THE ADVANTAGES OF YOUTUBE TO ENHANCE STUDENT'S VOCABULARY IN MECHANICAL ENGINEERING CLASSROOM

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Abstract

Most of Mechanical Engineering students have very low interest and motivation towards English even they regard English as huge obstacle. Besides that, it is the lack of module or material of English especially for mechanical engineering. Because of this problem, English teaching in this class needs the materials or methods which is suitable for those students therefore the student learning experience is more interesting and challenging. This is the main reason why lecturers of vocational colleges especially for mechanical engineering department is expected to always explore more motivative teaching resources, although there are many handbooks or modules include CDs. In order to learn more varied, lecturers can use English material for this department that can be taken or downloaded from Youtube. So that the students can understand and improve their English vocabulary competence related to mechanical terms. This study analyzes the effects of using material taken from Youtube in the mechanical department. Using Class Action Research consist of two cycles with stages of planning, action, observation, and reflection. Both cycles use the application of learning models by Teaching English for ESP assisted by Youtube. The result of research shows that the improvement of problem solving ability in English which is very significant that is 85,21% from 30 studenst get value $\geq$70 according to required minimum value.

1. Introduction

1.1 Background of the Study

Youtube is popular site of online video in the world. Most of Youtube users come from young generation, they can spread and also get video and information around the world, They can upload, download, search, watch, share and discuss about videos freely. Every time there are many people who use it. So Youtube is very suitable to be used as a medium in learning English. The function of this site as a media of learning English is to make learning atmosphere more fun, interesting and interactive. Instructional videos on Youtube can be used as an interactive learning in the classroom and for students themselves. Without limiting time and place, the students can use it as medium of learning English any time as they want.

The students from Mechanical Engineering Department often get difficult in learning English, especially in understanding new vocabularies about mechanical terms, such as kind of tools, health and safety at work, part of car (interior and exterior part). One of the solution is we can use Youtube.

This study examines the effectiveness of Youtube can be used as a medium and source of learning. The results of this study is expected to be a reference for internet-based learning, especially for English language courses. One of the general goals of teaching English is that students can use English in everyday conversations correctly, fluently, and in accordance with their context. One indicator of successful language acquisition is the ability to use them in pragmatic goals. In specific goal of teaching English ESP for Mechanical Engineering students is they can understand the terms of mechanical well. The purpose of this study is to analyze the effect of the use of material taken from Youtube and understanding of vocabulary in mechanical engineering.

2. Theoretical Review

2.1 Youtube

Youtube is a popular video sharing service website that lets users for uploading, watching and sharing video clips for free. Since its launch in December 2005 and acquired by Google in 2006, YouTube users continue to grow to more than one billion a day (Burnett, 2008) the latest statistic shows that more than 4 billion YouTube Videos are watched every day. This media is highly favored because it can be a source of information, entertainment and self-expression that can be accessed for 24 hours in 39 countries with 54 languages. In 2011, YouTube views reached more than 1 trillion or nearly 140 views.

According to Keen (2011: 50), "Youtube is a web-based file sharing service that

allows individual to build public profiles, specify lists of other users to share videos as well as to view a list of connections or content created by others".

2.2 Teaching English for ESP

ESP (English for specific purposes) is commonly known as English for non-English students. According to Donal (2014: 60), "ESP is an English teaching approach which the subjects taught and the method of teaching are based on the reasons why the students want to learn English". In generally ESP is divided into two kinds; EAP (English for Academic Purposes) and EOP (English for Occupational Purposes). The purpose of EAP is English learning for academic purposes and needs, but EOP is English learning for work or training purposes. And Orr (1998) adds that ESP is actually built on the basis of the EGP (English for General Purposes) and is designed to prepare English learners used in certain disciplines and occupations to achieve certain goals.

2.3 Vocabulary Learning

According to Nurfauziah (2013: 30), "vocabulary can be defined as knowledge about words or the meaning of words". They state that vocabulary learning is the basis of language and without vocabulary someone can not learn any language; It is knowledge of words. And Min and Hsu (2008: 70) states that vocabulary learning is closely related to foreign languages. In the process of learning a foreign language, the reader needs to understand most of the vocabulary and contextual meaning used in this section. Understanding the meaning of a better vocabulary, it will result in a better understanding of the overall meaning of the text. There are two forms of word - spoken and written. Words spoken or spoken are called oral vocabulary. Words that are understood or understood by the reader as they read or write are called written vocabulary (Beck et.al 2008). It is more difficult for Iranian students to master because it takes recognition of fast, accurate, and automatic written words. There are two types of knowledge words. They are productive and receptive.

3. Research Method

Model of Kemmis and McTaggart according to Widayati (2008: 30) is a development of the Kurt Lewin model. In Kemmis and McTaggart, the acting and observing is one component. It is based on the fact that the application of action and observation can not be separated. These two activities are done at the same time. Four components in the Kemmis & McTaggart model are seen as a cycle, in this case a round in activities consisting of planning, observation and reflection. Based on the reflection then prepared the plan (improvement), action, observation and reflection, and it is done repeatedly. The number of cycles depends on the problem solved.

4. FINDINGS AND DISCUSSION
4.1 The Description of Early Condition

Before the research has been done, teaching and learning process often use textual learning, it means the lecture always uses curriculum completely without adapting the conditions of students. Besides that, the atmosphere of learning in the classroom is monotonous, the students activity is more less. It is only focused on teacher centered learning. Lecturer also only uses speech as his method. The results of this study is an average of 50.02. The expected value of 70 with an average class 70 and complete percentage is 85%.

4.2 Description of Results of Cycle I

From the results that have been obtained on pre cycle with an average that is still far below the minimum value it needs to do cycle I in the following steps below:

4.2.1 Planning
1) Preparation of Lesson plan cycle I based on pre cycle reflection by using ESP-based vocabulary specific learning model.
2) Create an observation sheet for students,
3) Develop an observation instrument for Lecturers,

4.2.2 Implementation of Action (Acting)
At the time of implementation of this cycle I, the Lecturer asks for opinions or consults with supervisors or peers to determine corrective measures.

4.3 Description of Results Cycle II

From the result of cycle I, student learning outcomes is still under the standard of completeness and also the discovery of some problems that arise in the learning activities. For the reason, it needs to be done cycle II with the following steps:

4.3.1 Planning
1) Preparation of Lesson Plan cycle II based on cycle I reflection
2) Create an observation sheet for students
3) Develop an observation instrument for Lecturers

4.3.2. Implementation of Action (Acting)

In this second cycle of learning, Lecturer keeps asking advice and suggestion from colleagues and leaders more and more

4.4. Discussion of Research Improvement Research Results
4.4.1 The Discussion of Result of Cycle I

The learning in the first cycle has been using a special model of ESP assisted by Youtube discuss about Mechanical Vocabularies, the result is increased significantly in learning outcomes. Learning mastery reaches 60.11%, and the average value is more than minimum value of 71.12. The condition was obtained based on the analysis of the observation result of the learning, from 30 students who followed the learning there are 13 students (39%) who already had initiative in group 14 students (46,67%) are able to cooperate in group, 11 (36,67%) have courage to ask, 10 students (33,33%) have courage to answer, 9 students (30%) have readiness in doing the task, and quality of students activity in learning reach 12 (40%). Although in the first cycle has been achieved improvement in student learning outcomes, but based on the result of discussion with colleagues and advice from supervisors, researchers, it needs to continue improving this learning in cycle II in order to achieve more optimal result.

4.4.2 Discussion on Results of Cycle II

The learning process in cycle II has used props in each group, so that there is an increase in learning outcomes higher than achievement in cycle I. learning completeness is reached 85.21%, and the average value has exceeded the minimum value of 85.02. Students are more actively working together in heterogeneous groups following the learning process in a pleasant atmosphere. Some students even seem to enjoy every stage of learning. They know what is being learned, and understand what to do to master the material. The condition was obtained based on the analysis of the observation result of the study, from 30 students who followed the learning there were 19 students (63.33%) who already had initiative in group, 20 students (66.67%) were able to cooperate in groups, 18 students (60%) have the courage to ask, 17 students (56,67%) have the courage to answer, 18 students (60%) have readiness in doing the task, and the quality of student activity in learning is 19 (63,33%).

4.4.3 Discussion of Inter-Cycle Results

Based on the result of research, the improvement of learning from the pre-cycle stage up to cycle II is significant results. In the pre-cycle learning cycle is only 34%, after the action is

increased to 60.11% in cycle I and 85.21% in cycle II. The average value in the class is also increased, from 50.02 in pre cycle, up to 71,12 in cycle I and 85,02 in cycle II.

The quality of students activity in learning English using ESP assisted by youtube from each pre-cycle stage up to cycle II has also increased. At the pre cycle stage is only 34%, increased to 60.11% in cycle I and 85.21% in cycle II,

According to Djamarah (2009: 45), "teaching and learning process about a teaching material is successful if the purpose of learning or basic competence can be achieved". With the average above then in carrying out the improvement of learning which is illustrated by bar chart on the learning mastery, the quality of students activity, and the acquisition of the average value can be concluded that it is successful.

5. CONCLUSION

Based on the results of research improvements learning has been done, can be concluded as follows:

In cycle 1 the average score is 71.12. The highest score is 85 and the lowest is 51, the completeness is 61,90% with the good quality score 4 students or 13,33%, the good quality is 12 students or 40%, the fair quality is 7 students or 23,33%, and less 7 students or 23.33%. It means that the problem-solving ability of English for students at Mechanical Engineering Department at Politeknik Harapan Bersama Tegal is in fair category.In the second cycle obtained significant problem-solving abilities with an average value is 85.02. The highest score is 90 and the lowest is 70, the completeness is 85.21% with good category. Quality interval of either value is 8 or 26.67%, good quality value is 18 students or 60%, fair quality is 4 students or 13.33%, and there is no less value. Taking ESP-based for learning vocabulary assisted by youtube can improve the problem-solving skills of students at Mechanical Engineering Department, Politeknik Harapan Bersama Tegal especially for English subject.

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