

1.0 Purpose

In the face of evolving technology, these guidelines offer Peterborough Victoria Northumberland and Clarington (PVNC) Catholic District School Board K-12 staff and students a roadmap for navigating artificial intelligence (AI) in education. They provide practical advice and considerations for integrating generative AI tools into teaching and learning, with a focus on ethical implementation, privacy and classroom discussions.

Recognizing that AI's role in education is still unfolding, these guidelines represent a starting point, subject to ongoing adaptation as our understanding of this technology deepens. They acknowledge the broader context of AI's increasing prevalence in society, highlighting its potential to transform learning experiences and streamline educational tasks.

These guidelines emphasize a cautious and informed approach, aligning with current best practices emerging from government bodies, higher education institutions, and other school boards. This proactive stance aims to harness AI's potential while mitigating risks, ensuring responsible and effective integration within the PVNC Catholic learning community.

Student Learning

Guidelines on GenAl use can provide students with a clear understanding of how to harness the potential of GenAl 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 GenAl technologies to navigate the complexities of Al 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

2.0 Defining AI

Artificial intelligence (AI), as defined by ISTE, is a field of computer science dedicated to creating machines capable of mimicking human intelligence. This involves developing algorithms and systems that enable computers to perform tasks that typically require human cognitive abilities, such as understanding and responding to natural language, recognizing patterns in data, solving problems, and making decisions. AI empowers machines to learn from experience, adapt to new information, and carry out tasks in ways similar to humans, often with greater speed, accuracy, and efficiency. This rapidly evolving technology has already become deeply integrated into our daily lives, powering everything from the recommendations we see online to the virtual assistants we interact with.

2.1 Types of AI

While AI encompasses a broad range of approaches and techniques, it can be generally categorized into three main types:

Reactive (e.g., virtual assistants [Siri, Alexa, Google Assistant])
Predictive (e.g., Netflix recommendations, Grammarly, predictive text, Google Maps)
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)

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

3.0 Risks Associated with Generative Al

3.1 Privacy

Generative AI tools gather a lot of user data, including sensitive information like interactions and IP addresses. This raises concerns about data security and

potential breaches. It's important to remember that even seemingly harmless information can be combined and analyzed by AI models, potentially revealing personal details that users might not expect to be extracted later. Some AI tools may not even notify users of a breach, making it hard to protect information. PVNC Catholic is committed to protecting student data and following privacy laws like MFIPPA and the Education Act, but using generative AI requires careful steps to ensure student privacy.

3.2 Age of Consent

Many AI platforms require users to be 18 or older, sometimes allowing younger users with parental consent. This is tricky in schools. Getting consent for each student is tough and might leave some out. Also, do students under 18 really understand the privacy risks? PVNC Catholic needs to consider these age-related risks and follow privacy laws before using AI in classrooms.

3.3 Copyright

Al-generated content is often based on existing works, raising questions about ownership. Who owns the copyright? How do we credit the original creators? Al also makes it easier to plagiarize. Educators need to address these challenges and guide students on ethical Al use.

3.4 Accuracy

Al models learn from huge datasets that can contain biases, errors, and harmful content. This can lead to Al spreading misinformation and harmful stereotypes. Even with good data, Al can still be wrong. Users need to be critical of Al-generated content and check its accuracy. Students need strong critical literacy skills to identify biases and tell fact from fiction in the age of Al.

3.5 Bias

Al models are trained on large datasets that often reflect societal biases, which can lead to content that unintentionally reinforces stereotypes related to gender, race, culture, and socioeconomic status. Since Al does not think critically, it may amplify biased perspectives present in its training data, producing outputs that are skewed, exclusionary, or misrepresentative. This is particularly concerning in education, where students may not always recognize these biases. Educators must be aware of these limitations and guide students in questioning Al-generated content, identifying bias, and cross-referencing with diverse sources to ensure fair and accurate understanding.

3.6 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 GenAl tools to mislead, misrepresent, or deceive the audience.
- GenAl 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

- GenAl tools embedded in social media and/or GenAl content can lead to causing harm such as; privacy risks and social-emotional consequences.
- School boards should be aware that GenAl tools can be used to misrepresent students and staff and should look to their policies and procedures in handling bullying and harassment situations.

4.0 Access to Generative AI

While the previous section outlines various risks associated with generative AI, it's understandable to question whether such technology has a place in education. However, completely banning or blocking access within PVNC Catholic requires

careful consideration. A solely prohibitive approach may be counterproductive for several reasons:

- Blocking AI websites fosters the misconception that AI is limited to specific sites. AI is an underlying technology integrated into numerous applications and platforms.
- Restricting access to AI tools without providing guidance and support could lead staff and students to explore them independently, increasing the risk of them using platforms that don't meet our ethical or privacy standards.
- By avoiding open discussions about AI or implementing outright bans, we miss the opportunity to educate staff and students on responsible AI use
- Blocking access on school networks does not prevent Al use on personal devices outside of school.
- The rapid growth of AI tools makes it challenging to maintain an effective and up-to-date list of blocked websites.
- Blanket bans may inadvertently affect approved applications that utilize Al components, such as Canva, Google mail, Google drive and Google Translate.

PVNC Catholic encourages a proactive approach that focuses on educating staff about responsible AI use, fostering critical thinking skills, and integrating AI tools strategically to enhance learning experiences.

5.0 Approved Generative AI Applications

Artificial Intelligence development and adoption is moving very rapidly and being integrated with applications almost universally. To help you navigate this evolving landscape, the school board provides a list of approved applications on our PVNC Catholic Digital Tools Database website: <u>pvn.cc/applications</u>.

Here's what you can expect to find:

- **AI Details**: When available, we'll provide information on how each application uses AI, including the types of AI and specific features.
- Age of Consent: We'll clearly indicate the age requirements for using applications with AI features.
- **Privacy Assessment**: All approved applications have undergone a formal risk assessment and privacy impact assessment. The board uses the ECNO

VASP (Vendor Assessment and Selection Process) to make informed decisions based on risk thresholds and privacy concerns before any integration with board systems and data.

6.0 Education Guidelines for Generative AI

"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)

6.1 AI Use is Not Mandatory:

• Educators and staff are not required to use AI tools in their teaching practices.

6.2 Al must be taught:

• If AI is being implemented in the classroom, the program / app used must be taught and explored by students in a safe, secure manner, and instruction must be provided to ensure that students are using the technology equitably and for the greater good.

6.3 Privacy and Confidentiality:

- Never enter personally identifiable information like names, addresses, phone numbers, birthdates, student numbers, or any other details that could identify an individual.
- Do not input confidential or sensitive information, including board financial information, political affiliations, medical records, or private communications
- Exercise caution when sharing AI-generated content. Ensure it doesn't reveal private information or violate privacy of other

6.4 Approved AI Tools:

 Students are permitted to use AI tools for school-related activities only if they are designated as "Approved" in the PVNC Catholic Digital Tools Database.

- If a tool is not listed in the database, it should be considered "Not Approved" and submitted for review.
- If the tool is age appropriate

6.5 Access to Al

- Using Board accounts (@pvnccdsb.on.ca) with "Not Approved" AI tools may be restricted.
- The board may restrict access to certain AI tools from board devices and board networks.

6.6 Age of Consent

• Students are prohibited from using any AI tools that do not meet age of consent requirements.

6.7 Communicating Expectations

- Educators must clearly communicate to students which AI tools are approved for use in their class/course.
- Balance is required when helping students build a skill between instruction and the gradual release of responsibility. Some may have a tendency to have AI 'just do the work.'
- Finding the balance in education and an informed independence. We must support students to be critical when using AI in educational tasks.
- Students must understand the bias' and misinformation that can be generated by AI.
- Exceptions can be made at the educator's discretion for "Approved" tools or applications.
- Expectations regarding AI use should be communicated to students and parents/guardians through:
 - o A written statement in class expectations or course syllabus
 - o Verbal Communication in class
 - o Written statements on assignments/assessments, including honor pledges

6.8 Fact Checking and Responsible Output

- Fact-check all AI-generated content for accuracy and bias.
- Refer to the PVNC Catholic Guiding Principles when submitting Al generated content
- Use AI responsibly to avoid generating harmful, misleading, or offensive content, always considering the potential impact of your creations.

6.9 Copyright

- Be aware that copyright laws apply to both digital and physical content.
- Using someone else's work without permission, even if it's found online, can be a copyright infringement.
- Always give credit to the original creators of text, images, music, or code that you use or incorporate into your work. Websites such as <u>https://www.mybib.com/tools/apa-citation-generator</u> can assist students with citing the information they get from an AI generator.

6.10 Academic Honesty

"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 and staff must cite any use of approved AI tools in their work.
- Using AI to complete and submit work without proper attribution constitutes plagiarism.
- If academic dishonesty is suspected, follow these steps:
 - o Gather evidence to support the suspicion.
 - o Discuss the concerns with the student in person, providing them with an opportunity to respond.
 - o Assess the student's understanding of the content and their work.

- o Determine if academic dishonesty has occurred based on evidence and discussion.
- o Assign appropriate consequences as outlined in Growing Success.
- o Inform the appropriate administrator if necessary.

6.11 Mitigating Academic Dishonesty

The integration of AI into educational settings necessitates a reevaluation of traditional assessment practices. As AI tools become increasingly prevalent both within the classroom and at home, educators must adapt by incorporating new strategies and tools to accurately assess student understanding and progress. A greater emphasis needs to be placed on process and AFL Assessment for Learning. This shift in approach recognizes the evolving nature of learning in the presence of AI and seeks to ensure that our assessment methods remain effective and relevant.

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).

6.11.1 Assessment Strategies

- Incorporate a variety of assessment formats, including oral presentations, multimedia projects, and in-class activities, to evaluate learning comprehensively.
- Shift emphasis from final products to the learning process itself.
- Incorporate process journals, drafts, and "thinking" skills into evaluations.
- Monitor student progress through observations, conversations, and in-class activities to provide ongoing feedback.
- Use short quizzes, minute papers, and paper-and-pencil tasks to assess understanding in the moment.
- 'Flip the Classroom' by assigning a video for homework and the next day in class use the basis of the video for conversation or a written task.

6.11.2 Instructional Design

- Ground assignments in current events, local issues, and classroom discussions to encourage original thought.
- Design learning experiences that incorporate emotional intelligence, student experiences, and culturally responsive pedagogy.
- Foster critical thinking, problem-solving, and analysis. Incorporate discussions, conferences, and accountable talk.
- Reflect on the questions you are asking

6.11.3 In-Class Activities

- Use short quizzes, minute papers, and paper-and-pencil tasks to assess understanding in the moment.
- Provide opportunities for peer feedback, social annotation, reflection, and self-evaluation.

6.11.4 Using Board Resources

- Require the use of board resources
- Have students reference materials from board subscriptions and approved applications.

Current Relevant Regulations - Al in Education

MFIPPA <u>PIPEDA</u> <u>Enhancing Digital Security and Trust Act, 2024</u> <u>Education Act</u> <u>Ontario College of Teachers Professional Standards</u> - these standards play a role in shaping educators' use of technology, including Al tools, in teaching and learning.

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PVNCCDSB AI Guiding Principles



Ethical Use

Use the AI as a tool for inspiration and idea generation, not as a replacement for your own creativity and voice.

Innovation

Al is a tool for empowerment. Use your critical thinking to harness its power, break through limitations, and achieve your goals.

Transparency

Maintain academic integrity when using AI. If its use is approved, be upfront about how AI contributed to your work. Always cite AI assistance accurately and ethically.

Equity

Be aware of potential AI bias. If encountered, report it using the tools or discuss with an educator. Use AI ethically, with respect for human dignity and fairness.

Privacy and Security

Safeguard your information and that of others. Never share sensitive data like names, phone numbers, addresses, or passwords.



Can I Use AI on this Assignment? Generative AI Acceptable Use Scale

Generative AI refers to any of the thousands of Artificial Intelligence tools in which the model generates new content (text, images, audio, video, code, etc) This includes, but is not limited to, Large Language Modelsi LLMs such as ChatGPT, Google Bard, etc, Image creators such as Dall-E3, Adobe Firefly, and any tools with built in generative AI capabilities such as Microsoft CoPilot, Google Duet, Canva, etc etc)

O AI Use I-Assisted Idea	This assessment is completed entirely without AI assistance. AI Must not be used at any point during the assessment. This level ensured that student rely solely on their own knowledge, understanding, and skills.	No Al disclosure required May require an academic honesty pledge that Al was not used.
-Assisted Idea		
eneration and tructuring	No AI content is allowed in the final submission. AI can be used in the assessment for brainstorming, creating structures, and generating ideas for improving work.	Al disclosure statement must be included disclosing how Al was used. Link(s) to Al chat(s) must be submitted with final submission.
l-Assisted diting	No new content can be created using Al. Al can be used to make improvements to the clarity or quality of student created work to improve the final output.	Al disclosure statement must be included disclosing how Al was used. Link(s) to Al chat(s) must be submitted with final submission.
l for Specified ask Completion	Al is used to complete certain elements of the task, as specified by the teacher. This level requires critical engagement with Al generated content and evaluating its output. You are responsible for providing human oversight and evaluation of all Al generated content.	All Al created content must be cited using proper MLA citation. Link(s) to Al chat(s) must be submitted with final submission.
ull Al Use with uman Oversight	You may use AI throughout your assessment to support your own work in any way you deem necessary. AI should be a 'co-pilot' to enhance human creativity. You are responsible for providing human oversight and evaluation of all AI generated content.	You must cite the use of Al using proper MLA or APA citation. Link(s) to Al chat(s) must be submitted with final submission.
	Assisted hiting for Specified sk Completion III AI Use with iman Oversight	Assisted No new content can be created using Al. Al can be used to make improvements to the clarity or quality of student created work to improve the final output. for Specified for Specified sk Completion Al is used to complete certain elements of the task, as specified by the teacher. This level requires critical engagement with Al generated content and evaluating its output. You are responsible for providing human oversight and evaluation of all Al generated content. III Al Use with iman Oversight You may use Al throughout your assessment to support your own work in any way you deem necessary. Al should be a 'co-pilot' to enhance human oversight and evaluation of all Al generated content. You are responsible for providing human oversight and evaluation of all Al generated content. You are responsible for providing human oversight and evaluation of all Al generated content. You are responsible for providing human oversight and evaluation of all Al generated content. You are responsible for providing human oversight and evaluation of all Al generated content. You are responsible for providing human oversight and evaluation of all Al generated content.

Link to Original Work