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João Barroso · Frode Eika Sandnes (Eds.)

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Preface

The International Conference of Innovative Technologies and Learning (ICITL 2022) provides a platform for those who are working on educational technology to get together and exchange experiences. Benefiting from the use of a variety of emerging innovative technologies, the e-learning environment has become highly diversified along the way. Diversified innovative technologies have fueled the creation of advanced learning environments by adopting appropriate pedagogies. Moreover, these technologies not only facilitate learning but also actively help students reach maximized learning performances. However, due to the rapid evolution of new technologies, how to make use of these technologies by complying with effective pedagogies to create adaptive or smart learning environments remains a challenge. Therefore, this conference aims to provide a platform for those researchers in education, computer science, and educational technology to share experiences of effectively applying cutting-edge technologies to learning and to spark further research. It is hoped that the findings of each work presented at the conference will enlighten researchers in relevant fields or education practitioners to create more effective learning environments. ICITL is always ready to share work with the public.

Due to the unfolding COVID-19 outbreak and travel restrictions, this year's conference was held online. Therefore, all accepted papers shifted to a fully virtual format, with presentations in each session held interactively in a virtual meeting room. This year we received 123 submissions from authors in 26 countries worldwide. After a rigorous single-blind review process, 53 papers were selected as full papers and three papers were selected as short papers, yielding an acceptance rate of 45%. These contributions covered the latest findings in the relevant areas, including 1) Artificial Intelligence in Education; 2) VR/AR/MR/XR in Education; 3) Design and Framework of Learning Systems; 4) Pedagogies to Innovative Technologies and Learning; and 5) Application and Design of Innovative Learning. Moreover, ICITL 2022 featured two keynote presentations and two invited plenary presentations by renowned experts and scholars. Tassos A. Mikropoulos and Wu-Yuin Hwang brought us insights on the keynote topics: "Introducing virtual reality and other extended technologies in education: technological and pedagogical issues" and "Big Education: Active Learning in Authentic Contexts- Big Scalability, Long Sustainability and High Cognition". While the two plenary topics, "Digital competence when technology meets ecology" and "Applying a Business Simulation Game in a Flipped Classroom: Impact on Higher-Order Thinking Skills", were presented in detail by Margus Pedaste and Ting-Ting Wu, respectively.

We would like to thank the Organizing Committee for their efforts and time spent to ensure the success of the conference. We would also like to express our gratitude to the Program Committee members for their timely and helpful reviews. Last but not least, we would like to thank all the authors for their contribution in maintaining a high-quality

conference – we count on your continued support in playing a significant role in the Innovative Technologies and Learning community in the future.

August 2022

Yueh-Min Huang
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Frode Eika Sandnes
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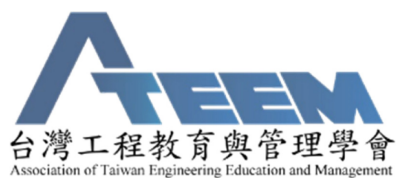
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