

New Work and New Study. Research and education for flexible, inclusive, sustainable, attractive workplaces

New Work e New Study. Ricerca e formazione per ambienti di lavoro flessibili, inclusivi, sostenibili, attrattivi

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1. Navigating the transformation of work and learning

The world of work and learning is undergoing an unprecedented transformation. Technological breakthroughs, social upheavals, and the rapid pace of economic change are reshaping what it means to work, learn, and thrive in contemporary society. As editors of this issue of Form@re, we are delighted to present a collection of contributions that delve into the heart of these changes, critically examining both the challenges and opportunities that the future of work and study presents.

At the nexus of our call for papers lies the recognition that the co-evolution of work and education is crucial to building resilient, adaptable, and inclusive futures. Our knowledge landscape is being rewritten by forces such as digitalization, artificial intelligence, globalization, and growing demands for sustainability and diversity. Across Europe, and throughout the rest of the world, organizations and educational institutions sit at the intersection of these shifts, searching for new models of talent development, flexible workplaces, and transformative partnerships. The research, reflections, and experiences collected in this volume illustrate the depth and breadth of current innovations and enduring questions.

2. Digital transformation, new and future skills, and workforce adaptation

A central thread in this issue is the exploration of new competencies and skills needed for the workforce of the future. Studies on digitalized stationary retail, critical thinking development in engineering, and training for upskilling corporate employees highlight the profound impact of digitalization and evolving business models.

Several contributions foreground the growing importance of soft skills, adaptability, reflective practice, and career guidance in a rapidly changing labor market, echoing our call's inquiry into the drivers of organizational transformation and lifelong learning needs.

¹ The call for papers, the structure of the issue, and this article are the result of the professional experience of the three authors, who served as guest editors for the number 1/2025 of the journal Form@re, and of their sustained collaborative exchange. For a preliminary thematic clustering of the papers accepted by the peer reviewers, generative AI (ChatGPT-4o) was also employed as a support tool. The paragraphs of this article may be attributed as follows: paragraphs 1 and 2 to Sabine Möbs; paragraphs 3 and 4 to Dirk Saller; paragraphs 5 and 6 to Laura Menichetti.

Young professionals' aspirations, teamworking in digital contexts, and the strategic upskilling of employees all signal the emergent contours of New Work: work that demands flexibility, resilient skillsets, and individual agency.

The first part of this issue offers a rich and multifaceted overview of contexts in which the urgent need for renewed synergy between the education system and the worlds of production and services clearly emerges.

In this perspective, the article *Competencies of future-capable employees in digitalized stationary retail* by Katja Wiedemann, Anna-Elisabeth Lohstöter, Eva Lienbacher, and Robert Zniva analyzes the impact of digitalization in retail, with a particular focus on the transformations in organizational, communicative, and relational processes. The redefinition of professional profiles prompts the authors to propose a competency model based on IT, process organization, cooperation, and customer interaction.

Digital transformation also concerns micro and small-sized enterprises: Massimo Marcuccio, Vanessa Lo Turco, and Maria Elena Tassinari, in *Artificial intelligence, training, and micro and small-sized enterprises: a survey on entrepreneurs' opinion*, demonstrate the widespread interest of entrepreneurs in artificial intelligence, alongside the limitations related to skills, costs, and awareness. The contribution highlights the need for inclusive and targeted training policies capable of supporting innovation even in resource-constrained enterprises.

Further examining the alignment between education and work contexts, with a view to enhanced, broader, and more informed employability, Antonella Poce and Carlo De Medio, in *New job skills: critical thinking analysis in higher education and engineering*, emphasize the crucial role of developing critical thinking and transferable skills through dual training models and cross-sector partnerships between universities and companies.

A concrete example of this tension towards synergistic alliances is offered by the study of Matteo Conte and Alberto Fornasari, *The employability potential: a pedagogical analysis of educational and professional challenges*, which analyses the employability of students enrolled in the Educational Sciences program at an Italian university. Self-efficacy, adaptability, social networks, and all soft skills emerge as resources to be enhanced within university curricula to address a constantly evolving labor market.

In parallel, the paper *Team working training in the digital transition: skills, strategies, and pedagogical challenges* by Emanuele Serrelli critically reflects on teamworking training practices in complex, interconnected, and digitalized contexts. The author moves beyond a purely performative logic and advocates for a pedagogical vision of teams as spaces for relational and democratic learning, in a formative perspective that values the human dimension of work even in technologically advanced settings.

Turning to individual dynamics, the article *Expectations and priorities of young professionals in finance*, by Christiane Weiland, investigates the employment expectations and motivations that drive the career choices of young professionals in the financial sector. Career trajectories are defined by factors such as gender, corporate culture, work-life balance, and economic security, providing a useful snapshot to understand the new directions of youth employment.

Enhancing this journey with Practices / Considerations, Miriam Bassi's reflection, *Career guidance for life: what skills for a new work culture?*, invites us to consider career guidance as an ongoing process, continuous throughout life, one that is vital for navigating occupational transitions shaped by global megatrends.

Finally, Viviana Vitari's reflection *Libraries and coworking orientation: a third space for learning* suggests rethinking libraries in light of digital transformation and new work practices, as community hubs that foster access to knowledge, support employability, and promote inclusive forms of educational coexistence.

3. Artificial Intelligence and (learning) technology as catalysts

Another key axis of the issue considers artificial intelligence and new learning technologies not as mere technical add-ons, but as catalysts for redefining how we learn and collaborate. In this issue, papers examine the adoption of generative artificial intelligence in higher education, implications for teachers' professional development, and the cognitive impacts of artificial intelligence at work. Augmented reality and multiple digital learning formats are explored for their capacity to enhance both accessibility and engagement. Crucially, the potential of technology to promote inclusion – whether in supporting people with disabilities, fostering universal design, or reimagining libraries as co-working and learning hubs – intertwines with our commitment to diversity and sustainable participation.

The article *From dystopian concerns to utopian view: adopting generative AI in South African higher education institutions* by William Tichaona Vambe focuses on the dilemmas associated with the use of generative artificial intelligence in South African universities, including cultural resistance, the absence of policy, and the digital divide. However, the author advocates for a systematic integration of artificial intelligence, emphasizing that this technology can serve as a catalyst for developing critical thinking and essential competencies for the 21st century.

Deborah Gragnaniello and Concetta Ferrantino, in their article *Teachers' professional development on Artificial Intelligence: the role of universities and companies*, expand the scope of the discussion, outlining an educational ecosystem where AI supports personalized and optimized pathways within synergies between universities and the world of work. Specifically, they focus on developing teachers who are digitally and pedagogically competent. The authors also highlight the challenges related to equity and educational quality.

Student preferences regarding new digital learning formats are at the heart of *Students' wishes for digital higher education: preferences in and expected added value of future learning formats* by Zeynep Tuncer, Daniela Feistauer, and Ines Schindler. The study's findings show converging interests in videos, virtual labs, machine learning, and serious games, with evidence suggesting that students prefer customizable formats that allow greater user control.

An additional exploration of emerging technologies applied to education is provided by Frank Samson and Deogratias Shidende, who investigate the potential of integrating artificial intelligence and augmented reality to make learning experiences more accessible, personalized, and engaging. In their article *Contribution of artificial intelligence in improving the user experience of augmented reality learning applications*, the authors propose adaptive and inclusive solutions that meet diverse needs.

Tonia De Giuseppe and Sabrina Lucilla Barone, in *Education, training and employment of people with disabilities in the age of AI: a systemic bibliometric analysis*, offer a focused reflection on inclusion. The authors provide a mapping of key research areas and propose

strategies to enhance the role of artificial intelligence as a tool for equitable and sustainable participation for people with disabilities.

Similarly, Ariel Pacchioni and Daniel Mastrosimone, in *An application horizon of Universal Design between visual impairment and access to cultural heritage*, explore the potential of integrating Universal Design, generative artificial intelligence, and emerging technologies. Their goal is to facilitate active access to cultural heritage for people with visual impairments, promoting inclusive and participatory engagement.

The potential of artificial intelligence in work contexts is examined by Frederike Marie Oschinsky and Thi Phuong Thao Nguyen, in *Cognitive processes while using Artificial Intelligence at work: a research agenda on challenges and opportunities*. The authors propose studying the cognitive processes triggered by artificial intelligence use, focusing on the interaction between technological design, well-being, and sustainability, in order to identify organizational strategies that integrate artificial intelligence in a conscious way, enhancing human, decision-making, and creative capabilities.

4. Partnerships and organizational transformation

Transformation at scale also demands institutional change. The articles on university-company partnerships, sustainability strategy development, and the legacy of New Work principles since the pandemic highlight the need for organizations to experiment with new forms of collaboration, innovation ecosystems, and operational models. These contributions illustrate that effective organizational transformation relies not only on technological adoption but on cultural shifts, on the willingness of institutions to reimagine roles, relationships, and values considering changing social and economic realities.

Flavia Di Donato's contribution, *Universities and companies' partnerships: theoretical-operational models and successful projects for shared innovation*, opens the discussion by emphasizing the transformative potential of university-business collaborations. Through a detailed analysis of theoretical models and successful case studies, the author illustrates how such alliances can become engines of social and cultural innovation. The partnerships described not only foster the creation of ecosystems focused on lifelong learning but also promote sustainable and inclusive change processes that can generate lasting, positive impacts on collective well-being.

On a related front, but with a different institutional focus, Natasha Mazzaro and Petra Morschheuser, in *Development of the sustainability strategy at the Baden-Wuerttemberg Cooperative State University (DHBW), Germany*, present a participatory process for developing the university's sustainability strategy. Despite the specificity of the dual structure, the experience provides a broad strategic model focused on the active involvement of stakeholders and transparent communication of results, serving as a reference for other institutions in transition.

In the business context, Roberta Scarano and Iolanda Sara Iannotta, in *A training experience for upskilling and reskilling corporate human resources*, describe a training program developed in collaboration with a transportation and logistics company in Campania for the adoption of a CRM system. The experience showcases the effectiveness of tailored training design and appropriate assessment of learning outcomes to support innovation processes.

Finally, Claudia Winkelmann, in *Bergmann's new-work concept and the new work megatrend in the Covid-19 pandemic: a comparative analysis*, distinguishes between Bergmann's original vision and the current interpretation of New Work. The author also highlights the need for careful change management to ensure that the evolutions associated with the New Work megatrend are made effective and sustainable.

Complementing this organizational perspective in the section Practices / Considerations, Claudia Baiata, in *The rise of corporate academies in higher education: how do universities fit into the equation?* explores the growing phenomenon of corporate academies. The article questions the role of universities in lifelong learning, in a context where digital transformation is driving a redefinition of the boundaries and responsibilities of educational providers. Academies thus emerge not only as a response to businesses' upskilling needs but also as an opportunity for universities to renew their educational mission through collaboration.

These contributions suggest that organizational transformation hinges on the hybridization of competencies, inter-institutional openness, and a renewed focus on the values that guide innovation. Universities, in particular, emerge as central actors—not only in producing knowledge but also in building generative alliances to coherently and responsibly address the challenges of our time.

5. Rethinking educational models. Hybrid, dual, and experiential learning

The authors recognize that the demands of New Work require a rethinking of educational models, what we might call the agenda of New Study. The rise of dual and hybrid study programs, experiential learning through augmented reality, the transformative power of immersive and role-play-based teaching, and the integration of AI-powered avatars reflect an evolution towards student-centered, flexible, and participatory teaching methods. Initiatives that place students at the centre of educational co-design, that bridge the gap between academic learning and professional deployment, and that emphasize collaboration between artists, experts, and learners, point toward institutions becoming more agile and responsive.

In line with the growing interest in immersive educational experiences, the study *Fostering agroecological knowledge through augmented reality-driven experiential learning* by Deogratias Shidende, Thomas Kessel, and Anna Treydte proposes the use of augmented reality (AR) as a tool to enhance learning in a complex field. The active engagement of students and the depth of understanding achieved demonstrate the potential of AR in fostering interactive and immersive learning, while also highlighting the need for equitable access to new technologies.

In higher education, various contributions reflect on the transformations in educational models. The study *The evaluation of a hybrid, dual study program based on students' experiences* by Oona Rantamäki and Kay Berkling highlights both the strengths and challenges of a hybrid degree program, designed around the concept of New Study, and targeted at an increasingly diverse and globalized student population. Online components offer flexibility, while in-person sessions reinforce pedagogical coherence and foster collaborative dynamics among peers.

Building on this perspective, Antonella Poce and Luca Contardi, in their work *Educational innovation and international mobility: a model for dual learning in Europe*, reflect on the

challenges currently facing higher education in Europe amid pressures from the labor market. The paper proposes a dual learning model that fosters the integration of theory and practice, promotes intercultural competencies, incorporates international mobility, and strengthens partnerships between educational institutions and businesses.

In the contribution *A self-assessment scale for competencies of socio-pedagogical educators in L-19 degree programs*, Maria Grazia Rionero introduces a self-assessment tool aimed at professional educators in training within university programs. The goal is to encourage reflection on individual professional development, supporting the construction of a professional identity and providing a solid foundation to tackle the challenges of practical application.

In *Working with pedagogical supervision: experiences and reflections of education professionals*, Alice Femminini and Irene Stanzione present an additional tool to support the growth of education professionals: pedagogical supervision as a catalyst for change in educational settings. This form of supervision creates a space for reflection and emotional support, fostering awareness, improvement, and a sense of professional efficacy.

Chiara Salvatori, Valeria Bruno, and Emiliane Rubat du Mérac combine service-learning with comprehensive sexuality education in a transformative experiential learning journey. This educational approach, focusing on active participation, is further explored in *The SFERA project: an integration of Service-Learning and Comprehensive Sexuality Education for a new training program*, which aims to promote active citizenship and social responsibility.

Lastly, in *Faculty Development and Universal Design for Learning: advancing inclusion in higher education*, Silvia Dell'Anna, Francesco Marsili, and Alessia Bevilacqua propose a virtuous interaction between a systemic approach to improving university teaching quality and an inclusive design-oriented framework. The goal is to support professional development models that prioritize diversity, active participation, and educational equity.

In the section *Practices / Considerations, More Places: students recreate school environments with artists and experts* by Luigi Airoidi, Simonetta Boscolo Nale, Anna Curci, Rossana Quarta, Paola Zanini, Giovanna Barzanò, and Maria Beatrice Ligorio, the authors describe a project that involved students, teachers, and artists in the revitalization of school spaces. This initiative transformed anonymous environments into meaningful, lived-in places, promoting well-being, aesthetics, and participation. The project particularly highlights the educational value of co-design and collective creativity.

The reflection *Innovative teaching and role-play for the job placement of new doctors in specialist training* by Claudio Pensieri, Cristiana Cardinali, Rossana Alloni, and Maria Cinque presents an innovative training model for the professional integration of medical residents. The authors demonstrate how role-playing and immersive technologies can facilitate the transition from academia to the workplace, providing tools to address complex situations and enhancing professional confidence.

These contributions mark an evolution in the educational system towards more flexible, student-centered approaches that are mindful of diversity and capable of connecting learning with citizenship. The New Study is not merely a response to the changing nature of work, but a cultural project aimed at shaping individuals and professionals who are conscious, reflective, and creative.

6. Beyond Skills: Wellbeing, Inclusion, and Co-Creation in New Work and Study

The future of work and learning extends far beyond technical or economic concerns: it deeply involves the holistic dimension of the individual and calls for reflection on the quality of the contexts in which knowledge, skills, and identities are formed. The interplay between education, personal development, and wellbeing plays a strategic role in building a work culture grounded in resilient individuals, meaningful relationships, and inclusive communities. In this context, pedagogical and organizational reflection must go beyond skills, embracing active participation, educational co-creation, inclusion, and care for the learning environment.

Wellbeing in academic and professional settings is the focus of the contribution by Daniela Frison and Chiara Funari, *Student Well-Being: supporting well-being skills development for well-being in learning and professional contexts*. The authors explore how university teaching can support the development of the wellbeing skills future teachers need both during their academic journey and later in their professional lives, with particular attention to fostering personal resilience and the ability to cultivate wellbeing skills in their own students.

New Study inherently requires deep collaboration between educators and students—something that may sometimes be perceived as a challenge and, in many contexts, represents a paradigm shift from traditional teaching approaches. The issue of student participation is addressed in the article by Lars Ewald-Schleip, Dennis Schulmeister-Zimolong, Marie Tuchscherer, Manfred Daniel, and Katja Wengler, *New Study: with participation to more learner-centredness*. The authors advocate for a substantial renewal of higher education, envisioning a participatory model in which students, as co-creators of their own learning, actively contribute to the design of their learning paths. In its exploratory phase, the research proposes a framework aimed at fostering autonomy, motivation, and social connection.

Several contributions included in the *Practices / Considerations* section further develop this conceptual framework, highlighting the central role of wellbeing, sensory and emotional development, inclusive environmental design, and the communal dimension of education. Although diverse in approach and focus, these studies share a common vision of education as an integrated space for human growth and social transformation.

In the case study *The Montessori approach to sensory development in children with autism spectrum disorder: a case study*, Stefano Scippo and Giulia Soriano investigate the effectiveness of the Montessori approach in supporting the sensory development of a five-year-old child with Autism Spectrum Disorder. The use of specific materials and experience-based teaching strategies led to lasting improvements in coordination, motor skills, and attention.

Another form of wellbeing is explored in the work of Christian Compare and Alice Bernardi, *Group interventions with adopted children: experiences from “Say, Do... Play!” working model and operational reflections*, which presents a group-based intervention model for adopted children, involving talking circles, expressive activities, and play. This safe space allows children to revisit and explore their adoption experiences through peer interaction. Feedback from participants and families points to increased emotional resilience and greater awareness of their adoption stories, emphasizing the effectiveness of group work as a tool for psychosocial wellbeing.

The study *Lighting design as a possibility for the design of training and work spaces: a research proposal*, by Paolo Creati, Antonio Cuccaro, and Chiara Gentilozzi, focuses on lighting design for educational and work environments. Framed as a pilot project for the renovation of school and university spaces, it places environmental conditions at the center of pedagogical reflection. The authors propose an experimental model that integrates technology and inclusive approaches, aiming to enhance both accessibility and the quality of the learning experience.

The perception of diversity is innovatively addressed in the contribution *Artificial Intelligence and avatar for the perception and interpretation of class heterogeneity* by Angelo Basta and Marilena di Padova, who present a university-level laboratory experience. The use of artificial intelligence to generate avatars allowed future teachers to explore perceived representations of diversity, encouraging critical reflection on classroom composition and heterogeneity. The initiative fostered the development of new awareness among teacher trainees, with a focus on inclusion and effective management of educational complexity.

Lastly, *Pace e Rivolta. Educazione, coscienza ed emozione nel tempo dei conflitti globali* by Anita Gramigna, as discussed in Boschi's review, emerges as an urgent, timely, and impassioned work. It appears to call for a renewed Education for Peace, stripped of empty rhetoric and grounded instead in commitment and practice, both in everyday life and in educational settings focused on children. This vision of peace education is presented as an immediate necessity, one that requires deep roots and the cultivation of enduring habits.

In sum, this issue of *Form@re* offers a timely and multi-faceted exploration of how research and education can foster flexible, inclusive, sustainable, and attractive learning and working environments. The variety of methodological approaches and the blend of theoretical and empirical perspectives presented here stand as a testament to the richness and necessity of interdisciplinary dialogue. We hope this collection will inspire researchers, practitioners, and policymakers alike to continue reimagining and co-creating a future where work and study are not only sites of productivity, but also vehicles for empowerment, meaning, and social progress.

We thank all contributors and reviewers for the rigor, creativity, and critical spirit they have brought to this issue. We wish you an engaging read.