



UNIVERSITÀ  
DEGLI STUDI  
DI BERGAMO

Dipartimento  
di Scienze Umane  
e Sociali



**CQIIA**

Centro per la Qualità dell'Insegnamento,  
dell'Innovazione didattica e dell'Apprendimento  
UNIVERSITÀ DEGLI STUDI  
DI BERGAMO



**ATEE**  
Association for Teacher Education in Europe

BOOK OF ABSTRACTS

# **ATEE Spring Conference 2024**

Teacher education research in Europe:  
trends, challenges, practices and perspectives

*Edited by Nicole Bianquin and Francesco Magni*

**May 29<sup>th</sup> – June 1<sup>st</sup>, 2024**

S. Agostino, 2 – Città Alta, Bergamo, Italy



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## **Parallel session n. 2**

**Day 3** // Morning / Friday, 31st May 2024

### **B.5. Digital innovation and artificial intelligence (AI): schools, teachers and students between real and virtual world**



## LET ME INTRODUCE OPEN EDUCATION... FACILITATING PROSPECTIVE TEACHERS' UNDERSTANDING OF OPEN EDUCATION THROUGH AN AI-BASED TOOL

Francesca Crudele, *University of Padua*, Italy, francesca.crudele@phd.unipd.it

Beatrice Doria, *University of Padua*, Italy, beatrice.doria@phd.unipd.it

Laura Foschi, *University of Padua*, Italy, lauracarlotta.foschi@unipd.it

Graziano Cecchinato, *University of Padua*, Italy, graziano.cecchinato@unipd.it

Valentina Grion, *University of Padua*, Italy, valentina.grion@unipd.it

Juliana Raffaghelli, *University of Padua*, Italy, juliana.raffaghelli@unipd.it

Open Educational Resources (OERs), first defined by UNESCO (2011) as “any educational material that can be used, adapted, and shared without restriction”, are central to promote access and inclusion. The EU still expresses the importance of open education ([https://joint-research-centre.ec.europa.eu/what-open-education\\_en](https://joint-research-centre.ec.europa.eu/what-open-education_en)) as a driver in the innovation of educational provision, reducing the barriers to access to quality education. However, embracing OER is still a badly understood and little practised approach (Ossiannilsson et al., 2020).

In this presentation, we explore ENCORE, a tool for undergraduate and prospective teachers designed to embrace open education. As mediational tool (Ghislandi et al., 2013), we hypothesised that it could enhance prior pedagogical knowledge and values to move towards an open educational perspective.

ENCORE combines AI-driven tools to retrieve relevant open educational resources to improve the teaching-learning process. Its main goal is to guide educators in designing courses to address contemporary challenges such as digitalization, climate change, and post-COVID economic recovery (Raffaghelli et al., 2023).

Two project-based workshops on ENCORE were implemented, with 64 participants. A pre-post test (student's t-test) based on EU recommendation (OpenEdu Framework, Inamorato et al., 2016) shows relevant results. The subscales “OER knowledge,” “Using OER,” and “Understanding and contribution to Open Knowledge” were significant at the cut-off level of  $<.001$  ( $df = 63$ ,  $t = 9.43, 9.83, 7.22$ , respectively). Moreover, the UTAUT scale was applied, observing that the most important variables for this sample were, in decreasing order: 1) performance expectation (avg. score 15.4) and behavioural intentions (15.1); 2) social influences (13), facilitating conditions (12.9) and effort expectation (12.3). This means that for the participants, the impact of using ENCORE to embrace an open educational perspective is relevant.

The results show the validity of ENCORE for the initial teachers' training (undergraduate level) to embrace an open educational perspective.

**Keywords:** open education; AI-driven tools; initial teachers' training

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