

THE BOC'S EFFECTIVENESS TO ENHANCE THE ESP INDUSTRIAL ENGINEERING

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Abstract

ESP is seen as the role of English in language teaching courses, where the content and learning objectives are determined by the specific needs of a particular group of learners. Likewise, English for Specific Purposes is a stimulus for students' needs and language acquisition relevant to the work they will face in the future. This study aims to find out the use and effectiveness of BOC in conducting the material of engineering class and values of the teaching program and the needs of students. The quantitative study questionnaire is spread out to 200 students. The result shows that 30% of students think that the Buana Online Course (BOC) plays a good role in engineering studies and 25% of students think that it is very important for learning in engineering classes. Furthermore, 30.70% of students agreed that BOC is effective and 26.50% of students strongly agreed that applying BOC is effective in engineering research practice. These results indicate that a significant proportion of students found BOC beneficial to their engineering studies.

Keywords: BOC; ESP Engineering; Development.

INTRODUCTION

Learning takes place through teacher-student interaction in the classroom learning space (Crnjac Milić et al., 2018). This learning is one of the mentoring activities that educators carry out to impart knowledge to students and students. Therefore, learning can be simply interpreted as an enlightening, guiding, and motivating process carried out by educators to help students or learners understand the material, in light of the concept of online learning (Rajeswaran, 2018).

Research is being conducted on online learning systems such as e-learning, Google Classroom, and Edmodo. This system is considered suitable for students because they do not have to worry about losing materials. Padjadjaran University (UNPAD), Bandung Institute of Technology (ITB), and several universities in Bandung have also implemented similar policies. This measure was taken as a follow-up to preparations for the coronavirus pandemic (Suardiman et al., 2021).

The learning process allows students to perform the learning process independently or collaboratively (Machmud, 2018). Online learning situations based on collaborative learning methods require communication options to support interaction between participants in the learning process (Machmud, 2017). The initial study tested hypotheses regarding various aspects such as analysis of learner perceptions, identification of strengths and weaknesses of e-learning application, significant differences in final performance and confirmation of learner performance, and the proposed method as stated by (Graham et al., 2020) and was carried out to use in e-learning. From the results of these studies, it can be concluded that e-learning and e-learning will continue to be urgently needed and will be further developed to enrich learning methods (Ahmad, 2023).

The second research with the research titled "Web-Based Assignment Application". In this study, there are several facilities to be able to follow the assignment online and offline, consultations, articles, and agendas (Chen et al., 2022). Discussion about online and offline lessons on research can be broken down as the following: for online projects, the question form is multiple choice and essay, presentation questions in the format of numerous choice are presented one question each and randomly given a time limit to answer each question that is not can be arranged by the lecturer (Lasagabaster, 2022). while for offline assignments the form of questions is in the form The files can then be downloaded by the student who takes the eye lectures that are taught by the lecturer

concerned and there is no deadline collection of his duties (Education, 2020).

This research focuses on how Buana online course as a tool of learning management system to carry out the lessons of English for engineering study and how effective is the app in presenting the features and the lessons to the students of industrial engineering program. Thus, the goal of teaching can be obtained (Zeng, 2022).

METHODOLOGY

A. Research Design

This research elaborates on the quantitative design by using a survey questionnaire as a data resource. Before conducting the research, the writer focuses on the scope of the study only on the students of the faculty of the technique of UBP Karawang.

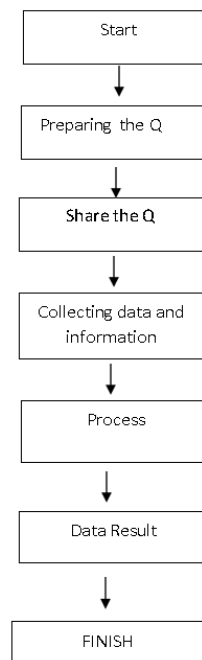


Figure 1. Research Design

B. Object of the Study

The writer conducts the students of UBP karawang, especially the year of 2023, the second semester in this 2023. They are five classes, each class is 40 students, there are 200 students as the respondent, as they are still facing the ESP Engineering Subject course as the research object.

C. Data Collection

This study involved 200 students at UBP Karawang Indonesia who were in the second semester. Determination of the number of samples based on Slovin calculations. The slovin formula is one of the most popular sampling theories for quantitative research. The Slovin formula is commonly used for taking the number of samples that must be representative so that the results of the study can be generalized and the calculation does not require a table of the number of samples.

$$n = \frac{N}{1 + N(e)^2}$$

$$n = 200 / 1 + 200 (0,1)^2 = 115$$

The result show there are 115 samples of student will be used in this research study. No specific criteria are used in this study because the researcher wants to explore the extent to which BOC media is used to improve the English skills of engineering students. The research was conducted by distributing online questionnaires in a Google form to students majoring in industrial engineering at UBP.

RESEARCH RESULTS

A. Buana Online Course Development

Buana Online Course (BOC) e-learning application produced by the IT Program of the university department. It has interesting features that allow teachers and students to carry out teaching and learning activities.

The research method used for this inquiry was a quantitative approach. The quantitative approach is a research method that uses numbers and statistical calculations to analyze the variables to be studied (Creswell, 2017). Because this research is used only to assess the effectiveness of a method, quantitative research is the proper research to use in this study. This study aims to determine the extent to which the efficacy of using BOC in ESP learning only for industrial engineering students.

The introduction of information communication and technology and performing ESP engineering program throughout the world into school systems began with the rationale that learners are required to develop and master the normal use of ICT tools, but, in the 21st-century, the focus has shifted to integrating ICT into teaching and (Training et al., 2020) . The importance of ICT has been seen through communication to obtain information and staying connected to a rapidly increasing digital world (Munje & Jita, 2020) . With the introduction of ICT resources, how people perceive and co-exist in the world has changed (Kervan & Tezci, 2018). "The ability to use ICT has therefore become the new literacy for the 21st-century".

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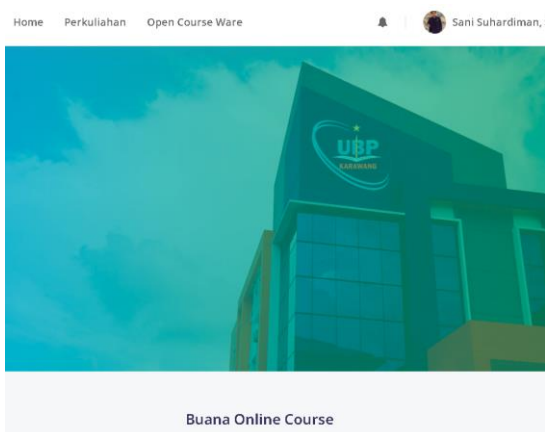


Figure 2. E-Learning of BOC

It can be seen in picture 1. The students can access it from the official website <https://elearning.ubpkarawang.ac.id/>. The home screen and the other modules can be accessed in terms of needs by the students. Both students and teachers of engineering courses can log in to this website to join and to follow the course.

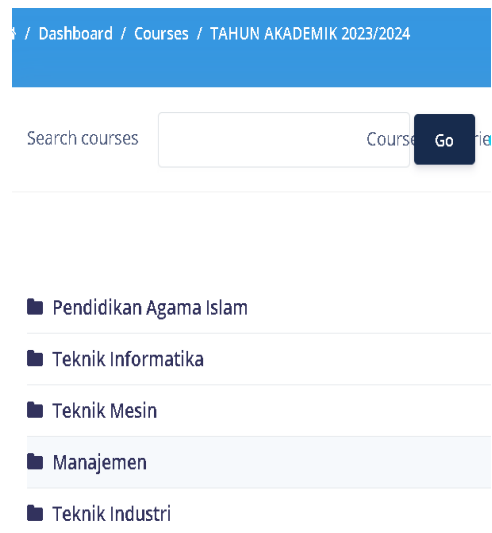


Figure 3. The BOC Module

The course of the programs serves the subject that will be chosen by the students including the engineering subject and the subject taken in the second semester. There are a lot of engineering material in the features that can me manage including the features of attendance and scoring of the assignment.

B. Research Results

The result is shown and explained in the diagram below:

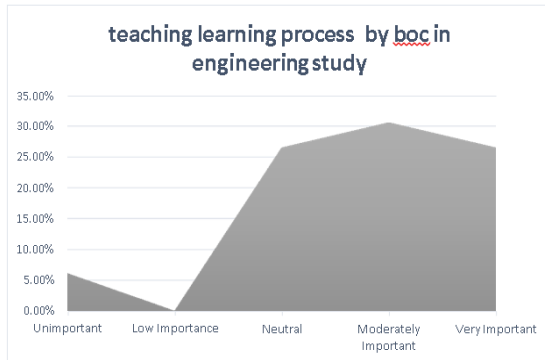


Diagram 1. Teaching learning Process

This study found that 30 % of students stated that Buana Online Courses has a good role in engineering study. And 25% of students said that very important to learn by BOC in engineering class. This result can be impacted by various factors, including the variety of methods provided by ESP Engineering teachers in online learning media and the role of the teacher in facilitating student learning.

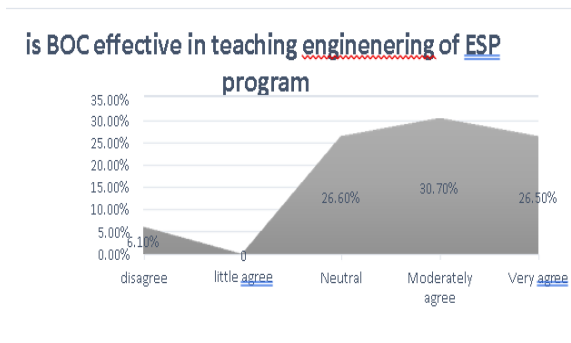


Diagram 2. BOC role to be effective

The result shows that 30, 70 percent of students agree that BOC is effective and 26,50 percent of students are very agree that the application of LMS BOC is effective in practicing engineering study.

CONCLUSION

The previous research conducted by (Suhardiman et al., 2021), about the online learning and TOEFL prediction test by using BOC has shown the significant result that really effective and support the teaching and learning process . and the research by (Hakiki et al., 2023) the mobile learning enhanced students' learning experience and outcomes. Research shows that 30% of students think that the Buana Online Course (BOC) plays a good role in engineering studies and 25% of students think that it is very important for learning in engineering classes. Furthermore, 30.70% of students agreed that BOC is effective and 26. 50% of students strongly agreed that applying BOC is effective in engineering research practice. These results indicate that a significant proportion of students found BOC beneficial to their engineering studies. The effectiveness of online learning, including BOC, can be influenced by many different factors, such as the quality of online course design, the level of communication between teachers and students, and technical support. techniques and the teacher's role in creating conditions for student learning. Future research should consider demographic factors, different respondent levels or degrees, different universities, and different engineering programs such as machine engineering, automotive engineering, chemical engineering, and other programs. Pay special attention to students' basic English skills and knowledge. Furthermore, investigating other factors that influence students' perceptions of the efficacy of using BOC in ESP learning in Engineering studies would be beneficial for

future research, and mixed methods can be used to obtain more comprehensive data to enrich the goal and research results.

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