Implementation of Project Problem Based Learning in English Lab Course at Islamic University of Riau

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Abstract—**English is one of the language skills that must be learned by the students as a foreign language. The main objective of English learning is to establish a comprehensive mindset in the development of English systems. Project Based learning (PBL) is an appropriate method used in the learning process of English. The use of PBL by following the V model in system development process is expected to encourage the achievement of the main goal of learning in English lab. Demosntration of knowledge during the partical work was done by drafting product development procedure documents, presentations, and project demo. The test result of English lab course based on PBL in Islamic University of Riau led to the conclusion that the model is acceptable and desirable to be passed with a few improvements. In addition, learners also feel there is a new challenge in following the PBL – based practicum.**

Keyword—*English, Project Based Learning, V Model*

I. INTRODUCTION

The importance of English as a communication language in the global world has placed foreign languages as one of the communication tools. For that reason, the educators need to design learning that can equip graduates to have the ability to communicate in oral and written form. It develops English communication competence for graduates. It is an effort to improve communication skills in the global community. English must be mastered by educators because English is an international language that supports communication from other countries. Moreover, there are many references to support learning by using English, so students need to improve their English skills. In education, English functions as a tool of communication in order to access information orally and written with the world community in daily context.Nowadays, the technologies, ubiquitous learning, global education, and collaborated learning are the main topics over the world in educational system not only in K-12 but also in higher education. In other words, the educational reform is from teacher center to student center. All these topics emphasize in helping student to learn and to cooperate. Therefore, many teaching methods are provided which are different from the traditional teaching, such as, lecturing or systematic teaching.According to the curriculum of English Department at Islamic University of Riau Pekanbaru, the aim of teaching English is to develop students' communication skills. Educational reform is not a new topic in education area.Most of these new methods emphasize learning instead of teaching. Problem based learning (PBL) is one of the powerful learning methods during this educational reform period. PBL includes the collaborated learning and technologies learning for student center. Therefore, PBL becomes a popular learning method in course design, especially in higher education. PBL fuller description is givenas follows:PBL integrate knowing and doing. Students learn knowledge and elements of the core curriculum, but also apply what they know to solve authentic problems and produce result that matter. Students in PBL use excess digital devices to produce high quality products and collaborative. PBL refocus education on students and not on the curriculum-a shift that is mandated by a global world that values of intangible assets such as motivation, passion, creativity, empathy, and durability. It can not be taught from a textbook, but it must be activated through the experience. PBL is a learning model that emphasizes on improving the ability (skill) analytical and critical thinking of students[1]. Explolaration, teamwork and communication skills are the foundation for the development of both these capabilities. Analytical ability and critical thinking are also the cornerstone of the students as long live learners. In this model, a group of students were asked to work on a project. Students are involved in designing, problem solving, decision making, and investigative activities. It allows students to work in groups or independently. They are also expected to generate ideas and realistic solutions and be able to deliver presentation. In this model, the lecturer acts as a supervisor/facilitator, providing feedback gradually, assessing the grating process with

ratings related to the skill growth. Project Based Learning is a learning approach that has the following characteristics students to make a decision on a framework[2]. Any problems or challenges are posed to the students. Students determine a solution for problems or challenges posed and students are collaboratively responsible for accessing and managing information to solve problems. The evaluation process is run continuously. Students regularly reflect on the activities that already carried out. The final product will be evaluated qualitatively, and learning situation is very tolerant to errors and changes.

Research in PBL has been done by and research in English lab course learning has been done . While researchers are develop English lab course learning using PBL. This PBL model can occur if educators are able to create an open classroom environment and to guide the exchange of ideas. The role of educators is as the stimulator, to guide the students' activities, and determines the direction of student learning. Based on the description above, the researchers develop PBL model as a learning model to anticipate the tendency of students who do not like to learn speaking English.

II. METHOD

A. V Model in The Development of English Lab Course Systems

V Model in the Development of English lab course System development should be done with a structured and well planned considering the mechatronic system[4]. English lab course system is an integration of four components that has a quirk in the design process.Research has developed a model V in the process of developing English systems, among others, performed. The definition used in the development of V model is the English is the integration synergies of mechanical systems, electronics, and information technology[5].

B. PBL Planning

The planning process of English lab using PBL method is implemented in the following order [6]:

- Start by thinking results
  In the English lab, students are expected to be able to develop (design and realize) mechatronic system with the correct procedure.
- Leading questions
  Some of the questions that lead to the achievement of the desired results are as follows: 1. What is the correct English system development procedures? 2. What skills are needed to develop an English system ? 3. How to support other subjects in achieving the desired results 4. Is the laboratory facilities to support the achievement of results ? 5. Is sufficient time available ? 6. Is there any cost of the project implementation ? 7. Are teachers who will implement the learning has been available ? Design practicum can be carried out by

answering these questions. The most decisive thing is the selection of project topics. Five the criterias for projects relatedwith mechatronics lab using PBL are 1. Qualify English system, electronics, control system, and computer systems; 2. Can be done by students with the support of knowledge of the subjects that have been taught; 3. Meeting Outlines Learning Programme; 4. Meeting the criteria set out in PBL; 5. Can be done by using the tools and components provided; 6. Can be done at reasonable cost and within 1 semester[7].

C. Curriculum Study

Curriculum study aims to map the position of the English courses among other subjects. The curriculum used in these studies is the curriculum of Economic Study Program Islamic University of Riau.Based on the map of the teaching material course, English lab is designed to harness the knowledge of students who have owned. Moreover map is also used to avoid duplication of teaching materials on English lab.

In this study, a V model of the research that has been done by is developed in order to comply with the definition mechatronic used in learning. V model development is very important considering the English system development process adheres taught following the V model. As a starting point of teaching English, the curriculum studies are also needed in the perspective of the course in English. These studies provide elements of English system that has been, is being, or has not been taught in other subjects. This study also aims to avoid duplication in teaching materials considering the English is a combination of several disciplines. In PBL, characteristics of the project is the most important thing that must be determined. Therefore, this study also examines criteria appropriate projects for English lab course. The process of practical implementation in line with the flow of product development must be controlled in order to achieve the learning objectives. The scoring system as part of the learning process needs to be developed considering the learning process using PBL has different demands with other learning methods.

D. Planning for assessment

At Islamic University of Riau, scoring system used is "Relative Assessment System." It is the system used to assess students 'performance relative to students' ability itself. The main target of the English lab was formed in the right mindset in the process of developing English systems. Therefore the assessment is not only based on the final outcome alone but also on the stage of the design process and project realization.

Thus, it is obtained which enabled a group of students, "Excellent", "Good", "Enough", "Less", and "Failed". They are stated by using A, B, C, D, and E.Implementation of assessments carried out as follows, determine the limit value for each graduate course,

valuation relative to the groups that are above the limit is divided into groups.

Table 2. show the prerequisites and activities as well as the objects and the assessment criteria at this stage of consciousness thinking.

TABLE 2 .THE PREREQUISITES AND ACTIVITES

No	Prerequisites	Activities
1	Understand PBL	Formation of groups and group names
2	Understand the English lab course system	Selection of project topics
3	Understand the rules of the lab	Preparation of project description
4	Understand the criteria for project	Presentation of project topic
5	Understand the function of the group in the project	

E. Mapping the project

At this stage, the development of English systems is mapped in the process of practical implementation and assessment processes. The result is a unit of events teaching and the assessment guidelines which refer to the PBL[8].

F. Regulate the process

The process of practical implementation using PBL methodlasts very dynamic and requires a lot of time, therefore the process of implementation needs to be well prepared. Obligationto develop and present a product development procedure document is a way applied to regulate the running English lab using PBL[9]. Special document production test was not carried out by the students during the practicum. Practical application of PBL English lab has been tested by involving students in grade 1Economic Program of Islamic University of Riau. Participants were divided into 15 groups; each group consist of6-9 students.

III.RESULTS AND DISCUSSION

Based on the research findings and discussions, In general, the students stated that the use of PBL in English lab needs improvement (75%), while the rest wanted incorporation PBL with conventional learning. The most preferred of practical implementation of PBL are the task of designing the tool (35%), presentation (19%), group work (12%), are more informed (10%), to share knowledge (7%), and to get feedback on its design (6%). While the obstacle faced by students is hardly sufficient time (30%); other lecturers are less supportive (26%); practical way that minimal information (21%), and knowledge of lab-based PBL were minimal (16%). Availability of time is important in the implementation of PBL. Types of projects should be assessed the amount of time needed. Some experiences in the implementation of PBL encourages additional criteria for project selection. The selected projects must also meet the specified topic in the semesters[10].

IV.CONCLUSION

English lab course using PBL method can be implemented in line with plans and got a positive response from students. Most students want improvement at PBL method such as the socialization of PBL, improvement guide lab, increased guidance by the lecturer, and the expansion of knowledge. The selection and project planning needs to be improved by taking into account the availability of time so that the target can be achieved with good lab.

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