

Learning outcomes from online learning in Malaysia: a case study on physics students' perception of satisfaction, perception of interaction and perceptions of individual features of online learning

Abstract

This paper reports the results of a study concerning of Malaysian undergraduate science physics students' and pre-service science teachers' perceptions of learning through online learning. Specifically, it required to ascertain whether students had positive perceptions of the new teaching and learning medium. 102 students were involved in this study which consists of 61 students from the School of Science and Technology (SST, science student) and 41 students from the School of Education and Social Development (SESD, pre-service science teachers). Both programmes were offered in University Malaysia Sabah. The students then followed all learning activities for sixteen weeks through online (i.e., N=50, PBL approach; N=52, traditional approach). The online learning environment (i.e., learning management system, LMS) was used as the main medium to carry the full learning process throughout the second semester of 2008/2009 academic year. Data gathered from an established open-ended questionnaire with 5 Likert Scale that administered after they completed with the learning activities at the end of the semester. Students' perceptions after experiencing the online learning were analysed into three main themes: students' perception of satisfaction; perception of interaction; and perceptions of individual features of online learning, and the main purpose was to seek the difference between PBL online and the traditional online learning approach. As the conclusion, student that exposed in PBL online shows positive perceptions in all three themes as compared to traditional approach. Thus, it suggests that some of the PBL's element did contribute to the students' satisfaction where they made a meaningful interaction and developed some individual features.