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Design and Implementation using Joomla for elearning and Problem-Based Learning Courses

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ABSTRACT

Nowadays, there are new methods in the process of delivering information in terms of learning and teaching. The new methods of information delivering include e-learning, cyber-learning and other terms that describe the new ways of learning. Education cyberspace has become more popular as it makes sharing information between the students easier. Besides, it also assists the instructors to disseminate information more effectively. The purpose of the more effective delivery is to make it more convenient for the students to study before entering the class. In order to improve the learning process, the Virtual Learning Content Management System (V-LCMS) for Problem-Based Learning (PBL) Courses developed at the College of Professional MARA Indera Mahkota. There are two types of end users which are instructors and students. This system is focusing on uploading of the notes and collection of questions easily and quickly, and also easing the interactions between the instructors and the students. In addition, the system also aims to develop a web site using Iterative and Incremental Development prototype. The programming language chosen is PHP 5.2.5, MySQL 5.0 as the database and Apache 2.2.8 as the web server. The system makes teaching process for instructors become easier as the students are able to reach the notes in class or beforehand. The students do not have to wait for the notes to be copied. Instead, the students can access the notes through V-LCMS. This facilitates the students to study by themselves. Other advantages of this V-LCMS are it makes it easier for the students to interact with instructors using forums or chat rooms. The interactions mentioned above use PBL method. Overall, not only the system assists the instructors, but also it supports their students in terms of receiving the knowledge imparted.

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