

**COMPUTER SUPPORTED SYSTEMS FOR
REFLECTIVE LEARNING**

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Abstract

Reflective Learning is on its way to becoming the leading distributor of research-based online solutions to make people happier and more resilient. This dissertation looks at the various ways in which reflective learning takes place and the revolution that may result. 35 students who were enrolled in Master programs offered through a faculty in University Malaya were interviewed. This interview was done in order to determine specifically how reflective learning occurs in the mind of the student and to understand the collision of the learning. A framework was developed based on the output of the data collected from these students. A review of the literature on reflective learning, and some of the techniques (e-portfolio, weblogs, learning journals, concept mapping and multimedia techniques) for facilitating reflection was used to provide theoretical framework for this research. Descriptive statistics (using SPSS) and qualitative data from research subjects indicate that providing opportunities for learning is facilitative approaches that may motivate reflection. It also shows that reflection, directs students to personal conversion. This study corroborates that emotional characteristics, as well as rational cognitive processes, are important elements of reflective learning. The perseverance to making lecture resources and related resources freely available obviates the need for students to take part in the traditional classroom, thus enhancing the push towards more and more of e-learning. In this thesis the learning framework was designed to facilitate and motivate student participation in a cycle of interpretation, evaluation and reflection of content evolving into individual and shared knowledge. It has four areas of assessment: Participation in weekly online sessions; Weekly reflective journals which includes a critique of readings and reflection on session's discussions; online comments on the session topics; an examination based on trainers and trainees. These components are designed to facilitate the students' construction of knowledge

through participation and reflection. By following this framework the prototype developed for the Faculty of Computer Science and Information Technology, University Malaya, in order to employ some of the reflective learning methods in its pedagogical system. The website uses blogs, multimedia (voice and video), learning journal, concept mapping and e-portfolio. Although this research focused on a specific apprentice's development, the conclusion goes beyond that. Reflective learning opens up the channel of communication where co-construction of knowledge can be activated. Reflection can help to better understand strengths and weaknesses, identify and question underlying values and beliefs, acknowledge and challenge possible assumptions on which base on ideas, feelings and actions. It also facilitates to recognize areas of potential bias or discrimination acknowledge fears, and identify possible inadequacies or areas for improvement.

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