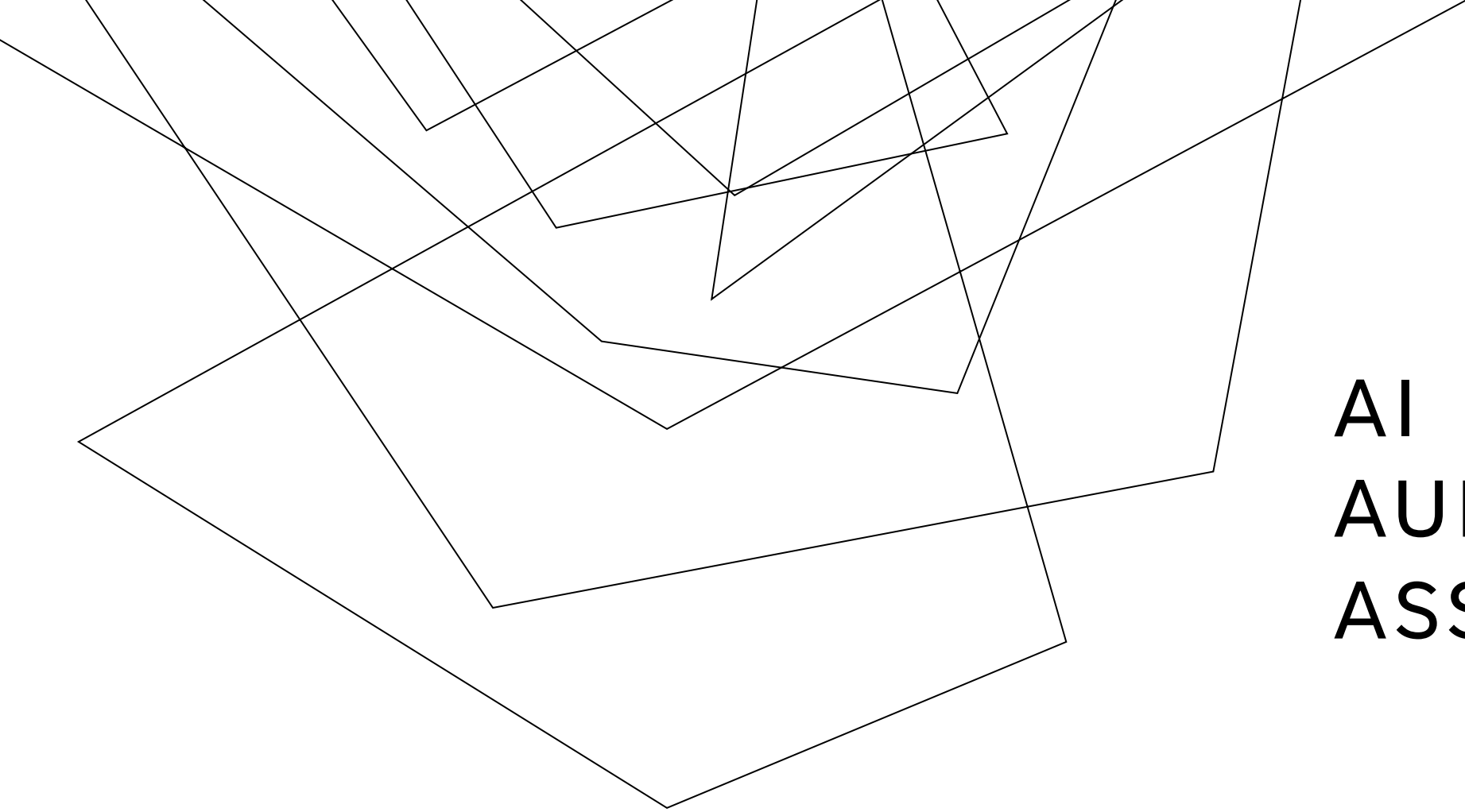




AI AUDITOR ASSISTANT



Ontario College Quality Assurance Service

Service de l'assurance de la qualité des
collèges de l'Ontario

INQAAHE 2025

*WELCOME

Take a few moments to introduce yourself to your peers.

- Speak about what specifically drew you to this workshop
- Are there any ways your institution currently uses or is exploring the use of AI for quality assurance processes?
- What are you hoping to learn about AI in QA today?



~CONTEXT

Who we are

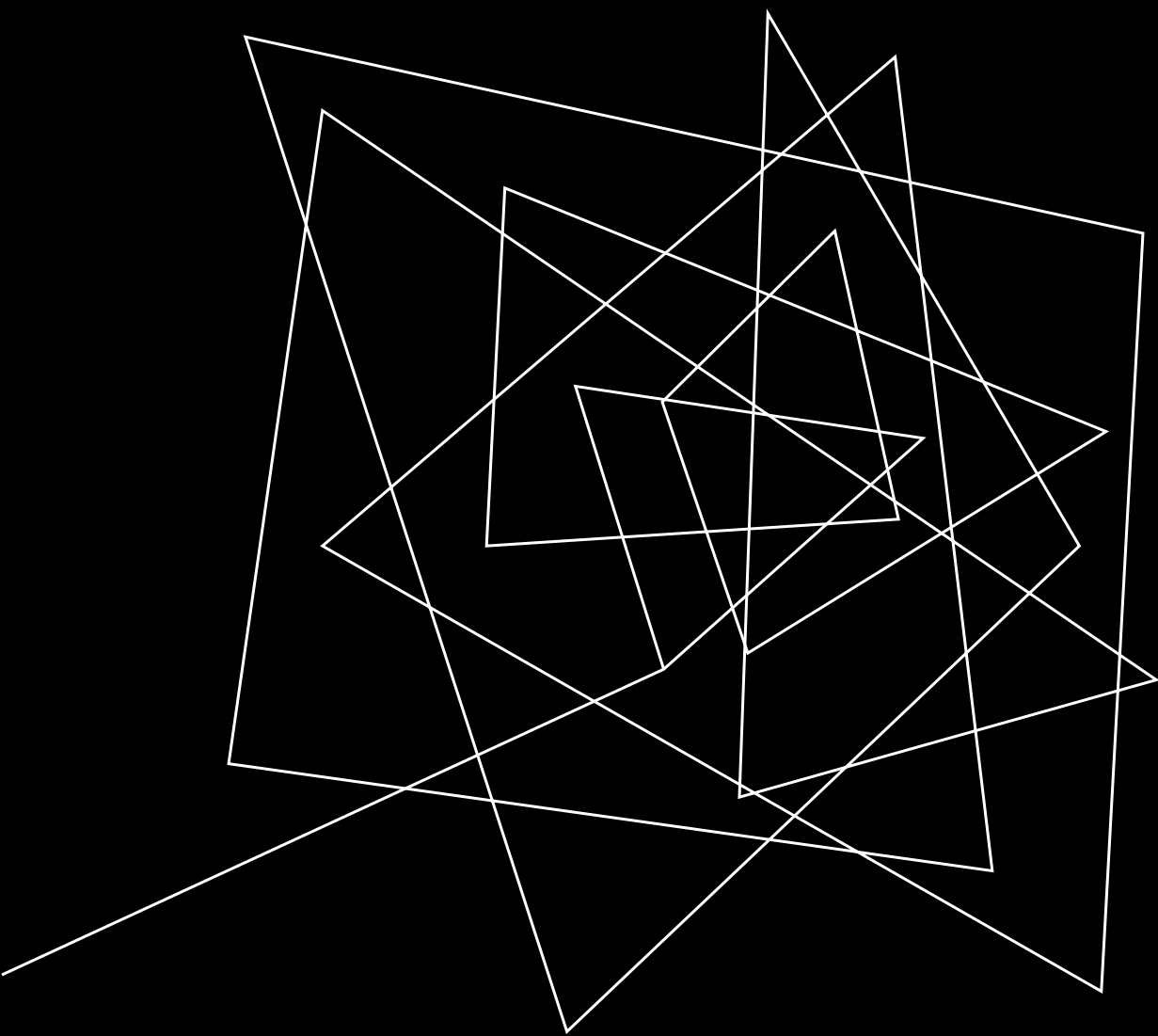
What we do

* How we have used AI:

Learning Outcomes

Program Advisory Committees

Analysis of Classification for
Instructional Program Codes (CIP)



~ WHY WE DECIDED
TO ENGAGE WITH
THIS RESEARCH
PROJECT

OUR INTENTION
THE PLAN

*SIGNIFICANCE OF THE STUDY

- Traditional QA audits:
 - rely heavily on manual data analysis
 - subjective interpretations
 - time-consuming
 - may struggle to effectively analyze these vast datasets
- This research is innovative:
 - will provide insights into how AI can contribute to more agile and forward-looking QA processes.
 - findings of this study have the potential to make a significant contribution to policy development in higher education quality assurance.



~INITIAL THOUGHTS ON AI INTEGRATION IN QA
TABLE DISCUSSION (10 MINUTES)

- What are your initial expectations regarding the potential benefits of integrating AI into institutional quality assurance audits?
- What are some of your initial concerns or reservations about using AI in this context?



~BACKGROUND

WHAT IS THE VALUE PROPOSITION OF QA?

Increase educational experience, reduce costs, and improve efficiencies.

- **Academic standards:** Safeguard the quality of teaching, learning, research, and overall student experience.
- **Continuous improvement:** Identify areas for growth and enhancement.
- **Accountability and transparency:** Build stakeholder confidence.

SICKKIDS VS: UNDENIABLE

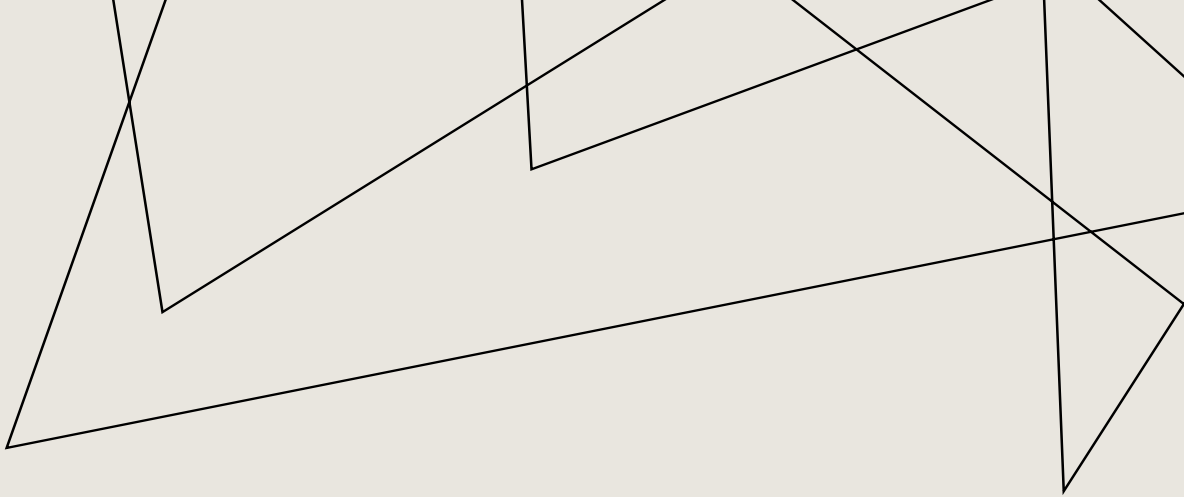


*AI CAPABILITIES IN DATA ANALYSIS

- Efficiency and speed: AI can process large volumes of data much faster than humans, freeing up auditors' time.
- Pattern recognition: AI has the ability to identify subtle trends and anomalies in data that might be missed by human reviewers.
- Objectivity and consistency: AI can apply predefined criteria consistently, reducing the potential for subjective interpretations.
- Natural Language Processing (NLP): NLP can be used to analyze textual data like student feedback, course evaluations, and policy documents.
- Machine Learning (ML): ML algorithms can learn from data and improve their analysis over time, potentially identifying predictive indicators of quality issues.

~POTENTIAL BENEFITS OF AI FOR QA PROCESSES

- Enhanced efficiency of audits: AI can automate tasks like initial document review, data summarization, and identifying areas of non-compliance.
- Deeper insights from data: AI can uncover hidden patterns and correlations that can provide a more comprehensive understanding of institutional performance.
- More objective assessments: By relying on data-driven analysis, can contribute to more impartial evaluations.
- Focus on strategic issues: By automating routine tasks, human auditors can dedicate more time to complex analysis, critical thinking, and formulating recommendations.
- Deepen the level of analysis: AI has no limit for the amount of data and information is can collect, analyze and summarize.



~METHODOLOGY

- This project employed two distinct auditing parties: the **human audit panel** and the **AI Auditor Assistant**.
- To safeguard sensitive information, we procured AI solutions that are compliant with industry-standard security protocols and confidentiality requirements.
- It's crucial to emphasize that both parties operated independently throughout the process, without any interaction, to ensure an unbiased comparison of their results.

STAGES OF THE AUDIT PROCESS/DATA COLLECTION

REVIEW OF THE AUDIT PACKAGE



*Human Panel

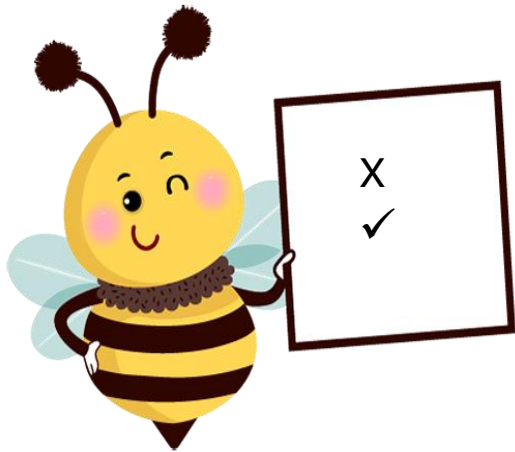
The panel members, comprising experienced QA professionals, meticulously reviewed the institution's comprehensive Audit Package. This involved a thorough examination of documents outlining the institution's mission, strategic goals, program curricula, assessment strategies, quality assurance policies, and evidence of compliance with the agency's standards. Their review involved critical reading, cross-referencing information, and applying their expert knowledge of QA principles and best practices.

~AI Auditor Assistant

We fed the AI Auditor Assistant the Audit Package in a digital format. It utilized Natural Language Processing (NLP) techniques to analyze the text, identify key themes, extract relevant information related to our standards and requirements, and flag potential areas of strength or concern.

STAGES OF THE AUDIT PROCESS/DATA COLLECTION

PRELIMINARY ASSESSMENT SUBMISSION



*Human Panel

Based on their initial review, the panel members individually formulated and collectively synthesized a preliminary assessment of the institution's alignment with the agency's standards and requirements. This assessment highlighted initial impressions, potential areas of focus for further investigation, and any immediate questions or concerns.

~AI Auditor Assistant

The AI Auditor Assistant generated its preliminary assessment based on its analysis of the Audit Package. This included a summary of its findings for each standard, highlighting areas where the institution appeared to meet or potentially fall short of the requirements, along with supporting evidence extracted from the documents.

STAGES OF THE AUDIT PROCESS/DATA COLLECTION

REQUEST FOR FURTHER INFORMATION



*Human Panel	~AI Auditor Assistant
Following their preliminary assessment, the panel collaboratively developed a list of specific questions and requests for additional information or evidence. These requests aimed to clarify ambiguities, delve deeper into specific areas of concern, and gather further proof of compliance. The questions were formulated based on the panel members' professional judgment and experience.	The AI assistant, was never prompted to specifically generate a list of requests for further information. Having said that, the preliminary assessment identified were the provided documentation was insufficient or where further clarification was needed to assess compliance accurately.

STAGES OF THE AUDIT PROCESS/DATA COLLECTION

THE AUDIT VISIT



Human Panel	AI Auditor Assistant
The audit panel conducted virtual visit. During this visit, they engaged in interviews and discussions with various stakeholders, including staff, faculty, students, and administrators. They gathered qualitative data and sought to gain a deeper understanding of the institution's operations and its adherence to quality standards in practice.	Crucially for this research, we utilized an AI assistant of the conference software to transcribe and summarize the conversations held during these interviews. This provided a consistent and automated method for capturing key information. The AI Auditor Assistant was provided with the transcripts and summaries of the conversations.

STAGES OF THE AUDIT PROCESS/DATA COLLECTION

REVIEW OF AUDIT NOTES



*Human Panel

The audit panel members reviewed their own notes and observations. They discussed key findings, identified emerging themes, and began to form a more comprehensive picture of the institution's strengths and areas for improvement.

~AI Auditor Assistant

The AI Auditor Assistant analyzed the transcripts and summaries and identified key themes, extracted relevant quotes, and cross-referenced the information with the institution's documentation and the agency's standards.

STAGES OF THE AUDIT PROCESS/DATA COLLECTION

FINAL REPORT SUBMISSION



*Human Panel

Based on all the information they gathered – the Audit Package, the responses to their requests, and the insights from the audit visit – the panel members collaboratively developed their final assessment for each of OCQAS’s standards and requirements. This involved critical evaluation, professional judgment, and consensus-building.

The audit panel collectively drafted a comprehensive final audit report. This report provided an overview of the institution's adherence to the agency's standards, highlighted key strengths, identified areas needing improvement, and offered recommendations for continuous enhancement. The report reflected the panel's expert judgment and collective understanding of the institution.

~AI Auditor Assistant

The AI assistant synthesized all the data it had processed – the Audit Package, the institution's responses, and the summaries of the audit visit – to generate its final assessment for each standard. This assessment was based on the patterns, correlations, and evidence it identified through its algorithms.

The AI assistant also drafted a comprehensive final audit report based on its analysis. This report summarized its findings for each standard, presented supporting evidence, and identified areas of strength and recommendations based on its algorithmic interpretation of the data.

~SPEED BUMPS



AI Auditor Assistant

AI Consultant

- Parallel processes –independence
- Explaining the process
- Describing the standards and requirements
- Explaining the reports
- Making the materials readable by the AI tool
- Prompting the AI Auditor Assistant

Review of Audit Package

- AI agent was not able to access the materials/ posted under a firewall with multiple verification
- Had to feed the documents (almost manually), organize them in folders
- AI agent could only read 10 files at time

Audit Visit

- The tool used for the virtual visits does not allow for transcriptions in breakout rooms
- We needed an extra person at the virtual visit to purposely record only the interviews

Review of Audit notes

- Make the interviews and transcripts for the AI agent

*TABLE DISCUSSION (10 MINUTES)

- ❑ What are your initial thoughts on the parallel audit methodology? What do you see as the key strengths of this approach for comparing human and AI auditors?
- ❑ Are there any potential limitations or challenges inherent in this methodology that you think could influence the findings of the study?
- ❑ What are some potential ways this methodology could be adapted or expanded in future research on AI in QA?



~FINDINGS

- ❑ Strong agreement between the two parties.
- ❑ Panel excelled compared to the AI Assistant
- ❑ AI Assistant excelled compared to the Panel
- ❑ *What these findings mean for the future of QA in higher education
- ❑ *The level of detail in the AI report

“Program Advisory Committees (PACs): The college ensures that every full-time program has an active Program Advisory Committee, as mandated by Ministry policy. A Board of Governors document for 2022-23 lists all PACs by program, noting that each program’s PAC meets at least twice per year and that Governors are assigned to attend these meetings. This confirms that PACs are not only formally in place but also that their meetings are happening regularly (each semester where possible) and involve college leadership (deans and board representatives). The PACs provide meaningful input on program relevance and quality – for example, PAC feedback has influenced curriculum updates like introducing new content or adjusting program direction (though specifics in the minutes are limited, it’s standard practice that PAC meeting discussions on industry trends lead to recommendations for the program). The Board receives brief verbal reports from Governors about PAC meetings, ensuring that PAC input is escalated to governance. Additionally, the college’s practice of adding new members (such as Indigenous industry experts to PACs in response to Truth and Reconciliation goals) shows it values diverse and current input on program quality. Overall, the college meets the requirement of having appropriate PACs and has mechanisms for PAC input to be heard and acted upon.”

*TABLE DISCUSSION (10 MINUTES)

- ❑ Based on the findings presented, what are some of the most promising ways higher education institutions could begin to integrate AI into their quality assurance processes?
- ❑ How might the role of quality assurance professionals evolve in institutions that integrate AI into their audit processes? What new skills or knowledge might be required?



~IDEAS

- ❑ The potential for AI to augment or complement human auditors.
- ❑ The specific tasks or stages of the audit process where AI could be most effectively utilized.
- ❑ The potential impact on the efficiency and effectiveness of QA processes.
- ❑ Considerations for training and supporting human auditors in working with AI tools.
- ❑ The technological infrastructure and data management requirements for integrating AI into QA.
- ❑ Ethical considerations and the need for human oversight in AI-assisted audits.
- ❑ The potential for AI to support continuous quality improvement efforts beyond the formal audit process.
- ❑ The use of AI to support program accreditation might required a different approach or methodology.

*STORY TIME





THANK YOU

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