OCUL Artificial Intelligence and Machine Learning Survey Report

Kari D. Weaver, Program Manager, Artificial Intelligence and Machine Learning, OCUL, kari.weaver@ocul.on.ca, August 2025

Purpose of the Survey

The objective of this survey, conducted by the OCUL AIML Program, was to explore respondents' thoughts, feelings, and experiences with artificial intelligence and machine learning in the context of their library work. The survey aimed to gather diverse perspectives to inform future decision-making and programming coupled with gaining an understanding in 2025 of the training needs of library workers in Ontario universities.

Key Considerations from findings

- While a majority of respondents (51%) reported being extremely or moderately familiar with AI tools and technologies, only a small percentage (16%) reported using AI tools and technologies beyond ChatGPT and Microsoft Copilot.
- 28% of respondents indicated they did not use AI in their work, with the majority of those respondents negative towards AI tools and technologies.
- A variety of interests and needs were expressed both for internal library productivity applications and to better meet the needs of library users. Professional development is needed to address both.
- The respondents most engaged with AI worked independently and emphasized an entrepreneurial approach to professional development, but there is a tension in the time and capacity for all workers across OCUL member libraries to be guided by this approach.

Methodology

From May 14 to May 30, 2025 a seven-question qualitative survey was distributed via OCUL and Scholars Portal communication channels asking for response from individuals working in OCUL member libraries. Initial distribution was through established OCUL listservs, with additional communication virtually via the Scholars Portal Newsletter in the second week of distribution, and a final marketing push from the AIML Program Director and AIML Program Manager at their program update during the Scholars Portal Days event. The survey was designed by the AIML Program Manager, who has training in survey design, with support from other AIML, OCUL, and Scholars Portal staff. The survey was validated by OCUL and Scholars Portal staff before distribution.

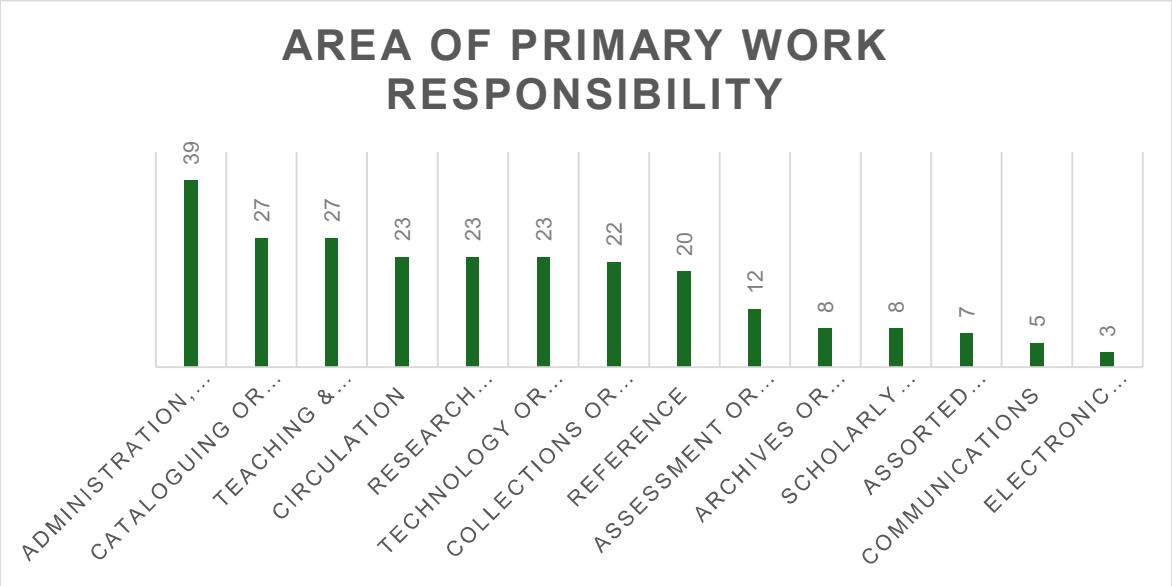
One question sought demographic information about the primary area of focus of the respondent's library work, and one verified permission to use anonymous quotations in reporting, such as this executive summary, or presentations about the AIML program. The other five open-ended survey questions focused on current experiences, interest, and training needs/desires related to artificial intelligence in academic library work.

While the exact population of workers at OCUL member libraries is not currently known, it is estimated to be around 3000. The survey received 247 valid responses, representing an estimated 8% response rate. As it is not possible to know exactly how many individuals actually received the survey invitation, the real response rate is likely higher. While response rates vary by type and focus of survey, a response rate over 5% is considered valid to support research or decision-making for a general response, qualitative survey design such as the AIML Survey (Ruel & Ruel, 2019).

Findings and Interpretation

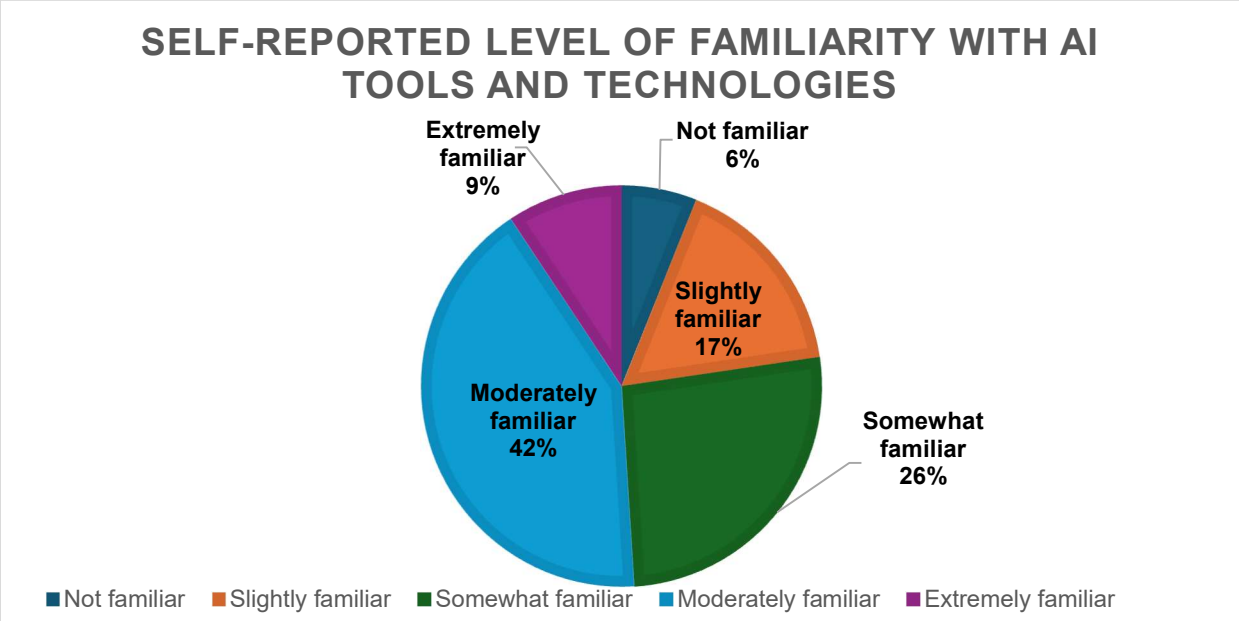
Area of Primary Responsibility in Library Work by Survey Respondents

While respondents in administration and management positions make up the largest single group of respondents, there was broad response across many other areas of library work including cataloguing and metadata, teaching and learning, circulation, research services, technology and web development, collections, and reference with more limited response from other specializations.



The assorted categories include responses indicating an even mix of multiple responsibilities or a singular response in an identified survey category (e.g. facilities).

What Level of Familiarity do Respondents Have with AI Tools and Technologies?



Just over half of respondents (51%) reported being extremely or moderately familiar with AI tools and technologies.

Are Library Workers in OCUL Member Libraries Using AI Tools and Technologies? If so, What are They Using?

When asked about the use of artificial intelligence tools or technologies in their work, 28% (n=70) of respondents reported not using AI in their work. Of those 70 respondents, 58 of those not using AI expressed a variety of concerns or negative sentiments. Examples included comments such as:

> *The technology is generally not ready, despite the mad rush to use it everywhere. I think we're putting human, time, and financial resources in the wrong place at a time when all three are in short supply in most libraries.*
>
> *[I refuse to use AI due to the] Loss of jobs as budgets continue to shrink AI will replace work done by library staff.*
>
> *If there isn't an obvious reason to use this technology, I have no idea why we would waste time trying to invent one.*

Of the remaining 72% (n=177) that did report using AI tools or technologies in their work, over 30 different AI tools or technologies were distinctly named. Of the tools mentioned, 58% of respondents identified ChatGPT and 48% of respondents identified Microsoft Copilot. ChatGPT and Microsoft Copilot where the most identified tools or technologies overall, with the third most reported AI tool or technology being Gemini, identified by 14% of respondents. Other identified AI tools or technologies included:

- Those integrated into existing library databases or technologies (e.g. Scopus AI, Metadata AI Assistant (Alma), Web of Science AI, Lexus+ AI);
- Those used to support discovery, knowledge synthesis, or information literacy instruction (e.g. Perplexity, Research Rabbit, Elicit, Semantic Scholar, Connected Papers)
- Those integrated into technology offerings from the institution (e.g. Concur AI, Zoom AI Companion, Grammarly AI Assistant, Leganto, Canva)
- Those used to support coding (e.g. Github copilot, Kaggle)

For Respondents Who Use AI Tools and Technologies in Library Work, What are They Using Them For?

Participants using AI tools and technologies within the scope of their library work for a variety of purposes. These included:

- Streamlining administrative tasks (e.g. writing emails, drafting letters of recommendation)
- Data-related work (e.g. analysis, collections assessment)
- Strategic communication (e.g. adapting tone in email, social media posts, event descriptions)
- Metadata enhancement
- Coding (e.g. web development, python scripting)
- Brainstorming, editing, and summarization
- Project management
- To fill gaps in disciplinary knowledge

Several participants also highlighted their use as pertaining specifically to support for user populations in their adoption/use of AI tools and as viewing use of these tools as useful in contexts outside of their direct work in libraries. Examples of such sentiments include:

> *I often put student research questions into an AI product after some initial searches on the topic. This practice gives an indication that I might be going in the right direction and not missing an important piece of the topic.*

> *Generating ideas for activities in meetings and in-class, generating ideas for questions and presentation prompts for interviews*

Opportunities for Professional Development in Libraries

Respondents were asked about their interest in learning or development on AI tools and technologies, including areas for potential focus. While responses were wide ranging, several commonalities between responses emerged including:

- Prompt engineering and prompt development
- Assessment or evaluation of AI tools and technologies
- Broad issues of ethical consideration (e.g. privacy/security, environmental impact)
- Integration into research workflows (e.g. evidence synthesis)
- Metadata generation, cleanup

- Use of AI for programming or data analysis
- Effective use for instructional preparation (e.g. designing slides, building lesson plans)
- Aspects of scholarly communication (e.g. copyright, IP, citation and disclosure)
- Applications to streamline repetitive operational or reporting tasks

Difficulties for Engaging in Professional Development in Libraries

In addition to sharing interests, many respondents shared concerns or barriers to engaging in professional development on AI tools and technologies. These issues are expressed through two main themes: time and capacity.

Time

Respondents who highlighted time as a difficulty, focused on the need to stay on top of ever-changing technologies, tensions in finding time within their work itself for professional development, and, sometimes, facilitating access. Comments like the following represent these tensions:

> *It's a fast-moving field, so it can be difficult to stay up-to-date with new applications and tools.*
>
> *[My difficulty is] Having the time, technical knowledge, and infrastructure.*
>
> *Biggest challenge I see is keeping up with developments so we can be useful to faculty and students.*

Respondents also found incorporating needed professional development into their existing schedules fraught and prefer opportunities with scheduled, dedicated time.

Capacity

Respondents expressed concerns around the actual benefit of engaging with AI and in the current capacity of their teams. While the capacity was not always fully negative, it highlights a tension between labour and AI that needs to be more fully explored in academic libraries. The following comments are representative of respondent concerns around capacity:

> *I'm close to retirement age and this would be a lot of work to take on with limited benefits to the library.*

> *I'm interested in developing skills that can help me and my team offload simple but time-consuming tasks so we can focus our efforts on more complex responsibilities. Like most libraries, we have more work than people to do it, so I'd like us to focus our human resources on high level tasks.*

In addition, some capacity concerns were related to specific work functions. For instance, a respondent focused on teaching and learning shared, "*I can't figure out how to get students invested in learning why they should care about AI, nothing I teach will stick.*" The same respondent went on to note, "[preparing for instruction with AI] *can be difficult to keep up with*."

Limitations

This survey is subject to some limitations. First, while it was distributed widely through a variety of communication channels, it is not clear how many faculty and staff across OCUL member libraries received the invitation to the survey. Second, survey participants self-selected, which naturally introduces a bias toward more extreme responses of both positive and negative persuasions. Finally, the survey responses are meant to give a general snapshot of thoughts, feelings, and experiences with artificial intelligence at the time of distribution and are not able to lend insight to conditions at individual OCUL member libraries.

Recommendations

- OCUL and/or Scholars Portal should consider the development of a shared resource hub with curated readings, tool guides, and case studies from across member libraries. This curated offering could streamline the time investment currently required for professional development.
- Library administrators and OCUL should consider how to best offer dedicated time or funding related to AI training.
- OCUL could consider establishing a working group to map and assess AI tools for specific library functions (e.g., instruction, metadata, research support) to clarify value.
- OCUL should support the development of guidelines or position statements on ethical AI use in libraries, including privacy, job impact, and transparency.
- Managers and administrators need to identify and highlight use cases where AI augments rather than replaces human work, especially in time-saving or repetitive tasks.

Next Steps

As this survey explored at a high-level respondents' thoughts, feelings, and experiences with artificial intelligence and machine learning in the context of their library work, there is need for more depth and broader scope to inform this work across OCUL member libraries. While the recommendations in this report are considered, additional efforts should be undertaken to gain additional insight from library workers as follows:

- Conduct follow-up focus groups to track changes in attitudes, usage, and training needs by April 2026.
- Collect feedback following capacity building program offerings (e.g Beyond the Algorithm Reading Club discussions) to refine content and delivery.

References

Ruel, E., & Ruel, E. (2019). *100 questions (and answers) about survey research*. SAGE.