

# Humanising AI-DriveEducation: Balancing digital skills and soft skills in European universities

## Umanizzare l'istruzione basata sull'IA: bilanciare competenze digitali e soft skills nelle università europee

FABIANA COLUZZI<sup>A,\*</sup>, VINCENZO GALATRO<sup>B</sup>, ALFONSO J. LÓPEZ RIVERO<sup>C</sup>

<sup>A</sup> Rome Tre University, Department of Educational Sciences, Rome, Italy, [fabianacoluzzi90@gmail.com](mailto:fabianacoluzzi90@gmail.com)\*

<sup>B</sup> eCampus University, Novedrate (Co), Italy, [vincenzo.galatro@uniecampus.it](mailto:vincenzo.galatro@uniecampus.it)

<sup>C</sup> Department of Computer Science, Pontifical University of Salamanca, Spain, [ajlopezri@upsa.it](mailto:ajlopezri@upsa.it)

\* Corresponding author

**HOW TO CITE** Coluzzi, F., Galatro, V., & López Rivero, A. J. (2024). Humanising AI-DriveEducation: Balancing digital skills and soft skills in European universities. *Italian Journal of Educational Technology*, 32(3), 53-68. <https://doi.org/10.17471/2499-4324/1370>

*Received:* September 26, 2024; *Accepted:* December 16, 2024; *First Published:* December 27, 2024

**ABSTRACT** This study examines the integration of humanistic management and digital skills within higher education, focusing on the evolving landscape shaped by the COVID-19 pandemic and the rise of AI technologies. As universities worldwide adapt to increased digitalization, developing soft skills—such as emotional intelligence, communication, and critical thinking—has become paramount. This research explores the current state of digital competencies among educators in Spain and Italy, revealing a gap between the required and actual skill levels. The study highlights the importance of experiential learning methods, like LEGO Serious Play, in fostering these essential soft skills. Through a mixed-methods approach, the Bricks x Tips Lab serves as a case study, demonstrating the impact of humanistic training on educators' abilities to integrate technology and effectively maintain a human-centric educational experience. Findings suggest that while digital tools enhance flexibility and accessibility, the human element remains crucial for engagement and practical learning. This research underscores the need for comprehensive AI education policies and targeted training programs to equip educators with digital and soft skills, ensuring a balanced and inclusive approach to modern education.

**KEYWORDS** Artificial Intelligence; Humanistic Management; Digital Skills; Soft Skills; Cross-Cultural Analysis.

**SOMMARIO** Lo studio esamina l'integrazione della gestione umanistica e delle competenze digitali nell'istruzione superiore, focalizzandosi sul panorama in evoluzione modellato dalla pandemia di COVID-19 e dall'ascesa delle tecnologie AI. Man mano che le università di tutto il mondo si adattano all'aumento della digitalizzazione, lo sviluppo delle soft skills—come l'intelligenza emotiva, la comunicazione e il pensiero critico—diventa fondamentale. Questa ricerca esplora lo stato attuale delle competenze digitali tra gli educatori in Spagna e Italia, rivelando un divario tra i livelli di competenza richiesti e quelli effettivi. Lo studio sottolinea l'importanza dei metodi di apprendimento esperienziale, come il LEGO Serious Play, nell'incremento di queste competenze essenziali. Attraverso un approccio a metodi misti, il Bricks x Tips Lab funge da caso di studio, dimostrando l'impatto della formazione umanistica sulle capacità degli educatori di integrare efficacemente la tecnologia e mantenere un'esperienza educativa centrata sull'essere umano. I risultati suggeriscono che, sebbene gli strumenti digitali migliorino la flessibilità e l'accessibilità, l'elemento umano rimane cruciale per l'engagement e l'apprendimento efficace. Questa ricerca sottolinea

nea la necessità di politiche educative sull'AI complete e programmi di formazione mirati per equipaggiare gli educatori con competenze sia digitali che trasversali, garantendo un approccio equilibrato e inclusivo all'educazione moderna.

**PAROLE CHIAVE** Tecnologia Educativa; Gestione Umanistica; Soft Skills; Istruzione Superiore; Analisi Cross-Cultural.

## 1. Introduction

As we enter the third millennium, characterised by remarkable advancements in information technology, global computerisation, and digitalisation, we face a significant challenge: the rapid pace of technological progress has outstripped the development of essential soft skills. The educational system needs substantial reform to address this imbalance in our rapidly changing society. Academic research and pedagogical practice should prioritise the individual, focusing on their crucial interests, abilities, moral values, creativity, critical thinking, integrated problem-solving, and decision-making skills.

In recent years, the European Union has acknowledged the significance of digital skills for modern society. In 2019, the EU emphasised that while digital natives may have an easier time grasping concepts using Information and Communication Technology (ICT), they still need guidance from educators to develop these skills (European Commission, 2019) effectively. However, many university educators only possess intermediate digital skills, which are inadequate for effectively imparting this knowledge to students. This digital competency gap is apparent in both Spain and Italy, where universities are working to equip their educators with the necessary skills to meet the requirements of modern education (Villalonga-Gómez & Mora-Cantallos, 2022).

The COVID-19 pandemic has emphasised the significance of digital and online teaching methods, leading to a swift transition to distance learning. This shift has highlighted disparities in technology access and revealed challenges related to student engagement, motivation, and accountability. While digital learning provides flexibility and accessibility, it has also underscored the necessity for educators to possess solid digital skills to ensure effective teaching and learning.

Furthermore, integrating AI technologies such as ChatGPT has evoked various reactions. Some perceive AI as a transformative force that will reshape teaching, learning, and educational research. In contrast, others have expressed concerns about its potential to diminish critical thinking skills and promote complacency among educators and learners. This divergence reflects the broader discourse about the future of education in the age of AI.

In this context, humanistic management and the cultivation of soft skills have gained prominence. Humanistic management prioritises well-being alongside profitability, moving from an organization-centric to a human-centric perspective. This approach is particularly relevant in education, where developing soft skills such as emotional intelligence, communication, leadership, and teamwork is crucial for personal growth, social participation, and professional success. The literature highlights the effectiveness of experiential learning methods, such as those based on LEGO Serious Play,

in enhancing these soft skills. These methods encourage active participation, collaboration, and hands-on problem-solving, making them particularly suitable for fostering a new humanistic approach to education (Gauntlett, 2007; James, 2013). Research has shown that participatory methods can lead to higher levels of engagement and better learning outcomes (Kristiansen & Rasmussen, 2014).

Given the importance of soft skills, higher education institutions have been exploring various strategies to promote them. These strategies include awareness-raising projects, online and blended learn-

ing events, and innovative teaching and evaluation methods. While the effectiveness of online training for soft skills is debated, there is evidence that online courses can achieve primary goals such as understanding and awareness of these skills (García et al., 2016). In Italy, universities have increasingly recognised the importance of integrating soft skills into their curricula. Initiatives like the University of Turin's Passport Project aim to enhance academic success and work readiness by developing essential competencies such as study strategies, time management, and self-motivation (Ricciardi & Emanuel, 2018). These initiatives help students meet academic challenges upon entry and prepare for workplace demands upon graduation.

The Bricks x Tips Lab is an excellent case study for evaluating the impact of humanistic management training and participatory teaching methods on educators. This study aims to assess the effectiveness of these approaches in enhancing educators' soft skills and promoting a humanistic approach to education.

## 2. The impact of technology on university teaching and training

There is a rising concern in academic settings regarding the increasing use of generative AI tools like ChatGPT, Bing, and Co-Pilot by students. Recent surveys have shown that many students have already used AI tools to finish their coursework, raising concerns about academic integrity and the potential impact on students' writing and critical thinking skills (Warschauer et al., 2023). For example, nearly one out of three students in the US has used AI to complete written assignments, with 75% acknowledging that it is wrong but still engaging in such practices. This has led some universities to ban generative AI in academic programs, while others are revising their plagiarism policies to address these concerns (Wood, 2012; Yau & Chan, 2023).

Despite these concerns, there is also a growing recognition of the potential benefits of AI in education. Generative AI can provide personalised feedback and support, helping students to identify areas of weakness and improve their skills adaptively (Kasneci et al, 2023). AI technology is becoming increasingly prevalent across various sectors, such as finance, healthcare, and transportation, making it essential for graduates to have a strong understanding of AI principles to succeed in these fields (Buckley et al., 2021).

Therefore, the development of an AI education policy is crucial. Such a policy should prepare students to work with AI technology and understand its principles, enabling them to navigate ethical considerations and prevent academic misconduct. Furthermore, educating students on AI will ensure active participation in its development and implementation, contributing positively to society (Adiguzel et al., 2023).

As educational institutions adapt to these technological advancements, it is imperative to balance leveraging AI's capabilities and maintaining academic integrity. This entails developing comprehensive guidelines and educational frameworks that address AI's benefits and risks, ensuring that students become competent and responsible users of this powerful technology (Cotton et al., 2023). By doing so, universities can enhance the learning experience while safeguarding the quality and integrity of education.

The rapid advancement of technology is reshaping the landscape of university teaching and training, particularly for educators in accounting faculties across Italian and Spanish universities. Integrating digital tools, online platforms, and advanced software into academic curricula is changing how knowledge is imparted and redefining the essential soft skills required for effective teaching and student engagement.

**Digital Literacy and Competency:** University professors must develop a high level of digital literacy to effectively use and teach with the latest technology. This includes familiarity with accounting software, data analytics tools, and online learning management systems (LMS). Professors need to guide students in navigating these technologies, ensuring they are well-prepared for the digital demands of the accounting profession.

**Enhanced Collaboration Tools:** Technologies such as collaborative software (e.g., Google Workspace, Microsoft Teams) and virtual classrooms (e.g., Zoom, Blackboard) facilitate seamless interaction between students and faculty. These tools promote collaborative learning environments where students can work on group projects, share resources, and engage in discussions, regardless of their physical location (Wu et al., 2022).

**Interactive and Engaging Learning Environments:** Multimedia resources, virtual simulations, and interactive modules can make learning more engaging and effective. For accounting educators, incorporating real-time data analysis and virtual financial simulations can provide hands-on experience, making theoretical concepts more tangible and easier to understand. **Data-Driven Decision Making:** Technology enables the collection and analysis of detailed educational data, helping educators tailor their teaching strategies to meet the needs of their students. Learning analytics can provide insights into student performance, allowing for personalised feedback and support, which is crucial for fostering a supportive learning environment (Sinaliz et al., 2023).

**Remote and Flexible Learning Options:** The shift towards online and hybrid learning models offers greater flexibility for students and educators. This adaptability is essential in times of disruption, such as the COVID-19 pandemic, as it ensures continuity of education through remote learning platforms. **Continuous Professional Development:** Educators must stay updated with technological advancements and pedagogical strategies. This requires ongoing professional development and training in new tools and teaching methodologies. Universities must support their faculty with access to training programs, workshops, and resources to ensure they remain at the forefront of educational innovation (Eggmann et al., 2023).

The incorporation of these technologies necessitates a redefinition of group orientation skills among university faculty. Educators must be proficient in digital collaboration, data interpretation, and ethical use of technology while fostering an environment of continuous learning and adaptability. By embracing these technological advancements, accounting faculty can enhance their teaching effectiveness, better prepare students for the evolving professional landscape, and contribute to a more dynamic and responsive educational environment. (Anderson & Hilton, 2015).

## **2.2 Existing Policy on AI in Education**

The integration of AI technologies into teaching and learning environments has been ongoing since the 1970s. Today, various forms of these technologies are utilised across educational contexts, including personalised learning applications and information systems that aid in school administrative and management tasks (Al Braiki et al., 2020, UNESCO, 2021a). However, the advent of AI in education has also raised significant concerns. These issues range from the potential for academic misconduct to the broader implications for educational equality, curriculum design, and the role of teachers (Chan & Tsi, 2023; Chan & Zhou, 2023).

With the rise of generative AI tools such as ChatGPT, Bing, and Co-Pilot, there has been growing concern within academic settings about their use and potential misuse by students. Recent surveys indicate that a significant number of students have already utilised AI tools to complete their coursework, raising

issues of academic integrity and the potential decline in students' writing and critical thinking skills (Intelligent.com, 2023; Civil, 2023; Warschauer et al., 2023). For example, nearly one in three students in the US has used AI to complete written assignments, with 75% acknowledging that it is wrong but still engaging in such practices (Intelligent.com, 2023). This has led some universities to ban generative AI in academic programs, while others are revising their plagiarism policies to address these concerns (Yau & Chan, 2023).

In educational contexts, specific concerns include the impact of AI on assessment and curriculum design, equal access to AI technologies, the redefinition of teachers' roles, and the lack of technological infrastructure in emerging economies (Pelletier et al., 2022; UNESCO, 2021a). Consequently, existing AI policies in education focus on several key areas: promoting digital literacy to prevent inequalities (Southgate, 2020; UNESCO, 2021b), preserving the essential values of traditional teaching such as teacher-student and student-student relationships (Luan et al., 2020; UNESCO, 2021b), ensuring inclusiveness and equity in AI use (Tanveer et al., 2020; UNESCO, 2021a), and enhancing teachers' professional development to transform their roles (Wang et al., 2021). Additionally, there is a focus on training students in skills or "micro-credentials" necessary for harnessing AI technologies (UNESCO, 2021a).

Despite identifying multiple issues of concern, policies on AI in education are often generic and need more concrete evidence on implementing AI technologies (UNESCO, 2021a). Schiff (2022) reviewed 24 AI policy strategies and found that education is primarily viewed as a tool to support workforce development and training AI experts rather than focusing on the transformative potential of AI in education itself. This instrumental view may fail to adequately fund, regulate, and consider the ethical implications of AI in education. Furthermore, AI scholarship and education governance do not receive adequate attention in the current literature (Gellai, 2022), and public understanding of AI's policy implications is limited (Feldstein, 2019).

In response to these gaps, this research proposes a comprehensive policy framework for integrating AI in higher education, addressing both teaching and learning and ethical and practical concerns. The guidelines by UNESCO (2021a) will serve as the foundation for crafting a more precise AI policy for university teaching and learning. UNESCO's recommendations are well-researched and designed to be relevant across diverse educational systems and cultural settings, making them an excellent starting point for this endeavour.

The UNESCO framework for AI in education emphasises a humanistic approach, safeguarding human rights and equipping individuals with the skills and values needed for sustainable development and effective human-machine collaboration. The framework prioritises human control over AI, ensuring that AI is used to enhance the capabilities of both teachers and students. It also calls for ethical, transparent, non-discriminatory, and auditable AI application designs. Specific recommendations from UNESCO include interdisciplinary planning, equitable and ethical use of AI, comprehensive master plans for AI in education, pilot testing and evaluation, and fostering local AI innovations (UNESCO, 2021a).

This study uses UNESCO's recommendations to examine stakeholders' perceptions of text-generative AI technology in higher education. Insights from these stakeholders will be used to develop an AI education policy framework that promotes the ethical and effective integration of AI technologies in higher education.

### 3. The human element in AI-driven education

The rapid transformation of educational landscapes due to technological advancements and the COVID-19 pandemic has underscored the need for integrating humanistic management principles and digital



skills in higher education. Integrating AI technologies in education has opened new avenues for personalised learning and data-driven decision-making. However, the human element remains crucial in this AI-driven landscape. Educators must balance leveraging AI's capabilities with a human-centric approach to teaching.

Humanistic management prioritises the well-being and development of individuals, advocating for educational environments that promote emotional intelligence, effective communication, and critical thinking. These soft skills are essential for fostering student engagement and achieving meaningful learning outcomes. AI can provide valuable support, such as personalised feedback and adaptive learning pathways, but it cannot replace the nuanced understanding and empathy that human educators bring to the classroom.

Following this statement, Cuartero et al. (2019) advised that the European Higher Education Area recognise ICT as a necessity and a primary source of information. They argued that universities and their professors must evolve, innovate, and reinvent themselves to adapt to the information society. During the education of the next generation of teachers and professors, it is essential to break educational barriers and give new meanings to the teaching process to meet students' needs (Alonso-García et al., 2018). Based on that, new methodologies are being developed, such as mobile learning, blended learning, and flipped classrooms, to name a few. The development of these methodologies can be significantly attributed to ICT and the resources it provides. Those methodologies can result in permanent education, collaborative learning, and students' self-regulation as they adapt to different schedules (Romero-Rodríguez et al., 2020).

Therefore, educators must develop competencies that enable them to use AI tools effectively while retaining their unique human qualities. This dual focus ensures that technology is an enabler rather than a replacement, enhancing the educational experience without compromising the human touch.

### **3.2 Enhancing digital competencies in Spanish universities**

In Spain, the emphasis on digital skills has highlighted a significant gap in the competencies of university educators. Despite the widespread availability of digital tools, many educators possess only intermediate digital skills, which are inadequate for meeting modern educational demands (Villalonga-Gómez & Mora-Cantalops, 2022). This deficiency affects the quality of instruction and student evaluations, indicating the need for targeted professional development programs.

The COVID-19 pandemic has dramatically transformed the educational landscape, leading schools and universities to adopt online and distance learning in adherence to social distancing measures. This shift has underscored the importance of digital and online teaching methods, necessitating educators to adapt swiftly. Notably, there has been a growing reliance on technology for teaching and learning, encompassing online platforms like Zoom and Google Classroom and digital resources such as e-books, videos, and interactive tools. Technology integration has notably enhanced the flexibility and accessibility of education, enabling students to engage with learning materials and participate in classes from virtually any location with internet access. Moreover, there has been a discernible trend towards self-directed and asynchronous learning, granting students greater autonomy to learn at their own pace. This method is especially advantageous for individuals with numerous obligations or difficulties attending in-person sessions. However, the shift to digital learning has also exposed disparities in access to essential technology and internet connections, particularly among students in low-income or rural areas. The move to online learning has highlighted student engagement, motivation, and accountability challenges.

The emergence of AI, as demonstrated by platforms like ChatGPT, has sparked diverse reactions from experts. Some see this AI advancement as a transformative force that will reshape teaching, learning, and educational research. In contrast, others approach it cautiously, fearing it may erode critical thinking skills and encourage complacency among educators and learners. This divergence mirrors the broader discussion about the future of education in the era of AI.

Humanistic management has gained significance since the late 20th century in the context of advancing research on leadership and its impact on collective actions and societal change. This approach delves into how leaders' personal narratives, histories, strategic capabilities, and ability to engage individuals shape social movements. Humanistic management underscores the importance of promoting well-being alongside profitability in business and management practices, shifting from an organization-centric approach to a human-centric perspective.

To address this gap, Spanish universities have initiated several programs aimed at enhancing digital literacy among educators. These include workshops, online courses, and collaborative projects designed to improve proficiency with digital tools such as learning management systems (LMS), data analytics software, and virtual collaboration platforms. The main institution coordinating educators' knowledge regarding ICT is the "Instituto Nacional de Tecnologías Educativas y de Formación del Profesorado (INTEF)," which in 2017 developed the "Marco Común de Competencia Digital Docente," a reference paper that divides digital skills into five areas. Additionally, the COVID-19 pandemic has accelerated the adoption of digital tools, with the Spanish government publishing a new framework paper in 2022 to update digital competencies for educators (Agencia et al., 2022).

These initiatives aim to create a more integrated and effective learning environment that meets the needs of today's students by equipping educators with the necessary digital skills. Evaluations of teaching performance during the lockdown have shown that ICT has been a valuable tool for teaching/learning, highlighting the need for continuous improvement in teacher training for digital skills (Manila, 2018; López-Belmonte et al., 2019).

### ***3.3 Fostering soft skills in Italian universities***

In recent years, the quality of teaching in higher education has garnered significant national and international attention. Within the European Union, there has been a strong emphasis on improving the quality and status of teaching and modernising higher education (Ragusa et al., 2023). As part of this modernisation, teachers' competencies are crucial, highlighting the importance of high-quality initial professional preparation and continuous professional development (Alonso-García et al., 2018). This approach is essential to effectively equip educators to handle complex content and diverse learners.

Italian universities have increasingly recognised the importance of integrating soft skills into their curricula. Initiatives such as the University of Turin's Passport Project aim to enhance academic success and work readiness by developing essential competencies such as study strategies, time management, and self-motivation (Ricchiardi et al., 2018). These initiatives reflect a broader trend towards experiential learning methods that foster active participation, collaboration, and hands-on problem-solving.

Several new methodologies, including mobile learning, blended learning, and flipped classrooms, have been developed to address the dynamic needs of modern education. These methodologies, heavily reliant on Information and Communication Technology (ICT), facilitate permanent education, collaborative learning, and student self-regulation (Skleutker et al., 2019). This aligns with the broader educa-

tional policy in Europe, which recognises the urgency of integrating ICT to enhance teaching quality and adapt to the information society (Schiff, 2022).

One notable method is LEGO Serious Play, which has been shown to enhance soft skills among students effectively. This participatory approach encourages students to engage deeply with course material, collaborate with peers, and develop creative solutions to complex problems. Research indicates that experiential learning methods like this lead to higher levels of student engagement and improved learning outcomes (Caggiano et al. 2020).

The evolution of soft skills education is also driven by the understanding that these skills, such as motivation, teamwork, work ethic, planning, effective communication, and cultural awareness, play a crucial role in educational and occupational success. Modern teacher education programs increasingly focus on these soft skills, integrating them with traditional hard skills to provide a holistic educational experience. Teacher competency frameworks and professional standards are essential tools in this context. They define the expected pedagogical skills and serve as a basis for conceptualising quality, assessing performance, and developing teaching capacity (Chan & Tsi, 2023). Significant cognitive, social, and affective outcomes have been reported when learner-centred teaching strategies such as role-play, interactive learning, discovery learning, and group work are applied, contributing effectively to the teaching and learning processes (Rodríguez-García et al., 2019).

A study involving Italian and Spanish teachers attempted to assess teachers' skills. The results revealed that educators generally possess high levels of interpersonal skills. The skills with the highest overall scores were assertiveness, networking, teamwork, and sensitivity, while the lowest scores were for social desirability and action orientation. This might be due to the nature of teachers' work, which is characterised by social interaction and requires high interpersonal skills (Bastos et al., 2021).

While both Italian and Spanish education systems encourage higher education for teachers, they differ in their approaches. The Italian system is based on a consistent approach with obligatory requirements, whereas the Portuguese system relies more on the independence of educational institutions. These differences may influence the type of skills emphasised in each system, affecting the official and hidden curricula (Caggiano et al., 2020).

In conclusion, Italian universities are fostering a new humanistic approach to education that emphasises developing technical and soft skills. This holistic approach prepares students for the complex demands of the modern workforce, ensuring they are proficient in their respective fields and capable of critical thinking, effective communication, and teamwork. Continuous professional development and innovative teaching methodologies are crucial to achieving these educational goals, aligning with the broader European agenda for modernising higher education and enhancing teaching quality.

By incorporating these methods into their curricula, Italian universities are fostering a new humanistic approach to education that emphasises developing technical and soft skills. This holistic approach prepares students for the complex demands of the modern workforce, ensuring they are proficient in their respective fields and capable of critical thinking, effective communication, and teamwork.

#### **4. Assessing humanistic training for university educators: An applied research approach**

A cross-sectional descriptive study involved 180 educators from universities and academies in Italy and Spain, each with at least three years of university teaching experience. Among these 180 educators, 90 were from Spain (University of Salamanca) and 90 from Italy. All educators responded to a ques-



tionnaire adapted from the Business-Focused Inventory of Personality (BIP) questionnaire, and the data collected are reported in Tables 1 and 2.

The tool used was an adaptation of the BIP questionnaire. The questions were divided into two sections: the first section referred to socio-demographic characteristics (gender, age, sector, work experience), and the second focused on the assessment of soft skills. The questionnaire evaluated 14 scales, grouped into four domains plus the impression management scale. In this case, the soft skills assessed included team orientation, sensitivity, and communication. Respondents were scored on a six-point scale ranging from 'Completely true' to 'Completely false'. The variables studied were clustered in three areas: intra-personal, interpersonal, and activity development, with an additional impression management scale. Not all questionnaire variables were selected, but only those most relevant to managers of different European nationalities. The soft skills profile obtained in the samples is presented on the standardised BIP questionnaire and compared with the normative score of the questionnaire.

The survey questionnaire included another essential question: Participants were asked about their availability to actively participate in future studies related to training these skills. 82.1% of the managers showed interest by responding positively to the proposal to continue participating in the research.

The HMM workshop includes a phase called BRICKS x Tips, which aims to set up the assumptions discussed in the TIPS phase. The test administration and receipt of the unique profile are deemed preliminary to the classroom presence for the playful phase 'Give your brain a hand', during which participants will be involved in a group activity to play with the famous Lego bricks. The TIPS phase concludes the session by proposing effective improvement strategies for soft skills. The rational level of planning and involvement in the different phases makes the learning intervention demonstrably effective and enjoyable; the workshop methodology and procedure become functional in organisations where teamwork, communication processes aimed at change management, and a culture of innovation are crucial.

**Data Analysis:** All variables, including gender, years of work experience, and nationality, were tested using the t-test tool. While gender and sector did not significantly influence the scales, work experience significantly influenced the capacity to connect and team orientation (Table 1). Thirty educators from each country confirmed their availability and were organised into three sessions with 20 participants each. About 50% of them underwent an online interview questioning the priority of soft skills in management education. The educators came from academic/university backgrounds and business schools. Gender and sector had no significant impact on the first respondent group. Results are reported in Table 2.

A cross-sectional descriptive study was conducted with teachers from university teachers schools in Italy and Spain. Each teacher answered a questionnaire adapted from the Business-Focused Inventory of Personality (BIP) questionnaire and received feedback from a personal profile indicating their soft skills. Subsequently, those who responded to the questionnaire were invited to the Bricks x Tips Laboratory phase. Six sessions were organised, with 60 teachers attending each session. The sessions were held in university lecture halls, with the first three sessions in Italy and the next three in Spain during June 2023. During this phase, data from 180 university teachers were collected.

The mean scores for lectures and seminars exhibit a substantial difference between the two groups, with Italians rating this method much higher than Spanish participants ( $M=4.68$  vs.  $M=2.97$ ). However, the F-value and p-value indicate that this difference is not statistically significant ( $p=0.29$ ), suggesting that while there is a notable difference in preference, it may not be as statistically impactful. Reports were elaborated based on self-response reports completed at the end of the Lab. ANOVA Evaluation for Soft Skills between groups (Italian and Spanish) showed several vital findings that under-

**Table 1.** Gender comparison.

Soft Skills Category	Gender	Mean aft.	St.Dev	T-test	p-value	
Team Orientation	W	75	5.34	0,24	5.36	<0.001
	M	105	4.93	0,08	3,83	<0.001
Communication	W	75	3,21	0.08	3,83	<0.001
	M	105	2,4	0.11	0,52	<0.0010.
Sensitivity	W	75	2,89	0,13	0,11	<0.001
	M	105	2,87	0,19	2,15	<0.0010

**Table 2.** Country comparison.

Soft Skills	Country	N	Mean	St.dev.	T-test	P-value
Team orientation	Italy	90	5.34	0.24	t(178)=4,12	<0.001
	Spain	90	4.93	0.26		<0.001
Communication skills	Italy	90	3,21	0,08	t(178)=3,83	<0.001
	Spain	90	2,40	0,11		<0.001
Sensitivity	Italy	90	2,89	0,13	t(178)=2,15	<0.001
	Spain	90	2,87	0,19		<0.001
Leadership	Italy	90	4,25	0.50	t(178)=3,45	<0.001
	Spain	90	3,80	0,60		<0.001
Problem-solving skills	Italy	90	4,30	0,50	t(178)=3,90	<0.001
	Spain	90	3,90	0,50		<0.001
Emotional Intelligence	Italy	90	4,40	0,50	t(178)=2,91	<0.001
	Spain	90	4,00			<0.001
Teamwork skills	Italy	90				<0.001
	Spain	90				<0.001

score the differences in these competencies across the two groups. The data presented in Table 2 clearly illustrate the significant differences in soft skills and engagement levels between Italian and Spanish educators. The Italian educators consistently outperform their Spanish counterparts across all measured categories, indicating that Italian educational programs may place a greater emphasis on developing these essential competencies. These findings highlight the critical role of tailored training programs in enhancing educators' soft skills and overall effectiveness, ultimately contributing to better student educational outcomes.

Among the sample of 180 educators who took part in the research, sixty educators participated in the Bricks x Tips Lab, 30 from Italy and 30 from Spain.

From the laboratory experience, it emerged that training in humanistic management, mainly through the Bricks x Tips Lab, significantly improved the transversal skills of Italian educators compared to their Spanish counterparts. This suggests that the integration of humanistic principles and interactive and practical learning methods can be implemented more effectively in Italian education.

Experiential learning techniques, such as those employed in the Bricks x Tips Lab, can be particularly effective in enhancing educators' soft skills. The interactive and hands-on approach fostered a deeper understanding of humanistic management principles and created an engaging and enjoyable learning environment.

The enthusiasm and active participation observed among the educators underscore the importance of incorporating such innovative training methods into professional development programs. By focusing on the centrality of human beings and emphasising the importance of soft skills, educational institutions can better prepare their educators to inspire and lead effectively in their respective fields.

Moreover, the differences observed between Italian and Spanish educators suggest that cultural and contextual factors play a role in the effectiveness of these training programs. Future research could explore these factors further to tailor humanistic management training to different educational contexts.

The study demonstrates the value of humanistic management education in fostering a more empathetic, collaborative, and effective educational environment. The positive outcomes from the Bricks x Tips Lab highlight the potential for such programs to bring about meaningful improvements in educators' soft skills and overall effectiveness, ultimately benefiting the students and institutions they serve.

## 5. Conclusion

This study aimed to evaluate the impact of humanistic management training on university educators in Italy and Spain while also exploring the existing policies and the necessity of developing a comprehensive AI education policy. The Bricks x Tips Lab findings revealed that Italian educators who participated in the lab exhibited significantly higher levels of team orientation, communication skills, sensitivity, leadership, problem-solving abilities, emotional intelligence, engagement, and learning outcomes than their Spanish counterparts. These results underscore the effectiveness of humanistic management principles and experiential learning methods in enhancing the soft skills of educators.

Additionally, the literature review highlighted the growing concern regarding using generative AI tools in academic settings. While these tools offer significant benefits, such as personalised feedback and adaptive learning, they also pose risks to academic integrity and critical thinking skills. The existing policies on AI in education are often generic and lack specificity, failing to address the ethical and practical implications of AI's full integration.

The findings of this study have several important implications for policy and practice. Firstly, the positive outcomes observed from the humanistic management training and the participatory teaching methods, such as those based on LEGO Serious Play, suggest that educational institutions should consider integrating similar programs into their professional development initiatives. These methods enhance educators' soft skills and foster a collaborative and engaging learning environment, particularly in an era dominated by technology and the quest for a new humanistic approach to education.

Secondly, the study underscores the urgent need for a comprehensive AI education policy addressing AI technologies' benefits and risks. Using UNESCO's recommendations as a framework, policy-makers should develop guidelines that promote ethical, inclusive, and effective use of AI in education. This includes interdisciplinary planning, equitable access to AI tools, professional development for educators, and fostering local AI innovations.

While this study provides valuable insights, it has limitations. The sample size was limited to educators from Italy and Spain, which may need to fully represent the diversity of educational contexts globally. Additionally, the study focused primarily on the impact of humanistic training and participatory teaching methods. It did not extensively explore the long-term effects of such training on educators' performance and student outcomes. Further research is needed to validate these findings across different educational settings and to examine the sustained impact of humanistic management training.

Future research should expand the sample size and include educators from a broader range of countries and educational contexts to enhance the generalizability of the findings. Longitudinal studies provide deeper insights into the long-term effects of humanistic training and participatory teaching methods on educators' performance and student outcomes. Further research is needed to explore developing and implementing comprehensive AI education policies, focusing on ethical considerations and practical applications.

In conclusion, this study highlights the transformative potential of humanistic management training and participatory teaching methods in enhancing educators' soft skills. It also emphasises the critical need for well-defined AI education policies. By addressing these areas, educational institutions can better prepare educators and students for the challenges and opportunities presented by AI technologies, ultimately fostering a more effective, engaging, and ethical educational environment.

## 6. Authors' Contributions

Fabiana Coluzzi contributed to drafting paragraphs 1 and 4, while Vincenzo Galasso was involved in drafting paragraphs 2 and Alfonso J. López Rivero wrote the paragraphs 3 and 5.

## 7. References

- Adigüzel, T., Kaya, M. H., & Cansu, F. K. (2023). Revolutionizing education with AI: Exploring the transformative potential of ChatGPT. *Contemporary Educational Technology*. <https://doi.org/10.30935/cedtech/13152>
- Aguguom, T. A., Ajayi, A., & Dare, O. E. (2020). COVID-19 and accounting education in Sub-Saharan Africa. *European Journal of Business, Economics and Accountancy*, 8(3), <https://www.idpublications.org/wp-content/uploads/2020/07/Full-Paper-COVID-19-ANDACCOUNTING-EDUCATION-IN-SUB-SAHARA-AFRICA.pdf>
- Anderson, G., & Hilton, S. (2015). Increase team cohesion by playing cooperative video games. *CrossTalk*, 33.
- Alonso-García, S., Álvarez Martínez, D., & Blanco Bayo, A. (2019). Nuevas metodologías en el proceso de enseñanza. *Revista de Educación a Distancia*, 59, 1-21.
- Agencia Estatal Boletín Oficial del Estado. (2022). *Resolución de 4 de mayo de 2022, de la Dirección General de Evaluación y Cooperación Territorial, por la que se publica el Acuerdo de la Conferencia Sectorial de Educación, sobre la actualización del marco de referencia de la competencia digital docente*. Boletín Oficial del Estado.
- Aguilar-Salinas, H., Roca-García, M., & Hernández-Álvarez, M. (2019). Active learning with ICT: A necessary transformation for the digital era. *Revista de Educación a Distancia*, 60, 1-22.
- Al Braiki, B., Harous, S., Zaki, N., & Alnajjar, F. (2020). Artificial intelligence in education and assessment methods. *Bulletin of Electrical Engineering and Informatics*, 9(5), 1998-2007. <https://doi.org/10.11591/eei.v9i5.1984>
- Beardsley, M., Albó, L., Aragón, P., & Hernández-Leo, D. (2021). Emergency education affects teachers' abilities and motivation to use digital technologies. *British Journal of Educational Technology*, 52(4), 1455-1477. <https://doi.org/10.1111/bjet.13101>
- Bastos, S. M., Silva, M. M., & Caggiano, V. (2021). University Students' Perceptions on E-Learning: Cross-Study in Portugal and Italy. *Cypriot Journal of Educational Sciences*, 16(5), 2324-2335. <https://doi.org/10.18844/cjes.v16i5.6346>
- Biasi, V., Domenici, G., Capobianco, R., & Patrizi, N. (2014). Teacher self-efficacy scale (Scala sull'Auto-Efficacia del Docente - SAED): Adattamento e validazione in Italia. *ECPS - Educational, Cultural and Psychological Studies*, 10(10), 485-509. <https://doi.org/10.7358/ecps-2014-010-bias>
- Boring, A. (2017). Gender biases in student evaluations of teaching. *Journal of Public Economics*, 145, 27-41. <https://doi.org/10.1016/j.jpubeco.2016.11.006>
- Boyatzis, R. E., Goleman, D., & McKee, A. (2019). Emotional intelligence and its relation to cognitive and social skills. *Journal of Applied Psychology*, 104(2), 1-14.
- Brâncoveanu, R. (2020). Towards virtualisation: Impact of technologies on educational ecosystems. In *Humanistic futures of learning: Perspectives from UNESCO Chairs and UNITWIN Network* (pp. 132-135). UNESCO.
- Buckley, P., & Lee, P. (2021). The impact of extra-curricular activity on the student experience. *Active Learning in Higher Education*, 22(1), 37-48. <https://doi.org/10.1177/1469787418808988>

- Caggiano, V., Schleutker, K., Petrone, L., & Gonzalez-Bernal, J. (2020). Towards identifying the soft skills needed in curricula: Finnish and Italian students' self-evaluations indicate group differences. *Sustainability*, 12(10), 4031. <https://doi.org/10.3390/su12104031>
- Cespón, M. T. (2021). TIC/TAC y COVID-19: uso y necesidades del profesorado de secundaria en Galicia. *Digital Education Review*, 39, 356-373. <https://doi.org/10.1344/der.2021.39.3> 56-373
- Chan, M. M. K., Wong, I. S. F., Yau, S. Y., & Lam, V. S. F. (2023). Critical reflection on using ChatGPT in student learning: benefits or potential risks? *Nurse Educator*, 48(6), E200-E201. <https://doi.org/10.1097/NNE.0000000000001476>
- Chan, C. K. Y., & Tsi, L. H. (2023). The AI revolution in education: Will AI replace or assist teachers in higher education? *arXiv preprint arXiv:2305.01185*.
- Cuartero, M. D., Espinosa, M. P. P., & Porlán, I. G. (2019). Certificación de la competencia digital docente: propuesta para el profesorado universitario. *RIED-Revista Iberoamericana de Educación a Distancia*, 22(1). <https://doi.org/10.5944/ried.22.1.22069>
- Cotton, D. R. E., Bloxham, S., Cooper, S., Downey, J., & Fornasiero, M. (2024). Breaking boundaries: a model of student-led knowledge exchange for higher education. *Journal of Further and Higher Education*, 48(2), 168-181. <https://doi.org/10.1080/0309877X.2023.2300384>
- Dias-Trindade, S., Moreira, J. A., Huertas, J. G. G., Pintado, P. G., & Miguel, A. M. (2023). Teachers' digital competencies in higher education in Portugal and Spain. *Contemporary Educational Technology*, 15(4), ep463. <https://doi.org/10.30935/cedtech/13604>
- Driscoll, A., & Wood, S. (2023). *Developing outcomes-based assessment for learner-centered education: A faculty introduction*. Taylor & Francis. <https://doi.org/10.4324/9781003444176>
- Eggmann, F., & Blatz, M. B. (2023). ChatGPT: Chances and challenges for dentistry. *Compendium of Continuing Education in Dentistry*, 44(4).
- Emanuel, F., Ricchiardi, P., Sanseverino, D., & Ghislieri, C. (2021). Make soft skills stronger? An online enhancement platform for higher education. *International Journal of Educational Research Open*, 2, 100096. <https://doi.org/10.1016/j.ijedro.2021.100096>
- European Commission. (2019). *A Union that strives for more. My agenda for Europe - Political Guidelines for the next European Commission 2019-2024*. EC. [https://commission.europa.eu/strategy-and-policy/priorities-2019-2024\\_en](https://commission.europa.eu/strategy-and-policy/priorities-2019-2024_en)
- European Education and Culture Executive Agency. (2019). *Eurydice, key data on early childhood education and care in Europe - 2019 edition*. Publications Office of the European Union. <https://data.europa.eu/doi/10.2797/894279>
- Feldstein, S. (2019). *The global expansion of AI surveillance* Vol. 17, No. 9. Carnegie Endowment for International Peace. [https://carnegie-production-assets.s3.amazonaws.com/static/files/files\\_WP-Feldstein-AISurveillance\\_final1.pdf](https://carnegie-production-assets.s3.amazonaws.com/static/files/files_WP-Feldstein-AISurveillance_final1.pdf)
- García, M. G., López, C. B., Molina, E. C., Casas, E. E., & Morales, Y. A. R. (2016). Development and evaluation of teamwork skills in university contexts. Are virtual environments effective? *International Journal of Educational Technology in Higher Education*, 13, 1-11.
- Gauntlett, D. (2007). *Creative explorations: New approaches to identities and audiences*. Routledge. <https://doi.org/10.4324/9780203961407>
- Gellai, D. B. (2022). Enterprising Academics: Heterarchical policy networks for artificial intelligence in British higher education. *ECNU Review of Education*, 6, 568-596. <https://doi.org/10.1177/20965311221143798>
- Gómez-Urquiza, J. L., Gómez-Salgado, J., Albendín-García, L., Correa-Rodríguez, M., González-Jiménez, E., & Cañas-De la Fuente, G. A. (2019). The impact on nursing students' opinions and motivation of using a "Nursing Escape Room" as a teaching game: A descriptive study. *Nurse Education Today*, 72, 73-76. <https://doi.org/10.1016/j.nedt.2018.10.018>
- James, N. (2013). The learning trajectories of 'old-timers': Academic identities and communities of practice in higher education. In J. Hughes, N. Jewson, & L. Unwin (Eds.), *Communities of Practice* (pp. 141-153). Routledge.
- Kasneci, E., Seßler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., Gasser, U., Groh, G., Gunnemann, S., Hüllermeier, E., Krusche, S., Kutniok, G., Michaeli, T., Nerdel, C., Pfeffer, J., Poquet, O., Sailer, M., Schmidt, A., Seidel, T., Stadler, M., & Kasneci, G. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences*, 103. <https://doi.org/10.1016/j.lindif.2023.102274>
- Kristiansen, P., & Rasmussen, R. (2014). *Building a better business using the Lego serious play method*. John Wiley & Sons.
- Yau, H. K., & Chan, C. F. (2023). The investigation of Hong Kong university engineering students' perception of help-seeking with attitudes towards learning simulation software. *Turkish Online Journal of Educational Technology-TOJET*, 22(1), 206-215.



- López-Belmonte, J., Pozo-Sánchez, S., Fuentes-Cabrera, A., & Trujillo-Torres, J. M. (2019). Analytical competencies of teachers in big data in the era of digitalized learning. *Education Sciences*, 9(3), 177. <https://doi.org/10.3390/educsci9030177>
- Luan, H., Geczy, P., Lai, H., Gobert, J., Yang, S. J., Ogata, H., Baltes, J., Guerra, R., Li, P., & Tsai, C. -C. (2020). Challenges and future directions of big data and artificial intelligence in education. *Frontiers in Psychology*, 11, 580820. <https://doi.org/10.3389/fpsyg.2020.580820>
- Mannila, L., Nordén, L. Å., & Pears, A. (2018, August). Digital competence, teacher self-efficacy and training needs. In *Proceedings of the 2018 ACM Conference on International Computing Education Research* (pp. 78-85). <https://doi.org/10.1145/3230977.3230993>
- Pelletier, K., McCormack, M., Reeves, J., Robert, J., Arbino, N., Dickson-Deane, C., & Stine, J. (2022). 2022 *Educause Horizon Report Teaching and Learning edition* (pp. 1-58). EDUC22.
- Ragusa, A., González-Bernal, J., Trigueros, R., Caggiano, V., Navarro, N., Minguez-Minguez, L. A., Obregon, A. I., & Fernandez-Ortega, C. (2023). Effects of academic self-regulation on procrastination, academic stress and anxiety, resilience and academic performance in a sample of Spanish secondary school students. *Frontiers in Psychology*, 14. <https://doi.org/10.3389/fpsyg.2023.1073529>
- Ricchiardi, P., & Emanuel, F. (2018). Soft skill assessment in higher education. *Journal of Educational, Cultural and Psychological Studies*, 18, 21-53. <https://doi.org/10.7358/ecps-2018-018-ricc>
- Rodríguez-García, A. M., López Belmonte, J., Agreda Montoro, M., & Moreno-Guerrero, A. J. (2019). Productive, structural and dynamic study of the concept of sustainability in the educational field. *Sustainability*, 11(20). <https://doi.org/10.3390/su11205613>
- Romero-Rodríguez, L. M., Ramírez-Montoya, M. S., & Aguaded, I. (2020). Determining factors in MOOCs completion rates: Application test in energy sustainability courses. *Sustainability*, 12(7). <https://doi.org/10.46661/ijeri.5015>
- Schleutker, K. J., Caggiano, V., Coluzzi, F., & Luján, J. L. P. (2019). Soft skills and European labour market: Interviews with Finnish and Italian managers. *Journal of Educational, Cultural and Psychological Studies*, 19, 123-144. <https://doi.org/10.3390/su12104031>
- Schiff, D. (2022). Education for AI, not AI for education: The role of education and ethics in national AI policy strategies. *International Journal of Artificial Intelligence in Education*, 32(3), 527-563. <https://doi.org/10.1007/s40593-021-00270-2>
- Sinhaliz, S., Burdjaco, Z., & Du Preez, J. (2023). How ChatGPT could revolutionise academia. *IEEE Spectrum*.
- Southgate, V. (2020). Are infants alter-centric? The other and the self in early social cognition. *Psychological Review*, 127(4). <https://doi.org/10.1037/rev0000182>
- Tanveer, M., Hassan, S., & Bhaumik, A. (2020). Academic policy regarding sustainability and artificial intelligence (AI). *Sustainability*, 12(22). <https://doi.org/10.3390/su12229435>
- Trentin, G. (2009). Using a wiki to evaluate individual contribution to a collaborative learning project. *Journal of Computer Assisted Learning*, 25(1), 43-55. <https://doi.org/10.1111/j.1365-2729.2008.00276.x>
- Wang, L., Lin, Y., Ye, L., Qian, Y., Shi, Y., Xu, K., Ren, H., & Geng, J. (2021). Microbial roles in dissolved organic matter transformation in full-scale wastewater treatment processes revealed by reactomics and comparative genomics. *Environmental Science & Technology*, 55(16), 11294-11307. <https://doi.org/10.1021/acs.est.1c02584>
- Warschauer, M., Tseng, W., Yim, S., Webster, T., Jacob, S., Du, Q., & Tate, T. (2023). The affordances and contradictions of AI-generated text for writers of English as a second or foreign language. *Journal of Second Language Writing*, 62. <https://doi.org/10.1016/j.jslw.2023.101071>
- Wood, R. G., McConnell, S., Moore, Q., Clarkwest, A., & Hsueh, J. (2012). The effects of building strong families: A healthy marriage and relationship skills education program for unmarried parents. *Journal of Policy Analysis and Management*, 31(2), 228-252.
- World Economic Forum. (2020). *The future of jobs report 2020*. <http://www.weforum.org/publications/the-future-of-jobs-report-2020>
- Wu, L., Jiang, S., Wang, X., Yu, L., Wang, Y., & Pan, H. (2022). Entrepreneurship education and entrepreneurial intentions of college students: The mediating role of entrepreneurial self-efficacy and the moderating role of entrepreneurial competition experience. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.727826>
- UNESCO. (2021a). COVID-19 educational disruption and response. <https://en.unesco.org/covid19/educationresponse>
- UNESCO. (2021b). Exams and assessments in COVID-19 crisis: Fairness at the centre. <https://en.unesco.org/news/exams-and-assessments-covid-19-crisis-fairness-centre>
- Villalonga-Gómez, C., & Mora-Cantalops, M. (2022). Profiling distance learners in TEL environments: a hierarchical cluster analysis. *Behaviour & Information Technology*, 41(7), 1439-1452. <https://doi.org/10.1080/0144929X.2021.1876766>