Guideline for the Responsible Use of AI in Research and Research Administration at Queen's

Queen's UNIVERSITY

Guideline Contents

Committee Membership

This guideline was developed by the Research and Research Administration AI Nexus Subcommittee and pending review of the Vice-Principal, Research has been approved as a guiding document for responsible and thoughtful use of AI in research and research related activity.

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1. Purpose and Scope

This guideline provides institution-wide expectations for the responsible use of AI in research, research-related activities, and research administration at Queen's University. *It requires that each member of the Queen's community take responsibility for their AI use and the results of this use.* If used, it must be in alignment with Queen's guidelines and the expectations of the fields of endeavour.

This guideline is maintained by the Queen's AI Nexus under the dual sponsorship of Board and Senate committees and will be reviewed annually to reflect the evolving AI landscape. Questions about interpretation or application should be directed to the Special Advisor to the Provost on Generative AI.

This guideline builds specifically on:

- Queen's AI Guiding Principles
- Queen's AI Applications guidance and data classification requirements
- Queen's guidance for the use of AI in graduate research
- Guidance from the Queen's Privacy Office and the University Secretariat

2. Definitions

- **Artificial Intelligence (AI):** Creates systems that can perform tasks typically requiring human intelligence, such as learning, reasoning, problem-solving, and perception.
- **Generative AI (GenAI):** Tools that produce amalgamated content such as text, images, audio, code, or data summaries from patterns in training data.
- **Agentic AI:** A class of intelligent agents distinguished by their ability to operate autonomously in complex environments. Agentic AI tools prioritize decision-making over content creation and do not require human prompts or continuous oversight.
- **Data Sovereignty:** The principle that data remain governed by the laws, policies, and ethical obligations of the organization or jurisdiction they belong to, even when processed by external AI systems or cloud providers.
- **Research lifecycle:** Activities ranging from developing research questions to archiving and disseminating results (e.g. study design, data collection, analysis, publication).
- **Research administration:** Functions that support research (grant development, ethics processes, budgeting, contracting, reporting, compliance).
- **Human-in-the-loop:** A system architecture in which a human operator is embedded as an essential component of the decision-making or control pipeline, such that the system halts, queries, or defers to human input at one or more defined stages before executing actions or updating its state.
- **Human Oversight:** A person retains accountability and responsibility for the results produced by the AI tool they are using.

3. Alignment With Queen's Guiding Principles

AI use at Queen's is governed by the Queen's Guiding Principles for Responsible Use of Generative AI and relevant University Policies such as academic integrity, privacy, copyright, fair dealing, and codes of conduct. Consider the below factors in your use of AI, if you choose to use AI in your role at Queen's.

3.1 Human accountability and responsibility

: Members of the Queen's research community remain accountable for all ideas, decisions, and outputs. It is human researchers who are responsible for all aspects of research, such as academic integrity, research ethics, data security, and compliance.

3.2 Safeguarding Data and Protection of Privacy

: AI tools must be appropriate for the data classification level. Sensitive, confidential, internal-use-only, and personally identifiable data must not be accessible by unapproved AI systems. The university takes privacy and data protection extremely seriously and has policies and procedures on the subject.

3.3 Accuracy

: AI outputs may contain errors or biases: including those that can perpetuate systemic inequities. All outputs must be verified and checked for bias as well as accuracy. The Queen's Library has provided a guide on the subject.

3.4 Fairness

: Access to AI tools is not always equitable, however there are freely provided enterprise tools at Queen's. Research involving First Nations, Inuit, or Métis communities or data must also respect Indigenous data sovereignty, as described in the OCAP principles (Ownership, Control, Access, and Possession). Similar considerations must be given to research with any population, particularly vulnerable or marginalized ones.

3.5 Transparency and Openness

: Use of AI in research or administrative work must be attributed openly and be transparent to the users, reviewers, or readers of the work as appropriate for the field.

3.6 Intellectual Property and Copyright

: Many AI tools collect, store, or reuse user inputs and outputs, which may create risks related to ownership, confidentiality, and unintended disclosure. Community members are responsible for ensuring that any materials (e.g. research proposals) entered into, accessed or generated by AI tools comply with Queen's intellectual property policies, copyright law, licensing agreements, and data classification requirements.

4. Roles and Responsibilities

4.1 Researchers and Trainees

are responsible for their use of AI and their scholarly outputs. In alignment with their field, they must:

- Risk-assess tools when working with research data
- Consider data privacy options and Queen's data classification
- Consider data sovereignty and that different institutions, countries, and jurisdictions may have different data standards
- Verify all AI-generated content
- Disclose or attribute AI use in alignment with scholarly field expectations
- Avoid uploading unpublished ideas, confidential partner information, identifiable participant data, or similar sensitive information into public AI tools
- Ensure AI use is aligned with the terms of grants, ethics clearances, and research agreements
- Use Queen's recommended AI tools for confidential information and documents
- Ensure fairness, equity, and transparency in all AI-assisted processes

Research teams must be mindful that power differentials (e.g. senior/junior investigators, supervisor/trainee, and marginalized people) may influence the perceived ability to question the use of AI. Expectations around AI use must be discussed openly and documented where appropriate.

4.2 Faculties, Schools, and Research Units

- Develop discipline-specific supplements where needed
- Provide or promote training in responsible AI use
- Maintain awareness of institutional AI governance and share updates across units

4.3 Multi-Institutional and Collaborative Research

Where research involves external partners, collaborators, or multi-institutional agreements, researchers must confirm that AI use is consistent with the data governance, privacy, and ethical requirements of all parties. Differences in institutional AI policies, jurisdictional data standards, or funder terms must be identified and reconciled early in the collaboration to mutual agreement and with attention to power differentials.

5. AI Across the Research Lifecycle

AI and AI tools can be used in a variety of situations in research and research administration. The overarching considerations are: the expectations of your field, Queen's policies, and the policies of external organizations you are engaging with. These compose the guiding frame of how AI could be used. Consider the below links as well as guidelines from your field:

1. Queen's AI Applications
2. Tri-Council AI Guidance

5.1 Planning, Scoping, and Design

AI may assist with brainstorming research ideas, creating outlines or conceptual diagrams, and generating alternative phrasings or methodological summaries of human-generated ideas.

Researchers must avoid entering or allowing access to unpublished or proprietary concepts into public tools. They must verify the accuracy of outputs, disclose AI use transparently, and consider the implications of making intellectual property available to an AI tool.

5.2 Data Collection and Participant Interactions

Never upload or provide access to the following to a non-enterprise AI (and only to an enterprise AI with express permission and informed consent): interview transcripts, focus group audio, field notes, clinical or personal data, internal partner data, or images/videos containing identifiable individuals.

Ethics applications at Queen's must explicitly state if AI-based tools will be used for transcription, translation, or analysis.

5.3 Data Analysis and Coding

AI may suggest analytic approaches, conduct specified analyses, produce draft code, or generate provisional qualitative codes or summaries.

Researchers must validate analysis independently, consider that AI tools are not conducive to reproducibility, review outputs for accuracy (such as misrepresented content or inaccurate sources), document AI involvement, and check for bias.

5.4 Writing and Scholarly Communication

AI may generate draft text, suggest alternative phrasing, or improve clarity and structure. Authors must check relevant guidelines for applications, reference letters, journal, or conference on AI use before commencing work.

AI is not an author. Human authors bear full accountability and responsibility for research output. AI use must be transparent as outlined above.

5.5 Grant Development and Research Administration

Applicants: As per Tri-Council guidelines, AI can be used to refine clarity and structure of applications only if no confidential information is entered into public tools. As well applicants must be aware that using AI may lead to the presentation of information without proper recognition of authorship or acknowledgement.

Queen's Internal Reviewers and Panels: Reviewers must not use AI tools to evaluate research applications if prohibited by the review or grant terms. These materials contain confidential and proprietary information.

5.6 Knowledge Translation

AI can assist with adapting research findings for diverse audiences, drafting plain-language summaries, generating outlines for presentations or policy briefs based on inputs, suggesting visual or infographic concepts, and producing alternative phrasings tailored to specific knowledge users (e.g., community partners, practitioners, policymakers, the public).

Researchers must ensure that translated content remains faithful to the original findings and does not introduce distortions, oversimplifications, or fabricated claims. Outputs must be independently verified for accuracy, particularly when communicating with audiences who may not have the expertise to identify errors. Researchers should avoid entering unpublished findings, embargoed results, or partner-sensitive information into public AI tools, and should respect any agreements with knowledge user partners regarding the handling of shared data or interpretations. AI use in knowledge translation products must be disclosed transparently in keeping with the expectations of the audience, publication venue, or funding agency.

5.7 Commercialization and Innovation

AI may support early-stage commercialization activities such as drafting non-confidential summaries, generating market landscape overviews, brainstorming potential applications or end users, and refining the clarity of pitch materials or business cases.

Researchers must exercise particular caution given the intellectual property implications of disclosing inventions, processes, or proprietary concepts to AI tools. Entering details of a potentially patentable invention into a public AI tool may constitute a public disclosure, which can compromise patentability and downstream commercialization opportunities. Researchers must not input confidential technical details, partner information, unpublished invention disclosures, or materials subject to non-disclosure agreements into non-enterprise AI tools, and should consult with Queen's Partnerships and Innovation before using AI in any activity connected to a disclosed invention or active commercialization file. AI-generated outputs must be independently verified, and any use of AI in the development of commercialization materials should be documented and disclosed to relevant institutional and external partners as required.

6. Documentation, Training, and Continuous Improvement

- Keep records of tools used, prompts applied, and verification steps taken. These records must be retained in accordance with Queen's research data management and retention requirements.
- Engage in ongoing training through the University resources provided.
- Units must periodically review emerging risks and update procedures.

7. Quick Reference Checklist

Before using AI in research or administration, ask:

1. Does this align with Queen's Guiding Principles including research ethics review?
2. What is the data classification level?
3. For research involving First Nations, Inuit, or Métis communities: is this in adherence with the OCAP® resource?
4. Am I exposing any confidential, internal, personal, or unpublished material?
5. Is the tool approved by Queen's?
6. How will I disclose AI use in the final output?
7. Am I ensuring human oversight and verification?
8. If collaborating across institutions, have AI and data governance expectations been aligned with all partners?