

ACTIVE LEARNING AND EXPERIENTIAL LEARNING IN CDIO APPROACH

Phung Thuy Phuong, Ph.D
Vietnam National University-Ho Chi Minh City
University of Science

ABSTRACT

Recently, CDIO project is carried out at the Department of Mechanical Engineering (University of Polytechnic) and the Department of Information Technology (University of Science) of Vietnam National University-Ho Chi Minh City (VNU-HCM). One of the challenges the faculty face is the teaching method. Most of them are not familiar with teaching methods that can help students meet the learning outcomes set by CDIO syllabus. In this regard, the Center for Educational Excellence (CEE) of the University of Science has played an important role in professional development of faculty by introducing to them different methods of teaching to enhance active learning and experiential learning of students through several training courses (brainstorming, think-pair-share, group-based learning, problem-based learning, role play, project-based learning, case study, simulation, service learning). These teaching methods can enhance student learning and help to meet the learning outcomes set by CDIO syllabus. However, there exist constraints for faculty to apply these methods (big class; lack of TAs, equipment; etc.). Therefore, concrete measures need to be done to overcome these constraints and to facilitate the application of active learning and experiential learning. With that in mind, this paper will be presented at the roundtable to discuss measures to overcome these constraints.

Relevance: In this paper, different methods of teaching to enhance active learning and experiential learning of students are presented. These teaching methods can help students meet the learning outcomes set by CDIO syllabus. The paper also analyzes the constraints for faculty to apply these new methods and seek measures to overcome. Therefore, this paper is relevant to the conference theme: active learning and experiential learning, professional development of faculty.

Submission Category: roundtable session

Keywords: professional development of faculty, active learning, experiential learning, CDIO