問題導向學習用於資訊教學之探討

An Exploration of Information Science Teaching Using Problem Based Learning

溫瑞烘

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摘要

資訊軟體人才除了應該具備資訊專業能力外，還應該擁有關鍵能力，教師宜利用有效的教學方法，同步培養學生這兩種能力。問題導向學習(problem based learning；PBL)是以生活中的問題作為驅動學習的因子，注重獨立學習與小組合作的團隊學習，有利於主題領域知識的建構，及關鍵能力的養成。本文首先針對PBL的教學方法進行探討，包括PBL的定義、特色、優點、教學模式、環境建立、及應該避免的問題等，接著探討PBL應用於資訊科目教學之可行性，發現PBL的特性應有助於培養學生的資訊專業能力與關鍵能力，最後設計了三個PBL的教學問題，提供有意利用PBL教學的資訊教師作參考。

關鍵詞：問題導向學習、資訊教學、關鍵能力

Abstract

The software human resources should have not only the informational professional competencies but also the key competencies. Teachers of information science had better use effective teaching methods to enhance both competencies for students concurrently. Problem based learning (PBL) uses the existing problems in life as key factors to drive learning. It emphasizes on the independent learning and cooperative learning to construct the subject area knowledge and the key competencies. This paper aims to explore the definitions, characteristics, models, environments, and problems of PBL. The feasibility of teaching information science using PBL is also discussed. It may help to enhance the information professional competencies and the key competencies. At last, three teaching problems have been designed that can be as references for information science teachers.

Keywords: Problem Based Learning, Information Science Teaching, Key Competencies