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## Editorial

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**Biographical notes:** Lorna Uden is a Professor Emeritus of IT Systems in the Faculty of Computing, Engineering and Technology at Staffordshire University. Her research interests include technology learning, HCI, activity theory, big data, knowledge management, web engineering, multimedia, e-business, service science and innovation, mobile computing, cloud computing, neuroscience, social media, intelligent transport systems, internet of things and problem-based learning.

Jeremiah Sullins is an Associate Professor of Psychology at Harding University. As a cognitive psychologist, his primary interests are in the learning sciences. His research focus is on learning/educational technologies, with branches extending into emotions, pedagogical strategies, tutorial dialogue/interaction, mechanisms of feedback, and question asking. He received his PhD in Psychology from the University of Memphis under the mentorship of Dr. Art Graesser.

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Welcome to Vol. 18, No. 2 issue of *IJLT*. There are five papers in this issue. The first article is titled ‘The design and development of the MetAR framework for designing an augmented reality application based on experts’ consensus’ by Siet Fah Lim and Yusri Kamin. Augmented reality technology is an emerging technology that has been applied in today’s formal and informal education in various ways. Applying AR technology to learning requires AR application design and development work. The AR learning environment involves appropriate and organised procedures. There should be proper guidance to drive the designer to the design and development process. Nevertheless, there are few existing frameworks and models associated with multimedia instructional design. The current study aimed to design and develop a framework for designing a metacognitive-supported augmented reality application for teaching and learning Basic pneumatic systems. In short, the results found that the design phase of the

framework using the fuzzy Delphi method resulted in expert consensus for all principal components.

The second article is titled 'How e-learning can accelerate education for sustainable development in higher education: a thematic review of literature' by Anshita Chelawat and Seema Sant. Sustainability has been defined by various researchers and the common theme among all definitions provides the holistic meaning of the term. It implies perpetuity and consistency accompanied by a maintained level of degree of efficacy. Education for sustainable development (ESD) empowers us to play this role with utmost dedication and sincerity. ESD is a progressive concept that aspires to bring a transformation in the educational process by developing those skills, knowledge, values, and attitude which can lead us toward a sustainable and equal society. It ensures inclusiveness and equality in quality education and promotes lifelong opportunities for all. The paper examined how the inclusion of e-learning solutions in the current education system can create sustainable educational institutes concerning campus structure, facilities, teaching pedagogy, evaluation system, etc. and contribute to attaining ESD.

The third article is titled 'Perspectives of Arab preservice teachers in Israel on online learning during COVID-19' by Moanes H. Tibi. During the COVID 19 pandemic, instructors and students who had previously enjoyed traditional classroom-based education were forced to continue teaching and learning online. Neither the universities and colleges nor the lecturers and students were prepared for this sudden shift. Consequently, most academic institutions initially lacked the infrastructure and strategies needed to deliver the entirety of their academic programs online, and the online teaching and learning process evolved gradually. The aim of this study was to identify the perspectives of Arab preservice teachers in Israel on various aspects of online learning during the COVID-19 pandemic and determine what they perceived as the major barriers to online learning. The findings indicated that the student's overall learning experience was positive, and they were generally satisfied with their online learning during the pandemic. The findings also showed that the students suffered from stress and a reduced ability to concentrate.

The fourth article is titled 'Computational tools to teach and develop socio-emotional skills: a systematic mapping' by Diógines Goldoni, Helena Macedo Reis, Mateus M. Carrascoso and Patricia A. Jaques. In a world that is increasingly fast-changing and diverse, which demands teamwork, adaptive behaviour, interaction, and collaboration, the role of socio-emotional skills, also known as non-cognitive and interdisciplinary skills, became more crucial. Socio-emotional abilities are chiefly concerned with how people manage their emotions, perceive themselves, and engage with others. This paper presented a systematic mapping to show how socio-emotional skills are being taught using technological resources.

The fifth paper is titled 'Experiences of elementary school teachers towards blended learning implementation' by Gizem Kara and Ayşegül Liman Kaban. Blended learning has been mostly described as a combination of face-to-face and online instruction. There are numerous factors involved in the effectiveness of blended learning implementation related to teacher competencies, learning styles, students' and teachers' attitudes, and interaction. The current study investigated the attitudes of elementary-level teachers toward blended learning implementation in Turkey. The results of quantitative data and qualitative findings indicated that teachers generally have a positive attitude toward the implementation of blended learning in elementary education.