# Teaching in an AI Moment: Questions Ontario Educators Are Asking

## Introduction

Predictions about AI and its futures are never certain. Be cautious of uncritically accepting predictions from anyone claiming clairvoyance on the issue. That is why we need an ongoing conversation on these issues. We have to collectively shape the uncertain futures together. This work has already begun—In staff rooms and classrooms alike, educators are asking: What does this mean for learning? For workload? For equity? For our students who already struggle to think critically about the information they consume?

These are important questions, and to propel this discourse, here are two perspectives from two panellists at OSSTF's Beyond the Code: Navigating the Role of Artificial Intelligence in Education conference which took place November 14-15, 2025.

These questions are in urgent need of engagement; they are not theoretical musings. And they are being shaped by the real experiences of teachers who are navigating AI with limited guidance and uneven system-wide support.

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Here are their perspectives:

## Q & A

### 1. What do you see as the biggest opportunity and the biggest risk of using AI in education within the next three to five years?

***Sunaina***

AI's biggest opportunity is the return of something educators never have enough of—time. When AI handles administrative tasks, such as differentiating text for students working at different reading levels, generating worksheets to accompany a video, or converting text to audio to support accommodations, educators can focus on what only humans can do: build relationships, notice emotional cues, and create meaningful learning experiences (Holmes et al., 2019; Zawacki-Richter et al., 2019). AI can also support inclusion by meeting learners at different

readiness levels through translation, scaffolding, and multimodal access (Southworth et al., 2023).

The biggest risk is uncritical use. Without leadership providing clear guidelines, modelling how AI can be used as a thinking tool, and investing in professional learning on how to design assessments in an AI-rich era, AI becomes a shortcut rather than a support. Many educators currently describe this absence of coordinated guidance as an unregulated and fragmented landscape, marked by uncertainty, inconsistency, and uneven practices across schools and systems (Kumar & Sharma, 2025). In this climate, educators are left to navigate this terrain independently, leading some to avoid AI altogether while others observe students relying on it without fully understanding its limitations or ethical implications (Kasneci et al., 2023; UNESCO, 2023).

***Rahul***

When examining the trajectory of artificial intelligence in education over the next three to five years, its impact manifests through multiple dimensions. At various junctures, AI functions as a transformative force that fundamentally reshapes pedagogical practices (Zawacki-Richter et al., 2019), a supportive tool that amplifies existing educational strengths, and a disruptive presence that challenges established educational paradigms (Selwyn, 2019).

The primary opportunity lies in cultivating graduates who possess dual competencies: the ability to leverage AI as an intellectual partner and the capacity to engage in rigorous independent thinking. Educational institutions must develop learners who can harness AI to augment their capabilities while maintaining the ability to reason, write, and evaluate quality through their own cognitive faculties. The development of responsible AI literacy emerges as an essential professional competency for educators (DeHart et al., 2025).

The opportunities are substantial. AI technologies can enhance educational productivity, establish higher baseline achievements for struggling learners, and stimulate intellectual curiosity by providing students with rapid access to concepts for deeper exploration (Holmes et al., 2019). This aligns with industry expectations, as organizations increasingly seek graduates who demonstrate AI readiness and can integrate these tools into professional practice (Selingo, 2025).

The risks demand equal attention. Educational systems face the prospect of producing students who possess operational knowledge of AI tools but lack the critical judgment to evaluate output validity and relevance. Excessive dependence on AI, particularly during the initial stages of ideation, may atrophy students' capacity for independent idea generation (Kasneci et al., 2023). This risk intensifies when AI transitions from serving as scaffolding to becoming a cognitive crutch.

Assessment integrity in secondary and postsecondary sectors presents additional challenges. While restricting AI use during in-person examinations remains feasible, online assessment contexts present significant compliance difficulties (Estaiteyeh & Kumar, 2025). Educators continue to grapple with redefining fairness in this transformed landscape, with some experiencing legitimate resistance as their professional judgment and expertise face new challenges.

The implementation of AI in education demands careful, deliberate, and cautious integration. Seemingly, AI possesses the potential to elevate learning quality; this outcome depends upon institutions maintaining judgment, reasoning, and independent thought as non-negotiable educational outcomes. The ultimate measure of success lies in whether students

develop the capacity to think both with AI and without it: a duality that will define educational excellence in the coming years.

**2. What ethical concerns, especially around critical thinking, should we be paying the most attention to right now?**

***Sunaina***

One of the most urgent ethical concerns is the illusion of reliability. AI speaks with confidence even when it is inaccurate, biased, or incomplete, and students often interpret that confidence as truth (Foroughi et al., 2024; Kasneci et al., 2023). In classrooms, today's teens regularly challenge us with questions like "Why are we doing this?" "Why does this matter?" or "Why should I believe that?" demonstrating strong critical thinking when information comes from a human source. Yet this criticality is not consistently transferring to AI-generated output (Theophilou et al., 2023). Increasingly, students are accepting AI's responses at face value, even though they rarely do this with teacher-generated information.

Another concern is the erosion of transparency. When students use AI without acknowledging it, educators lose visibility into how ideas were formed. This blurs authorship and undermines the ability to assess learning authentically (UNESCO, 2023; Cotton et al., 2024). Clear conversations about disclosure, ethical use, and academic integrity are no longer optional; they are foundational for maintaining trust, transparency, and meaningful assessment in an AI-mediated environment (Peters, 2023).

The goal is not to ban AI or fear it. The goal is to make students active, critical participants in the process rather than passive recipients of AI-generated output.

***Rahul***

The ethical concern that demands immediate attention centres on artificial intelligence's impact on students' capacity for independent thought. Educational institutions must ensure that AI strengthens rather than diminishes critical thinking capabilities. David Krakauer's distinction between cognitive artifacts proves particularly illuminating in this context. Krakauer (2019) delineates two categories of cognitive tools: complementary artifacts that enhance cognitive abilities without creating dependency (such as pencils or paper maps), and competitive artifacts that progressively supplant human capabilities (exemplified by GPS systems that inhibit the formation of mental spatial representations).

Artificial intelligence can function as a competitive artifact when students employ it as a substitute for intellectual engagement. When the primary interaction begins with "Do this assignment for me," the technology assumes responsibility for core cognitive work and acts as a competitive cognitive artifact. Conversely, AI can serve a complementary function when students approach it with queries such as "Here are my ideas. What am I missing, and how would you critique it? What next steps are reasonable to tackle the problem?" In this interaction, the tool facilitates metacognitive reflection rather than replacing cognitive processes (Lodge et al., 2023).

Consider the analogy of learning to ride a bicycle. If students use AI like an electric tricycle, they reach the destination but without learning to balance or exerting effort. But with proper educator support, using AI would be like giving students a bicycle with training wheels:

AI support is there, but students still must pedal (i.e., put in the effort) and learn the skills. The real test is whether, when the training wheels come off, they can ride on their own.

The ethical challenge, therefore, resides not in AI's presence but in patterns of utilization. Critical questions emerge: Are students outsourcing cognitive processes in ways that constitute academic dishonesty while fostering intellectual dependency? Or are they developing new forms of literacy that require structured pedagogical guidance (Aiken & Epstein, 2024)?

The resolution depends upon intentional classroom design and pedagogical decision-making. Given the impossibility of monitoring AI use outside classroom contexts, ethical integration must occur within instructional spaces. This necessitates teaching students transparent and reflective AI engagement strategies. Transparency should become a normative practice, as prohibition frequently drives behaviour underground while undermining authentic learning opportunities (Cotton et al., 2024).

A broader concern involves persistent educator skepticism toward AI technologies, which complicates responsible integration efforts. Educational communities require a shared understanding of ethical AI use parameters before effectively transmitting these principles to students (Christina & Panagiotidis, 2024).

The fundamental risk emerges when AI shifts from serving as a partner in thought to becoming a replacement for thought. This distinction will determine whether these technologies enhance or diminish educational outcomes.

**3. How do we ensure AI truly benefits all students, especially those from underserved or underrepresented communities?**

***Sunaina***

AI can widen gaps just as easily as it can close them. Equity depends on consistent access to devices, reliable internet connectivity, and system-supported tools rather than educator improvisation (UNESCO, 2023). The work of building students' critical literacy and teaching them how to *think with* AI, rather than simply *use* it, must be a system-wide commitment grounded in policy, leadership, and resourcing (Zawacki-Richter et al., 2019; Kasneci et al., 2023). If responsibility falls solely to individual schools, students in well-resourced communities will benefit most, further deepening the inequities education systems are already struggling to address (Redecker, 2017).

Just as importantly, AI has the potential to support student agency and empowerment when equity is intentionally designed into its use. Whether AI is used to translate a text into an English Language Learner's first language, convert content into audio for a low-vision student, or generate multiple entry points to a task so students can select a pathway that best supports their learning, inclusion cannot be an afterthought (UNESCO, 2023). Equity must be embedded from the outset through culturally responsive design, educator training, and the meaningful inclusion of student voice in decision-making processes (Paris & Alim, 2017).

***Rahul***

The history of educational technology demonstrates a consistent pattern: each innovative tool initially worsens educational inequalities before potentially ameliorating them. This phenomenon, documented across decades of technological integration, suggests no known

exceptions to this pattern (Reich, 2020). Access, familiarity, and confidence accumulate disproportionately among students and educators with greater socioeconomic resources, and artificial intelligence appears poised to perpetuate this established trajectory. The digital divide will likely persist and, in certain contexts, deepen (Hammerschmidt et al., 2025).

The fundamental question, therefore, centres not on eliminating inequality through AI implementation but rather on preventing existing gaps from widening and becoming entrenched. Three practical interventions emerge as essential.

First, educators require structured professional development (PD) before student implementation begins. Students at postsecondary levels currently engage with AI tools extensively, though with markedly uneven sophistication and effectiveness. Similar patterns are expected across secondary schools, though data on this topic are scarce. When educators possess stronger AI literacy than their students, they can guide rather than merely monitor usage patterns. This proactive approach prevents situations in which only confident or privileged students derive meaningful benefits from these technologies.

Second, educational systems must ensure universal access to at least one baseline AI platform. Public schools seeking to mitigate disparities must establish a common technological foundation available to every learner (Resta et al., 2018). Without this shared baseline, variations in subscription services, specialized plugins, and model capabilities will amplify existing educational inequalities. Nevertheless, families with greater resources will inevitably purchase subscriptions to multiple, specialized, and more advanced models—a reality that no policy intervention can fully address.

Third, pedagogical approaches require a fundamental redesign to position AI as scaffolding rather than a shortcut. Students with robust home support systems or private tutoring already demonstrate sophisticated AI utilization. Students lacking these advantages often experience limited opportunities or engage with AI sporadically and ineffectively, if at all. Assignments that emphasize process documentation and incorporate iterative instructor feedback can narrow achievement gaps by relocating the learning process within classroom boundaries. However, this approach remains viable only when class sizes permit meaningful individualized instruction.

Despite these interventions, resource disparities will persist. Artificial intelligence will almost certainly benefit students who are already privileged. The objective must focus on preventing gap expansion to the extent that it fundamentally alters educational trajectories and life outcomes (Holmes & Miao, 2023).

Perhaps the most addressable challenge lies not in unequal access to AI technologies but in fostering an equitable understanding of AI capabilities, limitations, and effective utilization strategies. This cognitive equity may prove more attainable and ultimately more transformative than purely technological access.

**4. Where should the role of human education workers remain central, even as AI develops further?**

***Sunaina***

Relationships, judgment, and modelling remain the core of teaching. Students learn because they feel seen, supported, and understood, not simply because content is delivered efficiently (Noddings, 2012; Hattie, 2009). AI can generate feedback or provide options, but it cannot read the room, recognize when a student is anxious, or adjust a lesson in response to the emotional

climate of a classroom (Holmes et al., 2019; Kasneci et al., 2023). Nor can it fully understand the cultural contexts or lived realities students bring with them into learning spaces (Paris & Alim, 2017).

Human education workers also provide moral and pedagogical reasoning that AI cannot replicate. Educators decide when a tool supports learning and when it compromises it; they interpret behaviour, negotiate conflict, mentor students through setbacks, and model what integrity, perseverance, and collaboration look like in real time (Biesta, 2010; Darling-Hammond, 2017). These moments of confusion, struggle, and breakthrough shape students' identities as learners, and they depend on the relational presence and professional judgment of a human being (Beijaard et al., 2004).

AI may assist with tasks, but the heart of schooling is relational, ethical, and deeply human. Those responsibilities cannot be automated (UNESCO, 2023).

***Rahul***

Human educators must remain at the centre of teaching and learning. This represents not sentimentality but a structural requirement for equitable education. When teachers become displaced from core learning processes, disparities between highly supported and poorly supported students demonstrably widen. Students with fewer socioeconomic resources depend on their teachers more, not less (Darling-Hammond, 2010). This dependency manifests particularly in early and middle years education, where learning continuity derives from the stability, structure, and care that teachers provide - not from tools, whether books, software, or AI.

Teacher professional judgment remains irreplaceable. While AI can generate information and content, it cannot interpret classroom dynamics, understand contextual nuances, or calibrate instruction for the specific amalgamation of needs, emotional states, cultural backgrounds, and personal histories that students bring to learning environments (Selwyn, 2019). These pedagogical decisions require human sensitivity, cultural competence, and accumulated domain expertise that current AI systems cannot replicate.

A critical concern involves the potential erosion of teacher authority and professional autonomy. If AI systems begin prescribing pacing, assessment protocols, or instructional decisions, educators risk devolving from professionals to mere implementers. This transformation would fundamentally weaken the teaching profession while undermining public trust in educational institutions.

An ethical dimension demands attention. Our data indicate that teachers frequently utilize AI privately for lesson planning, assessment tasks, worksheet generation, and communication, while simultaneously maintaining public stances discouraging student AI use. This disconnect between private practice and public messaging threatens teacher credibility. Students are acutely aware of such inconsistencies. A profession founded on trust cannot sustain itself through the concealed AI utilization. Transparency must become a normative practice. Students deserve clarity regarding when AI contributes to educational processes and the pedagogical rationale for its inclusion. Peters (2023) advocates for such transparency through systematic use of pictographs or logos to indicate AI involvement.

Artificial intelligence can effectively support administrative workload reduction, provide exemplars, and streamline routine tasks without displacing the teacher's central role (Baker & Smith, 2019). The learning relationship, recognition of individual student growth trajectories,

cultivation of critical judgment, and capacity for timely intervention when students encounter difficulties: these remain fundamentally human responsibilities that cannot be delegated to algorithmic systems.

The essential distinction crystallizes thus: AI can generate text, but only teachers can generate trust.

**5. What skills or mindsets do students need to thrive in a world shaped by AI?**

***Sunaina***

Students need critical AI literacy: the ability to interrogate, rather than accept, AI outputs (Ng et al., 2021). This includes asking who created the information, whose perspectives are missing, and how claims can be verified. In turn, this positions students not as passive consumers of information but as active participants in their own learning.

They also need creativity, adaptability, and ethical reasoning, capacities rooted in identity, empathy, and personal responsibility that AI cannot replicate, as they are central to human judgment (Hesse et al., 2015). When students know how to frame problems, evaluate solutions, and make principled decisions, they are better equipped to use AI as a support rather than a substitute.

To build these capacities, we must design learning that foregrounds human judgment: asking students to show drafts, explain choices, articulate their reasoning, and reflect on how AI did, or did not, shape their work (Darling-Hammond, 2020). This approach encourages independence and reflective thinking, allowing students to view AI responses with a discerning perspective (Xu et al., 2025). Ultimately, these metacognitive habits outweigh the value of any polished final product.

In a world where AI can generate almost anything, the value lies not in the final product but in students' capacity to explain how they arrived there and the principles that shaped their decisions.

***Rahul***

Students require both cognitive discipline and adaptive mindsets to navigate AI-integrated educational landscapes effectively. They must cultivate approaches to AI characterized by healthy skepticism, intellectual curiosity, and systematic verification capabilities (Wineburg & McGrew, 2019). This skeptical orientation represents not hostility toward AI technologies but rather the habitual practice of interrogating outputs: "Does this make sense?" and "Why or why not?" Such evaluative habits constitute protective competencies in environments where AI-generated content frequently projects confidence despite factual inaccuracies (Bender et al., 2021).

Along with skepticism, students require growth mindsets that acknowledge future uncertainty (Dweck, 2016). Numerous occupations perceived as stable today face significant transformation, with some facing complete obsolescence. The synthesis of ambition, intellectual humility, and adaptability supersedes mastery of any individual technological tool in importance.

Simultaneously, students must develop robust foundational competencies: written communication, logical reasoning, quantitative literacy, and evaluative judgment. These transferable capacities transcend domain boundaries and maintain their essential nature

regardless of available technological tools. While AI can amplify these skills, it cannot substitute for their fundamental development within learners.

Educators occupy pivotal positions in cultivating these competencies. They must exemplify transparent, reflective, and critical AI engagement practices. Students internalize approaches to AI through observing educator modelling behaviours (Bandura, 1977). When teachers use AI privately while avoiding open discussion of its capabilities and limitations, students receive contradictory messages that undermine learning objectives. Conversely, when educators adopt transparent and critical practices, they establish conditions for students to develop parallel cognitive habits.

The imperative extends beyond technical skill development to encompass metacognitive awareness. Students must understand not merely how to use AI but how to think about AI's role in their intellectual development (Lodge et al., 2024). This metacognitive dimension distinguishes superficial tool usage from genuine intellectual partnership with artificial intelligence.

The principle can be captured as: Students do not need blind trust in AI; they need trained skepticism.

## Conclusion

The perspectives presented here represent two positions within a much broader discourse on AI in education. While these viewpoints emerge from research and experience, they constitute neither definitive answers nor comprehensive solutions. The complexity of AI integration in educational contexts demands multiple perspectives, alternative frameworks, and innovative approaches that extend beyond any individual analysis. Educational communities must actively cultivate diverse theoretical and practical responses to these emerging challenges.

Most critically, student voices must occupy central positions in these deliberations. The decisions we make today about AI in education will fundamentally shape the intellectual, professional, and civic landscapes that students will inhabit. Their perspectives, informed by direct experience with these technologies and unencumbered by institutional inertia, offer essential insights that educator-centred discussions often overlook. Students are not merely recipients of educational innovation but active participants whose agency and understanding must inform policy and practice (Cook-Sather, 2020).

AI represents one development among many in education's evolutionary trajectory. It does not predetermine educational futures nor dictate pedagogical imperatives. Whether AI becomes a transformative tool or a disruptive force will depend upon deliberate, educator-led decisions grounded in principles of equity, ethics, and pedagogical integrity.

This extended dialogue serves as an invitation to sustain and expand these conversations across Ontario and beyond: questioning assumptions, sharing emerging strategies, and ensuring that professional expertise and student perspectives jointly guide our path forward. Whatever trajectory AI follows in education, the fundamental humanity of educators and students must remain paramount. The measure of our success will not be technological sophistication but rather our capacity to preserve and enhance the human dimensions of learning while thoughtfully integrating tools that serve our collective educational mission.

## References

Aiken, R. M., & Epstein, R. G. (2000). Ethical guidelines for AI in education: Starting a conversation. *International Journal of Artificial Intelligence in Education, 11*, 163–176.

Baker, R. S., & Smith, L. (2019). Artificial intelligence in education: Bringing it all together. In *OECD digital education outlook 2019* (pp. 43–54). OECD Publishing.

Bandura, A. (1977). *Social learning theory*. Prentice Hall.

Beijaard, D., Meijer, P. C., & Verloop, N. (2004). Reconsidering research on teachers' professional identity. *Teaching and Teacher Education, 20*(2), 107–128. https://doi.org/10.1016/j.tate.2003.07.001

Bender, E. M., Gebru, T., McMillan-Major, A., & Shmitchell, S. (2021). On the dangers of stochastic parrots: Can language models be too big? *Proceedings of the 2021 ACM Conference on Fairness, Accountability, and Transparency*, 610–623. https://doi.org/10.1145/3442188.3445922

Biesta, G. (2010). *Good education in an age of measurement: Ethics, politics, democracy*. Paradigm Publishers.

Christina, R., & Panagiotidis, P. (2024). Teachers' attitudes towards AI integration in foreign language learning: Supporting differentiated instruction and flipped classrooms. *European Journal of Education, 7*(2), 88–104. https://doi.org/10.26417/171oob60e

Cook-Sather, A. (2020). Student voice across contexts: Fostering student agency in today's schools. *Theory Into Practice, 59*(2), 182–191. https://doi.org/10.1080/00405841.2019.1705091

Cotton, D. R. E., Cotton, P. A., & Shipway, J. R. (2024). Chatting and cheating: Ensuring academic integrity in the era of ChatGPT. *Innovations in Education and Teaching International, 61*(2), 228–239. https://doi.org/10.1080/14703297.2023.2190148

Darling-Hammond, L. (2017). Teaching for social justice: Resources, relationships, and anti-racist practice. *Multicultural Perspectives, 19*(3), 133–138. https://doi.org/10.1080/15210960.2017.1335039

DeHart, J. D., Abas, S., Mora, R. A., & Pyles, D. G. (2025). *Reimagining literacy in the age of AI: Theory and practice*. Taylor & Francis. https://doi.org/10.1201/9781003510635

Dweck, C. (2016). *Mindset: The new psychology of success*. Ballantine Books.

Estaiteyeh, M., & Kumar, R. (2025, November 4). How AI is challenging the credibility of some online courses. *The Conversation*. https://doi.org/10.64628/AAM.rv597ntsq

Foroughi, B., Iranmanesh, M., Ghobakhloo, M., Senali, M. G., Annamalai, N., Naghmeh-Abbaspour, B., & Rejeb, A. (2025). Determinants of ChatGPT adoption among students in higher education: The moderating effect of trust. *The Electronic Library, 43*(1), 1–21. https://doi.org/10.1108/EL-12-2023-0293

Hammerschmidt, T., Stolz, K., & Posegga, O. (2025). Bridging the gap: Inequalities that divide those who can and cannot create sustainable outcomes with AI. *Behaviour & Information Technology*, 1–30. https://doi.org/10.1080/0144929X.2025.2500451

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge.

Hesse, F., Care, E., Buder, J., Sassenberg, K., & Griffin, P. (2015). A framework for teachable collaborative problem-solving skills. In E. Care & P. Griffin (Eds.), *Assessment and teaching of 21st century skills* (pp. 37–56). Springer. https://doi.org/10.1007/978-94-017-9395-7_2

Holmes, W., Bialik, M., & Fadel, C. (2019). *Artificial intelligence in education: Promises and implications for teaching and learning*. Center for Curriculum Redesign.

Kasneci, E., Sessler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., … & Kasneci, G. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences, 103*, 102274. https://doi.org/10.1016/j.lindif.2023.102274

Krakauer, D. C. (2019). Introduction. In D. Krakauer (Ed.), *Worlds hidden in plain sight* (pp. 1–16). SFI Press.

Kumar R., & Sharma, S**.** (2025). Secondary school teachers' perspectives on GenAI proliferation: Generating advanced insights. *International Journal for Educational Integrity.* 21(7). https://doi.org/10.1007/s40979-025-00180-z

Lodge, J. M., Thompson, K., & Corrin, L. (2023). Mapping out a research agenda for generative artificial intelligence in tertiary education. *Australasian Journal of Educational Technology, 39*(1), 1–8. https://doi.org/10.14742/ajet.8695

Ng, D. T. K., Leung, J. K. L., Chu, K. W. S., & Qiao, M. S. (2021). AI literacy: Definition, teaching, evaluation, and ethical issues. *Proceedings of the Association for Information Science and Technology, 58*(1), 504–509. https://doi.org/10.1002/pra2.487

Noddings, N. (2012). The caring relation in teaching. *Oxford Review of Education, 38*(6), 771–781. https://doi.org/10.1080/03054985.2012.745047

Paris, D., & Alim, H. S. (Eds.). (2017). *Culturally sustaining pedagogies: Teaching and learning for justice in a changing world*. Teachers College Press.

Peters, M. (2023). Logos for transparent use of artificial intelligence. https://mpeters.uqo.ca/en/logos-ia-en-peters-2023/

Redecker, C. (2017). *European framework for the digital competence of educators: DigCompEdu* (JRC107466). Joint Research Centre. http://publications.jrc.ec.europa.eu/repository/handle/JRC107466

Reich, J. (2020). *Failure to disrupt: Why technology alone can't transform education*. Harvard University Press.

Resta, P., Laferrière, T., McLaughlin, R., & Kouraogo, A. (2018). Issues and challenges related to digital equity: An overview. In J. Voogt, G. Knezek, R. Christensen, & K.-W. Lai (Eds.), *Second handbook of information technology in primary and secondary education* (pp. 987–1004). Springer.

Selingo, J. (2025). *The AI-ready graduate: Harnessing human creativity for the next era of work*. https://jeffselingo.com/resources/the-state-of-higher-education-2025

Selwyn, N. (2019). *Should robots replace teachers? AI and the future of education*. Polity Press.

Southworth, J., Migliaccio, K., Glover, J., Reed, D., McCarty, C., Brendemuhl, J., & Thomas, A. (2023). Developing a model for AI across the curriculum: Transforming the higher education landscape via innovation in AI literacy. *Computers & Education: Artificial Intelligence, 4*, 100127. https://doi.org/10.1016/j.caeai.2023.100127

Theophilou, E., Lomonaco, F., Donabauer, G., Ognibene, D., Sánchez-Reina, R. J., & Hernàndez-Leo, D. (2023). AI and narrative scripts to educate adolescents about social media algorithms: Insights about AI overdependence, trust and athewareness. In I. Jivet, O. Viberg, M. Perifanou, P. J. Muñoz-Merino, & T. Papathoma (Eds.), *Responsive and Sustainable Educational Futures* (Vol. 14200, pp. 415–429). Springer. https://doi.org/10.1007/978-3-031-42682-7_28

UNESCO. (2023). *Guidance for generative AI in education and research*. https://unesdoc.unesco.org/ark:/48223/pf0000386693

Wineburg, S., & McGrew, S. (2019). Lateral reading and the nature of expertise: Reading less and learning more when evaluating digital information. *Teachers College Record, 121*(11), 1–40. https://doi.org/10.1177/016146811912101102

Xu, X., Qiao, L., Cheng, N., Liu, H., & Zhao, W. (2025). Enhancing self-regulated learning and learning experience in generative AI environments: The critical role of metacognitive support. *British Journal of Educational Technology, 56*(5), 1842–1863. https://doi.org/10.1111/bjet.13599

Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education: Where are the educators? *International Journal of Educational Technology in Higher Education, 16*(1), 1–27.

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