Development of AI literacy support within a small academic library team: Reflections from the University of Edinburgh

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Abstract
This paper explores the experiences of one small team of academic librarians in developing AI literacy support for their university. Gibbs' Reflective Cycle is used to encourage deeper consideration of successes as well as areas that still need developing. Early achievements include good engagement from staff and students, development of our own confidence and understanding of the technology, and acknowledgment of our experience and knowledge within the wider library. Areas that require ongoing improvement include promotion of our support within the wider university, ensuring material is kept up to date in a rapidly changing field, and managing the impact of this work on our workloads. This reflective report highlights the value of using reflective models to encourage strategic consideration of our work and how to ensure any improvements we make are appropriately targeted.

Key words: *information literacy; generative artificial intelligence; artificial intelligence.*

Introduction

When ChatGPT launched in November 2022 it quickly became clear that it could have a significant impact on users'search behaviour and on education more generally. As Academic Support Librarians (ASLs) supporting students in their information literacy skills we knew we needed to understand this new technology and develop new resources to support staff and students. This article provides a reflective report on how AI literacy expertise and support was developed within one small library team and utilizes Gibbs' Reflective Cycle to enable greater understanding of our experience (1).

Reflective practice is well suited to reviewing professional work, particularly projects or responses to a new area of work that is changing rapidly. We have taken a continuous improvement approach to our work on AI literacy, whereby we use feedback, our increasing knowledge, and changes in the environment (both AI developments and changes in approach within higher education) to make small but continual improvements to our material and the support we offer (2). To ensure these changes are true improvements, we need to reflect on what has gone well and what hasn't in our previous work. Using a reflective practice model ensures we examine our work from multiple perspectives systematically. Gibbs' six-stage cycle proved particularly valuable in helping us distinguish between surface-level problems (like declining workshop attendance) and their underlying causes (such as students' overconfidence in their existing AI skills). This structured approach revealed actionable insights we might have missed in an unstructured team discussion. As Miller, Ford and Yang (3) highlight, in order for reflection to truly improve the work we do, we need to approach reflection with intention and so we decided to use a particular model to guide our reflection.

Gibbs' Reflective Cycle encourages practitioners to analyse any experience from six different angles, moving sequentially through them all: description, feelings, evaluation, analysis, conclusion and action (1). Gibbs' model was designed for use within teacher education and so felt particularly valuable to our work teaching AI literacy (*Figure 1*) (3).

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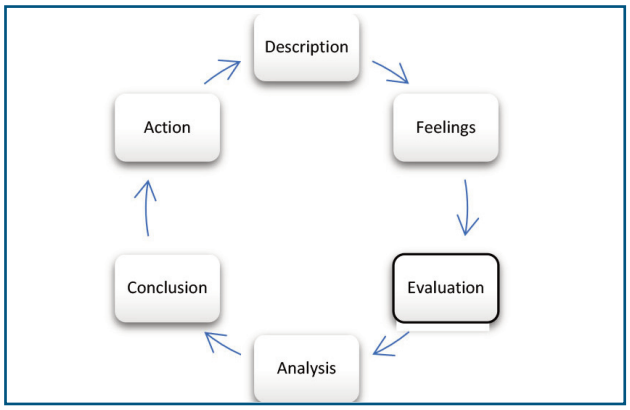

Fig. 1. *Gibb's reflective cycle.*

Gibb's reflective cycle

Description

The ASL AI Group was formed in May 2023, including the Associate Director, Library Academic Support, Elizabeth Williams, and ASLs Anna Richards, Ishbel Leggat, and Robert O'Brien. A further colleague, Christine Love-Rodgers, joined in 2025. One of our first tasks was to understand what AI literacy meant for us and our students.

Lo (4, para. 3) says that AI literacy is: "the ability to understand, use, and think critically about AI technologies and their impact on society, ethics, and everyday life". He argues that AI literacy in academic libraries includes:

- technical knowledge of how systems work;
- awareness of ethical issues;
- critical engagement with AI output use;
- practical knowledge of how to use tools;
- understanding of the societal impacts of AI.

We recognised that our existing expertise positioned us well to apply this conception of AI literacy to information literacy, in particular:

- understanding the ethical concerns around generative AI (GenAI) development and use, both generally and in an academic context;
- helping staff and students to use GenAI tools as part of the literature and information searching process, such as using it for pre-search preparation (deciding on a research question, designing a search strategy etc.), and using generative AI technologies for searching for academic literature.

Our approach has been one of continuous development from the start. Our first online lecture for students was only 30 minutes long and focused on ethical and responsible use, as well as discussing what GenAI is. We then extended this to 60 minutes long, before creating three, hour-long sessions. The first of these covered ethical and responsible use concerns, the second use of GenAI for pre-search preparation and the final one use of GenAI for literature searching. These workshops were supported by a LibGuide (Using Generative AI Tools in Academic Work), which mirrors their content. We have since delivered further sessions aimed at dissertation students and integrated content on GenAI into embedded teaching within the curriculum. We have also created shareable slides to help ASL colleagues embed GenAI content into their own in-curriculum sessions.

Feelings

Our initial feelings about GenAI were a combination of concern, uncertainty, and curiosity about this new technology. We knew that it could change how people searched and used information, as well as potentially impacting our careers and professional work (5). However, we were uncertain about the full extent of any impact this new technology would have – other technologies have had less impact than initially thought (e.g., Second Life (6)). This uncertainty, combined with our lack of knowledge about GenAI at this point, meant that we initially felt intimidated by the task of teaching ourselves whilst also developing material to inform our colleagues and support our students.

As we learnt more, our confidence in our ability to inform others grew. However, GenAI technology has moved very quickly – ChatGPT, for example, has released 11 models since November 2022 (not including the mini and nano versions of each model (7)) and new tools are being developed very rapidly. This has led to us feeling overwhelmed with the task of keeping up to date and also frustrated at the constantly shifting landscape. It has sometimes felt that as soon as we feel confident in what we are teaching students, the technology changes or we learn some new theory that changes how we perceive GenAI.

We have also felt a tension when it comes to the ethical implications of this technology. There are many librar-

ians and researchers who are critical of GenAI and the implications for information literacy and education (e.g., Shah & Bender (8), Williamson (9)). Some librarians argue that we should not encourage their use in any way (Slater (10)). However, we feel we have a duty to help our students use them in a responsible way, so they can make informed decisions about whether to use them or not, and if they do use them, to use them well.

Evaluation

The creation of the LibGuide proved advantageous in offering a framework around which to develop workshop sessions and to provide a useful support resource. Since August 2025 the LibGuide has been viewed 7441 times, more than any of our other guides. However, with the changing nature of AI development, it has been difficult to keep our support materials up to date. We also saw strong interest in live sessions delivered; we saw 280 staff and students in academic year 2024/25 and received 100% positive feedback. However, the numbers registering for sessions has declined; for instance, in 2024/25 we had 121 people register for our autumn session on using GenAI for literature searching whilst in 2025 we only had 49 registrations.

In addition to our activities around designing and delivering AI sessions, the ASL AI Group has become a useful reservoir of collective AI knowledge and a point of contact for ASL and academic colleagues on AI-related matters. The experience has been helpful as a springboard to collaborate on AI-related projects, both within the University of Edinburgh and externally, and to promote our work via conference presentation and experience sharing. It has also developed as a useful working group and as an advocacy group within the Library and University Collections Team, contributing to broader discussions on AI development within the University's Information Services Group and beyond.

An ongoing challenge – which may be familiar to colleagues in other institutions – is that academics do not yet widely recognise AI literacy, particularly the use of AI-powered tools for information searching, as falling within librarians' professional expertise. This creates a barrier to embedding our support within curricula and engaging with faculty on AI-related pedagogical decisions. We need to actively work to shift this perception, demonstrating that critical evaluation of AI search tools is a natural extension of information literacy and firmly within our professional remit.

Analysis

The aspects of our work that succeeded early on – strong LibGuide views, positive feedback from sessions, and requests for input from AI policy groups in certain schools and from academics planning their teaching – drew largely on competencies already embedded in our practice. As Lo (4) observes, academic librarians are well placed to play a key role in supporting AI literacy: libraries have long championed information literacy and extending this to AI contexts where librarians' expertise in critical evaluation, bias detection, and ethical judgments about academic information tools proves highly relevant. Our existing skills and knowledge enabled us to act quickly in creating a guide and teaching content on AI use. We were also aided by our focus on a relatively bounded application of AI's use in literature searching. This reduced the need for cross-disciplinary agreement and enabled us to respond quickly to emerging AI trends in higher education, helping the Library make an early contribution to AI literacy at the University.

The challenges we encountered reveal deeper, systemic issues beyond workload alone. Keeping the LibGuide current highlights a mismatch between the slow pace and ongoing learning demands of updating it and a field where tools, capabilities, and expectations evolve frequently. This echoes Huang, Cox, and Cox's (11) finding that UK academic library strategies rarely mention AI explicitly – leaving individual teams to monitor fast-moving developments themselves, without sector-wide structures to support timely knowledge sharing and professional skills development. Declining attendance, despite evident need, may reflect students' perceived proficiency masking shallower literacy: Freeman's (12) HEPI/Kortext survey shows 92% of UK undergraduates now reporting AI tool use (up from 66% the prior year), yet only 36% reporting receiving institutional AI skills training.

The difficulty we have experienced in gaining traction within schools is also hard to explain but may be accounted for by Cox's (13) jurisdictional analysis, in which librarians' claim to emerging technology work is often contested – or simply unrecognised – by other professional groups, including academics. On reflection, the

issue may be less about the visibility of our work and more about a perception, across the University, that AI literacy does not fall within the Library's remit.

Conclusions and future actions

The final stages in Gibbs' reflective cycle are conclusions and an action plan. Ideally, you reflect on what you would do differently should a similar situation arise in the future (1). However, as this work is ongoing, we have reflected on how our experiences will inform future actions within the same project.

One of the most important conclusions we have come to is that keeping up with the fast-changing nature of AI requires planning for, rather than hoping to update materials on an ad-hoc basis. Whilst our focus on AI in literature searching has helped manage the workload, even keeping our small number of "deliverables" up to date has proven difficult. To counter this, we have already committed to re-working the LibGuide before the start of the 2026-2027 academic year. Once it has been updated, we will need to plan for how we can keep it up to date within our current workloads; this may mean only being able to commit to an annual review, even if tools change mid-year.

We also need to plan for how to transition some of our work to "business as usual". As AI has gained traction within higher education and society, it is no longer sufficient to provide support on AI information literacy in standalone, optional sessions. Rather, we need to consider how to ensure that all ASLs are confident in teaching the core skills and knowledge students need. Although we already provide reusable slides, and some librarians will be integrating this content into existing sessions, coverage across all disciplines is not uniform. We will therefore organise an ASL-focused session to discuss what is being taught by other ASLs and what support we can offer to them. Increasing the coverage of AI information literacy within in-curriculum sessions may also mitigate declining attendance at our optional sessions.

One final conclusion is that we should not assume that other people will recognise the links between AI literacy and the Library's areas of expertise. Whilst we could immediately see that aspects of GenAI were highly relevant to our work as librarians, this may not be apparent to academic colleagues. We therefore need to work alongside our ASL colleagues to increase promotion of our work in the wider University. This will not only increase knowledge of the support we can offer but also help us by increasing our knowledge of disciplinary differences in the approach to GenAI.

Discussion

Our hope in sharing this reflective report is to provide an insight into the approach taken by one small team within a large academic library. We chose Gibbs' Reflective Cycle due to its development within teacher education but also because it provides a clear structure for reflection. Whilst we have updated our material since it was initially developed, we have not collectively conducted intentional consideration of what has gone well or not, and what actions we need to take to address any issues. Writing this article has allowed us to do that and has encouraged us to consider how we can be more strategic in addressing the problems we have identified.

When our group initially formed, our first task was to inform ourselves about the capabilities and concerns around GenAI and then to support our students. Our reflection on the work of the past three years has shown that we have been successful in this; our live sessions and LibGuide have good engagement and we are a recognised point of contact for other members of staff in the library. However, conducting this reflection has also helped us to consider areas that still need improvement, and to consider what actions we might want to take next. This includes work to increase the visibility of our work outside of the library, including increasing our connections with faculty staff, and considering how we manage the need to keep materials current when the technology changes very rapidly. We also need to focus on working with our colleagues in the wider ASL team in order to increase the amount of AI literacy support they can provide as part of their own teaching.

The most profound observation we have taken from this process of reflection has been how difficult it is to integrate this work into our existing workload. A project should have an end point, but this work is ongoing and has indeed increased in complexity and volume. Moreover, "project work" should only comprise a small percentage of our workload. We are now at the point where integrating AI literacy into our work is no longer a project but a significant and time-consuming expan-

sion of our remit. Considering that burnout in academic librarians has been linked to role overload, serious consideration needs to be given to how our roles can change to integrate AI literacy in a sustainable way (14).

Submitted on invitation.
Accepted on 21May 2026.

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