

Quaderni di Comunità  
Persone, Educazione e Welfare  
nella società 5.0

Community Notebook  
People, Education, and Welfare  
in society 5.0

n. 3/2023

REINVENTING UNIVERSITY.

THE DIGITAL CHALLENGE IN HIGHER EDUCATION

*Edited by*

Stefania Capogna, Ligita Šimanskienė, Erika Župerkienė



Iscrizione presso il Registro Stampa del Tribunale di Roma  
al n. 172/2021 del 20 ottobre 2021

© Copyright 2024 Eurilink  
Eurilink University Press Srl  
Via Gregorio VII, 601 - 00165 Roma  
[www.eurilink.it](http://www.eurilink.it) - [ufficiostampa@eurilink.it](mailto:ufficiostampa@eurilink.it)  
ISBN: 979 12 80164 71 1  
ISSN: 2785-7697 (Print)

Prima edizione, febbraio 2024  
Progetto grafico di Eurilink

È vietata la riproduzione di questo libro, anche parziale,  
effettuata con qualsiasi mezzo, compresa la fotocopia

## INDICE

### EDITORIAL

*Stefania Capogna, Ligita Šimanskienė, and Erika Župerkienė* 13

### RUBRICA EDUCATION 19

1. University teachers' data literacy for pedagogical decision making  
*Aleksandra Batuchina and Julija Melnikova* 21

### RUBRICA EMPOWERMENT 35

1. Digital pharmacology  
*Gianluca Della Puppa* 37

### SAGGI 45

1. Digital innovations as the basis for the implementation of the Concept for the development of T-shaped skills in higher education  
*Halyna Mishenina, Ligita Šimanskienė, and Erika Župerkienė* 47

2. The Shifting Paradigm of “Onlife Learning” in European Higher Education Institutes (HEIs): A Case of Working-Life Competence Development Best Practices  
*Paresh Rathod and Pasi Kämppi* 91

3. Self-assessment in vet and higher education: links and further developments <i>Laura Evangelista and Concetta Fonzo</i>	121
4. Evaluation of Universities QoS using Fuzzy Cognitive Maps <i>Panagiotis Perivolaris and Vassilis Stylianakis</i>	155
5. The impact of digitalisation in scientific research: risks, opportunities and ethical challenges <i>Maria Chiara De Angelis</i>	195
MISCELLANEA	227
1. Modernity and Identity processes on the light of the diffusion of new digital technologies <i>Giuliana Parente</i>	229
2. L'impatto della pandemia sui comportamenti a rischio dei giovani: le challenge rischiose <i>Patrizio Pastore e Gerarda Grippo</i>	259
3. Le "destinazioni educative" della Generazione X: risultati e disuguaglianze in una prospettiva generazionale <i>Orazio Giancola e Matteo Bonanni</i>	289
APPROFONDIMENTI	325
1. Guidelines and Recommendations for Academic Bodies within the Framework of the Erasmus+ Project ECOLHE <i>Luca Torchia</i>	327
2. Nuove competenze e loro certificazione: sviluppi in Europa e in Italia <i>Fulvio Oscar Benussi</i>	333

RECENSIONI	341
Recensione del manuale <i>Understanding Organizational Culture</i> <i>Francesca Greco</i>	343

## EDITORIAL

In the ever-evolving realm of higher education, where the pervasive influence of digitalization is reshaping traditional paradigms, we are pleased to present this special issue of the Journal *Quaderni di Comunità*. Titled “Reinventing University. The Digital Challenge In Higher Education”, this collection of papers navigates the multifaceted intersections between technology and higher education, offering a timely exploration of the challenges and opportunities that define the contemporary academic landscape.

The digital challenge in higher education is not merely a technological shift but a transformative force reshaping the essence of academic practices. As we stand at the confluence of tradition and innovation, this special issue serves as a repository of insights, ideas, and innovations, each carefully curated by the D-ChallengHE Scientific Board, as part of the second work package addressed to promote the D-ChallengHE Hub Research Network<sup>1</sup> (Project Code: 2022-1-IT02-KA220-HED-000087029). These contributions delve into the complexities of reinventing universities in the digital age, addressing the critical themes that resonate across the academic spectrum.

The journey begins with Aleksandra Batuchina and Julija Melnikova, who shed light on the pivotal role of data literacy among university teachers. Their systemic literature analysis research identifies key skills for effective engagement with learning analytics

---

<sup>1</sup> Official website: <https://d-challenghe.unilink.it/about-us/research-network/>.

tools. By emphasising digital literacy, data collection, and interpretation, the study aligns with current educational priorities, providing valuable insights into the evolving landscape of education. This research serves as a beacon for educators and institutions seeking to enhance pedagogical practices through informed decision-making in the era of data-driven education.

Gianluca Della Puppa reflects on the impact of the digital revolution and the university's role. Using the idea of “digital pharmacology”, which proposes a critical review of digitalisation through identifying beneficial and harmful factors, he considers the possibility of experimenting and monitoring technological processes from a qualitative point of view.

Moving further into the digital terrain, the collaborative research by Halyna Mishenina, Ligita Šimanskienė, and Erika Župerkienė from Klaipeda University explores the transformative role of digital innovations in cultivating T-shaped skills within higher education. Through extensive literature analysis and thematic studies, this research identifies key strategies for integrating digital platforms and tools to enhance multidimensional skills in students. The study provides valuable insights into T-shaped skill development and advocates for continued exploration in this dynamic landscape. It underscores the pivotal impact of digital innovations on strategic planning, resource allocation, and proactive measures in higher education.

The collaborative research by Paresh Rathod and Pasi Kämppi from Laurea University of Applied Sciences takes us on a journey through the transformative paradigm shift brought about by “Onlife Learning” in European Higher Education Institutes (HEIs). In the context of the digital revolution, the integration of digital technologies and online learning has given rise to “onlife learning”. This approach emphasises the amalgamation of formal and informal

learning, lifelong learning through technology, and the cultivation of new skills and competencies.

Rooted in the outcomes of the EU Innovation project ECOLHE (E-learning in the European Education Area), the research elucidates best practices for training and skills development in on-life learning within European HEIs. The insights contribute to the design of effective working-life training, equipping learners for success in a rapidly evolving digital world.

Quality criteria and indicators are increasingly important for all Education providers. Based on this perspective, Laura Evangelista and Concetta Fonzo illustrate the self-assessment policies and tools in VET (Vocational Education and Training) and higher education, discussing links and further developments for quality improvement in education.

Shifting our focus to the internal dynamics of Higher Education Institutions (HEIs), the collaborative research by Perivolaris Panagiotis and Stylianakis Vassilis introduces a novel approach to evaluating the Quality of Service (QoS) in HEIs using Fuzzy Cognitive Maps (FCM). In the context of the digital transformation gaining momentum, the need for effective evaluation tools becomes paramount. The proposed FCM model, incorporating eight key concepts, provides a comprehensive internal evaluation tool for HEIs. This research explores the potential of FCM in HEI-QoS and opens avenues for future developments in the evolving landscape of artificial intelligence and decision-making algorithms.

The transformative phenomenon of digitalisation extends its reach to scientific research, as highlighted by Maria Chiara De Angelis from Link Campus University. In her essay, she critically examines how digital technologies, including the Internet of Things, Big Data, and virtual reality, permeate various dimensions of scientific work. Drawing from the OECD International Survey of Scientific Authors, the paper identifies challenges in data access,



skills development, and infrastructure. De Angelis emphasises the multidimensional nature of digitalisation's impact on academic research, focusing on its generative and transformative dimensions. The essay explores the implications of automation, digitisation, and the emergence of e-scholars in the research process, shedding light on the ethical issues inherent in this digital revolution. The work emphasises the need for a methodological framework to confront ethical and socio-political challenges. HEIs are urged to foster multidisciplinary reflections, promoting critical awareness among teachers, staff, researchers, and students. The article underscores the importance of questioning the purposes and functions of digital technology in scientific research, advocating for a mature style of data literacy and a critical understanding of the evolving ICT-driven reality.

As we navigate the digital frontier of higher education, the contributions within this special issue collectively paint a nuanced picture of the challenges and opportunities that lie ahead. From data literacy in pedagogical decision-making to the transformative impact of digital innovations on skills development, and from evaluating QoS in HEIs to the profound implications of digitalisation on scientific research, each piece of research is a mosaic piece in the larger canvas of reinventing universities.

The miscellaneous section and insights complete the special issue. In this section, Giuliana Parente's essay "Modernity and Identity Processes on the Light of the Diffusion of New Digital Technologies" focuses on the relationship between identity processes, modern society, and new media to reconstruct the renewed online and offline socialisation processes.

Patrizio Pastore and Gerarda Grippo discuss the pandemic's impact on young people's risk behaviour, which leads us to reflect on the risky challenges put into practice by young people through self-harming practices. These challenges testify to the educational emergency of our times, which even the HE cannot escape.

The last essay of this section, by Orazio Giancola and Matteo Bonanni, entitled “The “Educational Destinations” of Generation X: Results and Inequalities in a Generational Perspective”, presents an analysis of inequalities over time, especially those related to education. It is a diachronic study based on cohorts of generations since World War II that offers a reflection on the educational destiny of future generations in light of the paradigmatic changes that have occurred over time.

The in-depth section includes two contributions. In the first, Luca Torchia summarises the most important results of the Erasmus + ECOLHE project, particularly on the recommendations and guidelines for academic bodies dealing with complex organisations such as the university; in the second, an interesting reconstruction by Fulvio Oscar Benussi focuses on the micro-credentials introduced by the European Council to foster lifelong learning, especially their dissemination in Italy and universities.

The special issue ends with Francesca Greco’s review of the manual “Understanding Organizational Culture: Innovation, Transparency, Leadership, Community” written by Antonio Cocozza, Full Professor of Sociology of Economic Processes at Roma Tre University, in Italy. It is a very appropriate reading because its multidimensional theoretical approach allows us to observe complex organisations that move within the digital and complex society as our universities are today.

This special issue stands as a testament to the resilience and adaptability of higher education in the face of digital challenges. We thank the authors, reviewers, and the D-ChallengHE Scientific Board for their dedication and invaluable contributions. May this collection inspire further inquiry, discussion, and innovation as we collectively shape the future of higher education in the digital age.

Stefania Capogna, Ligita Šimanskienė, and Erika Župerkienė

## **Acknowledgement**

The European Commission's support to produce this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.