ABSTRACT

The fundamental function of web based learning is to deliver resources to students with the help of electronic technology. As such, there is no doubt that Information Communication Technology (ICT) plays a vital role in Web Based Learning Environment (WBLE). Although there is no breakthrough in improving learning achievements, many developed countries have experienced good results on a minor scale under specific conditions. Studies have also shown that technology alone cannot be used to improve teaching-learning process. In order to achieve better results, this research attempts to deploy the Knowledge Management practices to support Web Based Learning.

Knowledge management is a relatively new concept that challenges higher education institutions to consider their strategic functioning as learning organisations. Whilst the semantics of knowledge management are still uncertain, there is agreement that it embraces knowledge creation and the human interaction of knowledge sharing. These are enhanced by technology. This study describes and analyses of knowledge sharing in web based learning environment.

Knowledge sharing and collaboration are also common terms in the corporate world of today’s knowledge economy. However better infrastructure and facilities that enable these important issues are yet to be set and fully utilised in web based learning environment. The purpose of this research is to investigate the usefulness of emerging social computing technologies and tools in supporting the
sharing of knowledge between students and educators in web based learning environment.

A literature survey was conducted to analyse and examine the type and usage of social computing tools within Web Based Learning Environment and to examine how useful they could be in supporting the sharing of knowledge. A framework for knowledge sharing incorporating social computing tools was then developed.

As part of analytical study, Social network analysis was conducted. It is a research technique that focuses on identifying and comparing the relationships within and between individuals, groups and systems in order to model knowledge sharing. The analysis aims to illuminate informal relationships like: ‘who knows whom’ and ‘who shares knowledge with whom’. This allows educators to visualise and understand the diverse relationships that either facilitate or impede knowledge sharing. A set of methods and measures are provided to identify, visualise, and analyse the informal knowledge networks of the learning environment. The steps and applications outlined in this research work provide suggestions for practical interventions and follow up activities to influence students, their relationships, and network structure to improve knowledge sharing among individuals, groups, and learning environment.

The developed system was evaluated by a group of students. The results showed that the proposed framework and the social computing perspective for sharing tacit and explicit knowledge sharing are workable and acceptable in the web based learning environment.