

EDITORIAL PREFACE

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We are pleased to introduce the International Journal of Web-Based Learning and Teaching Technologies' (IJWLTT's) second issue of volume 10. It is due to the dedicated efforts by our associate editors and reviewers that our journal is attracting high quality research papers from the authority in the field, and is becoming more and more popular amongst our researchers, learning facilitators, and practitioners. It gives us immense pleasure to see the journal grow by leaps and bounds, and become stronger with each passing day.

This new issue of IJWLTT highlights multidisciplinary contents, which include four original research articles.

In the article entitled, "An Effective Assessment of Knowledge Sharing and E-Learning Portals", the author(s) attempt to use the multi-dimensional metric model, metric database and statistical technique to validate the effectiveness of the e-Learning and Knowledge portals.

The authors propose a method to build the domain independent multi-dimensional metric model, and provide some description about the Knowledge and E-Learning Portals. It illustrates a metric database for Web Based Knowledge, with five key tables, such as KA_BASE_TBL (knowledge porta), The KA_USER_TBL, and so forth, and describes the ways to identify key dimensions, quality factors and measures and design a multi-dimensional model and metric databases.

The experiments (with 250 subjects, although only 180 candidates are used in the experiment) six e-learning portals and knowledge portals were evaluated.

The results show that: (1) the combination of Metric Database with a Statistical technique such as WAM could be useful to predict the usefulness and effectiveness of the KM Systems. (2) in complex KM Systems, the KM System Infrastructure is heterogeneous and contains multiple social and economic factors and hence more dimensions have to be considered. The proposed metrics have two important proactive characteristics: metrics that help to detect deviations in the knowledge sharing process and use of KMS and to act before damage is made, and second, these metrics can have the effect of motivating and encouraging top managers in their involvement and commitment with the knowledge sharing process and improvement of KMS and E-Learning Portals. Therefore, it is important to note that the effectiveness of the Knowledge and E-Learning portals should be periodically evaluated and maintained regularly, for completeness and optimality by the assigned moderator or auditor or CKO (Chief Knowledge Officer) of the organization.

The article entitled, "A new approach of an intelligent e-learning system based on learners' skill level and learners' success rate", proposes an intelligent e-learning system capable of generating personalized learning paths based

on individual learners' skill levels and success rates. The proposed scheme can simultaneously consider courseware difficulty level and the concept continuity of successive courseware according to the incorrect testing responses in a pre-test while implementing personalized courseware sequencing during learning processes. The topic of this article will be of interest to the e-learning research community and practitioners. The authors recognized and emphasized the important role of matching the difficulty level of course material with the knowledge level of individual learner in achieving learning efficiency. Accordingly, they developed an adaptive mechanism for generating personalized learning path for each individual learner. The experimental results in this article showed that the proposed intelligent e-learning system can improve learning performance. Learners' skill level is obtained from pre-test result analysis, while learners' success rate is acquired through specific tests after completing a learning unit. After computing success rate of a learning unit, the system then modifies the difficulty level of the corresponding learning unit to update courseware material sequencing.

Experiment results indicate that applying the proposed intelligent e-learning system can generate high quality learning paths, and help learners to learn more effectively. Compared to the OES, experimental results indicated that the proposed IES can precisely plan a personalized learning path for the courseware that a learner has not acquired yet based on pre-test score and difficulty level of each learning unit, and moreover can promote learner's learning effectiveness during learning processes.

The article entitled, "Providing Personalized Services to Users in a Recommender System" presents a recommender system capable of providing personalized recommendation of electronic library materials for both new and existing users by alternating between content-based and collaborative filtering techniques. The aim of this work is to develop a Personalized Recommender System that switches between Content-based and Collaborative filtering techniques, with an objective to design an algorithm

to recommend electronic library materials, as well as personalize recommendations to both new and existing users. The authors recognized the pros and cons of content-based and collaborative filtering techniques and emphasized the necessity of switching between these two filtering techniques in cases where they are most efficient. Accordingly, they proposed a switching algorithm that alternates between the content-based and collaborative filtering techniques for new users and existing users respectively. Experiments were conducted with evaluations showing that the recommender system was most effective when content-based filtering and collaborative filtering were used to recommend items for new users and existing users respectively, and still achieve personalization. The article's experimental results showed that the proposed switched hybrid model of personalized recommendation can provide the best decision-support for both new and existing users. The article will make a good contribution to the e-learning literature and the topic of this article is of interest to the e-learning research community and practitioners. Perhaps a better way to guarantee that only the most accurate, effective and efficient filtering technique would be used is to design a recommender system such that each filtering technique is tested with various evaluation parameters. Another way to ensure accuracy is to incorporate more filtering techniques into the hybrid recommender system. This should be beneficial at the transition between content-based and collaborative filtering techniques when the number of available ratings is still few.

Finally, in the article entitled, "The Influence of Social Networks on High School Students' Performance", the authors explore the influence of social media use, and especially Facebook, on high school students' performance. In education, two streams are prevailing: the use of social networks as a tool supporting activities deemed important for the purpose of educational institutions, instructors, and students. The second stream is the bad influence social network inflicts on students behaviors and time management. This study will

explore the relationship between performance and social network use.

The study used the GPA of students in four courses and their responses regarding the use of social media. Statistical analysis is used to infer this relationship and its implications. Results indicated a support of this study aim and the relationship between the different dimensions of Facebook influence on students with respect to the time spent on the Internet and Facebook specifically. This study is one of the first to connect perceptual reported estimates (measured through a survey) with a real objective GPA measure (students' grades). Also, it comes in an important era, where research is in conflict regarding the advantages and disadvantages of Facebook. It is important to note that the performance index is not a measure of performance (GPA) but a perceptual one related to

the influence of spending time/using Facebook and performance. This means that students do not believe that Facebook influence their performance in school (the mean of items related to PI is low), and also the GPA did not correlate with performance or any other dimension.

At the end of this preface, I would like to take the opportunity to extend my sincere acknowledgement to all the authors and readers of our journal, the International Journal of Web-Based Learning and Teaching Technologies, for extending their kind support and co-operation which truly helped the journal to grow and become as successful as it is today.

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Mahesh S. Raisinghani is an associate professor in the Executive MBA program at the TWU School of Management. He is a Certified E-Commerce Consultant (CEC) and a Project Management Professional (PMP). Dr. Raisinghani was the recipient of TWU School of Management's 2005 Best Professor Award for the Most Innovative Teaching Methods; 2002 research award; 2001 King/Hagggar Award for excellence in teaching, research, and service; and a 1999 UD-GSM Presidential Award. His previous publications have appeared in IEEE Transactions on Engineering Management, Information and Management, Journal of Global IT Management, Journal of E-Commerce Research, Information Strategy: An Executive's Journal, International Journal of E-Business Research, Journal of IT Cases and Applications, Information Resources and Management Journal, Journal of IT Theory and Applications, Enterprise Systems Journal, Journal of Computer Information Systems, and the Information Systems Management among others. Dr. Raisinghani is included in the millennium edition of Who's Who in the World, Who's Who Among America's Teachers, and Who's Who in Information Technology.