Lorna Uden Dario Liberona (Eds.)

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Learning Technology for Education Challenges

10th International Workshop, LTEC 2022 Hagen, Germany, July 11–14, 2022 Proceedings



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10th International Workshop, LTEC 2022 Hagen, Germany, July 11–14, 2022 Proceedings



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Preface

Welcome to the proceedings of the 10th International Workshop on Learning Technology for Education Challenges (LTEC 2022) held at the FernUniversität in Hagen, Germany, during July 11–14, 2022. The conference was preceded by a day of free tutorials for participants who wished to learn the state of the art of research relating to the topics of LTEC. Tutorials were held on July 11, with the conference itself commencing on July 12, 2022.

Today the education sector is going through an unprecedented period of change with the sudden shift away from the classroom in many parts of the world because of the COVID-19 pandemic. Due to this change, there has been a distinct rise in online learning. The effect of the pandemic on our teaching and research is far from uniform or wholly negative. No doubt there will be many new insights gained from the use of online learning, although the fundamentals regarding the use of technology for learning remain. The question is, how can we use technologies that push the boundaries of the learning experience, engage students more deeply, and produce learning outcomes that live up to the high expectations of society? In this conference, we wanted to focus not just on the impact of COVID-19 on education but on the pedagogical innovations that help us to advance education research. Such innovations include playful learning, learning through wonder, action learning, making thinking visible, and virtual studios, amongst others.

LTEC 2022 sought to examine how technologies and pedagogical advances can be used to change the way teachers teach and students learn while giving special emphasis to the pedagogically effective ways we can harness these new technologies in education. The aim was to provide a platform for research in the very broad area of educational technology that bridges theory, research, practice, and policy.

The proceedings consist of 20 papers covering various aspects of technologies for learning including:

- Serious games and virtual learning environments
- Learning practices and methodologies
- Learning technologies
- Learning technologies performance

The papers were selected following a X-blind review process, with a minimum of X reviews per paper. The authors of the accepted papers come from many different countries including Austria, China, Colombia, France, Germany, Greece, Indonesia, Italy, Malaysia, Mexico, Slovenia, Spain, Russia, and Taiwan.

We would like to thank our authors, reviewers, and Program Committee for their contributions and the FernUniversität in Hagen, Germany, for hosting the conference. Special thanks to the speakers and participants at the conference. Without their efforts,

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there would be no conference or proceedings. Special thanks also to Birgit Feldmann for local support and coordination.

July 2022 Lorna Uden
Dario Liberona

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