



AI readiness guide

12 practical steps for schools to keep
student data protected

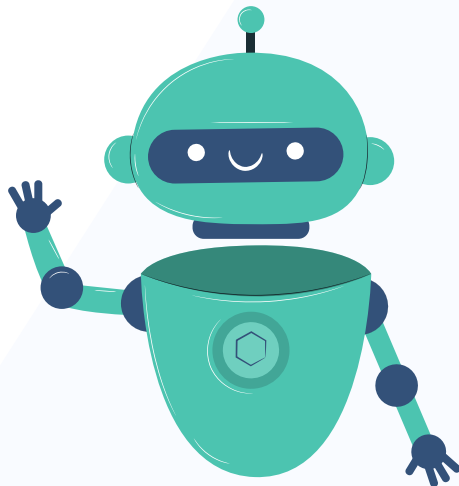


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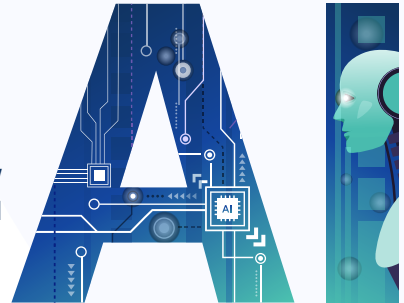
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Considerations for Using AI in Schools

Practical tips

What is Artificial Intelligence?

Artificial intelligence or AI, refers to computers or software that are able to reason, learn and resolve problems of various complexity levels which historically only humans could do. There are a few types of AI but in this blog post we will be exploring Limited Memory AI, a type of AI that uses past events and data to predict and generate new content. In this category we find In this category we find generative AI such as Chat Generative Pre-trained Transformer or ChatGPT, and virtual assistants and chatbots such as Siri, Google Home and Alexa.



UNESCO has defined generative AI in its recent guidance document as “an artificial intelligence (AI) technology that automatically generates content in response to prompts written in natural-language conversational interfaces. Rather than simply curating existing web pages, by drawing on existing content, GenAI actually produces new content.”

The Office of the Privacy Commissioner of Canada, has also defined generative AI in a manner that is easy to understand “...Generative AI is a subset of machine learning in which systems are trained on massive information sets – often including personal information – to generate content such as text, computer code, images, video, or audio in response to a user prompt. This content is probabilistic, and may vary even in response to multiple uses of the same or similar prompts...”

Common Uses of AI in Schools

AI has come really handy for many industries, including Education, and it seems that it will be more prevalent in 2024. A recent report by the Department of Education in the UK found that “...By November 2023, 42% of primary and secondary teachers had used GenAI in their role (an increase from 17% in April). Pupils and students may be using GenAI more than their teachers. 74% percent of online 16-24 year olds in the UK have used a GenAI tool. Evidence on GenAI use in an educational context shows figures ranging from 14% to 67% of students having used GenAI for schoolwork and studies...”

1.Excerpt from the “Guidance for generative AI in education and research” by UNESCO

2.Excerpt from the “Principles for responsible, trustworthy and privacy-protective generative AI technologies” by the Office of the Privacy Commissioner of Canada

3. Excerpt from the “Generative AI in education Educator and expert views January 2024” by The Open Innovation Team, Department for Education.

AI tools help educators understand where every student is in their learning process, and address weaknesses and harness strengths through personalised learning plans. AI adapts as it interacts with the student, not at the end after a right or wrong answer review, but at every step ensuring the relevance of every assignment.

Schools around the world are using AI to automate tasks such as grading assignments and correct grammar, for course development, personalised learning paths, tailored study plans, and to empower teachers with easy access to information, just to name a few uses.

Concerns on the Use of AI

One concern behind the use of AI-powered systems in education is that it could enable students to cheat when completing coursework and homework by using content generated by the AI as their own (plagiarism), decreasing their ability to truly learn. There is also a concern about the conversations that may take place between the AI and students for lack of age-appropriate boundaries (the AI is unable to assert it is interacting with children).

Another concern on the use of AI is its lack of moral compass, as without the ability to distinguish right from wrong, it may harm individuals through discriminatory or unjust decisions. This could be possible when there is no human intervention or review of any kind in AI processes, when there is a lack of transparency or clarity as to how the AI makes decisions and inappropriate results are avoided.

In terms of privacy, some of the concerns around the use of AI include:

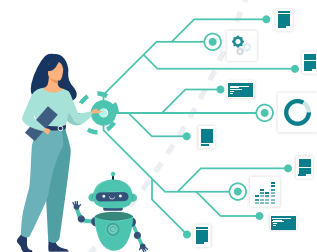
- **Lack of transparency**

AI algorithms are difficult to understand so it may not be clear how they arrive at their conclusions, or the bases for their decision making. Therefore, the school will not be able to explain it to individuals (eg. in the privacy notice), or to regulators resulting in decreased public trust in the organisation's means to process personal data.



- **Data minimisation out of the window**

The use of AI-powered systems implies processing vast amounts of information to allow the AI to learn and improve accuracy. This may not be inline with the data minimisation principle present in almost every data protection legislation of the world. The data minimisation principle requires organisations to limit the amount of personal data that is collected to that which is strictly necessary to achieve the purpose(s) of processing.



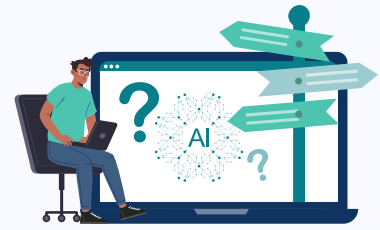
- **Diminished data protection rights**

Individual's limited knowledge on what is done with the data once collected or processed by the AI, may translate in their inability to control it, including exercising the right to access, object to the processing, request deletion of their data, etc.



- **Unauthorised processing**

AI is able to process conversations and realise a person's location, preferences, and habits without students' knowledge, often used for algorithmic development (a different, unrelated purpose). Users in a school setting are generally children and through the use of AI their data may be exposed to unexpected processing including profiling.



- **Risk of bias and discrimination**

AI's understanding is limited to the information it has been trained on, if this information is not complete or accurate its decision making may be compromised resulting in biased or discriminatory outcomes.



- **Data security**

AI-powered applications are targeted by cybercriminals looking to exploit system weaknesses to get a hold of the personal data these applications store. AI's presence in classrooms may pose a risk of unauthorised dissemination or disclosure if hackers get a hold of the data.



What is the World Doing About It?

AI legislation

The European Union, the United Kingdom, the United States, China, and many other countries are currently reviewing and enacting legislation to ensure algorithmic transparency and accountability so that individuals do not fall victim to unregulated AIs.

These soon to be laws seek to protect individuals from automated decision-making with a potential to cause real harm or devastated consequences due to improper configuration or review. Some laws target the foundations and look to establish a standard for developing and using generative AI, others look for transparency so that data subjects can make an informed decision on whether or not to allow the automated processing. In every case a data protection impact assessment, or similar risk assessment, seems to be required due to the vast amount of data that AI-powered systems need in order to perform properly.

Regulatory guidance

Many data protection and privacy regulators around the world have already issued guidance on AI implementation so that it stays within the boundaries of the law. Regulatory guidance is a good starting point in your compliance efforts as it denotes the interpretation of the law by the regulator that has the authority to open an investigation on a school's privacy practices.

Enforcement

Data protection regulators and courts all over the world are investigating and ruling against excessive or unlawful processing of personal data through AI technologies. Here are two examples of recent decisions relevant to schools:

- **Lack of Notice**

In the Province of Quebec, Canada, a school with the help of an external firm developed an algorithm to target students in grade 6 at high risk of dropping out over the next three years. After the investigation, the data protection and privacy regulator (CAI) found that the personal data of all students at issue was shared with the assisting firm through an agreement as required by law, and that the purpose for the processing was consistent with one of the school's objectives "to ensure academic success"; However, the school failed to inform parents of students that predictive indicators of school dropout were created about their child as part of the project.

- **Discrimination**

A court in New York, United States, ordered a tutoring company to pay \$365,000 to tutor victims. The company had programmed their application software powered by AI to automatically reject female applicants over the age of 55 and male applicants over the age of 60 which constitutes discrimination based on age and gender.

12 Practical Recommendations for Schools Using AI

1. Identify all service providers your school uses, and determine which ones process personal data using an AI-powered application.
2. Assess whether your AI is ethical, in other words, that it does not discriminate or reinforce bias, and is age-appropriate.
3. Carry out an in-depth [Vendor Assessment](#) for every AI-powered tool. 9ine's Vendor Management Platform has many AI providers pre-assessed, reducing the overhead on schools to have to undertake the regulatory assessments themselves. You can get started with our [freemium account here](#).
4. Complete a Data Protection Impact Assessment either using a template, or the 9ine DPIA feature within the [9ine Privacy App](#). An outcome of the DPIA will be an AI Policy which sets the compass on how your school will evaluate and use AI technologies in school. A template to be used/in use, to identify risks (including every concern on the use of AI) and relevant mitigating measures. You can get started with our [freemium account here](#).
5. Develop AI policies and procedures that:
 - a. ensure only personal data that is strictly needed will be processed using the AI, and that the AI is not provided with/or allowed to collect pupil data that is unnecessary to achieve educational purposes.
 - b. ensure that AI tools are not linked in any way to the school management information system (MIS) as it holds too much data that can easily be found as excessive processing.
 - c. ensure the purpose(s) for processing are clearly identified from the start.

- d. ensure you only use the personal data for a new purpose if (1) compatible with your original purpose, (2) you obtain consent, or (3) you have a clear legal obligation to justify this new processing.
 - e. outline how AI tools should be evaluated and implemented;
 - f. outline acceptable uses of AI tools (eg. to create materials for lessons, to come up with a customised learning path, to grade students' assignments, etc.), and also unacceptable uses (eg. to replace teachers, to do students' homework for them, etc.);
 - g. ensure that all materials are reviewed by teachers before they are used in lessons or shared with students/parents;
 - h. outline a formal plagiarism detection process and introduce discussions with students about the importance of honesty and integrity in academic work.
6. Adopt a human-in-the loop approach to make sure your AI's decision-making is guided and supervised by teachers or other school employees, and issues promptly addressed.
 7. Invest in having employees trained on AI's capabilities and limitations so that they can:
 - a. identify uses which could result in unjustified adverse effects on data subjects (eg. discrimination, loss of opportunities or benefits, etc.);
 - b. list data elements that should not be considered in the decision-making process;
 - c. determine whether the AI can handle data from a wide range of individuals fairly and accurately;
 - d. establish a testing regime where AI outcomes are thoroughly reviewed.
 8. Include education about AI to the curriculum to increase student awareness of dangers, and improve AI literacy.
 9. Consider if the school would inform parents and students about how AI is used by the school, this may be a consideration from a reputational point of view to ensure transparency.
 10. Allow parents and students to maintain control over their data processed by the AI, including exercising their data protection rights.
 11. Make data security a priority, having the amount of personal data an AI handles, makes you a target for cybercriminals.
 12. Stay tuned with the [9ine Privacy App](#) as we inform you about any legislative developments, and enforcement actions related to AI-powered tools.

You can subscribe to our mailing list here <https://www.9ine.com/>




Thank you

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Who are 9ine ?


9ine are leaders in cyber security and data protection for schools. They specialise in providing technology and compliance solutions, and work with a wide range of school types and sizes here in the UK and around the globe. From cyber vulnerability assessments, to trust wide IT audits and cyber essentials compliance, 9ine's professional services provide clarity on your technology risks and issues.

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