Editorial
Artificial Intelligence in Schools and University Education: Risks and Opportunities

Michele Corsi*, Pier Giuseppe Rossi*, Lorella Giannandrea*, Giacomo Nalli**

In recent years, there has been a sharp rise in interest in Artificial Intelligence (AI), particularly Generative AI (GenAI) (Farazouli et al., 2023; Moorhouse et al., 2023).

This issue aims to explore how AI can be utilized in learning experiences for students and teachers.

The recent advancements in GenAI promise to revolutionize teaching and assessment practices, introducing new opportunities while also raising concerns about equity (Sandvik et al., 2023), the competence of operators, and the attribution of productions to specific authors (Cotton et al., 2023; Nikolic et al., 2023).

Numerous challenges and perspectives arise on this topic. Two primary, seemingly opposing, viewpoints dominate the discourse:

1. Human-Centric Viewpoint: This perspective claims that AI can never compete with humans and should not replace them. This view is often driven by an unfounded fear rather than logical reasoning, as it involves comparing two fundamentally different entities. Even the term "intelligence" may be misleading and perhaps should be avoided when referring to technologies. Intelligence is a characteristic of humans and does not aptly describe how AI operates.
2. Techno-Optimistic Viewpoint: This approach extols the virtues of AI as if it were a self-sufficient agent capable of independently organizing processes, creating artifacts, solving problems, and generating texts and projects.

Despite their apparent differences, both perspectives share the notion of separating the human world from artificial agents. However, a third way (Rossi et al., 2024) suggests a middle ground based on interaction between the two realms. This approach does not view technologies as either replacements for humans or as autonomous, salvific devices. Instead, it hypothesizes a dialogue

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* Università degli studi di Macerata.
** Middlesex University London.

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that brings together different agents – human and artificial – with equal dignity and distinct logics: analogical and digital (Chiriatti et al., 2024).

Interaction as the Basis for AI Use

Current experiments with GenAI highlight that its use fundamentally involves interactive practices (Giannini, 2023; Pratschke, 2024). Consider ChatGPT, which relies on continuous dialogue between human and artificial agents. The quality of the artificial agent's response depends on the quality of the human agent's question and the subsequent ability of humans to evaluate the response.

Machines do not autonomously construct their outputs; their responses are shaped by human training on vast datasets of human-produced texts and guided by the prompts provided by users. Discussions of AI autonomy often ignore the crucial role of remote human agents who design and interact with artificial agents, focusing solely on the final user interaction.

The challenge lies in extending the interaction between human and artificial agents across all phases – from preparation to usage of AI. For this dialogue to occur, AI's logic must be transparent and comprehensible to the end user, enabling them to actively shape the relationship.

AI, Democracy, and the Common Good

The topic of AI intersects with democracy, control, and individual agency. Many ethical issues surrounding AI stem from how political and economic power centers utilize it. Expanding the concept of the common good could include areas related to information management.

While everyone seemingly has access to information today, the sheer volume can lead to overload, which, paradoxically, becomes a source of misinformation. Viewing AI as a common good implies the availability of transparent and democratic tools for information gathering, decision-making, and creative production.

AI in Education: Challenges and Directions

AI is already embedded, often invisibly, in many objects around us. However, not everyone can use it consciously and critically. This raises the

question: how can we establish a meaningful dialogue between different agents?

For humans, learning to interact with AI involves understanding its processes, crafting effective prompts, and deciding when and how to engage in this dialogue.

In schools, this translates to fostering a critical and informed approach to AI. The challenges for education are manifold:

- Some advocate for excluding AI from classrooms, aiming to focus on humanistic culture. However, this risks leaving students ill-equipped to navigate the surrounding processes, making them dependent on those who design the tools.
- Others believe education can continue along traditional lines, viewing AI as just another tool to fit into old paradigms.

It is essential to provide adequate support for teachers to design and use AI-powered educational tools responsibly and safely (Wang et al., 2021; Zhang, 2023). Additionally, revisiting educational procedures, strategies, and models becomes necessary, as every new technology is both shaped by and shapes the educational environment.

This issue seeks to explore various scenarios where AI is becoming increasingly relevant in education. Key areas of focus include teacher training, AI-supported feedback and assessment, AI's role in higher education, and its integration with other technologies such as virtual and augmented reality. Other contributions examine AI's potential in inclusive learning pathways and the impact of AI tools and applications in education.

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