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ENCORE Newsletter October 2022

ENCORE is an innovative project that brings together cutting-edge data-driven techniques, and a qualitative pedagogical approach to foster the use of OERs and existing taxonomy of skills- ESCO to produce resources for teachers

Dear colleague,

Welcome to our newsletter, directed to all colleagues interested in the ENCORE project. Our purpose is to let you know what has been happening in the different areas of work and to inform you on what project activities are coming up, so that you can share them with colleagues and other interested contacts.

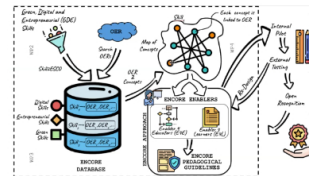
[ENCORE website](#)

WHAT HAS BEEN HAPPENING IN THE PROJECT?

Enriching Circular use of OeR for Education

ENCORE will be able to contribute to the teaching and recognition of skills most affected by new macro trends by leveraging the knowledge enclosed in OER. This knowledge will be extracted from the text of OERs using Natural Language Processing (NLP) techniques. NLP is a field of computer science that mixes linguistics and artificial intelligence to program computers to process and analyze natural language data ("understand" the contents of documents).

The ENCORE approach mixes data-driven tools for teaching design with pedagogical guidelines: it will guide teachers towards a proper design of courses with learning outcomes linked to skills that will help students facing the macro-trends of digitalization, climate change, and post-COVID economic recovery challenges. To do so ENCORE will leverage another source of textual knowledge, ESCO (the European framework of Skills, Competences, Qualifications, and Occupations). By using NLP the OER will be analyzed and Skills detected and linked to the ones existing in ESCO. The ENCORE database will then be organized with OER on one side and with relevant skills on the other (see visual below).



ENCORE at a glance: a pedagogical perspective

The UNIPD took part at the [SIRD National conference](#) (on Educational Research) with a paper presented by Juliana Raffaghelli and Valentina Crion, introducing project ENCORE. Specifically, the colleagues of UNIPD considered the pedagogical perspective, and particularly, the debate on the Faculty Development professional learning needs to interact with automated, intelligent tools such as those promoted by the ENCORE project.

The goal was both to disseminate the interest on the ENCORE project, as well as to start discussing with other scholars in the field the new challenges for the professoriate and for the whole HEIs system with regard to adopting intelligent technologies supporting learning design, teaching and learning.

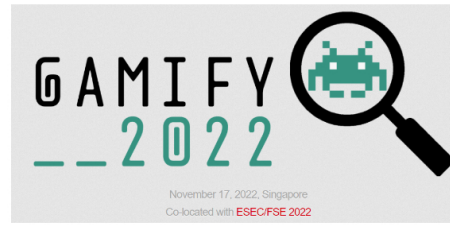
Here you can find the [programme of the parallel session where the presentation was done](#), and the abstract (in Italian).



PolyGloT: A Personalized and Gamified eTutoring System

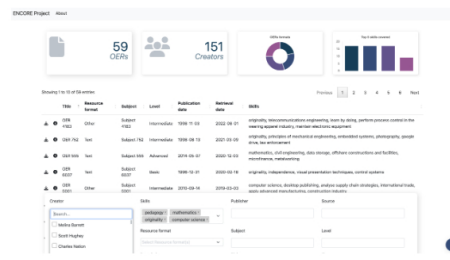
This paper presents PolyGloT, a system able to help teachers to design and implement a gamified and adaptive learning paths. Through it we address some important issues including the engagement, fairness, and effectiveness of learning environments. We do not only propose an innovative platform that could foster the learning process of different disciplines, but it could also help teachers and instructors in organizing learning material in an easy-access repository.

Workshop where the paper was presented: <https://softengpolito.github.io/Gamify2022/>
 Program: <https://2022.esec-fse.org/program/program-gamify-2022/>



Development of a platform to manage the OERs database

The main aim of this activity is developing a database to manage the Open Educational Resources (OERs). The database is completed with an Application Programming Interface (API) to support the connection with other external platforms and a dashboard for experts to control de contents, curate, and display the database. Specifically, the dashboard provides a graphical interface that supports navigation throughout the collected OERs, as well as a set of filters to perform advanced searches based on several attributes of the OERs, such as their title, creators, description, language, skills, format, educational objective, contributors, sources, publishers, and publication date, among others.

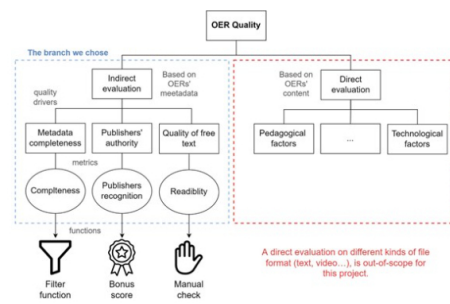


Conclusion of Task 3.2: Quality Guidelines

Inside WP3, named Searchable open Database containing OER on GDE skills, Task 3.2 aims to realize a reference framework to measure ROERs' quality. BMU, task leader, has designed and realized that framework, using a bottom up approach: the quality of a ROER is defined by the quality of OERs contained. Starting from literature review, BMU has shaped an evaluation method which determines the quality of the OER analyzing the quality of the connected metadata, using a quantitative automatic method; this method could be used to massively and fastly evaluate a great extent of OERs.

The work carried out includes, in addition to the literature review:

- A study on the metadata standards to be used.
- The definition of 3 metrics to evaluate OERs' metadata quality, measurable through the code developed in R language.
- The definition of a practical ROER assessment procedure using the developed code and metrics.



#OER_ENCORE

CONTACTS

Project coordinator: **Filippo Chiarello**, University of Pisa (UniPi)

Dissemination team: **Beau Nijsten** and **Alessandra Antonaci**, European Association of Distance Teaching Universities (EADTU)



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