



# Guidelines For Responsible Use of Generative Artificial Intelligence

## History and Context

The OASBO Joint Collaborative Committee held an initial discussion about Generative AI tools in June 2023 and formed a working group to examine the issues related to the use of Generative AI tools. Subsequently, two work streams were formed: one to address “Guidelines for Responsible Use of Generative AI” and a second to review “Generative AI Resources”.

**Generative AI continues to develop rapidly, and thus these documents must be read in the context of our collective understanding at the point in time of (pdf) publication.** The ‘live’ versions of these documents are stored in Google and are available to school boards for comments. Here are the links to the live versions:

<a href="#">English Generative AI Resources</a>	<a href="#">English - Generative Artificial Intelligence Guidelines</a>
<a href="#">Français - Ressources: IA Générative en Éducation</a>	<a href="#">Français- Lignes directrices de l'Ontario pour une utilisation responsable de l'intelligence artificielle générative</a>

<p>Aimed at:</p> <ul style="list-style-type: none"> <li>• boards</li> <li>• educators</li> <li>• admin staff</li> </ul>	<p>Aimed at:</p> <ul style="list-style-type: none"> <li>• boards</li> <li>• educators</li> <li>• admin staff</li> </ul>
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## Rationale

The purpose of this document is to provide clear guidelines for the use of **Generative Artificial Intelligence** (GenAI) within Ontario publicly funded schools. This document will provide suggestions and considerations on how to use GenAI rooted in a human-centred approach to foster equity, inclusion, and belonging. We aim to empower public education stakeholders to enhance their practices through meaningful use.

There are three types of **Artificial Intelligence**:

1. Reactive (e.g., virtual assistants [Siri, Alexa, Google Assistant])
2. Predictive (e.g., Netflix recommendations, Grammarly, predictive text, Google Maps)
3. Generative (e.g., ChatGPT, Copilot, Gemini)

The guidelines within this document outline our current understanding and best-use practices of GenAI. GenAI represents a significant advancement in educational tools. While it's natural to feel apprehensive about new technologies, GenAI is designed to augment, not replace, the human element in teaching. Embracing this technology is a step towards fostering a culture of innovation and preparing students for a future integrated with AI. Blocking or banning GenAI tools is not recommended as this strategy is rarely effective or productive. It also creates a fundamental misconception of what AI is. It is not a website but an underlying technology already built into millions of websites and applications.

*“In responding to long-standing educational issues, it is key to uphold the idea that human capacity and collective action, and not technology, is the determining factor in effective solutions to fundamental challenges faced by societies”*

(UNESCO, 2023, 7)

AI does not change our duty of care and our duty to educate. The Education Act has not been revised.

## Acknowledgment

This document was produced using assistance from ChatGPT and Copilot. The content has been thoroughly examined, modified, and refined from any AI-generated outputs.

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## Summary

These Guidelines aim to direct school boards on how to utilize Generative AI tools safely and effectively, adhering to existing regulations. Acknowledging both potential risks and benefits. It aims to guide sound decision-making to prevent harm and guide use.

The guidelines within this document outline the current understanding and best-use practices of Artificial Intelligence. As we navigate this transition, governments, educational institutions, organizations, businesses, and individuals alike are feeling the pressures of adjusting to rapidly changing technologies. It is important to acknowledge that Artificial Intelligence has been around for a long time, and has been a part of the daily lives of many people for years. When a navigation system selects a route for your travel or a spelling or grammatical suggestion is made, that is Artificial Intelligence. More recently, innovations have been made in Generative Artificial Intelligence (GenAI), which has opened up a variety of questions in education. This document looks to offer some considerations and guidance for public education stakeholders in Ontario as they navigate this new technology in classrooms and schools.

### Student Learning

Guidelines on GenAI use can provide students with a clear understanding of how to harness the potential of GenAI tools to enhance their research, creativity, and problem-solving skills while maintaining academic integrity. By integrating these principles into the curriculum, educators can prepare students to navigate the evolving landscape of their future.

### Teacher Support

For educators directly involved in classroom instruction and student assessment, specific sections of the guideline offer insights into effectively integrating GenAI technologies to navigate the complexities of AI in their professional practice.

### **School Leaders**

School administrators can leverage these guidelines to enhance instructional strategies and professional growth initiatives focusing on the teaching approaches that are aligned with each board's objectives.

### **Management and Operations**

Leaders within the education system have a valuable role in shaping the future of their institutions. This document offers a template to tailor individual school board guidelines.

### **Parents and Guardians**

Parents and guardians will find this document helpful in understanding how Generative AI tools can be used safely and effectively in their child's education. It explores how AI can enhance learning, creativity, and problem-solving skills, while still ensuring academic integrity. This guide empowers parents to be informed partners in their child's educational journey with this new technology.

## **What is Artificial Intelligence and Generative AI?**

**Artificial Intelligence (AI)** is an advanced computer technology that can do tasks typically requiring human intelligence. These tasks include understanding spoken language, learning from experiences, and solving complex problems.

**Generative Artificial Intelligence (GenAI)** is AI that can create content by taking instructions from users, usually in the form of short written prompts and a back-and-forth chat.

GenAI tools have been trained on **Large Language Models (LLMs)** that sift through massive amounts of data that are available on the internet. It then analyzes vast datasets and identifies complex patterns, a process akin to how humans learn from experience. These models can use this training data to generate content when provided with a prompt. They can also improve their performance through techniques like human supervision and reinforcement learning. Users can provide feedback or adjust their prompts to refine the GenAI's responses. This means that GenAI can generate content that appears as if a human created it. GenAI may exist as a standalone website/App or be integrated into tools that you may or may not be already using. Examples include but are not limited to ChatGPT, Copilot, Gemini, Magic School, Canva, DALL-E, Midjourney, Adobe Firefly, Khanmigo, and countless others.

To maximise the significant benefits AI can offer in education, both teachers and students must possess a foundational knowledge of how these models function. LLMs are distinct from search engines and require a different approach for effective outcomes is essential.

# Ethical Considerations

Before using GenAI tools, users must carefully consider, understand, and adjust their use to protect both the privacy of themselves and others, as well as ensure their ethical and legal use.

## Bias

- Human biases, inherently present in the process of information generation, can be replicated in GenAI tools. These advanced systems generate outputs based on pre-existing human-created content, including blogs, websites, and other media, which may not align with our societal values.

## Transparency and Accountability

- Before promoting specific tools within your system, it is recommended that educators consult their system procedures around approving tools.
- Privacy and data security for students and educators needs to be front and centre when educators are making decisions around the use of AI tools in the classroom.
- When AI tools are in use, this information should be disclosed to the end user, and consent obtained if their work is being inputted (students, colleagues, parents, etc.).

## Legal Use

- As GenAI gains traction in creative industries, it brings with it the risk of inadvertently infringing on intellectual property. These tools operate by analyzing vast repositories of data and snippets of information to discern patterns and relationships. Despite their growing prevalence, the legal landscape surrounding the use of GenAI remains ambiguous.
  - Key issues include copyright infringement, the ownership rights of AI-generated works, and the use of unlicensed content within the AI's training data. This uncertainty highlights the need for careful consideration and awareness of potential legal implications when employing GenAI technologies.
  - When we consider using GenAI, copyright and plagiarism are of paramount concern. In particular, when individuals use GenAI and claim it as their intellectual property, this disrupts academic integrity. While the output may look unique, it is a compilation of other users' work and publicly available information from the internet without credit or citation to the original work (Elgersma, 2023).

## Critical Thinking

- GenAI can produce misinformation and hallucinations. The large sets of data used by GenAI tools have made it easier to create content that is often indistinguishable from that produced by humans. Because these models are calibrated to create original content, inaccurate outputs are possible.
- The responses generated in response to prompts may be based on information that is several months or years old.
- GenAI language models are most effectively utilized by users who have expertise in the relevant subject matter. Users must consult reliable sources for verification.

## Misinformation and Disinformation

- **Deepfakes**
  - “A deepfake refers to a specific kind of synthetic media where a person in an image or video is swapped with another person's likeness” (Somers, 2020).
  - The intentional use of GenAI tools to mislead, misrepresent, or deceive the audience.
  - GenAI can be used to create and/or manipulate text, audio, visuals and other multimedia content.
  - Deepfakes have the potential to be harmful regardless of intent.
- **Chatbots**
  - Chatbots are AI tools that can be created and used for either live conversations and/or to post content online to various social media platforms and chat groups that could appear like a person, potentially with a designed goal to spread bias, misinformation and/or disinformation
- **Bullying and Harassment**
  - GenAI tools embedded in social media and/or GenAI content can lead to causing harm such as; privacy risks and social-emotional consequences.
  - School boards should be aware that GenAI tools can be used to misrepresent students and staff and should look to their policies and procedures in handling bullying and harassment situations.

## Environmental Considerations

- GenAI's environmental impact is substantial, with significant carbon emissions from high energy use in training and operating complex models. This contributes to climate change and increases greenhouse gas emissions. Additionally, the disposal of AI-related electronic waste, which contains harmful chemicals, poses environmental risks. AI also affects natural ecosystems, potentially disrupting wildlife and causing biodiversity loss, particularly in agriculture (Kanungo, 2023).

## Conclusion

It would be unethical to turn a blind eye to a present and future reality where GenAI is integrated into digital tools and technologies. By engaging with GenAI ethically, educators can ensure that the technology enhances, rather than undermines, the educational experience, promoting a learning environment that is innovative, inclusive, and reflective of our evolving digital landscape and preparing students for a future where such technologies will be integral.

## Safety, Security, and Privacy Considerations

Exercise due diligence and full transparency before engaging in the use of GenAI tools, safety, security, and privacy need to be at the forefront - for example, check with your privacy officer or IT department. Some tools may not meet the safety and privacy standards outlined by governance, oversight, or third parties who assist with compliance reviews.

The following considerations emphasize the best practices as they relate to the use of data in AI systems or tools. Individual privacy is violated when personal information is used with AI. Personal information is defined as anything that can identify a specific individual, e.g., name, student number, fingerprint, voice or face and in some cases an IP address. Depending on the tool, information that has been submitted can be used to further train it and be shared with other users. This can result in privacy breaches, misuse, and misinformation (CyberArk Centre of Excellence, 2023).

### 1. Privacy Protection:

- **Compliance with Laws:** Organizations must ensure that generative AI tools adhere to applicable **privacy laws and regulations** in Canada. This includes handling personal information collected during training or system operation.
- **Personal Identifiable Information:** Boards should use caution when using generative AI systems that require personal information of an individual.
- **Respect Privacy Best Practices:** Use generative AI tools that respect privacy laws and best practices.
- When selecting AI tools, consider prioritizing GenAI tools with **commercial/enterprise data protection** rather than using publicly available tools, which could introduce risks (e.g., where data is used to train the underlying model).

### 2. Security Risks:

- **Data Validation:** Verification of information is essential to prevent security vulnerabilities. Ensure that input data is thoroughly checked to prevent malicious inputs.
- To satisfy the accuracy principle, you should also have tools and processes in place to ensure that the data is obtained from reliable sources, its validity and correctness claims are validated and data quality and accuracy are periodically assessed.
- **Secure Deployment:** Practise good security hygiene (e.g., use strong passwords whenever possible to reduce the chances that your personal information may be compromised through another actor's bad choices).
- **Threat Modelling:** Conduct threat modelling to identify potential security risks specific to generative AI systems.

### 3. Privacy Considerations:

- **Data Collection:** Be transparent about the personal information collected during training. Minimize the use of sensitive data.
- **Notice** Ensure notice is provided to students, parents, and guardians before using generative AI tools.
- **Consent** may still be required where there is no authority for collection of personal information.
- **User Control:** Provide users (including students) with control over their data and generated content.

### 4. Compliance and Regulations:

- **Legal Framework:** Understand and comply with existing legal frameworks related to privacy, data protection, and education. Where possible, establish provisions in agreements with vendors to disclose the use of AI. When new terms and conditions arise with respect to the privacy and security of the tool, including AI integration, Boards must continue to follow established approval processes and revise as appropriate. This includes contractual clauses

that the vendor must notify the Board in the event of a material change, such as the integration of AI.

- **Ongoing Monitoring:** Continuously monitor compliance and adapt to changes in regulations this may include regulations already in place and new regulations that need to be developed based on this changing technology.

#### 5. **Education and Training:**

- **Educate Stakeholders:** Train teachers, administrators, and students about the responsible use of generative AI and how it works.
- **Empower Students:** Teach students about good digital citizenship about privacy, security, and their rights regarding AI-generated content and how to contact the relevant authorities or support if something goes wrong. .
- **Reporting Mechanisms:** Establish mechanisms for reporting privacy or security incidents.
- **Transparency:** At all times you must be transparent about using AI

## Guidelines for Use

### AI Use Guidelines

School Boards acknowledge the benefits that technology can bring to enable its daily operating activities and student learning and achievement.

Note - Use of GenAI tools is not required in Board work and learning spaces.

All staff intending to use AI tool(s) should review the following considerations:

GenAI may be used to support and enhance Board work, learning, creativity, and research across curricula. The content created using GenAI should not replace the teacher's professional judgement or responsibility over core instructional duties.

#### When using GenAI tools:

- Educators must comply with board policies/procedures on acceptable use of technology.
- Before use, consult your Board's approved digital tools list and/or VASP list in addition to the privacy policy. If you have further questions contact your Board's Privacy and Security Officer.
- Be vigilant of what is shared and input within the tool. Limit the amount of data shared, keep it general, and exclude identifiable information (e.g. names, addresses, birthdays, class lists, marks, demographics, information, and data that is not accessible to the public).
- Do not use any personal or private information relating to staff, students, and/or families **as part of prompts entered into the tool.**
- Do not use any confidential or sensitive board data, information, or content as part of prompts entered into the tool
- Understand the limitations and risks which include: fact-checking, bias, hallucinations, copyright, and data collection timelines.
- Before using a GenAI tool, take time to review best-use practices and resources available in your board.

# Pedagogical and Instructional Considerations

*“Today’s graduates will enter a world that is more competitive, more globally connected, and more technologically engaged than it has been in any other period of history.”*

(Ontario Ministry of Education, Transferable Skills, 2024)

GenAI can be a partner to help students adapt and grow in a rapidly changing world. When students are engaged in high-yield instructional practices, across the Ontario curriculum, they have a voice that translates to powerful collaborative learning experiences.

GenAI can be a partner in supporting the pedagogy that is already well-established in our classrooms and schools. Incorporating GenAI into educator pedagogical practices necessitates a deliberate emphasis on fostering agency and addressing equity within the learning environment. GenAI has the potential to be a dynamic tool that can enhance and diversify teaching methodologies. If educators intentionally consider leveraging GenAI in their learning design, it can support educators in delivering personalized, engaging, and inclusive learning experiences.

A critical component of this pedagogical integration involves educators being acutely aware of and actively addressing the inherent biases in GenAI training models. By recognizing these biases, educators can critically assess and selectively utilize GenAI content, ensuring that it aligns with equitable teaching principles and does not perpetuate stereotypes or skewed perspectives. On the other hand, GenAI can also assist educators in creating and sharing resources that are diverse and connect with the lived experiences of their students. This mindful application of GenAI in pedagogical practice not only upholds the ethical standards of education, but also makes it a powerful ally in the pursuit of a more informed, inclusive, and equitable educational landscape.

AI is already an embedded and integral part of “Digital Literacy” as a [Transferable Skill](#) (Critical Thinking and Problem solving, Innovation, Creativity and Entrepreneurship, Self-Directed Learning, Collaboration, Communication, Global Citizenship and Sustainability, and Digital Literacy). Digital Literacy and Digital Citizenship are the skills students require to navigate and critically consider emerging technologies such as GenAI. When educators build responsible Digital Citizenship skills through the lens of the Transferable Skills, students are better prepared not only to navigate their digital world but an ever-changing future work landscape.

*“Jobs and life in the future will require foundational skills, of course, but also key competencies that cannot be taught by artificial intelligence like creativity and collaboration, plus vital human character qualities like compassion, curiosity, resilience, and adaptability.”*

(Fullan, p. 113)

## AI Literacy: Classroom Implementation of GenAI

*“AI literacy refers to the knowledge, skills, and attitudes associated with how artificial intelligence works, including its principles, concepts, and applications, as well as how to use artificial intelligence, such as its limitations, implications, and ethical considerations.”*

(TeachAI, 2024)

AI literacy equips people to make knowledgeable decisions, enhancing our collective well-being by preparing everyone to actively participate in discussions on the ethical and responsible creation and application of artificial intelligence. AI Literacy is Digital Literacy.

Current Ontario curriculum expectations provide a foundation for AI Literacy. These expectations foster computational thinking, technological proficiency, and essential [Transferable Skills](#). AI Literacy will continue to demand a strong focus on media literacy, critical thinking, and ethical considerations. Students who learn to effectively collaborate with AI tools will be empowered to critically evaluate media, and make ethical choices concerning AI tool usage and content creation. Incorporating AI literacy across the curriculum will prepare students to thrive in the present and a quickly changing future.

### **Integrated Learning: Enhancing AI Literacy in Ontario**

[Integrated learning](#) is a powerful approach that engages students in a holistic learning experience, allowing them to make connections across different subjects and apply their knowledge and skills in meaningful contexts. Integrated learning can be further enriched by GenAI by enhancing the learning journey and promoting deeper understanding.

### **Transparency of GenAI Classroom Use**

GenAI use needs to be clear and transparent. This will look different across all levels of education. Effective and appropriate use of GenAI in public education has a foundation of clear communication and expectations from all stakeholders. Classroom educators, students, and their parents and guardians should have a clear understanding of when and where GenAI is being leveraged, and where it is not. This can and should be informed by school policies with administrators, under the guidance and direction of school board leadership.

## **Assessment and Evaluation**

AI enables educators to focus on the human aspects of assessment and evaluation and give the kind of feedback that only a human can give (Spencer, 147).

*“It is worth noting, right from the start, that assessment is a human process, conducted by and with human beings, and subject inevitably to the frailties of human judgement. However crisp and objective we might try to make it, and however neatly quantifiable may be our “results”, assessment is closer to an art than a science. It is, after all, an exercise in human communication.”*

(Ontario Ministry of Education, Growing Success, p. 29)

Educators need to thoughtfully consider the implications of incorporating AI into their assessment and evaluation strategies while emphasizing the importance of maintaining inclusivity, personalization, and ethical considerations in the educational environment.

When utilizing AI in assessment and evaluation, exercise caution.

## **Triangulation of Data**

As AI becomes more and more prevalent, especially with students' personal use of GenAI tools on school assessments, educators should continue to focus on the triangulation of data, emphasizing the learning process over the final product. "Evidence of student achievement for evaluation is collected over time from three different sources - observations, conversations, and student products. Using multiple sources of evidence increases the reliability and validity of the evaluation of student learning" (Ontario Ministry of Education, Growing Success, p. 39).

In an age where GenAI tools can create essays or solve problems, authentic assessment becomes crucial. Triangulation allows teachers to compare and contrast different types of assessments (like projects, in-class participation, and exams) to ensure that the work reflects the student's true ability and understanding. This is particularly important in maintaining academic integrity in a technology-rich environment.

## **Rethinking Academic Dishonesty**

*"Individual school boards will work collaboratively with their schools and communities to develop strategies for helping students understand the gravity of such behaviour and the importance of acknowledging the work of others. School boards will also develop policies that address, at a minimum, the following:*

- *prevention of cheating and plagiarizing*
- *detection of incidents of cheating and plagiarizing*
- *consequences for students who cheat or plagiarize"*

*Ontario Ministry of Education, Growing Success, p. 42*

Students may leverage GenAI as a powerful tool without committing plagiarism. For example, students may use GenAI to generate ideas, outlines, or rough drafts, students can gain fresh perspectives and inspiration for their assignments. It is essential, however, to use these AI-generated materials as a starting point rather than a final destination in and of itself; student thinking should be at the core of all learning. Students should critically engage with the AI outputs, integrating their own analysis, insights, and understanding. In the end, the key is that there is clear communication and understanding between students and classroom educators for if and when AI is being used in the learning process.

## **Disclosing AI Use**

Generating content using GenAI and claiming it as one's own is plagiarism. School Boards and their schools will outline guidance on the prevention and actions educators may consider when students engage in academic dishonesty.

The goal should be to equip students with the knowledge and skills to be transparent and ethical in their academic pursuits. Teachers play a crucial role in this educational journey, guiding students to understand what constitutes plagiarism and how to accurately cite sources, including those derived from GenAI tools.

This approach ensures that students can harness these innovative technologies responsibly, fostering a culture of integrity and honesty in their academic work.

A variety of organizations and institutions have published recommendations and guidelines for appropriate use of and citations of GenAI, such as MLA, Chicago and APA. Many post-secondary institutions have shared guidelines for students and educators as well, with recommendations and guidance that may be shared in such areas as their websites, a course outline, etc. School boards and educators may look to reference these as they build out their own guidelines and policies for their schools and classrooms. As boards, schools, and classrooms set policies and procedures for effective and appropriate use of GenAI, the most important element is that the classroom educator and student have clear communication and understanding of when, where and how GenAI is being used in the learning process.

### **Suspected Plagiarism and GenAI Detection Tools**

If a teacher suspects that a student's paper was entirely written by a GenAI tool and does not include citations indicating use, the first step is to assess the paper critically, looking for signs that might indicate AI authorship, such as a lack of personal insight, uniform writing style, or content that doesn't align with the student's known capabilities. The teacher should then have a confidential and non-accusatory conversation with the student, inquiring about the process they used to write the paper and their understanding of the content. This conversation can provide insights into the student's involvement and understanding of the subject matter.

In the rapidly evolving landscape of academic integrity, the efficacy of traditional plagiarism detection tools is increasingly challenged, particularly in the face of documents produced by GenAI technologies. This leads to a significant blind spot, as these tools are primarily designed to identify verbatim or closely paraphrased text and not the nuanced, original-like content produced by GenAI (Elkhatat, Elsaid, Almeer, 2023). AI detection tools have been shown to be biased against multi-lingual learners resulting in a majority of student written work being labelled as plagiarized (Myers, 2023).

In light of this, relying solely on plagiarism detection tools to uphold academic honesty is likely problematic. Instead, educators should consider incorporating triangulation of data. Triangulation of Data through the use of observations, conversations and products, as outlined in *Growing Success*, not only helps in identifying inconsistencies that might indicate the use of GenAI but also encourages a deeper engagement with the student's learning process. By adopting this multifaceted approach, especially with a focus on observing student learning in the moment and through individual and small group conversations, educators can more effectively navigate the challenges posed by GenAI in academic settings, ensuring a more accurate and fair assessment of student work.

# Current regulations relevant to the use of AI in education

[MFIPPA](#)

[PIPEDA](#)

[Enhancing Digital Security and Trust Act, 2024](#)

[Education Act](#)

[Ontario College of Teachers Professional Standards](#) - these standards play a role in shaping educators' use of technology, including AI tools, in teaching and learning.

## Glossary

**Academic Integrity:** A commitment to and demonstration of honest and moral behaviour in an academic setting. This principle involves acknowledging others' contributions and avoiding plagiarism, and it extends to maintaining high academic standards in teaching, curriculum, and fostering sound research processes.

**AI Literacy:** AI literacy refers to the knowledge, skills, and attitudes associated with how artificial intelligence works, including its principles, concepts, and applications, as well as how to use artificial intelligence, such as its limitations, implications, and ethical considerations.

**Artificial Intelligence (AI):** AI refers to the capability of computers or algorithms to mimic intelligent human behaviour, such as reasoning, learning, and problem-solving. It encompasses a broad field within computer science, focused on developing intelligent machines that can perform tasks that typically require human intelligence.

**Bias in AI:** This involves the tendency of AI systems to produce prejudiced outcomes due to the data they are trained on or the way they are programmed. Bias in AI can lead to unfair or unethical results, reflecting existing human prejudices in their outputs.

**Chatbot:** AI tools that mimic / replace human conversations or text based interactions.

**Copyright:** A legal right granted to the creator of original works, including the exclusive right to reproduce, distribute, and display their work. Copyright laws aim to protect creators' intellectual property and encourage the creation of new works.

**Data Privacy:** Refers to the handling of sensitive information, especially personal data, in a way that respects individual privacy and confidentiality. It involves protecting data from unauthorised access, collection, use, or disclosure and ensuring ethical use of personal information.

**Deepfake:** A specific kind of synthetic media where a person in an image or video is swapped with another person's likeness and can be used to create and/or manipulate text, audio, visuals and other multimedia content.

**Digital Citizenship:** The responsible use of technology by citizens, involves the understanding of how to use technology ethically, legally, and safely. It includes awareness of one's digital footprint and the impact of digital actions on oneself and others.

**Digital Literacy:** The ability to use digital technology, communication tools, or networks to access, manage, integrate, evaluate, and create information. It involves the skill to use information ethically and effectively.

**Ethical Use:** In the context of technology and GenAI, ethical use refers to using these tools in a morally sound way, respects individual rights, and does not cause harm. This includes considering the impact of technology on privacy, security, and societal norms.

**Generative Artificial Intelligence (GenAI):** A type of AI that can generate new content or data based on the inputs it receives. GenAI often involves the use of machine learning models to create outputs that are novel and not explicitly programmed.

**Generative Pre-trained Transformer (GPT):** A type of artificial intelligence model primarily used for natural language processing tasks. GPT models are widely used in various applications, such as chatbots, content generation, language translation, and more. They are known for their ability to generate text that is often indistinguishable from text written by humans.

**Hallucination (in AI context):** Refers to instances where AI systems generate false or misleading information. This can occur due to limitations in the AI's understanding or the data it has been trained on.

**Intellectual Property:** Legal rights that arise from intellectual activity in the industrial, scientific, literary, and artistic fields. These rights allow creators to protect and benefit from their creations.

**Large Language Models (LLMs):** These are advanced AI models trained on vast datasets to process and generate human-like outputs. LLMs can understand and respond to queries, create content, and even engage in conversation.

**Misinformation:** The spread of false or inaccurate information, often without malicious intent. Misinformation can be due to errors, misunderstandings, or lack of information.

**Pedagogy:** The art or practice of teaching. It involves instructional techniques and strategies to support learning and educational outcomes.

**Plagiarism:** The act of using someone else's work, ideas, or expressions without proper acknowledgment or permission, presenting them as one's own. Plagiarism is considered unethical and can violate copyright laws.

**Societal Values:** refer to the beliefs that individuals and society hold about what is important. These values can be implicit (unstated) or explicit (directly stated). They play a crucial role in shaping our decisions about what is right or wrong, good or bad.

**Transferable Skills:** Transferable skills are the skills and attributes that students need in order to thrive in the modern world. They include critical thinking and problem solving, innovation, creativity, and entrepreneurship, self-directed learning, collaboration, communication, global citizenship and sustainability, digital literacy ([Ministry of Education](#)).

**Triangulation of Data:** The use of multiple methods, sources, or data points to assess and evaluate students' conversations, observations, and products. This approach increases the reliability and validity of the results or findings.

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