

1. Lecture introducing a specific didactic activity and its pedagogical rationale.
2. Design and experimentation where teachers plan and implement a classroom activity incorporating AI or digital tools.
3. Survey where participants report on emotional state, engagement, confidence, and perceived feasibility of the designed activity.
4. Focus groups, conducted by school level, aimed at capturing qualitative reflections on challenges, opportunities, and contextual adaptations.

This sequence is repeated across six activities, generating both quantitative data (baseline and follow-up surveys) and qualitative data (focus groups, open responses). At present, only the baseline survey results are available, providing the foundation for the initial insights reported in this paper.

The Initial Questionnaire (2025), administered to 389 Italian teachers at all school levels participating in an action-research project exploring the relationship between AI and learning, reveals similar trends among teachers

The baseline data reveal that while over 70% of teachers already use digital tools, more than half remain uncertain about assessing the reliability of online sources. This gap suggests that the main challenge is not technical proficiency but the cultivation of critical digital literacy. Moreover, although nearly 40% of teachers have experimented with AI tools, many perceive them as double-edged: while they acknowledge their potential for pedagogical innovation, almost half express concerns about passivity, diminished critical thinking, and loss of creativity. Notably, more than 60% of teachers explicitly request structured, continuous, and practical training, signaling the need for systemic investment in professional development.

The open-ended responses clearly indicate that the main difficulty is not technical but relates to the critical ability to evaluate sources: a significant proportion of teachers acknowledge not having sufficient tools to guide students in this field.

These results point to a critical gap: while digital access is widespread, the ability to engage critically with sources and AI-generated content remains fragile. Teachers' open comments illustrate this: "Students know how to use search engines, but not how to identify trustworthy sources". This reflects international concerns that AI literacy must include not only technical competence but also critical, ethical, and epistemological dimensions (Holmes, Bialik & Fadel, 2019; Selwyn, 2022).

Risks of Misinformation and Perceptions of AI

The overabundance of online information makes it difficult to discern the reliability of content. Selwyn (2022) refers to information overload and the risk of cognitive dependence on platforms. Generative AI amplifies this issue: it can produce texts that are plausible but not always accurate, thus risking the consolidation of false beliefs (Holmberg & Cukurova, 2022).

The data reveal a multifaceted picture: while most teachers view AI as a teaching opportunity, almost half nonetheless express concerns about the loss of critical thinking and the passive use of technological tools.

This "cautiously positive" profile indicates that teachers are willing to experiment, but request guarantees of pedagogical support and tools to preserve the critical and creative dimension of students.

The analysis confirms that training is the most pressing and widely shared demand: more than 60% of teachers highlight the need for structured pathways. Comments further suggest that such training should not be generic but pedagogical as well as practical, contextualised, and collaborative among peers.

School as a Central Node, but Not Alone

The findings suggest that inclusive digital governance must operate at multiple levels (OECD, 2021): School is at the centre of a broader educational ecosystem that includes families, local authorities, civil society, and the world of work.

Families are irreplaceable partners. Epstein (2018) demonstrates how school success is closely correlated with parental involvement. The questionnaires confirm this awareness: «Family support is decisive for ensuring continuity in the critical use of technologies». Many teachers stress that the lack of digital education within households makes schoolwork more difficult.

Municipalities play a fundamental role in ensuring infrastructures, cultural spaces, and educational services. The National Strategy for Digital Skills (MIUR, 2022) highlights the importance of the local level in reducing territorial disparities.

The third sector and associations offer projects and pathways of active citizenship that enrich the school experience (INDIRE, 2021).

From this perspective, school is a common good: a democratic stronghold where knowledge, cultures, and generations intersect (UNESCO, 2021b).

The findings point to the necessity of governance frameworks that are multi-level and inclusive. At the national level, clear policies and funding are required to ensure equitable access. At the local level, municipalities should provide infrastructures and foster networks of innovation. At the school-community level, families and civil society must be engaged to co-design educational pathways. In practice, inclusive governance means that AI is not simply adopted as a technical solution but embedded in pedagogical strategies that respect human agency and equity. Teachers' feedback confirms this: they are open to experimentation with AI, but demand training and institutional support to sustain meaningful integration.

Laurillard (2012) emphasises that innovation cannot be imposed top-down: it must be co-constructed through continuous dialogue between schools and communities. Teachers confirm this view: «If we were more connected with the municipality and associations, we could carry out stronger and more sustainable projects».

Operational recommendations

Develop critical digital competences UNESCO (2023) states that “the ability to distinguish what is generated by humans from what is generated by AI is a new key competence.” The OECD (2019) links social resilience to the ability to select and interpret information. The questionnaires reveal a clear fact: many teachers do not feel adequately prepared to work with OECD and UNESCO sources together with their students.

1. Train teachers as transformative intellectuals Laurillard (2012) defines teachers as designers of learning environments. Selwyn (2022) emphasises the political dimension of digital education. More than 60% of teachers requested structured, continuous, and practical training. Not one-off courses, but integrated and shared pathways.
2. Promote territorial networks of educational innovation UNESCO (2021b) affirms that learning is “a collective process, in which the educational community contributes in a plural way.” INDIRE (2021) shows that schools working in networks are more inclusive and innovative. From the questionnaires: “I feel the need to share good practices with colleagues from other schools in the area.”
3. Ensure equity of access to technologies OECD (2021) warns that “the lack of equitable access risks exacerbating educational inequalities.” The Italian National Strategy for Digital Skills (MIUR, 2022) stresses the need to bridge digital divides.
4. Foster pluralism, creativity, and ethical responsibility Selwyn (2022) warns that AI may lead to “algorithmic reproduction.” UNESCO (2021a) recalls ethical principles to ensure that “human autonomy remains at the centre.”

International Comparisons

The Italian case resonates with international experiences, where AI in education is seen as promising but requires robust governance and teacher empowerment:

- Finland: The National AI Strategy (2017) explicitly integrates teacher training as a core element of digital transformation. Research shows that Finnish schools prioritise critical literacy and ethics in AI curricula

(Rintala & Nokelainen, 2020).

- Singapore: The Smart Nation initiative introduces AI tools in schools through carefully monitored pilot programmes. Emphasis is placed on teacher readiness and continuous evaluation of impact (Tan & Koh, 2022).
- Estonia: With one of the most advanced digital governance models, Estonia ensures equitable access to devices, platforms, and training, reducing digital divides and promoting innovation across all school levels (Kampylis et al., 2019).
- OECD reports underline that countries combining policy clarity, local implementation, and teacher agency achieve more sustainable results in digital transformation (OECD, 2021).

These cases demonstrate that governance for AI in education cannot be top-down: it must be co-constructed with educators and communities, ensuring that digital innovation is anchored in pedagogical value and social equity.

CONCLUSION

The role of school in the digital society is crucial: it must become a space of critical citizenship, a stronghold of democracy, and a laboratory of creativity. Yet, it cannot achieve this alone. A community with vision is needed to accompany and sustain the change.

AI and digital technologies should not be passively endured but governed at the territorial level through an inclusive, multi-level, and participatory vision that places people, communities, and territories at the centre.

In this way, school can truly become a common good, capable of generating the future and guiding society towards an ethical and solidarity-based use of innovation.

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