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Student Centered Learning: Teaching Strategies

Noraini binti Desa, Azimah binti Jusoh @ Alias & Anis Salwani binti Abu Bakar

Politeknik Sultan Haji Ahmad Shah Kuantan, Pahang

norainidesa@polisas.edu.my,azimahalias@polisas.edu.my & *anis@polisas.edu.my*

Abstract

In education, appropriate teaching method is very important to determine the students' motivation during teaching and learning process. Student-centered learning is one of the key factors of a memorable educational journey. In this article, we have reviewed about the Student-Centered Learning (SCL) Teaching Strategies that seek to explore the methods, techniques or approaches relevant to student-centered learning. The student-centered learning principle and the contrast between student-centered learning and lecturer-centered teaching will be defined in this study. The methods or techniques discussed from the study of problems or issues related to teaching and learning. In addition, the discussion will focus on appropriate contemporary teaching methods to be applied with the concept of student-centered learning. Among the student-centered learning methods that are meant are cooperative methods, group approaches, discussion techniques, problem solving and project-based learning.

Introduction

The Malaysian education system had gone through many transitions in the past decades. Most universities and polytechnics worldwide are going through several changes. This means ensuring that students excel in finding a good job after graduated from college and satisfying the requirements set by their employers. This is because most parties point the finger at the education system for failing to produce quality graduates and subsequently getting jobs. According to Arco-Cobbah (2004), the Teacher Centered Learning approach is usually practiced in universities and claims that it is not enough to prepare students to face the job market. So, a new approach is needed to be taken which is Student Centered Learning.

In line with that, Malaysia's Ministry of Higher Education Polytechnic has taken steps from the June 2010 Session to implement a curriculum focused on learning outcomes for students, namely using the Student-Centered Learning (SCL) approach. By applying OBE teaching and learning concepts in the Ministry of Higher Education Malaysia's polytechnics, it is hoped that the graduates produced would be in line with the country's needs and requirements as well as comparable to graduates from other higher learning institutions. According to Mursheed and Yusef (2004),

"*OBE is considered to be a learner-centered, result-oriented education system which is based on the belief that individuals have the capacity to learn, as well as to demonstrate learning after having completed an educational activity. Its main aim to equip all learners with the knowledge, competence and orientation needed for success after they leave school."*

Teaching and learning should be based on a continuous process of interaction between students and lecturers. This interaction process can be student-centered, or lecturer centered. Based on teacher-centered learning (TCL), lecturers are fully responsible for determining learning objectives, designing learning assignments and selecting learning resources for their students. On the other hand, in student-centered learning (SCL), students are 'autonomous' and they are fully responsible for determining the direction of the learning process. The learning process and direction from TCL to SCL takes time. The process will increase according to the age and maturity of the students.

Concept of student-centered learning

Student-centered learning is a term widely used today to describe and understand the teaching and learning process that takes place in and outside the classroom. There are many ideas and descriptions that can be made about SCL. However, it leads to a basic idea that is students. SCL can be defined as a discipline that involves interaction between teams of students experiencing creative learning that will be applied in real situation.Student-centred learning. SCL is a learning approach during which students generate learning opportunities and reconstruct knowledge dynamically in an open-ended learning environment (Lee & Hannafin, 2016).

In the traditional approach to higher education, the burden of communicating course material resides primarily with the instructor. In student-centered instruction (SCI), some of this burden is shifted to the students (Felder and Brent, 1996). SCL is a comprehensive learning approach that includes techniques such as actively transforming the learning experience, solving problems that require critical and creative thinking, involving students in simulations and the role of using self-paced techniques and cooperative learning. Indirectly SCL provides students the opportunity to study independently. SCL will increase motivation, comprehension and students will be more interested in the lessons taught. Unlike Teacher Centered Learning, SCL strategies contain a variety of training methods that can build students' social skills. When students learn in different ways and applying various methods will increase the likelihood that students will be exposed to at least one of the methods implemented. The use of only one method may be boring for students. Keep in mind that different students and different training goals require a flexible approach. This learning approach emphasizes the active involvement of students in the teaching and learning process.

Students play important role in planning learning, conducting in-depth research, evaluating work outcomes, as well as interacting with instructors, students and other sources of information in their learning process. In this case, the lecturer only acts as a mentor or facilitator in the learning process. Thus, such a learning environment will be able to form a highly motivated student personality, always have a high curiosity instinct, able to manage time wisely, and skilled in finding information. Thus, student-centered learning is the most appropriate and effective learning teaching strategy to cultivate soft skills among students.

Difference between Lecturer-centered learning and Student– centered learning

The concept of student-centered learning can be further clarified through a comparison between student-centered learning approaches and lecturer-centered learning in terms of student and teacher roles, as well as features of teaching-learning involving the use of learning-based approaches, methods and techniques. The change in perspective suggested here is that the focus should be on learning and not on teaching to expand the experience of students whether they are studying in polytechnic or university. Briefly, the differences between lecturer-centered learning approach and student-centered teaching from several aspects of teaching and learning such as exploration of knowledge and information, lecturer role, learning assessment, type of motivation possessed by students in the learning process and types of learning perspectives for students.

Student-centered learning strategy

Student-centered learning (SCL) identifies students as the owners of their learning. According to Suhaida Abdul Kadir (2006), learning strategy refers to the special characteristics of a student to see, interact and respond in a learning environment. Students adopt an active role in learning by assuming responsibility to organize, analyze, and synthesize information rather than acquire content from the teacher (Lee & Hannafin, 2016). The teacher's role is to support students in the learning process and scaffolding the learning experiences. This implies that a student is accountable for his own learning and, by the different teach ing methods, the teacher must play an important role as a stimulant, motivator and facilitator. Here, listed among the student-centered learning strategies include:

Cooperative Learning

A cooperative approach is learning that involves students working together to learn and take responsibility for each member of their group (Suhaida Abdul Kadir, 2002). Cooperative learning is also

a teaching and learning strategy where students help each other in small groups with shared goals. Cooperative methods take into account the cognitive, behavioral, emotional and social aspects of students. According to Devisch et al., (2019), cooperative learning can be achieved only through good supervision and aptitude of the tutors to handle the situation. Thus, teachers must explain specific procedures for handling their respective groups. The target is the maximum level of learning not only for yourself, but also for other friends. Five basic elements in cooperative learning:

i. positively dependent on each other
ii. interact face to face
iii. individual accountability for self-learning
iv. cooperative skills
v. group processing

Group Approach

The shift toward student-centredness through the use of interactive small group activities based on primary resources appears to have significantly enhanced students' learning in this case (Barraket, 2005). Group learning is based on the principles of social psychology and group dynamics where group activities should have a purpose. Teachers need to choose group teaching procedures that can help students achieve specific objectives, identify appropriate topics for group work and actively involve students in groups. Effective group work will exist if individuals are given responsibilities and the spirit of teamwork should be nurtured. In addition, the advantage of group teaching is that it enables students to identify, analyze and solve problems cooperatively.

Discussion Techniques

Discussion is a group activity where students interact with each other and discuss an issue or problem. Important features, students have the opportunity to submit issues, opinions and ideas on a topic and the teacher and students will make a conclusion at the end of the discussion session. Students will give a reaction or response to a topic or problem and the discussion will be conducted under the control of the teacher. Discussions can be implemented in all subjects and any classroom situation and the main purpose of the discussion is to encourage students to develop self-skills in presenting arguments, opinions, questions and problem solving (Azela Abdullah, 2009).

Problem Solving

Tarhan and Acar-Sesen (2013) describe problem-based learning (PBL) as an active learning approach which was first developed in medical education. Before students start learning, they are acquainted with a problem and then have to learn some new knowledge about the topic in order to solve the problem. Problem solving is a mental process that requires one to think creatively and critically in finding alternative ideas and specific steps to overcome the shortcomings and subsequently solve the problems encountered. It is also a way of using the power of thought to handle a difficult situation, overcome obstacles, produce something desired, and solve something complicated. An important aspect to know is that the purpose of problem solving is to enable students to think rationally, logically and objectively when facing problems, to enhance students' creative and critical thinking and its advantage is to create a student-centered learning process and result in active student involvement in lessons. Through PBL students learn to work in groups, become partners in teaching/ learning process where they can work successfully, can deal new situations and develop life- long learning skills (Sheeba, 2019).

Project Based Learning

According to Kokotsaki et al., (2016), project-based learning is an extended piece of work in which the learner is involved in in-depth research and/or development leading to detailed understanding of the topic and ability to apply learning.

A project is a method in which students conduct an experiment or activity in a real situation and produce something. It is an activity carried out by students inside or outside the classroom and they learn through the process of producing something. The purpose of the project method is to develop students 'creativity and expand the students' experience while carrying out the project. This also helps students work together and instill a positive attitude in producing a project, developing learning through the experience of performing activities. The project to be made should be meaningful and beneficial to students. The materials needed for the project should be readily available and the project should be in line with the

learning objectives. The advantage of the project method is that students achieve success and satisfaction if they can complete the project and the knowledge gained is permanent and effective.

Conclusion

The purpose of this research is to provide understanding and knowledge on student-centered learning (SCL) as SCL has very good implications for the development of education today, especially in the polytechnics of the Ministry of Higher Education Malaysia. This is because, this SCL emphasizes the aspect of student involvement compared to traditional methods centered on lecturers. Through SCL students are increasingly daring to give ideas and views and actively engage in learning. Lecturers only act as facilitators in learning using this method. Next, the graduates produced will be in line with the needs and requirements of the country and comparable to graduates from other institutions of higher learning.

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