

EPBL: An E-Learning System Based On the Problem Based Learning (PBL) Approach

M.Hassan

M.Samaka

Computer Science and Engineering Department

Qatar University

This paper presents a case study of applying an E-learning system based on Problem Based Learning (PBL) approach in a Web-based environment. It aims at designing and implementing a software system framework that supports several important features and functionalities required in a PBL environment such as resource sharing, cross-functional teamwork, and efficient information distribution. The system is illustrated by highlighting the operational framework allowing an author to design PBL-based curricula; moreover the two main learning approaches (structured and unstructured) referred to the learner access to the curricula are proposed, allowing him to capture the most suitable learning resources for solving complex problems. Finally, the main benefits from the learner perspective, together with some indications for future research will end the paper.

Keywords: E-learning, Problem based learning, web-based environment