Editorial

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Welcome to the V13N4 issue of *IJLT*. This issue consists of four papers. The first paper is 'MS-Kinect in the development of educational games for preschoolers' by Raul Marcelo Lozada, Luis Rivera Escriba and Fernando T. Molina Granja. There are many studies about the benefits of using interactive technologies in the educational field. Despite the benefits, these authors argue there are very few empirical studies that determine how those devices facilitate and improve teaching and learning.

MS-Kinect Microsoft is an electronic device that enables the capture of the movement of a user's complete body and the recognition of the gestures of the user through the RGB camera and infrared depth sensors that it incorporates. MS-Kinect enables users to control a console or PC application without a device limiting their movements and targeting the hardware. The built-in sensors enable MS-Kinect (in its PC version) to recognise 25 anatomical reference points per subject.

This paper is concerned with the study of applying a MS-Kinect-based learning system in a real preschool environment. However the results are not clear and conclusion weak making it difficult to see what benefits the study contributes. Suggestions for future work appear fuzzy and unconvincing.

The second paper is 'Attitudinal learning and its relation to gender, age, ethnicity, enrolment purpose, and most impactful learning activity in a science of happiness MOOC' by Sunnie Lee Watson, William R. Watson, Ji Hyun Yu, Secil Caskurlu, Shamila Janakiraman and Holly Fiock. This paper describes a mixed-method study to examine learners' perceptions of attitudinal learning gains in a MOOC and the impact of their demographics, enrolment purpose, and perception of the most impactful learning activity on those gains.

According to these authors, the interview data provided greater insights into survey results, with learners sharing their thoughts on instructional design choices and learning challenges and how those impacted attitudinal learning in the MOOC. In this study, the authors also performed a series of hierarchical multiple regression analyses. The analyses reveal that age and ethnicity were the best predictors for affective learning gains, gender and perception of impactful activity for behavioural learning gains, and ethnicity, enrolment purpose, and perception of impactful activity for cognitive learning gains. In this paper, these authors also discussed the design and facilitation of instructional activities in MOOCs to enhance attitudinal learning. Further research is needed to verify the results.

The third paper is 'ARCS motivation model adapted to gamification applications on a programming language course' by Fezile Ozdamli. The author of this paper argues that

attention, relevance, confidence and satisfaction (ARCS) motivation model, which is uniquely based on teaching design, has a significant role in increasing the effectiveness of the teaching environment.

This study was conducted in order to examine the effects of gamification applications adapted to an ARCS motivation model for programming courses on the academic achievement and motivation of students. Two groups used the ARCS motivation mode during an eight-week blended study period. The results of this study indicate that both groups successfully adapted to the ARCS model. However, the experimental group, supported by gamification, reported better success than the control group. Another important finding is that students in both groups were highly motivated in the areas of self-confidence and satisfaction, but there was a significant difference in favour of the experimental group supported by gamification applications. The author argues that the use of gamification usage increased the success and motivations of students in the programming class. Further empirical studies are necessary to validate the results.

The final paper is 'An integrated competency acquisition progress tracking system in competency-based higher education' by Secil Caskurlu and Iryna Ashby. The authors in this conceptual paper propose an inclusive and adaptive competency tracking system to allow students, instructors, mentors, and other stakeholders to work collaboratively on managing student's competency pathways. The proposed competency acquisition progress tracking system (iCAPTS) goes beyond competency tracking feature of existing LMSs and integrates critical aspects of individualised learning and differentiated support in competency-based education within a digital ecosystem, namely:

1   planning component

2   assessment component

3   curriculum sequencing component

4   achievements, credentialing, and progress dashboard component.

These authors argue that the advantages of such digital ecosystem include a single point of access for each stage of learning personalisation, assessment, and competency curation that integrate interactive solutions for students and their mentors to allow for collaboration throughout the learning experience and also involve other stakeholders as needed.

In addition, the iCAPTS could also be helpful for programs to catalogue skill sets and courses for their students in K-12 that implements CBE, higher education, and HR divisions. Specifically, programs would benefit from accessing and managing data necessary to make decisions about each individual student based on their progress, and to support students on their path towards realisation of their career goals. Instructors would benefit by monitoring each individual student's progress to adjust their instructional practices to address individual's learning goals and needs. To validate the conceptual model, it is important to build the system and conduct tests on the actual tool.