

How can teachers integrate AI within schools? Five steps to follow

AI: The elephant in our schools

Artificial intelligence (AI) technologies, such as ChatGPT, have burst onto the scene and present formidable challenges to classroom-based assessment. Secondary students can now generate essays in seconds by typing in simple prompts to chatbots. It is inevitable that students will be using these technologies to help them complete school assignments. Educators need to adapt their approach to teaching and assessment in order to integrate AI in a manner that is both ethically and educationally defensible. To do otherwise would be to ignore the elephant in our schools.

From low- to higher-order thinking: A five-step strategy

A five-step strategy for teachers to meaningfully integrate AI into their classroom begins with helping students understand the limitations of AI technologies. It is important for students and teachers to know what AI cannot do in order to emphasize its potential uses. For example, far from being a panacea that miraculously generates A+ essays, AI applications are prone to factual errors, with writing that often suggests a “surface” level of understanding. AI is useful to itemize and organize facts or arguments, typically lower-level cognitive activities. The teacher plays a critical role in helping a student produce a final essay (or other product) that reflects higher-order thinking.

5 Steps to Meaningful Integration of AI in Teaching, Learning, and Assessment

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| <p>1. Know the limits and possible uses of AI and be explicit about the role of AI in assignments.</p> | <p>This requires a frank discussion with students on what portion, if any, of the final essay or product can be AI generated. Although the check software is not 100 percent accurate, new versions of GPT are being developed to help teachers make this determination.</p> |
| <p>2. Collaboratively establish assignment criteria with students that explicitly acknowledges the integration of AI technologies in the grading criteria.</p> | <p>For example, one criterion on an analytic rubric could have the highest descriptor requiring students to provide four iterations from the original to the final product that gradually demonstrate higher-order thinking.</p> |
| <p>3. Engage in feedback cycles that require peer, self, and teacher feedback.</p> | <p>Students can be one another’s “fact-checkers” for AI-generated text. Fact-checking undoubtedly improves students’ research literacy skills, an important outcome in a world where social media and other popular media sources can be inaccurate or entirely misleading. Additional feedback cycles could focus on argument structure, synthesis of ideas, and critical/creative/higher-order connections.</p> |
| <p>4. Supplement traditional essay assignments with “Other Evidence.”</p> | <p>This step aligns with a UbD/Backward Design approach, widely used in Canadian classrooms. Students could present their traditional essay in class via a presentation, video, or other artistic avenue. The use of alternative assessments provides teachers with more reliable and valid information about student learning, serving as an additional verification of students’ understandings of the topic.</p> |
| <p>5. Use both traditional and authentic assessments as an opportunity to further develop students’ application of knowledge across contexts.</p> | <p>Authentic assessments invite students to establish real-world connections and build community relationships in their learning. Moving assessment into authentic and community spaces reduces reliance on AI.</p> |

The agentic student

These five strategies outlined above align with best practice literature and provide teachers with general guidelines to help direct their classroom instruction. Although AI may supplement some of the foundational aspects of an assignment or task, these strategies support learning and assessment processes illustrative of higher-order and critical thinking. Taken together, these strategies not only make clear the role of AI in teaching, learning, and assessment, but also encourage students to take more agency in the learning and assessment process.

For online resources and references please visit:
www.edcan.ca/facts-on-education

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