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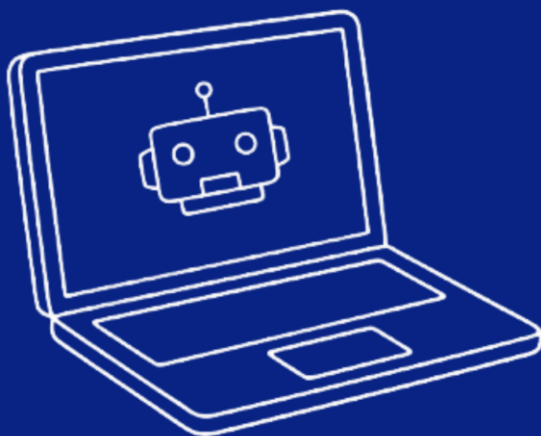
de l'IA

et du Numérique

REPORT

No more hiding

Putting AI to work for Education



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Executive Summary

The emergence of generative artificial intelligence (AI) places the education system – here, we focus on primary and secondary education – in a paradoxical situation: its use by students outside the classroom is widespread; its transformative potential is now well documented; teachers perceive its potential and, in some cases, are already making use of it; yet these uses most often remain concealed and unacknowledged. General-purpose generative AI models have become a genuine blind spot within the education system. At the same time, AI tools specifically designed for education are gradually making their way into the classroom. Over the past years, the Ministry of National Education has taken initiatives to support, regulate, and provide training for both teachers and students. Despite these efforts, the home stretch of these policies has yet to be completed: the proportion of trained teachers in France remains particularly low compared with other European countries; AI tools are not sufficiently integrated into teaching practices; evaluation of these tools' effectiveness remains inadequate; and the sharing of good practices could be further implemented and systematised.

Since the beginning of the year, many scientific publications highlighted that when placed at the service of teachers, AI-powered applications can free up time, improve lessons, enrich assessment practices and extend interactions with students. With an education system already being in need of reform, failing to make use of these opportunities would be a strategic mistake.

On the students' side, the balance of benefits and risks associated with the use of AI models is less clearly documented and more context-dependent, particularly because the risks are real: the risk of superficial learning, the risk associated with models' tendency to exhibit sycophantic biases, and the risk of cognitive disengagement. Some risks also relate directly to the mental health of children and teenagers as they develop.

In this respect, this report examines the prerequisites for a successful and responsible integration of generative AI into primary and secondary education: how can we move beyond the “hidden” use of general-purpose generative AI tools – predominantly non-European and offered without safeguards – and provide students and teachers with high-quality, sovereign tools specifically designed for education? How can students and teachers be trained and informed? How can assessment and funding arrangements be adapted to overcome silos, all while protecting students' cognitive, social, and emotional development in light of the documented risks associated with these tools?

The question is no longer whether AI has a place in education – it is already there – but rather how to stop hiding by ensuring the quality of what it delivers. This requires a full engagement within the education system, and to initiate the changes and investments necessary to address this new reality.

The deployment of these technologies requires rethinking teaching methods so as to combine “teaching with AI” and “teaching without AI.” **This principle of a dual approach should serve as a guiding principle for the evolution of curricula and teaching practices in secondary education.** It means, on the one hand, ensuring that education with AI relies on tools developed specifically for education, tested and deployed by trained teachers who remain in control of the pedagogical

architecture of learning activities. On the other hand, it requires dedicated AI-free periods of time, enabling students to consolidate the acquired fundamental knowledge, preserve core cognitive abilities as well as their capacity to keep learning without having to rely on AI.

This report draws on two scientific literature reviews – one conducted without AI, the other with AI (see *explanations in the appendices*) – as well as nearly 50 hearings involving teachers, researchers, national institutions, public and private actors in the education system, EdTech players, and other representatives.

It sets out the main findings regarding the education system's current position in relation to AI (Part I), establishes a set of overarching action guidelines (Part II), and puts forward operational recommendations (Part III).

The first part analyses the actual place AI occupies among students and teachers, and in the classroom. It provides a status report while assessing the risk-benefit's balance of AI tools. The first part also highlights the institutional and structural opportunities and barriers affecting the role of educational digital tools in the French primary and secondary education system.

The second part of the report introduces a set of new action guidelines aimed at ensuring the effective and responsible integration of AI within the French education system.

Finally, Part III outlines operational guidelines to implement these principles. It puts forward **eleven recommendations**, each broken down into several concrete actions:

- Establish a national program to train teachers at and with AI;
- Implement an AI education program starting in primary school;
- Adapt pedagogical and assessment methods;
- Address mental health issues and cognitive risks related to exposure to generative AI;
- Organise a conference on age-related safeguards and restrictions to define an acceptable level of exposure to AI;
- Co-develop a charter governing the use of AI in schools;
- Promote "Socratic"¹ applications that guide students through questioning, by creating a national certification process;
- Establish a principle of systematic evaluation of the AI solutions to which students are exposed;
- Create a "national kiosk" of sovereign AI solutions for teachers;
- Encourage experimentation with AI by schools and by teachers in their classrooms;
- Clarify and secure the funding of AI tools in education to avoid institutional deadlock.

This report calls for a pragmatic approach in which AI complements human action without replacing it – training and preserving the cognitive development, critical thinking, and intellectual autonomy of both students and teachers, while upholding the values of equity, inclusion, and digital sovereignty.

¹ Socratic learning refers to a "strategy based on questioning, aimed at stimulating learners' critical thinking by bringing them to recognise what they implicitly know, and then to articulate and assess it. This strategy places the learner at the centre of the learning process. Socratic dialogue is particularly effective in supporting conceptual learning through guided questions and analogies designed to stimulate the learner's interest, whether they are a novice or an expert. Through its inductive logic, Socratic dialogue is particularly conducive to the development of metacognitive knowledge." Wikipédia. Available at : [Dialogue socratique](#). Accessed on June 2nd, 2026.

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