

## **iLRN 2018 Main Conference Preface**

iLRN 2018 was the fourth annual international conference of the Immersive Learning Network. It followed on from the inaugural conference held in Prague in July 2015, the second conference held in Santa Barbara in June 2016, and the third conference held in Coimbra, Portugal, in 2017.

In response to the increasingly accessible and powerful range of VR and AR technology, the vision of the iLRN is to develop a comprehensive research and outreach agenda that encompasses the breadth and scope of learning potentialities, affordances, and challenges of immersive learning environments. To achieve this, the iLRN invites and hosts scientists, practitioners, organizations, and innovators across many disciplines to explore, describe, and apply the optimal use of immersive worlds and environments for educational purposes. The annual conference aims to explain and demonstrate how these immersive learning environments best work. In 2018, 21 formal papers were received for the main conference and after a rigorous reviewing process six were selected for this Springer publication (28% acceptance rate). The authors of these papers come from institutions located in Brazil, Germany, the UK, and the USA (Florida, Texas, California).

The main conference papers cover a range of interesting topics in some depth, providing useful information for other educators and researchers. Alvarez-Molina et al. report on how video games can help players develop their musical skills and illustrate this by creating and evaluating a music-video game that aims to improve the key skill of pitch recognition. Bakri et al. investigate the subjective perception of the fidelity of 3D cultural heritage artifacts on the Web and how this affects the user experience. De León reports on the promising results of utilizing problem-based learning for bridging theory and practice in teacher preparation programs through the use of immersive, ill-structured problems in a multi-user virtual environment that simulates a real school. Feenan draws upon 10 years of studies into the use of digital game-based learning as the basis of an analysis that recommends a five-pronged approach to the successful use of games to support social resiliency skills for students in a fast-changing world. Johnson and Sullivan describe a pilot study that identifies three key strategies for making students feel more comfortable and productive in an experimental game design class. Queiroz et al. present a literature review of learning outcomes from using fully HMD-based IVE in primary/K-12 education, highlighting relevant studies, identifying gaps, and providing insights for use in further research.

This informative and fascinating collection of papers reflects the emerging and valuable possibilities of immersive learning research. We know you will find many points of interest and use in the well-presented reports in this collection. Finally, we strongly encourage you to join iLRN and contribute your own insights and research to the community.

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