Problem-based learning on English for food and beverage operation subject course

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Abstract - The 21st century learning paradigm is centered on some of the abilities that one of them is the ability for students to think critically, connect knowledge with the real world through problem-solving. Therefore, it is necessary to apply problem-based material by providing various problems. The learning process is directed so that students are able to solve problems systematically and logically. The purpose of this research is to investigate problem-based learning in the course of English for Food and Beverage Operation for students in semester 2 of Hotel Study Program, Tourism Department, Bali State Polytechnic in 2018/2019 academic year. This classroom action research is a descriptive qualitative in which data is collected through three learning cycles with planning, action, observation, and reflection. The results showed that the problem-based learning model for the second semester students in the English for Food and Beverage Operation course can improve students' speaking ability. The improvement is also supported by increased learning motivation and interest.

Keywords: *Problem-based learning, speaking ability, problem-solving*

1. Introduction

From a theoretical point of view of teaching English as a foreign language, lecturers have sought to implement a number of approaches in the classroom. Among these approaches, it can be said that there are two well-recognized by the lecturers. First they can present to students speaking principles based on situational or functional context and then they give students the opportunity to practice them (deductive approaches) or students can practice a series of pattern and then directed to perform its own generalization (inductive approach). Although both approaches represent different philosophical positions about the nature of learning, a lecturer must adapt the techniques of each as they also consider the characteristics of the students in a class that are so heterogeneous.

The tendency to learn as an active process is more likely than other alternatives, or most of the current teaching and learning activities. This happens, because the lecturers want to reduce the dominance of lecturers during the activities in the class that the conductor is learning tend to be centered on the lecturer and considered as a conventional method. Somawati et al (2018: 3) stated that the method of conventional English language learning proved to be less effective for supporting communicative language teaching (CLT) to achieve student communicative competence. In the reflection of the facts that exist in the field, can be applied learning methods that are centered on the student or student-centered learning (SCL). The implementation of SCL in class means engaging students intellectually and emotionally. The essence of learning as an active process, essentially corresponds to cognitive views and learning behaviors. Perception of relationships between concepts, grammar is known and understood as well as the process of giving awards and stimuli actively performed (Richards and Rodgers, 2014).

Learning English with problem-based learning can be a great solution to implement. This learning strategy was developed from Discovery Learning as opposed to expository learning. In fact, the discovery of the learning method itself was first introduced by Jerome Bruner in 1960 (Thorsett, 2002:2). According to Richards and Schmidt (2013) troubleshooting learning is where "learners develop processes related to discovery and inquiry by observing, concluding, formulating hypotheses, predicting and communicating. Holesinska (2006) stated that the problem-solving learning strategy is the most practical and encouraging example of an active learning strategy in which students must arrange rules and discover their own text concepts.

Similarly, Thorsett (2002:1) defines problem solving as a learning situation where the main content of what to learn is not given, but must be found independently by students, making students an active participant in His studies. Balin (2009:2) provides a strong definition of problem solving as a strategy that encourages students to come to conclusions based on their own activities and observations. It is also supported by Nutting (2013:8) that this strategy can also bring out student creativity, because there are two exploratory activities performed by them i.e. observation and experimented.

According to Saumell (2012) Problem solving is a modified inductive approach where there is a first language exposure, followed by the use of inference, and ultimately the explicit focus on rules and practices. It is further stated that learning with problem-solving has cognitive, linguistic, and social benefits, namely encouraging analytic learning, exploiting the participants' cognitive skills, improving critical

thinking skills, involving students in problem solving tasks, helping learners become conscious and articulate their mental processes. Learners participate actively in the learning process, understand and better remember what they have been working on for themselves. The linguistic benefit is to resemble natural language learning, if done in a group will provide additional language practices. Social benefits are increasing students' participation and encouraging collaboration, empowering learners to increase autonomy and independence. This motivates for learners who enjoy a straightforward approach.

Based on the above background and in connection with the complexity of class interaction, then conducted class action research aimed at improving the proficiency of English speaking students semester two of Hospitality Study Programs, The Bali State Polytechnic through problem-based learning.

2. Method

This study is conducted by using a classroom action-based research. Classroom action research can be defined as cyclic process of planning, action, observation, and reflection (Kemmis et al., 2013). Thus, on the basis of this kind of research, the research involved two cycles in which each cycle was completed in two sessions. The implementation of this research includes the following.

2.1 Subject of the Study
The subject of the study was the second semester students (IIA class) in Hotel Study Program of Tourism Department, Bali State Polytechnic in the academic year 2018/2019. The class consisted of 28 students in which they were 14 female students and 14 male students. This group of students was used as the subject of this present study based on the problem encountered by English team teaching that taught in that class. The teachers said that the students' class interaction and achievement on the oral task/practice were low. And also based on the problem encountered by the students in which they felt uninteresting in learning English as they were overwhelmed by such kinds of language expressions and grammar rules. They were often unfocused and getting prone in learning English.

2.2 Instrumentation
Instruments were used as a means of collecting the data. There were three kinds of instruments, which were used in the present study, namely teaching diary, observation sheets, and questionnaires. The teaching diary was used to observe the result of applying action both of the daily performance of the students' class interaction and their speaking ability. The observation sheets were used to record the students' speaking ability that consists of 5 aspects: fluency, pronunciation, comprehension, vocabulary, and grammar. Beside that these sheets were also used to record the classroom interactions of the students, which included group, pair work interactions and interaction between the students and the teacher. The questionnaires were used to collect the data especially those that were related to the students' feeling, motivation, and interest after doing the learning procedure using guided discovery-learning strategy given during the action.

2.3 Procedure

Since this present study used action-based research then its procedure was consisted of planning, action, observation, and reflection. Before the research was done, a preliminary speaking test was given to the students. The materials that were used in the test taken from the lesson book in which the teaching method used in learning English was mostly deductive as it is based on the chronical order of the book (presentation, practice, and communicative activities. The result of the test was 53.25. This result was indicated as bad/poor result in which most of the student's poor score (many students got below five).

2.4 Data Analysis

The data were analyzed in two ways, namely quantitatively and qualitatively. The quantitative data were analyzed base on the speaking performance done by the students during the action. Here it measured about the achievement of the students who had been given action/treatment. In relation to this point, the mean score (X) of the students as the subject of this study was used.

$$\text{Mean} = \frac{\text{The total score of the students}}{\text{The total number of the students}}$$

In addition, the mean score here was also used in order to know the improvement of the students' speaking ability after the application of the guided discovery-learning strategy in the class.

Meanwhile, the qualitative data were analyzed based on the result of the observation conducted after the action applied, and the result of the questionnaires. Here, the condition and the situation of the class during the teaching learning process took place, the interaction, the motivation, the attitude, and the interest of the students in doing the communicative activities and practices given by the researcher were analyzed in order to know the effectiveness of the learning strategy applied. And also, in order to know the problems that might be faced by the students during the teaching learning process, which caused they could not improve their speaking ability.

3. Results and Discussion

After doing the action in the 2 learning cycles, this part discusses about findings of each cycle done before. There were 15 topics discussed in the semester and each topic consisted of two teaching sessions as the learning strategy applied (problem-based) was also consisted of two actions (communicative activities and practices) in every discussed topic. Before conducting the research, the researchers conducting the initial observation or preliminary test. The result of the preliminary-test showed poor result. The mean score of the students after being given an oral test by using a deductive method was only 53.25. This mean score was categorized into low beside that the students seemed not focused, uninterested, and often getting prone during the teaching learning process.

Based on the result of the preliminary observation, the research was started for the first cycle. In the planning step the researchers concerned on improving the students' speaking ability on the English subject matter using problem-based method.

In this stage the instructional planning or teaching learning scenario and the instruments were prepared. After the planning step then it was conducted the action in which the treatment of brain storming, group discussion and pair work were given. The students perform the speaking activities and their performances were recorded in the observation form. At the end of the meeting session the speaking test was conducted to assess the students' speaking ability based on their performance in presenting dialogues and making a generalization of specific details from the discussed topics. The score of the speaking test is measured based on the scale suggested by Brown which consists of 5 components, namely grammar, vocabulary, comprehension, fluency, and pronunciation.

From the action given in the first cycle, then it was done an observation as the next step of this research. The test achieved by the students in this cycle was 66.50 showed that there was a good improvement if it was compared with the result of the pre-test that was only 53.25. Although the achievement of the students in this cycle higher than the pre-test, the whole observation of this cycle it was found that the students still feel not too confident and the slow students also found themselves still difficult to adjust with others in the group discussions. Knowing the weakness found in cycle 1 and then it was done a reflection as the last step of this cycle. As the reflection, it can be stated that the students needed facilitation during the process of exploration that could release the factors that cause the learning security in presenting the language activities and practices. The researchers thought that language games and role-plays could be the solution.

Similarly, with the previous cycle, the second cycle was started with the planning in which the researcher planned to apply language games and role plays in the communicative activities and practices in order the students felt comfortable in the discussion and then it was followed by preparing the teaching learning scenario. The action then was conducted in which the researchers asked the students to work in group of 5 or 6 persons and they did the communicative activities with language games and practices with role plays. In the observation step of this cycle it can be stated that the students began to feel comfortable. They became more active to participate in the group discussions and they were keen to perform acting in the role-play practices as the result of their speaking ability was improved with the mean score of 72.86.

There was an improvement from the mean score of the students in the cycle 1 which was only 66.50. At the reflection step it can be described as there were some students who often borrow their friends' works in their respective group prior to well understand in order to be able to present orally at that time. This problem is known as short-term utility learning. That was why for the next cycle every student was given WebQuest as tasks that were completed in small groups so that they had more interaction with each other and can jointly evaluate the information they find on a given website. The tasks included questions that involve some degree of higher level thinking, so having the students working in groups is a good way to generate a level of involvement and topic discussion that they would not encounter when working by themselves. Beside the tasks the students were also given problems to solve and each group of the students was encouraged to present different solutions.

In the planning step of the third cycle, the researchers designed the communicative activities and practices to be given to the students and then preparing the teaching learning scenario prior to give the action. The action was given in the form of communicative activities with WebQuest tasks and open-ended problems and then

the students presented the topics they worked on the WebQuest orally and solution of the problem solving. In the observation step it was found that the students were really active in doing the communicative activities and practices. The students' mean score in this cycle was 81.25 which was the highest one. For the reflection of this cycle it can be stated that the students were really high motivated in learning English. However, this present study was only consisted of three cycles so the research was stopped.

The result of the students' achievement as it was stated in the pre-test and the three cycles could be shown in the following table.

Table 2 The students' achievement in pre-test, cycle 1, 2 and cycle 3.

TESTS	MEAN SCORES
Pre-test	53.25
Cycle 1	66.50
Cycle 2	72.86
Cycle 3	81.25

From the table above, it could be seen that the students' achievement in the tests given by the researchers increased from 53.25 at the pre-test that was categorized into low then it increased into 66.50 at the cycle 1, 72.86 at the cycle 2, and 81.25 at the cycle 3. The result on the last cycle was categorized into very good. For the basis of the improvements stated above, the students' improvement in each cycle conducted could be shown in the following figure.
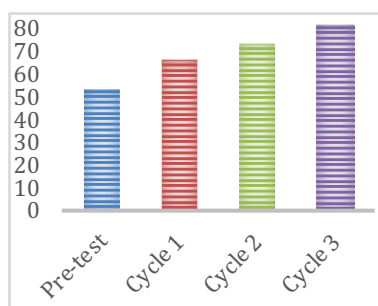

Figure 1 The students' improvements in the test

From the result of the pre-test to the result of the test in cycle 1, it showed rather extreme improvement that was from 53.25 into 66.50. The advantages of the technique applied in cycle 1, which was facilitated with brain storming, group discussion, and pair works in the communicative activities and practices, could be stated as the students performed actively like questioning, responding others' and the teachers' questions. However, this technique was still not contributing an optimal result in which the students became not too confidence in asking and responding questions needed in the brain storming. This condition was happened because they still thought about mistakes of expressing the language items to be made in speaking, beside that some of them were still insecure working in group, especially the slow students who were still hesitant to learn from others.

As the cycle continued, the students' interactions were getting better in which they were challenged to be active in learning due to the technique applied in cycle 2 facilitated with language games and role plays in the communicative activities and practices. As a result, the students became more active participated in the learning since the found learning was fun and interesting. In addition, they could release their tension and stress in learning and they could also freely express their ideas in the activities beside that they could also share ideas with others in the group. Even, the slow students they could learn here from others and they got phrases, sentences, and grammatical points from their friends, which were used for oral presentation. And finally, in the cycle 3 in which facilitated with WebQuest and problem solving in the communicative activities and practices. In doing tasks with topics which were specially designed for the WebQuest, the students could get engaged in collaborative activities, shared learning experiences and new knowledge.

They also tried to interact maximally in order to get better solution for the problems. These activities and practice were intended to stimulate their speaking creativity. So here, it could be clearly seen that the students' participation during the teaching learning process improved well. It also meant that the students enjoyed the class, which make them be able teste to use their English. Consequently, their speaking fluency is improved significantly from 56.45 in pre-test into 71.75 in cycle 1, 80.36 in cycle 2, and 87.68 in cycle 3. Meanwhile the number of mistakes in pronunciation and grammar could be reduced too. In addition, the three aspects of speaking ability (fluency, pronunciation, and grammar) were also supported by the other two aspects such as using more word choices and idioms (vocabulary) in expressing their ideas and also their ability to understand others in speaking English (comprehension). The description of achievement score which included the 5 components of speaking ability conducted in the 3 cycles could be shown in the figure below.
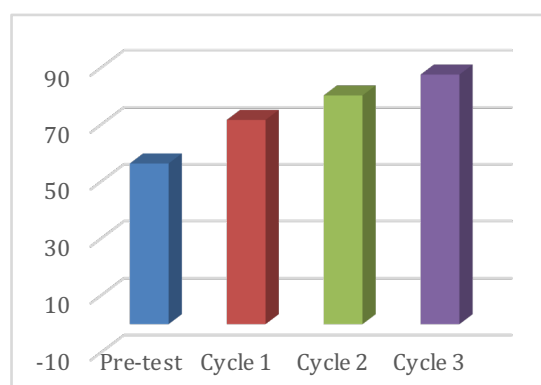

Figure 2 The students' improvement in the speaking fluency

From the diagram above it could be clearly identified that the students' speaking ability was significantly improved as the cycle continued. In accordance with the improvement, the communicative activities and practices applied to facilitate the learning activities were also created an active classroom interaction. In addition, the thing that could be reported based on the result of the application of problem-based learning method here was the method of learning was also able to make the students practice their English lively and the generalization they made through the process of exploration would be long lasted in the sense that it was not easy to forget.

Consequently, it was hoped that their English would become better as it was expected in the overall goal of the curriculum. Beside that the performance indicator which targeted the score of the students' English proficiency TOEIC ≥500 would be achieved and also the students' grade performance score (GPS) would increase too.

4. Conclusion

Based on the result of the findings and discussion stated earlier, it can be concluded that the application of the problem-based learning method can improve the speaking ability of the second semester students of Hotel Study Program, Bali State Polytechnic. The improvement achieved by the students here is also supported by the fact that the application of that learning strategy can also improve the students' learning motivation and interest so that they can interact actively during the entire process of learning. The result of questionnaires distributed to the students after being given communicative activities and practices that facilitated their presentation in performing the speaking activities showed good findings in relation to the students' attention and response towards the application of the communicative activities and practices in the class.

They felt that they could release the factors that cause unsecured learning in which often make them fail in using their English in the class. The integrated communicative activities and practices are really needed to be applied to the students so that they can practice their ability in English, especially in speaking skill.

Considering on the conclusion formulated above, the essence of problem-based learning method can be used as an alternative technique or activities in English class. The teacher should be active in facilitating the learning so that the exploration process prior to the stage of finding the solution of the problem can be created. The teacher's creativity in designing fun and lived communicative activities and practices will be able to stimulate their learning interest and motivation.

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