

# But, what do they need? A user-centred approach to Generative Artificial Intelligence literacies in an academic library

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As Generative Artificial Intelligence (Gen-AI) is transforming learning and teaching in higher education, the Library has taken a leading role in supporting students' AI literacies at Curtin University. Early workshops revealed a mismatch between content and student needs, prompting a user experience survey that uncovered confusion, fear and uncertainty. We found that teaching Gen-AI requires flexibility, critical thinking, and a shift from traditional approaches – which starts by listening to our learners. As Gen-AI technologies and institutional policies change, our approach to learning and teaching AI literacies must be adaptable, student-centred, and open to uncertainty and discovery.

**Key Words:** AI literacies, higher education, student-centred learning.

## 1. Context: Curtin University Library

Generative Artificial Intelligence (Gen-AI) technologies are reshaping learning and teaching across educational settings, prompting widespread engagement by both staff and students within the Australian tertiary sector (TEQSA, 2024). Following an initial period of uncertainty and limited guidance, Curtin University has now developed policies and frameworks to support staff and students in using Gen-AI for study and assessment. Consequently, the Library became responsible for supporting students' Gen-AI literacies, alongside traditional information literacy and academic skills development.

Initially, this work was driven by individuals in the Library who had an interest or curiosity about Gen-AI. Communication channels to exchange ideas and readings were set up, and staff started working on guides and workshop content for students. As the university solidified its stance on acceptable uses of Gen-AI, the Library also approached the task more strategically. We began work on refining our resources using three lenses: a theoretical angle to build staff competencies and a Gen-AI literacy framework; a content angle for the creation of learning objects; and a user-centred angle that focuses on students' experiences and needs. This research-in-practice paper focusses on the user-centred approach, as we think it will be most useful for the readers of this journal.

## 2. Applying a user-centred approach

As an academic library, we regularly run workshops on a range of topics. In 2025, Library staff were invited by faculty to deliver a series of workshops on Gen-AI and how it can be used as a student at Curtin University. These 'Deep Dive' sessions focused on large language models, using

Copilot as an example, alongside tools such as Goblin Tools, NotebookLM, Mem, and AI features in databases like ProQuest's Research Assistant. We ran six workshops in total, three online and three in-person in the library.

Attendance varied, with some sessions attracting very few participants. Teaching staff asked us if they could join sessions, and so occasionally we had both staff and students in the workshop. This resulted in some workshops becoming informal discussions about the role of Gen-AI in student life at Curtin. While this was useful for our own understanding of the current state of the Gen-AI landscape at Curtin, it was less effective in terms of teaching AI literacy. The content did not go as deep as advertised, as we spent much of each session introducing Gen-AI tools, assuming students needed that foundation. In practice, some did and some did not. Teaching beginners alongside experienced users meant the material was sometimes too basic and at other times too advanced.

Taking the time to reflect on the workshops afterwards, we realised that usually our focus is academic skills, and the foundational approach to learning these skills has remained consistent over the years. For example, searching for information in a catalogue, writing academic assessments and referencing sources all have tried and true methods that can reliably be passed on to students. We realised that we had approached Gen-AI like any other topic: adding a UniSkills module (Curtin University Library, n.d.) and developing a workshop. When asked to deliver the 'Deep Dive' sessions, we created those using this usual process: we identified a focus for each one, determined what students needed to know and designed activities to support their learning.

With Gen-AI however, we realised our approach was based on assumptions about what students needed and struggled with. The workshops were designed without a clear understanding of what students already knew or wanted to learn. To address this shortcoming, we conducted a user experience (UX) survey (Priestner, 2021) to identify the types of questions students have about Gen-AI and whether they were aware of the Library's resources. We also took the opportunity to gather feedback on the organisation of content in our UniSkills website (Curtin University Library, n.d.), as we had received comments about difficulties locating Gen-AI content in the current structure.

We conducted both guerrilla interviews (short, ad hoc interviews) and a card sorting activity<sup>1</sup>, both common UX research methods (Priestner, 2021). We asked three questions:

1. Thinking about Gen-AI, what do you struggle with and what questions do you have?
2. Do you know the Library has Gen-AI resources and workshops?
3. How would you sort these cards into two categories and why? Are there any you feel you need to leave out? And could you suggest names for the categories you have made?

We collected data during two separate timeslots in May 2025, approaching both individual students and groups in the TL Robertson Library, and invited them to take part in a brief interview in exchange for a piece of chocolate. Although two students declined the offer, the vast majority agreed, resulting in data being collected from a total of 25 students – including one also working in the Library as a Peer Academic Mentor (PAM).

We began to analyse the data the day after the UX was conducted, identifying common themes regarding questions about Gen-AI, and determining how many of the students were previously aware of the Library's Gen-AI resources and workshops. In a second analysis session, we reviewed the findings from the card sorting activity, however, as those are arguably only relevant to our context and the organisation of our online UniSkills resources, we do not report on those findings in this paper.

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<sup>1</sup> The cards for the card sorting activity were printed with the names and a brief description of UniSkills modules (Curtin University Library, n.d.).

### **3. Students' questions and concerns around Gen-AI use**

Analysis of the students' responses to our first question about Gen-AI revealed the following three main themes.

#### **3.1. Theme 1: Rules around Gen-AI use at Curtin**

Students who participated in the UX wondered if they could and should be using Gen-AI, what they were allowed to use it for, and whether there was a limit to its use for their studies. Students also wanted advice on how and when to reference Gen-AI in their assessments, and some were concerned about how they could prove that they didn't use Gen-AI if they were alleged to have used it. Two students stated that they actively avoid using particular words common in Gen-AI output, and that they misspell words on purpose to avoid being accused of using Gen-AI – as they would rather receive a penalty for this than have to try and prove they didn't use Gen-AI.

#### **3.2. Theme 2: Understanding how Gen-AI works and how it can be used effectively**

Students reported wanting to know how to write good prompts, and wanting to understand how Gen-AI works in terms of how it produces output, including hallucinations. One student questioned how they could determine which tools were better than others – and therefore which ones to use. On the latter topic, it is worth noting that the only tool students mentioned by name was ChatGPT, with five students referring to it.

#### **3.3. Theme 3: The various ways that Gen-AI will impact students in future**

Two students told us they wondered how they will be expected to use Gen-AI in the workforce (with one student asking specifically about maths), and another asked if Curtin will embrace Gen-AI use. Students also reported worrying about whether Gen-AI use will impact their skills negatively, one student asserted that they don't trust it, and another told us they would be interested in discussing the ethics of Gen-AI use, particularly with regards to large companies making money off its use.

## **4. Students' awareness of Library Gen-AI resources and workshops**

Analysis of students' responses to our second question about the Library's Gen-AI resources and workshops revealed that only five out of 25 had seen or heard about either the Gen-AI workshops or UniSkills content, one of whom was the PAM. Removing their response from the analysis, only 4 out of 24 (17%) of respondents were aware of this support. This result made us evaluate our current communication strategy regarding the Library's support for Gen-AI literacies, with some new forms of communications planned for 2026.

## **5. Reflections on findings**

Findings from the UX and ongoing discussions made us realise that contextual factors strongly influence how students engage with Gen-AI – introducing more variability than any topic we have previously taught. For instance, a student may be permitted to use Gen-AI tools in one unit but prohibited in another. Individual goals, challenges, and learning preferences also shape usage: some students seek quick fixes, others need help finding sources, and some want support organising their ideas. Concerns vary too – while some students worry about bias, privacy, copyright, environmental impact, or the effect on skill development (Zhai et al., 2024), others may not consider these issues at all. Experience levels range from students who have never used Gen-AI to those who rely on it daily, yet even frequent users often lack understanding of how it works or its limitations.

The UX also highlighted confusion around Curtin's Gen-AI policies, and we found that most student questions require contextual answers: "it depends" is often our starting point, followed by

a conversation about how Gen-AI could be used. Even common questions like, “Which tool is best?” must be answered with “Well, what are you trying to do?”.

Many of the questions students asked us about Gen-AI stem from a clear fear of getting it wrong. In tertiary education, we are used to working within well-defined rules, and students understandably want clarity to avoid having to redo assessments or entire units. However, those rules no longer apply in the same way when it comes to Gen-AI use, and this shift requires us to adapt our approach to better support students as they navigate an unfamiliar and often confusing landscape. We realised that teaching Gen-AI demands flexibility: we need to embrace uncertainty, maintain a playful mindset, and emphasise critical thinking.

## **6. Implications for practice**

Not only was this UX project quick and straightforward to carry out, but it also provided us with valuable insights. While many of these reinforced ideas we had already considered or suspected, it was affirming to hear them directly from students

Gen-AI’s impact on tertiary learning is still evolving, and approaches to AI literacy must remain flexible. Staff will need to continually adapt content in response to technological developments and changes in institutional policy, maintaining a flexible mindset until these tools become more stable and predictable. For example, if Curtin introduced institutional Gen-AI tools, we would need to revise much of our advice on privacy and data protection. We have therefore learned to take a more experimental and flexible approach, embracing trial and error in both design and delivery of content.

Closely tied to the need for flexibility when teaching Gen-AI is the importance of embracing the uncertainty that comes with emerging technologies. It helps to remind ourselves, our colleagues, and our students that while Gen-AI can feel disruptive and challenging, it also invites curiosity, discovery, and renewed engagement with critical literacies. At Curtin Library, this means recognising that we are learning alongside our students – sometimes even at the same pace – and acknowledging that students may occasionally know more about the tools than we do. This uncertainty can be difficult for colleagues who are used to relying on deep expertise. Leaning into this uncertainty is essential, and can be supported through open acknowledgement, collegial support, and reminders that discomfort is often part of learning something new.

Another way to embrace the uncertainty surrounding Gen-AI and its implications for learning and teaching is to adopt a playful mindset (Leather, 2020), having a go at things for the sole aim of exploration and with curiosity. At the same time, we do remind ourselves that using Gen-AI simply for the sake of it, especially when other tools could achieve the same outcome, can raise ethical concerns, including their environmental impact. Regular discussions about ethics and respect for individual values have worked well for us in this context.

A final takeaway from our experience, though it may seem obvious, is that critical thinking must underpin all Gen-AI-related teaching and learning (Feiming et al., 2025). Our decisions should be guided by ethics and values, including concerns around environmental impact, data protection, and biased outputs. We also need to critically examine the assumption that using Gen-AI automatically enhances productivity. We know high-achieving students tend to benefit more from Gen-AI, while those already struggling may over-rely on it which widens existing equity gaps (Hawkins et al., 2025). This reinforces the need to prioritise teaching critical literacies.

In summary, our experience at Curtin Library when teaching AI literacy highlights the importance of a flexible, student-centred approach grounded in critical thinking and ethical awareness. By listening to students, adapting to evolving technologies and policies, and embracing uncertainty with curiosity and care, we can help learners build the literacies they need to thrive in a rapidly changing academic environment.

## Declarations

The authors have used Copilot for substantive editing and copyediting of this text. We have reviewed all content and wordings created by CoPilot, edited this content as needed, and take full responsibility for the content of the publication.

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