Editorial for EJEL Volume 19 Issue 6

Dear readers of the EJEL,

2021 is nearly over and the EJEL team has worked diligently to provide you with the last issue of the year. A total of 13 articles makes up the issue, mainly focusing on the topics of learners' perceptions of digital learning tools (e.g., user satisfaction, convenience, and emotions), game-based learning and gamification, as well as the use of digital tools in the context of generative learning. In addition, the influence of cultural context on digital learning tools, the application of olfactory and haptic sensory stimuli, the use of instructional design models and cooperative learning are addressed in separate articles. Malaysia (3) and South Africa (2) are the most represented countries of origin of the authors, together with contributions from Chile, Egypt, Estonia, Hong Kong, Indonesia, Norway, Russian Federation, Singapore, United Arab Emirates and the USA.

The issue kicks off with a qualitative study on social media in the classroom. Wilson O. Otchie, Margus Pedaste, Emanuele Bardoneand Irene-Angelica Chounta from the University of Tartu, Estonia interviewed teachers about their use of social media in 7th to 10th grade. Their findings suggest that social media (and YouTube resources in particular) could be a useful pedagogical resource for learning, and teaching, but also note that challenges such as the distractive nature of social media use in class, and increased workload for staff should be carefully considered prior to adoption.

Hassan Bello and Nor Athiyah Abdullah of Universiti Sains Malaysia examine the extent to which quality factors of summative computer-based assessment influence user satisfaction. In addition to developing a synopsis of benefits of computer-based assessment, they apply the Delone and McLean information system success model to predict user satisfaction with computer-based assessment in a developing African country.

In the third paper, Lubna A. Hussein and Mohd Faiz Hilmi, also from Universiti Sains Malaysia investigate the acceptance factor for learning management systems. Based on an online questionnaire, and structural equation modeling, they conclude that student satisfaction is positively influenced by information quality, system quality, service quality and convenience.

The fourth paper addresses the need to integrate educational technology into the cultural context in which it is applied. Drawing on the theory of culturally relevant pedagogy, Jenny Eppard, Amir Kaviani, Michael Bowles, and Jason Johnson of Zayed University, United Arab Emirates describe the dependencies of successful educational technologies on culture through three case studies, each featuring an educator providing in-depth comments. Consideration of the findings from this study may enable the development of more accessible educational technologies.

In the fifth article, Kelvin Wan, Vivian King, and Kevin Chan, a team of authors from three Hong Kong universities employ a survey to examine the conditions for self-regulated game-based learning in formal learning contexts. Among the findings are that flow conditions, such as focus and challenge, are important to students. However, contrary to conventional expectations, students use game-based learning less for immersion than to achieve solid learning outcomes.

The authors Mona Kamal Ibrahim (Al Ain University, UAE and Helwan University, Egypt), Natalya Spitsyna (Far Eastern Federal University, Russian Federation) and Anastasia Isaeva (Tula State University, Russian Federation) investigate the student perceptions of the sudden transition to e-learning caused by COVID. Based on the results of questionnaires and learning tests, which were answered by students in the Russian Federation at the beginning and at the end of a 3-month period, the authors can prove that the acceptance, comfort, and usefulness of e-learning dropped significantly during the period. The learning outcomes, too, showed worse results especially for male participants.

The paper by the Norwegian author team Olav Dæhli, Bjørn Kristoffersen, Per Lauvås jr and Tomas Sandnes from the University of South-Eastern Norway and Kristiania University College presents LernER, a gamified web-based learning tool for database modeling. The supporting field study includes data from six courses covering four

academic years, during which the learning tool has been continuously improved, as evidenced by increased engagement as well as qualitative feedback from students.

In a comparative study, Aubrie Adams and Weimin Toh from California Polytechnic State University, USA, and Nanyang Technological University, Singapore, survey emotions during the learning process. For this paper, the media text, video and game were compared with respect to 13 emotions. Among the results, six of the tested emotion outcomes indicated positive differences between the text and video game conditions (in comparison to the video condition) for the emotions of joviality, self-assurance, attentiveness, surprise, hostility, and general positive emotions. It is concluded that text and games can evoke a higher emotional intensity than video.

Marelize Malan from University of Johannesburg, South Africa, discusses cooperative learning in online learning environments. Specifically, the assessment results of group work are compared with those of individual work, and it is found that group work receives better scores than individual work. Other findings of this mixed method study include the students' belief that the ability to collaborate is an essential one for their future professional practice.

The topic of gamification is taken up again in the paper by authors Putu Wuri Handayani, Satrio Raffani Raharjo and Panca Hadi Putra from Universitas Indonesia. The study examines the use of points, badges, and leaderboards in a learning management system. Among the positive results are the positive impact on active learning, student acceptance, and the increased participation in online classes stimulated by badges.

The next paper explores olfactory and haptic technologies that have been little used in educational settings so far. Chit Su Mon, Kian Meng Yap, and Azlina Ahmad from Sunway University, Malaysia and Universiti Kebangsaan, Malaysia envision the technologies as a means of supporting visually impaired learners. For the technical prototype examined in a pilot study, excellent scores were obtained for the surveyed parameters of Usefulness, Ease of Use, and Satisfaction, encouraging further research into these innovative technologies.

Joyce West and Makwalete Johanna Malatji of the University of Pretoria, South Africa, report on a study in which pre-service teachers were given the task of designing and implementing a website. The evaluations found that the task promoted the integration of different types of knowledge domains, authentic learning and proximal development, and the pre-service teachers indicated that they gained from the task. Overall, the study recommends higher education institutions to integrate technology into their curricula.

Last, but not least, Paula Charbonneau-Gowdy, who also serves as an associate editor of this journal, together with her colleagues Jaime Pizzaro and Danisa Salinas from Universidad Andres Bello, Chile, demonstrate how the application of a concurrent instructional design model for digitally supported learning activities improved the learning process during the COVID pandemic. The results of applying the instructional design model included positive effects on students' meta-skills, higher participation in collaborative online learning opportunities, and more self-directed engagement.

I hope that readers will enjoy reading these papers, that again document the diversity of the e-learning domain, show the opportunities, but also highlight that the e-learning community still has some homework to do, and the work continues. With this in mind, we would like to thank you for your support in 2021 and wish you a pleasant end to the year and a successful new year in 2022. We would be delighted if you would continue following the EJEL.

Journal Editors
Heinrich Söbke and Marija Cubric