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## Editorial

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Welcome to V16N4 issue of *IJLT*. There are four papers in this issue. The first paper is ‘Mapping of learning style with learning object metadata for addressing cold-start problem in e-learning recommender systems’ by Jeevamol Joy and V.G. Renumol. According to these authors, assigning suitable learning objects according to the learner’s choice is a big challenge in personalised learning environment (PLE). E-learning content recommender systems (RS) were developed to overcome this problem by generating relevant LO recommendations based on learner preference. These authors argue that one of the drawbacks associated with RSs is the new user cold-start problem because there is not enough data about the learner to make reliable recommendations. In this paper, the authors proposed an ontology-based recommendation algorithm that makes use of the learning dimensions of the Felder Silverman Learning Style Model to map with the learning object characteristics. The knowledge about the learner and the learning objects are represented using ontologies.

Experiments were conducted to evaluate the accuracy of the proposed recommendation model using the evaluation metric, f-measure. The learner satisfaction with the proposed model is measured based on the ratings given to the learning objects by the participants of the experiment. However, it is not clear what the results of the experiments are and whether the proposed model works.

The second paper is ‘Emotion AI in education: a literature review’, by Stefan Reindl. In this paper the author gives a literature review of emotion AI in education. It discusses this emerging field of research on emotion artificial intelligence in the context of education. The study can be grouped into three clusters:

- 1 concept and model development
- 2 intelligent tutoring systems
- 3 students’ state of mind.

According to Reindl, emotion artificial intelligence (EAI) is commonly referred to as affective computing or artificial emotion intelligence. It aims at computers learning or at least simulating the behaviour of humans.

Stefan argues EAI holds great potentials to enhance several aspects of learning, such as increased responsiveness, better timing and difficulty-adjustment of learning content delivery, and improved interaction between learner and technology/device based on emotional states. In addition, EAI may be able to greatly improve several aspects of

education management and administration, including tracking and reporting of learner engagement, immediate alerts for teachers to allow for real-time adjustments of learning style and delivery, or the design of more sophisticated automatic learning delivery systems, to mention just the major ones. However, there are many limitations in this paper. Firstly, this review was conducted under a narrow focus on EAI in the context of education and explicitly left out related AI and EAI areas such as other AI technologies in Education, or emotion AI in non-educational contexts. Secondly, the review is based on a small number of 12 studies; the inclusion of such articles is not always practiced in rigorous literature reviews. A more comprehensive survey would be more useful.

The third paper is 'What determines students' behavioural intention to use mobile learning management systems? Empirical answers from a blended environment in Sub-Saharan Africa' by Emmanuel Arthur-Nyarko, Stephen Brobbey Gyan and Alexander Asante. This study investigates the determinants of students' behavioural intention (BI) to use mobile learning management systems (M-LMS) in a blended learning environment.

The study was undertaken at the College of Distance Education (CoDE) of the University of Cape Coast (UCC) in Ghana. Using a predictive correlational design, a 28-item questionnaire based on the extended technology acceptance model (E-TAM) was used to gather data from 370 students, for which 98% return rate (365) was achieved. The data were analysed using descriptive statistics and multiple linear regression with the stepwise method.

According to these authors, the study revealed that distance learning students at the College held a positive behavioural intention to use M-LMS for learning, to support face-to-face engagement. It was also revealed that factors such as perceived ease of use (PEOU), perceived usefulness (PU), perceived educational compatibility (PEC), and facilitating conditions (FC) were significant determinants of students' behavioural intention to use M-LMS for learning. Moreover, PEOU was the best predictor of students' behavioural intention to use M-LMS in a blended distance environment, explaining about 44% of the variations in the dependent variable with FC being the least predictor. However, there are limitations. Further research must be carried out to validate its effectiveness.

The fourth paper is 'Media profiles and transmedia learning in university students' by Meritxell Estebanell-Minguell, Juan González-Martínez, Moisès Esteban-Guitart and Elisabet Serrat-Sellabona. According to these authors, their study here was designed to meet a dual objective. Firstly, to characterise the transmedia profile (transmedia competences) of a sample of university students. Secondly, to analyse the relationship between personal or daily transmedia practices and learning practices. The study participants comprised 733 university students who answered an online questionnaire related to their media literacy skills, transmedia practices and learning practices through transmedia resources.

The results show that those students who learn most through the media are more critical; that is, they are actively involved in the creation of transmedia content but are critical in both their consumption and production of such content. In addition, other traits can be added to the profile of students who learn in informal transmedia contexts. The results are discussed in relation to the approaches employed in this new learning ecology. More research is needed to verify the concept of transmedia learning.