Student-Centred Learning Approach, Its Idea And Implementation –
A Case Study In Introduction To Electrical Engineering Class
Of Petra Christian University

Hany Ferdinando
Petra Christian University
Surabaya, Indonesia

ABSTRACT: Student-Centred Learning has given new ideas in doing effective good teaching. Unfortunately, as most teachers in developing countries just know Student-Centred Learning theoretically, they need some practical examples on how to implement this approach. For this reason, the writer tries to share how he has implemented the Student-Centred Learning in his Introduction to Electrical Engineering class. The implementation has ignited two different responses from the students, i.e. positive and negative responses. The first response is the student think that the Student-Centred Learning approach is alright, because they don’t mind having difficulties in finding information from many resources, like library and the Internet. Whereas the second response that the student think that it is not a good approach since they still have a conventional concept about learning, where lecturers should be the centre and source of all information. No matter what their reason is to reject this idea, the Student-Centred Learning will give new and better approach in learning process at university.

Introduction

Long-life learning development should be based on four important elements, i.e. learn to know, learn to do, learn to live together, and learn to be [1]. The main focus of education in Indonesia is transferring knowledge only, while the other points are not touched, or even omitted. The reason is the education system is still curriculum-centred based. So, teachers just follow the procedures written on that curriculum. No matter it is right or wrong. Besides, the curriculum does not give the freedom to students to answer some problems, for example, students have to memorize all the ‘correct’ answers, and not to think to solve certain problems. This education system places teacher or instructor as the centre of information or education, so we will call it Instructor-Centred Learning Approach. In this system, the education is done with an assumption that the books referred by the school are the most correct printed books, while teachers’ experiences are the best resources for students. If this system is applied in a university or any higher education institution, we will not get the best graduates for our country.

The alternative method is Student-Centred Learning Approach. Although it is not a new idea, it is interesting to apply it in education system instead of the Instructor-Centred Learning Approach, because students will be the centres of learning process, not the teacher. The problem in implementing this concept is most teachers just know it theoretically, so they need some practical examples. Actually, there are many examples written on the web, but every example has its different problem.

Student-Centred Learning
The paper used a general format: two columns, title, the writers information. While they use Internet, they would discuss some to use the library and the Internet in searching for the applications of electronics in various systems. Besides, the information from the industries would make students have better understanding about the material given in the class. On this occasion, they could see the real application of electronics engineering in industries. Student had to write some report to analyse several applications in industries. The objectives of this assignment were:

- Students would use material given in class as tool to analyse what they have seen during the study tour.
- Students were forced to ask specific questions about those applications to complete their report.

For the last part of this class, students had to write a paper with a special topic, i.e. the new electronics development. So, students in groups (3 persons) had to take certain topic from the lecturer like lucky draw. Every group would have a different one. Actually, students have studied those topics briefly in class. For this reason, students had to search for the material to be studied in the discussion (see the process done in the discussion). They also enjoyed the process of searching information on the Internet, because they had to use English. They said that they could practice it well. This group preferred using Internet as the tool in seeking out information. It was their new experience in learning that was different with what they did while in high school.

Students with the positive response said that Student-Centred Learning had forced them to study well. Although the process to search information was not easy for the first time, they enjoyed it. Besides, they felt that the lecturers were their partners in studying something. As the centre of learning process, they acted as subject not object and could actively determine the material to be studied in the discussion (see the process done in the discussion). They also enjoyed the process of searching information on the Internet, because they had to use English. They said that they could practice it well. This group preferred using Internet as the tool in seeking out information. It was their new experience in learning that was different with what they did while in high school.

While other students with negative response felt that:

- The new method had made them got difficulties in learning something.
- They had to spend more time than usual, since they had a lot of assignments and activities.
- There was no balancing between the assignments and the supporting facilities. The number of Internet terminals cannot facilitate the number of students.
- English was still a problem for them.

Another reason was reading, because this kind of students was not trained to read before. So they thought that it was difficult to start. Incapability of using the library effectively was also a problem, since they had to search for information in the library too. Students tend to read all, not just skim it.

The Student-Centred Learning Approach was not useful for students only, but also for the lecturers who would be forced to improve themselves in reaching higher capability. Unfortunately, the method had been implemented successfully in specific subjects cannot be carried out in other subjects directly, since it needed some modifications. So, Student-Centred Learning Approach needs creativity of the lecturers in applying it in their own classes and subjects. This would be a problem for the lecturers in Indonesia. They had no time to think out how to implement the Student-Centred Learning Approach in their classes, because they do not teach only, but do other non-academic activities as well.

Conclusion
Generally, it can be summarized that the goals of implementation of the Student-Centred Learning Approach for students are:

- To train students to search for information and write it systematically, since they have to write a paper.
- To encourage students use all facilities provided by campus to support their studies.
- To make students use English, since not all students in Indonesia (or other developing countries) speak English.
- To train students to learn something by themselves, for the learning process is a continuing one.

Besides the benefit for student, the Student-Centred Learning Approach makes the lecturer:

- Improve their knowledge and capability in teaching.
- Have a motivation in learning something new to be given to their students.
- Think creatively in using the available limited facilities.

Firstly, the implementation of Student-Centred Learning Approach in developing countries like Indonesia is difficult. Universities have limited facilities, so student cannot use them efficiently in searching information. Lecturers in these kinds of campus have to think creatively how to use the available facilities effectively. Secondly, its implementation in new students classes needs special monitoring, so individually they can do it better someday.

The successful method of its implementation on one subject cannot be applied directly to other subjects, because every class has different problems and need a different teaching method. To apply the new method for other subjects is still a big problem in Indonesia, since lecturers in Indonesia have other non-academic activities, so they simply have no time to contemplate the best way to modify the Student-Centred Learning Approach to suit the subject they are teaching.

The most useful facilities to support Student-Centred Learning are the library and the Internet. To provide these facilities are important because all students and lecturers will need them. The most important thing in applying this method is the support from its department and other lecturers. To make the Student-Centred Learning Approach a reality in the learning process in that campus.

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Reference:


