Editorial

Lorna Uden

School of Computing,
Faculty of Computing and Digital Technologies,
Staffordshire University,
Mellor Building, College Road, Stoke-on-Trent, ST4-2DE, UK
Email: L.uden@staffs.ac.uk

Welcome to V 18 N 1 issue of *IJLT*. This issue consists of five papers.

I would like to thank my associate editor, Professor Jeremiah Sullins who writes this editorial.

The first paper, 'Factors influencing online learning on social media', is by Shabana Khurshid, Faseeh Amin, Nayera Masoodi and Mohammad Furqan Khan. Social media learning has seen an accelerated pace recently. However, some aspects of online learning remain unaddressed. To fill this gap, the authors explored the relationship between social media use and four antecedents (i.e., perceived interactivity, perceived usefulness, perceived ease of use and perceived enjoyment). They also examined the association of social media use with various outcome variables (i.e., active learning, creativity and collaborative learning, learning performance). Results revealed that social media was positively correlated with all antecedents, but perceived enjoyment had the most substantial influence. Furthermore, it was found that social media use enhanced all outcome variables. These results offer unique insight into social media learning that all stakeholders can apply to improve learners' performance in an educational domain.

The second paper is titled 'Implications of student satisfaction with flipped classroom design in a Taiwan university', by Amy Roberts and Gregory S. Ching. There is increasing pressure for higher education institutions to develop and expand student learning using evidence-based and needs-based data. In this article, the authors use a longitudinal mixed methods design to investigate student satisfaction in undergraduate courses using a flipped classroom approach. Results revealed positive satisfaction from using a flipped classroom as a pedagogical approach. The participant perceptions of the flipped design were generally encouraging over the span of seven years but with a significant minority having some negative views indicating that the flipped classroom approach may not apply to all learners.

The third paper is titled 'Extending the technology acceptance model to understand the use of e-learning during COVID-19 pandemic for enhancing learning process: Iraqi universities' students', by Suad Shatti Azeez, Salih Hajem Glood and Mohammad Kasib Layous Alhasnawi. Although influencing factors on e-learning during COVID-19 have been previously examined, a gap exists in the literature regarding educational environments' physical characteristics (e.g., lighting and noise) and their impact on learning. The authors adapted TAM as a theoretical framework to bridge this gap and extended it by adding learning content. Results revealed relationships among the core constructs of TAM. For example, learning content had a positive effect on perceived ease of use and perceived usefulness. Additionally, moderating effect of environmental

factors on the relationship between perceived usefulness and intended behaviour was supported. This study contributes to the literature by developing a model responding to the COVID-19 pandemic.

The fourth paper is titled 'Audio-visual resources and learning improvement: an experimental analysis', by Marta Magadán-Díaz and Jesús I. Rivas-García. Historically, the use of video as a didactic resource has been transformed according to technological possibilities, focusing its implementation on video case studies, video-based self-reflection, video podcasts, or video clips. However, since 2005 (the creation of the YouTube platform), the use of video in the classroom through the internet has increased, becoming one of the most widely used educational resources today due to technological change and new ways of learning by students. The objective of this research was to analyse students' learning performance on the use of audio-visual resources in the subject of didactics of the business and its environment. Results showed that learning performance was higher in the intervention group than in the control group. Additionally, a positive perception of using audio-visual resources in the classroom was shown using open-ended questions.

The fifth paper is titled 'Visual programming and computational thinking environments for K-9 education: a systematic literature review', by Dimitrios Trakosas, Christina Tikva and Efthimios Tambouris. Teaching programming and computational thinking to young students has gained increasing attention in recent years. This great attention is attributed partially to the emergence of easy-to-use visual programming environments. These environments help students focus on the logic and concepts of programming and at the same time enhance their engagement. It has been shown that the characteristics of visual programming environments influence students' engagement with programming. However, there is still no systematic investigation of these characteristics. To address this gap, the authors provided insights on the characteristics of visual programming environments for K-9 education based on a systematic literature review of 83 empirical studies on K-9 teaching and learning programming. In the results, the authors discuss selected programming environments targeting K-9 education highlights and important features that could enhance the learning and teaching of computational thinking and programming at K-9 education but also shortcomings.