Editorial for EJEL Volume 19 Issue 5

Dear readers of the EJEL,

As we are approaching the third year of the global pandemic, online learning is gaining in maturity, quality and the level of adoption across the world. And this is also having a positive impact on widening the range and quality of e-learning research. This trend is evident in this new issue of EJEL, the last of 2021, which includes 11 research papers written by authors from 12 nations: Thailand, UK, Denmark, Austria, Greece Cyprus, USA, China, Hungary, Kuwait, Philippines, Morocco and Israel.

Athitaya Nitchot, Lester Gilbert and Wiphada Wettayaprasit, from Prince of Songkla University, Thailand and University of Southampton consider knowledge maps as a pedagogical tool and introduce an experimental tool (Mytelemap) in their design science study. The evaluation shows that the students who engaged with the tool have achieved better final results. The findings are limited to web design courses and will need to be validated in other subject area as a part of the future work.

Another design-based research study by Heidi Hautopp and Mie Buhl from Aalborg University in Copenhagen, focuses on the importance of drawing and sketching in designing digital artefacts and supporting learning designs in humanities. The findings from the paper suggest that drawing as a means for developing ideas, collaborating, presenting and discussing design ideas is equally important as the more traditional means of academic discourse such as reading and writing. Teaching (of drawing) was important for students' engaging in the drawing practice and for overcoming some initial barriers with the new method.

Assessment, although one of the most important areas for a university's standing and students' engagement and satisfaction continues to be under-represented in e-learning research in general, and in EJEL in particular. One of the rare contributions in this area comes from Susanne Seifert and Lisa Paleczek from University of Graz. The focus of their study is the evaluation of a specific digital assessment tool (Graz Reading Comprehension test: GraLeV) that measures reading comprehension skills in primary schools in Austria. In addition to contributing to standardising national comprehension assessment the authors offer some other interesting findings that require further investigation, such as the increasing impact of digital competences on student performance.

The fourth article in this issue is by Eirene Katsarou and Paraskevi Chatzipanagiotou from Democritus University of Thrace, and European University Cyprus. The aim for their systematic review was to identify the impact of various types of interactions in the learning environment to the success of learning. They report that learner-instructor interactions significantly (positively?) correlate with learners' academic performance, and that the quality of learner-learner interactions in online and blended collaborative learning environments are affected by learners' sentiments and characters. The latter will need to be considered when designing collaborative (online) learning tasks.

The next article is by Hong Huang and Yongji Li from University of South Florida, and AsiaInfo Tech, (China) respectively. Their focus is on online livestreaming programs for computer programming education. Based on the content analysis of 256 streams and twenty-six discussion posts they found that the primary motivation is cognitive and related information seeking, followed by social integration such as community outreach, and social capital through personal recognition.

In the sixth article in this issue, the Hungarian authors László Berényi (University of Miskolc), Nikolett Deutsch (Corvinus University of Budapest), Bernadett Szolnoki (University of Miskolc) and Zoltán Birkner (University of Pannonia) study views and opinions of engineering students in Hungary on their e-learning practice. The analysis of survey results from 97 students, indicates that more experience can boost successful utilisation of digital learning practices by initiating network effects.

The study by Colleen Carraher-Wolverton and Zhiwei Zhu from University of Louisiana at Lafayette, USA, examines the level of instructor engagement in online courses using the Perceived Characteristics of Innovation (PCI) instrument. The factors resulting from the application of structural equation modelling on the data collected, such as result demonstration, relative advantage, and compatibility were found to be instrumental in

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engagement, which in turn affects the level of engagement. Consequently, the paper discusses various measures that could be used to promote these factors.

In the eighth paper, Marsela Thanasi-Boçe from the American University of the Middle East, Kuwait, investigates the influence of instructors on student satisfaction with online learning. The statistical model that they developed from the data collected shows that instructors exert a high influence on the motivation of students through interactions, who as a result develop positive perceptions of online learning. Moreover, the positive impressions result in higher satisfaction of the students. A further result of the study is that female students develop a higher level of satisfaction, while for male students, instructors had no influence on the perception of and satisfaction with online learning.

The following paper presents a mixed method study by Ma. Theresa Christine C. Valdez and Lea D. Maderal from De La Salle University-Dasmariñas (Philippines). They investigate students' attitudes towards online assessments in mathematics which are more commonly administered in the context of digital teaching. The results show that students hold positive attitudes toward online examinations. Based on the factor analysis, they conclude that the differences in attitudes could be attributed to factors such as ease of use and functionality, personal preference, technical considerations, and complementation with other methods. The interviews confirmed the results of the quantitative analysis of data.

A systematic literature review about e-learning recommender systems is discussed in the tenth paper by Sonia Souabi, Asmaâ Retbi, Mohammed Khalidi Idrissi and Samir Bennani from Mohammed V University in Rabat, Morocco. From a total of 51 articles published between 2007 and the first half of 2021, it emerges that recommender systems based on feedback and explicit ratings are predominant. Overall, the literature review reveals some deficiencies, such as the rather limited coverage of recommender systems in social learning contexts, the commonly rather small database sizes on which recommendations are based, the lack of emphasis on strengths and weaknesses of different recommender system categories, and especially the negligence of implicit feedback, e.g., user behavior recorded as a data source in recommender systems.

The final paper in this issue, written by Eyal Eckhaus and Nitza Davidovitch from Ariel University, Israel, explores the advantages and disadvantages of online teaching experienced by students as a result of the increased use of digital learning tools imposed by the COVID crisis. They conducted an open-ended survey at 11 Israeli higher education institutions, in which the impressive amount of over 1900 students participated. Structural equation modeling was applied to identify major factors that have a positive impact on students' perceptions of the transition to online teaching, even beyond the COVID induced pressure.

We believe that this issue of EJEL again gives a solid and stimulating overview of current activities in e-learning research and practice. We would like to wish all readers an inspiring and fruitful time reading this issue.

Journal Editors
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