may be necessary	Appears to understand everything without difficulty
Vocabulary	Vocabulary limitations so extreme as to make conversation in L2 virtually impossible	Produces 1-3 English words (brands or place names such as KFC, Kraton, etc.	Produces 4-6 English words	Speaks mostly in L2 with few L1 words	Speaks in L2 with accurate English words
	so that the student speaks in L1 all the time	as English word/ vocabulary) due to very limited vocabulary			
Grammar	Unidentified because of speaking in L1 all the time	Answers mostly in L1, with 1-3 English words/phrases (Madsen, 1983)	Produces inconsistent and incorrect sentences/ phrases (E.g. I can walking around, buy food, some The game, etc.).	Produces some phrases instead of complete sentences with consistent and accurate word order	Produces complete and accurate sentences (E.g. 1. This is Gasibu, 2. I can see many people there.
Fluency	Unidentified because of speaking in L1 all the time	Speaks mostly in L1 tries to speak in L2 but so halting with so many	Speaks mostly in L2 with some long pauses and hesitancy.	Speaks in L2 less fluently due to few problems of vocabulary/	Speaks in L2 very fluently and effortlessly

		pauses and "er.."		select ion of the word	
Pronunciation	Unidentified because of speaking in L1 all the time	Speaks mostly in L1, but produces 1-3 English words. Needs some repetition in pronouncing the words to understand them	Speaks mostly in L1, but produces 1-3 English words and pronounce them in intelligible mother tongue accent.	Speaks mostly in L2 Intelligible with mother tongue accent	Speaks in L2 Intelligibly and has few traces of a foreign accent

D. FINDINGS AND DISCUSSION

Based on the results of data analysis obtained from observation sheets, field notes, tests, and questionnaires have been conducted in the teaching and learning process, namely starting the project, developing the project, reporting to the class, and assessing the project (Utama, 2014)

The first stage is to start a project conducted in class, including greeting, checking students' attendance list, and conveying the learning objectives and assignments given. The point was that students need to know the learning outcomes which have results in improving speaking English. At first, students were given an overview of the current waste, which is increasingly rampant. Students in this study were Mechanical Engineering's students, so the intended waste was more specified in the waste machine so that students pay more attention to the surrounding environment and according to their field, namely Mechanical Engineering. Moreover, after conveying the need for students' concern for waste, especially machine waste, students were asked to pay attention to their environment, which was utilizing the waste of machines that scattered around by making the waste into a work that was able to become a high-value item and was able to assist their learning in field subjects of the machine. In this stage, students were also required to interact with other students to discuss projects that will be made.

The second stage is developing the project. The project that will be made by students required a long time, which was surveying the field first and then collecting materials from machine waste that can be recycled; the process of this stage means that students need to proceed outside as tasks. They can consult with lecturers related to appropriate waste used and can be useful later, and most importantly, they also need to give a unique name to the project.

The third stage is reporting to the class. Students presented the results of the project that they made earlier. They presented some tools or components in the project, explained the manufacturing procedures, and discussed the project's objectives and benefits both in daily life and in learning subjects in the machine. When presenting, students brought projects and showed tools or components that convey. During the presentation, students provided the

opportunity to speak in accordance with their abilities in good English. In this presentation, the process observes, and the most important was the assessment according to the speaking criteria.

The fourth stage is assessing projects. The lecturer and classmate assessed the project presentation. After that, the lecturer evaluated the result of learning with the question, answer discussion, and reflection at the end of the stage.
Based on the observation, the result can be found that 75%-90% of the students gave contribution and active presentation. The result of speaking test can be shown as table below:

Table 2. Average Score of Speaking in Cycle One and Two

	Average Score of Each Indicator of Speaking					**Total**
	Fluency (1 – 20)	Vocabulary (1 – 20)	Pronun-ciation (1 – 20)	Grammar (1 – 20)	Compre-hension (1 – 20)	
Preliminary	13,4	14,45	12,1	11,25	14,25	65,45
Cycle one	14,45	14,7	13,35	12,85	14,75	70,1
Cycle two	15,65	16,35	16,8	16,9	16,3	82

From Table 2, it can conclude that students' speaking result was enhanced from the while the maximum score is 75. In preliminary, the average score was 65,45, and the average score of cycle one was 70,1 from 20 students.

In addition to taking student test data, researchers also administered a questionnaire; 80% of students said that they like studying English using the waste machine, 85% of students said that presentation in English with the waste machine is helping them, and 90% of students enjoyed involving in speaking class by using the waste machine.

For the next cycle of the research, students were required to be more active in presenting projects related to machines, and students were given the opportunity and corrected it if there were errors during the presentation. Actually, in cycle one, it has been conducted effectively, and the results of the research have been said to be successful in learning activities, but there are still things that need to be evaluated and improved; students presented the project again directly in front of the class, and they also presented it in the form of videos complete with presentation equipment. Students also hesitate to speak. There are some mistakes students in speech; students confused using the correct sentence; they are also afraid of saying the word, it is difficult to build good content to tell something. The good thing is that the teacher guides students to pay attention to the teacher's explanation during the learning process and can motivate them to present their speaking without hesitation (Erfiani, 2017).

In addition to taking student test data, researchers also administered a questionnaire, 100% of students said that they like studying English using the waste machine, 100% of students said that presentation in English with the waste Actually, this cycle focused on helping students to enrich their fluency, vocabulary, grammar, pronunciation, and comprehension. Based on the observation of cycle II, the result can be found that 85%-95% of the students gave contribution and active presentation. The result of the speaking test can be shown in Table 2. It can be concluded that students' speaking achievement was enhanced significantly

from the while the maximum score is 85, the average score of cycle II was 812 from 22 students.

In addition to taking student test data, researchers also administered a questionnaire, 100% of students said that they like studying English using the waste machine, 100% of students said that presentation in English with the waste machine is helping them, and 100% of students enjoyed involving in speaking class by using waste machine During the research, the students in observation were attracted, enjoyed and comfortable in learning because first they learn with the new strategy and it is not far from their field that encourages them independently because they have the effort to find and make the project and also present it. This research also supports students to involve actively in the class. (Ulla, 2020) also had reported results of a lack of confidence and students' vocabulary to use English conversation. However, Thai EFL learners have high motivation in learning English Task-based language teaching (TBLT).

E. CONCLUSION

Having researched using the waste of machine's spare part directly to help students in enhancing their speaking skills, and raises their desire in enhancing their speaking performance. This enhancement has been shown by the achievement of the students' speaking, and the score obtained. The score of the speaking test has fulfilled the criteria for success. The findings revealed that the first cycle activities showed that only a few students had extraordinary speaking abilities; the flaw in the first cycle was the inaccurate use of the students' pronunciation or intonation to speak. The speaking ability of students has increased in cycle II practices. There are also fascinating learning events, and students are involved in engaging in learning activities. From the analysis results, it can be inferred that, after the introduction of learning through the use of waste from spare parts of machines, there is an improvement in students' ability to talk.

F. ACKNOWLEDGMENT

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