



# Longevity and artificial intelligence: towards caring for ageing

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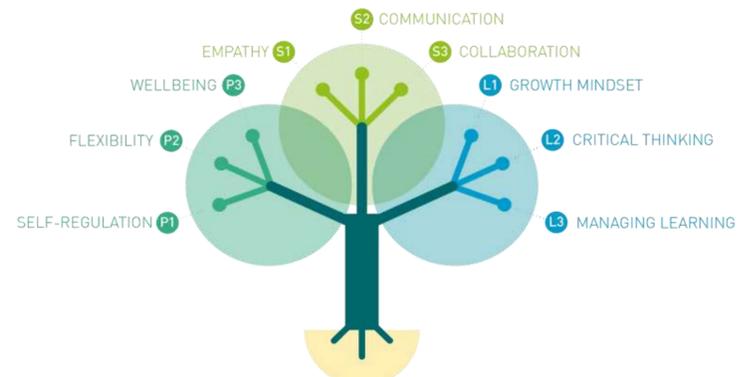
## Introduction

The research explores, from a pedagogical-educational perspective, the perceptions and representations of university students and professors on the interconnection between longevity and artificial intelligence in terms of opportunities, critical issues and implications for human development and quality of life. In recent decades, we have witnessed a significant ageing of the population: a demographic trend that adds important challenges in terms of education and training, requiring a different approach to the issue of ageing and concrete responses in terms of promoting employment, promoting social engagement, combating educational poverty, developing skills for the future and improving quality of life (ISTAT, 2024; Boffo, 2022; WHO, 2002). In an increasingly globalised and interconnected society, changes in human perceptions and behaviours will be manifold and will involve, on the one hand, issues of identity and, on the other, the redefinition of entire areas of human life (European Commission, 2022). The aim, therefore, is to understand how education and training processes can ensure good levels of longevity and promote the acquisition of life skills, integrated with knowledge and skills in the conscious use of artificial intelligence, in order to foster care for and transitions in life in the context of the major demographic, social and technological transformations currently underway (Togni & Boffo, 2024).

## Pedagogical models



## Theoretical framework



**LifeComp: The European framework for Personal, Social and Learning to Learn Key Competence** describes nine competences, organized in three areas: the *personal area* (P1, P2, P3); the *social area* (S1, S2, S3) and the *learning to learn area* (L1, L2, L3). (Sala, Punie, Garkov & Cabrera, 2020). © EU 2020, creative commons (CC BY 4.0)

## Research design

### Research questions

- Main Research Question:** How do university students and lecturers represent the interconnection between longevity and artificial intelligence, in terms of opportunities, critical issues and implications for human development and active ageing?
- Sub-questions:** 1) How is ageing represented? What images, meanings, expectations or fears emerge in relation to quality of life in adulthood and old age? 2) What skills are required to deal with the transformations linked to demographic change and technological development? 3) What is the role of artificial intelligence in supporting education, training and learning processes? How does its use shape our vision of the future, both personal and professional?

### Aims

- To investigate the perceptions of students and professors on the topic of longevity and active ageing in relation to artificial intelligence.
- To understand whether the knowledge and skills acquired in the context of Higher Education, support a caring transition to the labour market in support of active ageing.
- To explore which skills need to be developed to achieve optimal longevity levels, taking into account the technical-technological and social changes that characterize our living.
- To analyze the role of Artificial Intelligence in facilitating work transition through education and learning processes.

### Methodology

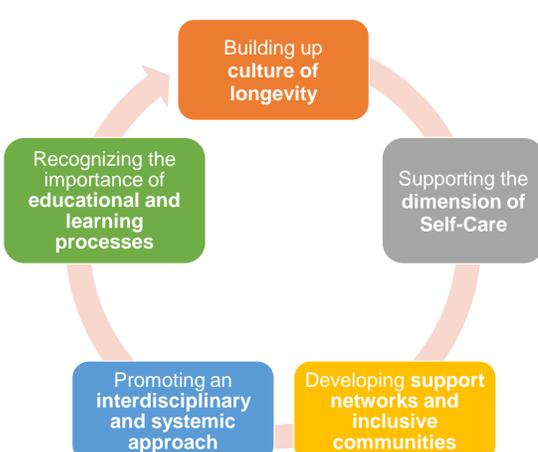


- Research strategy: case of study
- Research context: Higher Education
- Quantitative research tool: semi-structured questionnaire
  - Sample: Student enrolled in the Study Programs of the Education Area at the University of Florence.
- Qualitative research tool: semi-structured interview
  - Sample: Professors working at the Filozofska fakulteta, Faculty of Arts, University of Lubiana.

## Conclusion and future prospects

The integrated analysis of quantitative and qualitative results reveals that longevity and artificial intelligence are interconnected phenomena shaping educational and training processes for human development. Longevity emerges as a transformative, lifelong process that involves biological, psychological, social and cultural dimensions, and requires an educational approach centred on meaning-making, autonomy, care and active participation throughout the life course. The study highlights the need to educate for longevity by supporting individuals in navigating personal, social and professional transitions, fostering empathy, relational care, responsibility and sustainable behaviours within inclusive communities. Intergenerational learning appears as a key lever for innovation and social cohesion, enabling reciprocal exchange, solidarity and the reduction of stereotypes across generations. The findings also show that life skills—critical thinking, reflexivity, communication and relational competence—are essential for coping with complexity and developing ethical, responsible and transformative learning. In this perspective, AI is perceived both as a potential resource for learning and as an ethical and educational challenge that requires critical understanding, human-centred judgement and awareness of its cultural, social and normative implications. These interpretative nuclei connect empirical evidence with the theoretical frameworks adopted in the study and open new directions for developing inclusive, lifelong and AI-aware higher education ecosystems.

### Strategic priorities



### Operational Proposals

- 1. Development of New Hybrid Professional profiles**
  - Design training pathways that integrate pedagogical, digital and AI-related competencies, preparing future educators to operate in complex, multicultural and intergenerational learning ecosystems.
- 2. Transdisciplinary Curricula on Longevity, Active Ageing and AI Literacy**
  - Promote learning pathways that connect humanistic and technological knowledge, fostering life skills such as critical thinking, flexibility, collaboration, empathy and reflective communication.
- 3. Creation of Intergenerational Learning Communities (Longevity Labs)**
  - Establish collaborative spaces where students, faculty and citizens of different ages co-design activities and educational projects, encouraging reciprocal knowledge exchange and critical, reflective use of technologies.

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