ENHANCING SPEAKING SKILL

THROUGH WASTE OF MACHINE’S SPARE PARTS

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**ABSTRACT**

The study investigated whether the waste of the machine's spare parts impacts teaching, especially enhancement the students' speaking skills, and describe how the waste of machine's spare parts influences the students' speaking skills. The study explored the waste of the machine's spare parts, which has a negative impact on the environment, to create a learning method 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. The finding showed that it gives enhancement to students' participation, confidence, and speaking skills.

*Keywords****:*** waste of machine’s spare part, speaking skill

**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. Goh and Burns argued that speaking is a 'combinatorial language ability' (2012: 67). 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 (see Jones and Richards 2015; Maley and Peachey 2015 on creativity in language teaching).

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 et al., 2016).

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.

**C. RESEARCH METHODOLOGY (12 pt)**

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 population for the study was made up of 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. do not count | Produces 4-6 English words | Speaks mostly in L2 with few L1 words | Speaks in L2with 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 (E.g. 1. Gasibu. 2. Seeing many people | 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 pauses and “er..” | Speaks mostly inL2 with some long pauses and hesitancy. | Speaks in L2 less fluently due to few problems of vocabulary/select ion of the word | Speaks in L2 very fluently and effortlessly |
| 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 vocabulary students’ 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.

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**F. REFERENCES (12 pt)**

Bashir, M., Azeem, M., & Dogar, A. H. (2016). Factor Effecting Students ’ English Speaking Skills. *British Journal of Arts and Social Sciences*.

Brown, A. (2003). Interviewer variation and the co-construction of speaking proficiency. *Language Testing*. https://doi.org/10.1191/0265532203lt242oa

Erfiani, Y. P. F. (2017). Improving Second Semester Students’ Speaking Ability Through Storytelling Learning Modelat English Study Program of Timor University (A Classroom Action Research Method). *Metathesis: Journal of English Language, Literature, and Teaching*, *1*(2). https://doi.org/10.31002/METATHESIS.V1I2.472

Kemmis, S., McTaggart, R., & Nixon, R. (2014). The action research planner: Doing critical participatory action research. In *The Action Research Planner: Doing Critical Participatory Action Research*. https://doi.org/10.1007/978-981-4560-67-2

Leoanak, S. P., & Amalo, B. K. (2018). TRASH to TREASURE: UTILIZING WASTE MATERIALS AS A MEDIUM of ENGLISH INSTRUCTION. *ELT Echo : The Journal of English Language Teaching in Foreign Language Context*, *3*(1), 22. https://doi.org/10.24235/eltecho.v3i1.2590

Maulany, D. B. (2013). THE USE OF PROJECT-BASED LEARNING IN IMPROVING THE STUDENTS` SPEAKING SKILL (A Classroom Action Research at One of Primary Schools in Bandung). *Journal of English and Education*.

McNiff, J., & Whitehead, J. (2012). Action Research for Teachers. In *Action Research for Teachers*. https://doi.org/10.4324/9780203462393

Muttaqin, M. Z. (2019). Enhancing Speaking Skills in the Material of Remedial Learning Through Community Language Learning in SMP Multazam Semarang. *Vision: Journal for Language and Foreign Language Learning*, *8*(1), 1. https://doi.org/10.21580/vjv8i13266

Rachmania, R. (2018). Peer and Self-assessment for Learners in Higher Level of Education. *Academic Journal Perspective : Education, Language, and Literature*. https://doi.org/10.33603/perspective.v6i1.1085

Spratt, M., Pulverness, A., & Williams, M. (2011). The TKT Course Modules 1, 2 and 3. In *The TKT Course Modules 1, 2 and 3*. https://doi.org/10.1017/cbo9781139062398

Tuan, N. H. ., & Mai, T. N. (2015). Factors affecting students’ speaking performance at Le Thanh Hien high school. *AJER (Asian Journal of Educational Research*, *3*(2), 8–23. http://multidisciplinaryjournals.com/ajer-vol-3-no-2-2015/

Ulla, M. B. (2020). Students’ Speaking Motivation and their Perspectives on a Task-based Language Classroom: Pedagogical Implications. *The Journal of Asia TEFL*, *17*(2), 319–757. http://journal.asiatefl.org/main/main.php?inx\_journals=64&inx\_contents=826&main=1&sub=3&submode=3&PageMode=JournalView&s\_title=Students\_Speaking\_Motivation\_and\_their\_Perspectives\_on\_a\_Task\_based\_Language\_Classroom\_Pedagogical\_Implications

Utama, E. F. (2014). *Methods of teaching English as a Foreign Language (TEFL): Traditional method, designer method, communicative approach, scientific approach*. Era Pustaka.