

# The Use of Teaching Method Using Student Centered Learning (SCL) in University

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**Abstract-** In today's world, our jobs as educators become more challenging. As an educator, teaching techniques need to be improved to make it more efficient so that we can keep pace with today's world. In line with the rapid technological changes, students become more informative and active. Therefore, as educators we need to devise teaching and learning activities more proactive than using traditional approaches. Student centered learning (SCL) is an approach that focuses on abilities and student involvement, and put the teacher as facilitator of learning. It is seen as a method to produce graduates who are more competitive and able to work independently in the future. This study aimed to examine the effectiveness of teaching methods in UiTM Negeri Sembilan. The method used in this study is SCL and we are focusing on problem based learning (PBL). PBL is a centered learning where it focuses on problem-solving skills, self-directed learning, and teamwork skills. A total number of 50 respondents were selected using random sampling method. The respondents were the students from faculty of Applied Sciences students of UiTM Negeri Sembilan. Details of the findings are useful as a guide for academicians to carry out teaching and learning methods based on student centered. Academicians can use the findings from this study to implement and improve their teaching strategies in the future.

**Keywords:** Teaching, Learning, Student Centered Learning, Problem Based Learning

## I. INTRODUCTION

Education is a process of changing the patterns of human behavior that includes thoughts, feelings and actions. (Tyler,

1949). Therefore, education is an important agenda for the country to create a knowledge society and thus stimulate the advancement of civilization. Thus, teaching and learning must also be changed along with the progress of a country. Teaching methods discussed in this paper is student centered learning (SCL), which focuses on problem-based learning (PBL). Student centered learning (SCL) is an approach that focuses on abilities and student involvement, and put the teacher as facilitator of learning. It was seen as a method to produce graduates who are more competitive and able to work independently in the future.

In PBL learning approach, students will be exposed to problem solving. They will be directly involved in the team to find the best solutions to complex problems. By using the PBL method, the students can apply their knowledge and experience to solve problems. The role of the lecturer is as the facilitator in assisting students to solve problems. As a facilitator, delivering a lecture on proper approach would ensure a better understanding among students. In this way, we are able to have an active two-way communication.

## II. LITERATURE REVIEW

### *Student Centered Learning (SCL)*

Teaching is a process to help students build knowledge and also any activities that aim to generate learning. Teaching also

involves the supply of teachers or lecturers such as knowledge, skills, and materials available for professionals such as movies, computer software, human resources or talent, and skills and knowledge existing in students (Reigeluth & Carr-Chellman, 2009)

Student-centered learning (SCL) is a teaching strategy in which students become major players in a teaching and learning. Students are encouraged to participate actively in their learning sessions. More time is allocated to explore and solve learning problems with the help of educator who act as a facilitator (Hashim et al, 2003). This is an effective method to produce independent learners. Through this way, students can share ideas, work together in resolving problems and conflicts effectively. According to Meyers and Jones (1993), student-centered learning have an impact on the increase in motivation to learn, mastery learning deeper, and a more positive attitude towards the courses taken.

*Problem Based Learning (PBL)*

Problem-Based Learning (PBL) is an educational approach that involves learning constructivist methods (Harper-Marinick, 2001). According to Barrows and Tamblyn (1980), PBL is defined as learning resulting from the process of understanding or solving a problem.

This issue is becoming a driving force or a trigger (trigger) that will focus on the use of problem-solving skills, reasoning and encourage students to equip existing knowledge, so that the issue can finally be settled. Issues that need to be introduced to the students serve as an appetizer to the overall topic of learning (Scot et al., 2007). Using PBL, students can apply their knowledge and experience to solve problems. Thus, when discussing in groups actively, more solutions can be realized. In this way, alternative solutions will be better and students are able to present the best solution. Two-way communication between students and lecturers can also be improved through this method.

According Searight (1996), there are four things that need to be emphasized in order to make more effective PBL, namely:

- a. Theory and facts that have been known or studied.
- b. Additional information is required when solving problems.
- c. Hypothesize about issues raised.
- d. The questions that arise are resolved by asking questions and seeking information.

Features of PBL (Savoie and Hughes, 1998) are as follows:

- a. Learning begins with a problem.
- b. Make sure that the problem is related to the student world.
- c. The contents must be processed by the problem and

not by discipline.

- d. Students should be given primary responsibility for establishing and determining the direction of their learning.
- e. Students learn in small groups.
- f. Students demonstrate learning outcomes whether in the form of products or performance

The emphasis on theory and the facts as a basis for solving the problem will result more relevant and accurate decision. Therefore, when a theoretical plus additional information, students can make hypothesis more efficient and able to produce a better question. In this way, the results can be obtained better. Carderoy and Copper (2000) also argues that students will be more motivated to apply PBL, has the advantage in networking and talent required for their professionalism.

III. DATA ANALYSIS

*Research Design*

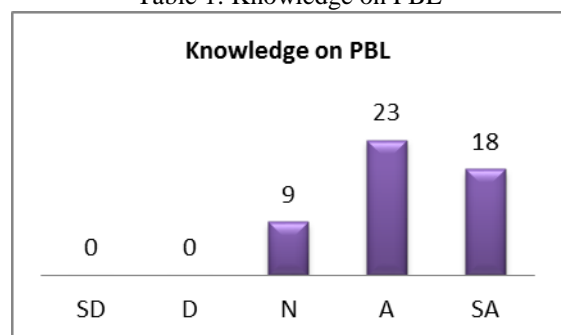
The design of this study is categorized as frequency. This study is conducted to observe the students' acceptance of the use of teaching methods (focusing on the SCL-centric approach – PBL) in UiTM Kuala Pilah. The results of the study were analyzed using SPSS software.

*Sampling*

Sampling was done randomly on the Faculty of Applied Science Degree students who take the program Bachelor of Science in Biology and a Bachelor of Science in Chemistry. A total of 80 questionnaires were distributed. However, only 50 respondents managed to give a response to the questionnaire. Respondents consist of 30 girls and 20 boys. There are 31 students of BSc Biology while 19 students are from BSc in Chemistry.

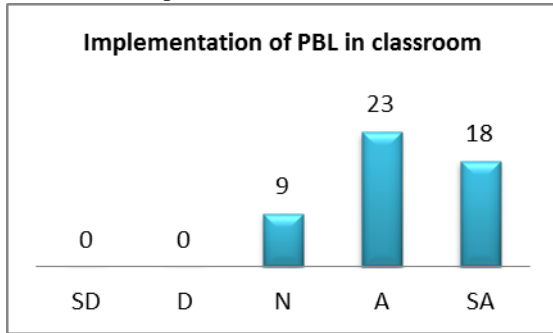
*Result*

Table 1: Knowledge on PBL



Based on the results of Table 1, the majority of respondents, 54% (27 students) agreed and 24% (12 students) strongly agreed that they had knowledge of teaching methods based on Problem Based Learning (PBL). There are only 2 students (4%) that do not have exposure to the PBL.

Table 2: Implementation of PBL in classroom



It was found to be 68% (34 students) agreed while 20% (10 students) strongly agreed that their lecturers using PBL methods in their teaching and learning. Only 4% (2 students) who do not agree with this statement.

Table 3: PBL Method Helps in understanding the lesson.

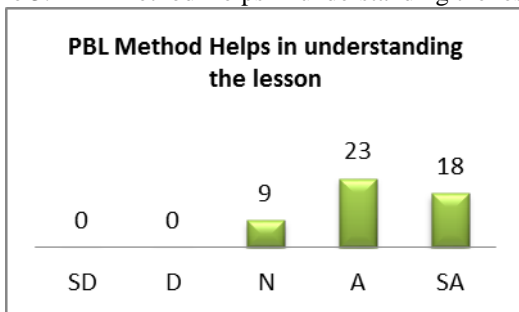
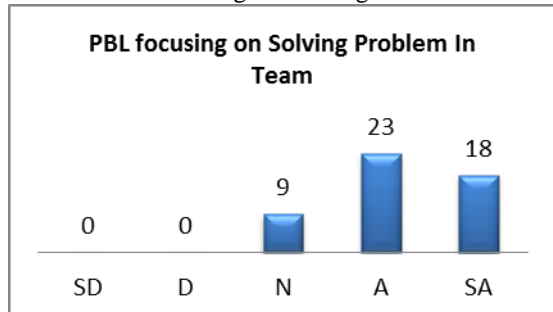


Table 3 shows that majority of respondents, 24% (12 students) strongly agreed and 54% (29 students) agreed that PBL helped them to understand better the subject learned. There are only 2 students who do not consider this method assist them in the learning process.

Table 4: PBL focusing on Solving Problem In Team



Majority of respondents, 56% (28 students) agreed and 26% (13 students) strongly agreed with the statement that PBL method focuses on problem solving in groups. This means, students can share ideas and views with colleagues and highlight the best results. Only 6% (3 students) are not agreeing with this opinion.

Table 5: PBL supports students to actively involved in learning session

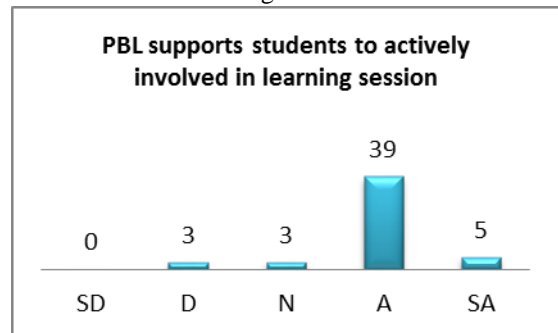
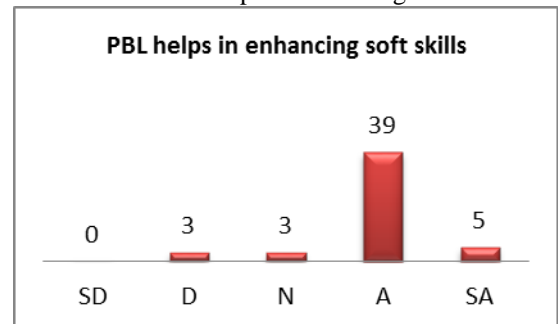


Table 5 shows that 46% (23 students) agreed and 36% (18 students) strongly agree that students can play a more active role when PBL method are implemented in their learning. While no student is recorded as agreed with the statement.

Table 6: PBL helps in enhancing soft skills



It was found that 78% (39 students) agreed and 10% (5 students) strongly agreed that PBL as method in enhancing student skills and confidence. There are only 3 students (6%) who did not consider PBL as method in enhancing student skills and confidence.

#### IV. DISCUSSION

On average, majority of students agreed with the implementation of student-centric learning centered (focusing on PBL) in UiTM Negeri Sembilan. Majority of respondents (78%) agreed that they had knowledge of teaching methods based on Problem Based Learning (PBL). This means they have been exposed to the concept of PBL in this campus. The students also agreed that their lecturers using PBL methods in

their teaching and learning.

Respondents also agreed that PBL helped them to better understand the subject being studied. They consider this method facilitates them in the learning process. They also agreed with the statement that PBL method focuses on problem solving in groups. It means that students can share ideas and views with colleagues and highlight the best results. They also consider if the PBL is implemented, they will play a more active role in their ideas and arguments.

The students believed that PBL method improve their skills in teaching and learning. They also agreed that work in team can solve problems more effectively. Group work is seen as a motivating factor in solving the problems. Overall, the students recommend that PBL method can be used widely.

## V. CONCLUSION

Student-centered learning methods that focus on problem based learning (PBL) are highly recommended. Lecturer needs to play an active role in implementing the method. PBL is seen as the way to involve active student-centered commitment. It can also improve the quality of student work when this method emphasizes on problem solving in groups. Students will become more confident and played an active role in finding the best solution to solve their problems. Thus, the development of the mind will continue where they will always think and propose the best idea in performing tasks. These methods are important in producing students who are more independent, resourceful and self-confidence, and

skilled in making rational decisions.

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