AISEER: International Workshop on AI in Society, Education and Educational Research

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Abstract

The AISEER 2025 International Workshop on AI in Society, Education and Educational Research is a part of 28th European Conference on Artificial Intelligence ECAI 2025.

This workshop has two distinct foci with the aim of facing the field of AI in society and education in a wider manner. The first one is more technical, focused on the issues of applying AI methods in society and education, while the second will open up to a more interdisciplinary perspective, including social and educational perspectives of the use of AI in education.

- 1. Technical Perspective: The use of AI-based systems to support teaching or learning has been developing for more than four decades, but usage and application has increased markedly in recent years. This is partly due to the increase in the use of e-learning tools during the COVID-19 pandemic and the recent explosion of generative AI. We are at a key moment of development in this field, in which experts in AI and experts in education must join forces to achieve an optimal use of this technology in teaching and learning processes. This workshop aims to create a space for the presentation of new proposals with an emphasis on the cooperative implementation in this field of social relevance. In this first part, we are specially interested on the technical aspects of AI, focusing on the specific techniques used for content creation (generative AI), student profiling (machine learning), learning analytics or explainable AI methods for teacher's dashboards strongly encouraging reflections on the interdisciplinarity of the implementation processes. The aim is to provide a clear picture of the type of approach followed in the scope of education, and its particularities.
- 2. Interdisciplinary Perspectives: the workshop is also dedicated to AI methods in and for education and educational research. This includes the study of educational and teaching AI, but also social sciences, economics, and humanities, including all subjects such as education and teaching in action, labor market research with a focus on educational needs, history of education and related cultural heritage of education, as well as informative predictions for decision-making and behavioral science perspectives. On the one hand, we focus on the connections between AI, education, and society. This includes quantitative and qualitative research, data science methods for analyzing education and labor market data, AI approaches for recommender systems, and digitized learning. On the other hand, we focus on how AI can be used to push the boundaries of the field. This includes developing new methods (including methods using AI), finding and making accessible new data sources, enriching data, and more.

In both perspectives, it is essential that the different disciplines, actors, and stakeholder communicate and understand each other, which is also one of the goals of this workshop. More broadly, we are interested in how AI methods affect all areas of society, education, as well as businesses and labor markets. This includes approaches to how all sectors of education, from primary to tertiary, are affected

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by and respond to AI methods. The design of digitalized futures with AI methods raises several questions for education: At the broadest level, legislative and normative questions; at the level of companies, questions about investment decisions and how to maintain productivity and their workforces; at the level of individuals, questions about qualifications and which skills need to be applied and possibly learned anew. Skills and qualifications are thus at the heart of AI in education and educational research.

While digital methods and AI are emerging topics in these fields, this workshop is not limited to discoveries in these areas, but is also dedicated to reflecting on methods and results in the field of AI. Thus, we are particularly interested in interdisciplinary exchange and dissemination, with a clear focus on AI methods. This workshop was born with the purpose of lasting in future editions of ECAI, thus creating a specific community within this event.

The complete program of the workshop, together with the keynote speech by Dr Stefan Speckesser (Associate Dean, School of Bussiness and Law, University of Brighton, UK) on "The AI-powered Campus: Innovating Teaching, Learning, and Assessment", can be found at https://wp.uni-koblenz.de/cssbibb/en/international-workshop-on-ai-in-society-education-and-educational-research-aiseer/. There were 15 papers submitted for peer-review to this workshop. Out of these, 13 papers were accepted for this volume, 8 as regular papers and 4 as communication papers.

We are grateful to all PC members for submitting careful and timely opinions on the papers.

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