



Conversations with students on self-regulated learning with GAI

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Presentation abstract

How can learning developers foster AI literacy while helping students use AI ethically in their academic work? Recent research (Lin et al., 2024) shows students value generative artificial intelligence (GAI) for levelling the linguistic playing field, particularly for multilingual writers, while expressing concerns about unethical use, reduced critical engagement, and the flattening of linguistic diversity. As GAI literacy can support academic success (Seo et al., 2021; Hashim et al., 2022; Barrot, 2023), learning developers play a critical role in supporting students' self-regulated AI use to maximise learner benefits while avoiding pitfalls.

In this workshop, we shared our framework for teaching AI literacy in academic writing, building on Winne and Hadwin's (1998) COPES model of SRL and recent work on AI literacy (Allen and Kendeou, 2024). Our five-phase model integrated skills in prompt formation, output evaluation, and ethical AI use (see: <https://wordpress.kpu.ca/gaiwriting/>, Vytasek and Page, 2025).

Participants will explore implementing this framework across disciplines through educational scaffolding that addresses (a) defining the writing task; (b) planning and goal setting; (c) using learning strategies; and (d) applying metacognitive processes to evaluate, reflect, and improve on both task completion and broader skill development.

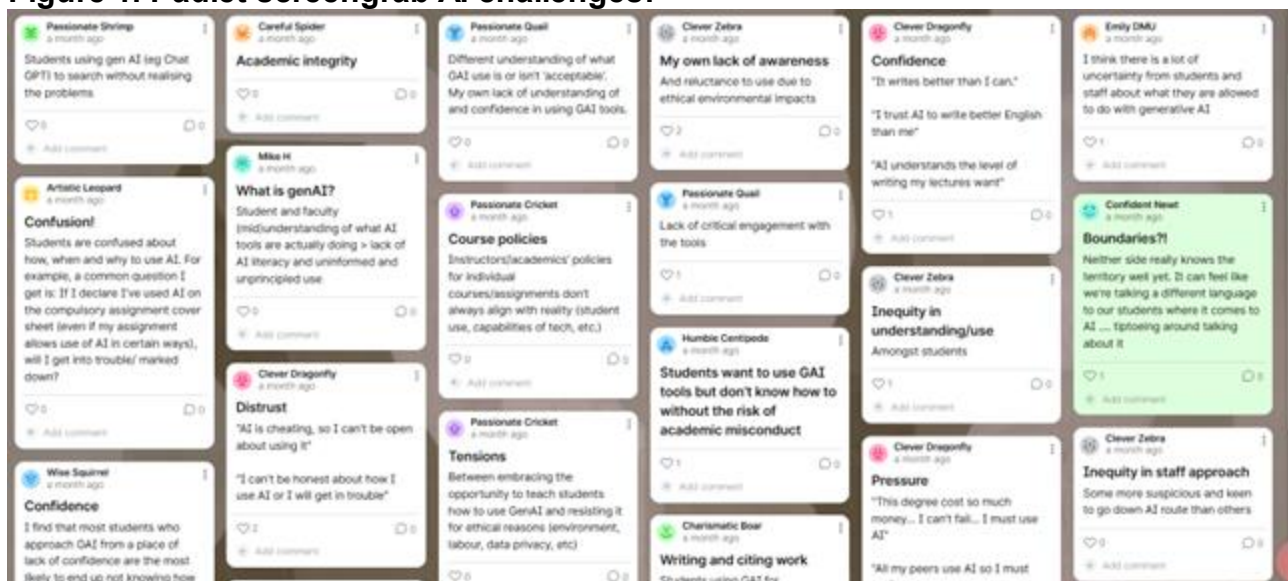
Keywords: generative artificial intelligence; literacy; self-regulated learning.

Community response

In their workshop, Jovita and Christina presented their five-step model. Their approach can be used to help students critically approach the use of Generative AI but also reframe some of the AI uses away from unfair means and towards critical co-production. For example, instead of getting the AI to write the assignment, ask it to support their timeline, or to introduce them to authors they may wish to read. This aims to help students use AI to better look at and integrate information, but with their own critical voice still at the heart.

At the start of the workshop, participants were asked to define what GAI-related challenges were encountered in their work with students. This activity prompted lots of engagement from the room, with many keen to contribute to their own experiences.

Figure 1. Padlet screengrab AI challenges.



‘Neither side really knows the territory well yet. It can feel like we’re talking a different language to our students where it comes to AI ... tiptoeing around talking about it’.

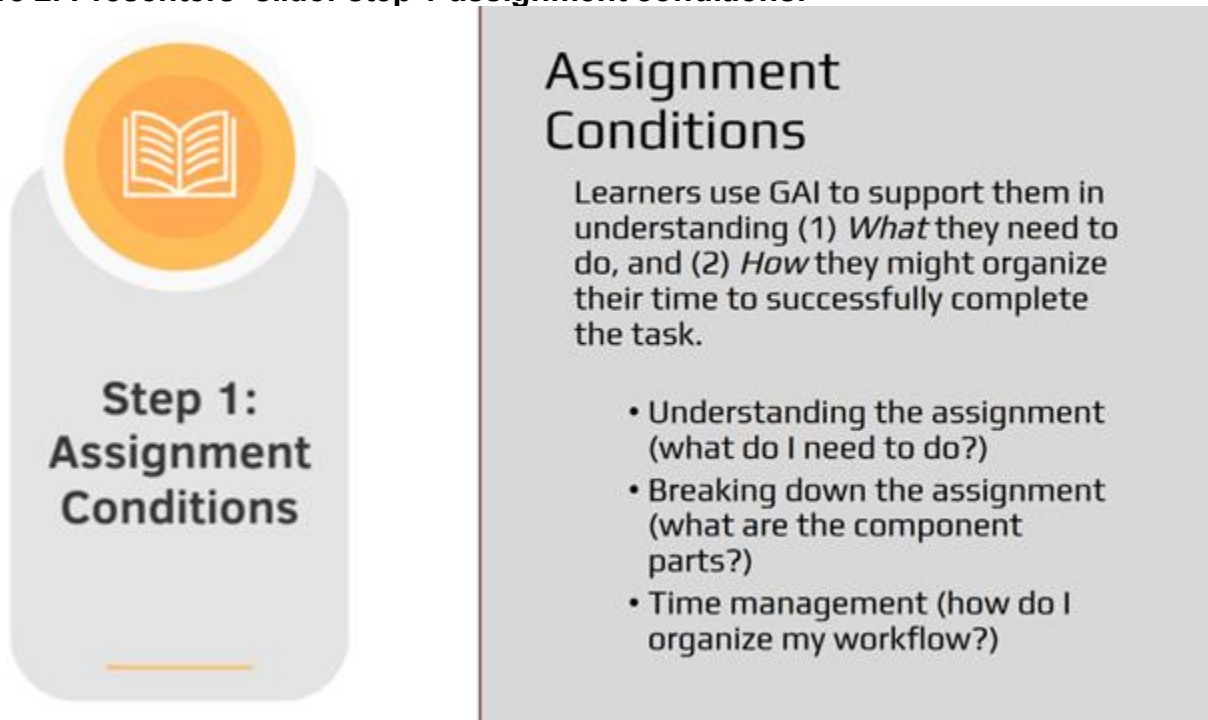
Some key questions were then presented to the group:

- How do we support students in using GAI in ways that support self-regulated learning and skill-development?

- How do we include learning *with* GAI in conversations, alongside learning how to use AI?
- How does learning *with* GAI intersect with other AI literacies?

The potential of GAI and the role of learning developers to support self-regulated learning was discussed in the session. The introduction of the framework and explanation of how it can be applied proved insightful to participants.

Figure 2. Presenters' slide: step 1 assignment conditions.



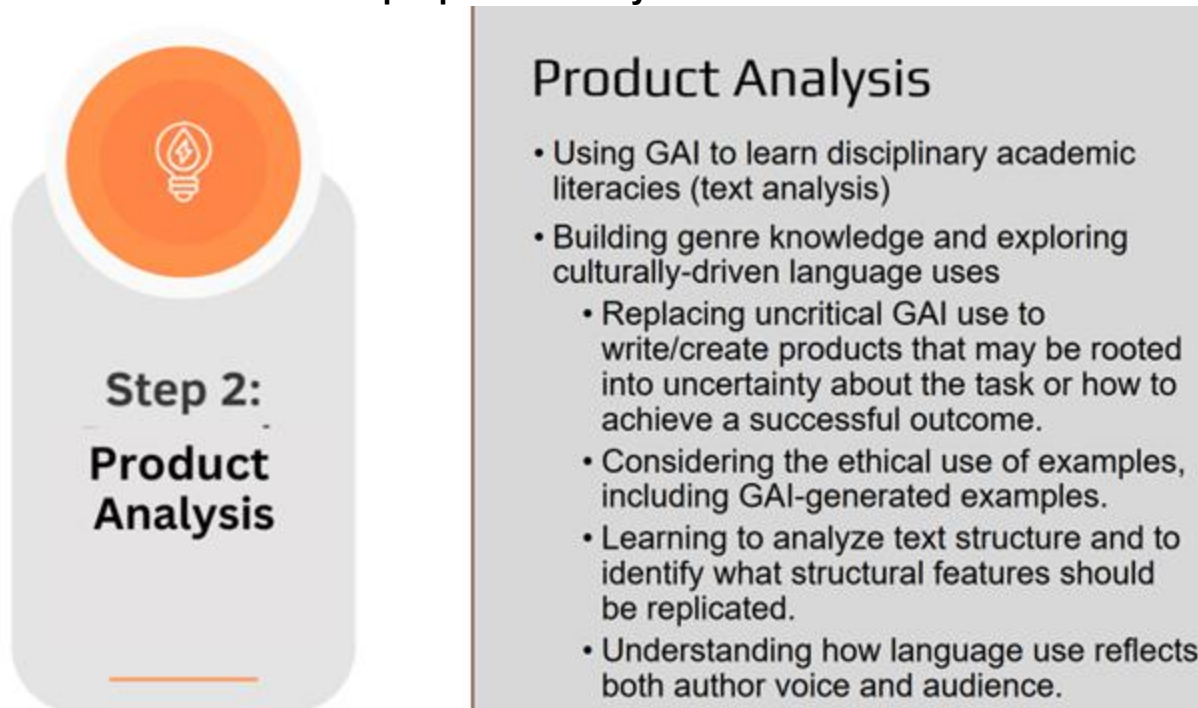
The slide is divided into two main sections. On the left, there is a vertical grey bar with a rounded top. At the top of this bar is a circular orange icon containing a white outline of an open book. Below the icon, the text 'Step 1: Assignment Conditions' is written in a bold, black, sans-serif font. A thin orange horizontal line is positioned at the bottom of the grey bar. To the right of the grey bar, the slide content is set against a light grey background. The title 'Assignment Conditions' is displayed in a large, bold, black font. Below the title, a paragraph of text explains that learners use GAI to support their understanding of (1) *What* they need to do and (2) *How* they might organize their time to complete the task. This is followed by a bulleted list of three items: 'Understanding the assignment (what do I need to do?)', 'Breaking down the assignment (what are the component parts?)', and 'Time management (how do I organize my workflow?)'.

Step 1: Assignment Conditions

Learners use GAI to support them in understanding (1) *What* they need to do, and (2) *How* they might organize their time to successfully complete the task.

- Understanding the assignment (what do I need to do?)
- Breaking down the assignment (what are the component parts?)
- Time management (how do I organize my workflow?)

Figure 3. Presenters' slide: step 2 product analysis.




**Step 2:
Product Analysis**

Product Analysis

- Using GAI to learn disciplinary academic literacies (text analysis)
- Building genre knowledge and exploring culturally-driven language uses
 - Replacing uncritical GAI use to write/create products that may be rooted into uncertainty about the task or how to achieve a successful outcome.
 - Considering the ethical use of examples, including GAI-generated examples.
 - Learning to analyze text structure and to identify what structural features should be replicated.
 - Understanding how language use reflects both author voice and audience.

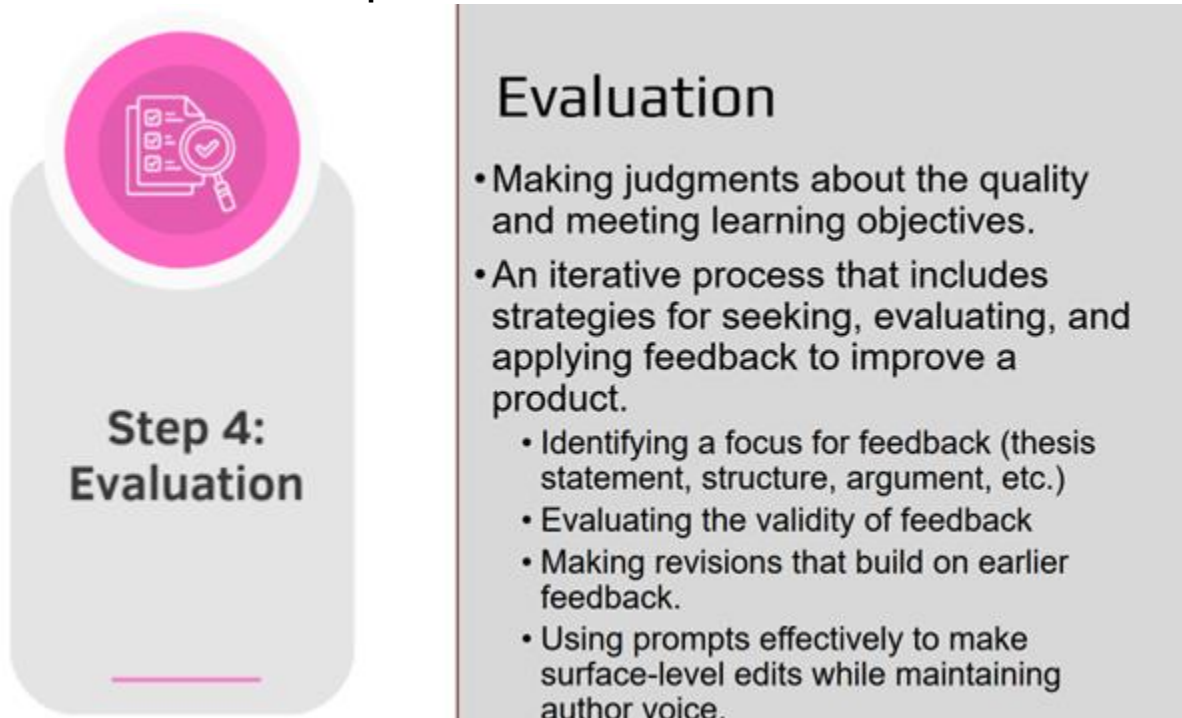
Figure 4. Presenters' slide: step 3 research synthesis.



**Step 3:
Research and Synthesis**

Research and Synthesis

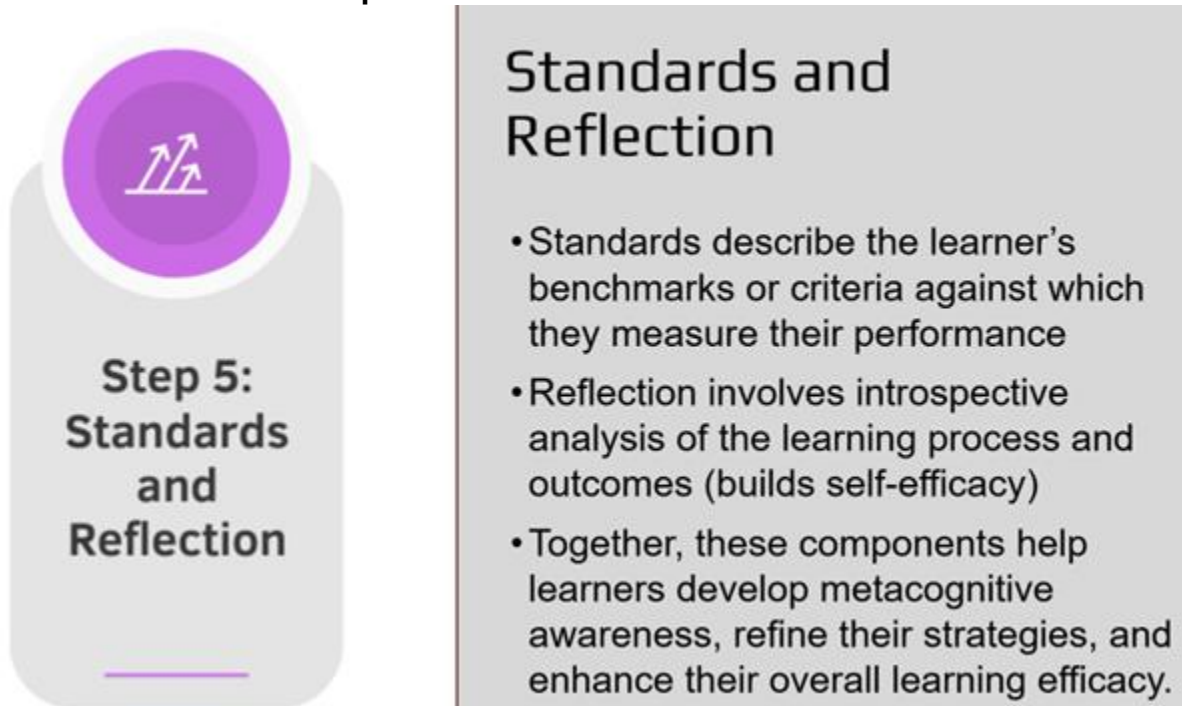
- Gathering, understanding, evaluating and integrating information.
 - Information gathering (exploration and refinement)
 - Source evaluation (peer review, accuracy, bias)
 - Understanding the topic
 - Reading comprehension
 - Critical analysis
 - Reflecting with AI on the collection of resources

Figure 5. Presenters' slide: step 4 evaluation.


**Step 4:
Evaluation**

Evaluation

- Making judgments about the quality and meeting learning objectives.
- An iterative process that includes strategies for seeking, evaluating, and applying feedback to improve a product.
 - Identifying a focus for feedback (thesis statement, structure, argument, etc.)
 - Evaluating the validity of feedback
 - Making revisions that build on earlier feedback.
 - Using prompts effectively to make surface-level edits while maintaining author voice.

Image 6. Presenters' slide: step 5 standards and reflection.


**Step 5:
Standards
and
Reflection**

Standards and Reflection

- Standards describe the learner's benchmarks or criteria against which they measure their performance
- Reflection involves introspective analysis of the learning process and outcomes (builds self-efficacy)
- Together, these components help learners develop metacognitive awareness, refine their strategies, and enhance their overall learning efficacy.

Figure 7. The five-step model.

LF: There were some really interesting ideas shared by Jovita and Christina and I will definitely be returning to the resource to look at these in more detail. One idea that I plan to explore in my interactions with students is to consider using GAI to break an assignment brief down into manageable tasks and organise time, which had never occurred to me before. Fear of getting started is a huge barrier for students and I think this is a great way to potentially overcome that. For students who are cautious about using GAI, this also feels quite removed from the assignment itself and might feel more ‘low stakes’ than using it to create a plan or provide feedback on writing, for example.

KW: There are also several questions that I will be mulling over and discussing with my team. When is the optimal time to introduce GAI to students (when they’re probably already using it anyway)? How do we support students to be more open about their GAI usage? How do we balance conflicting opinions on appropriate uses of GAI in HE?

Authors’ reflection

Reflecting on the workshop discussions, one point that stood out was how much alignment there seemed to be around the idea of making AI use more visible and intentional. The conversations suggested that both faculty and students are looking for ways to move beyond the current uncertainty around AI policies toward something more transparent and educational. In our workshop, we framed this as an opportunity for metacognitive development, helping students not just use AI, but think about how and why they are using it. Some felt that the prompting guides might help reduce the confusion around prompt logging and partial acceptance policies that many of us have been grappling with, though there is still work to be done to better understand how this can be implemented practically across different disciplines and course structures. My hope is that these examples will

serve as a starting place and encourage others to think creatively around guided uses that support learning. In response to the question of timing, I believe the earlier this is introduced, the better. Clarity and continued conversation can help build the use and utility in the course.

A new insight that came to me (Christina) as I interacted with workshop participants is that much of the work around strengthening student metacognition around AI use may relate to helping students move from overly broad/general prompts to those that are more specific and focused. When students offload large portions of the cognitive task to AI, they tend to ask broad content-focused questions and may rely on the AI output heavily. In other words, relying on broad content-focused prompts leads to using AI as a content creator, rather than as a learning tool. Alongside building student self-efficacy around their writing processes, teaching students how to think critically about their task and to create focused, iterative prompting sequences with AI-tools may be a critical part of the process. As I think about how I continue to shape my discussions around AI use with my students, I envision making explicit the differences between broad/content prompts and specific/task-focused prompts.

The discussions around writing instruction revealed some interesting tensions and possibilities. Several groups talked about the potential benefits of breaking down writing tasks to seek specific AI feedback as a way to preserve student voice, while still allowing AI assistance with surface-level elements, and there was particular interest for how this could support additional language learners. Multilingual students who have sophisticated ideas but struggle with expression may really benefit from this type of support, but there is tension in how to preserve multiple writing styles without all conforming to one form. Those with perceived weaknesses in writing may not yet have the skill or confidence to reject overly crafted AI suggestions and revisions that alter their ideas or expressions. The tendency of AI tools to shift student writing to dominant culture language and cultural norms is an ongoing tension. How do we help multilingual writers leverage tools to support their ability to express themselves in ways that are heard and valued, without diminishing authentic voice and linguistic diversity?

The interest in experimenting with different writing samples and styles was also a point of discussion, especially given how often students ask for this kind of support in introductory courses. There were good points made about the importance of finding a balance between

providing that scaffolding and ensuring students still develop independent writing capabilities. Often, we learn and understand through writing and working through the messy confusion of our ideas, so making it too formulaic or structured might detract from the learning. On the other hand, the 'messiness' of experimenting with genre often relies on implicit knowledge of writing conventions, and experimentation may emerge more organically after developing a foundational understanding of disciplinary constructs. These conversations have given me a lot to consider as I think about my own work as a learning strategist and ways to work with instructors and students in their use of AI.

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The community response was edited by Amy Sampson, who captured the central themes emerging from the discussion.

The authors did not use generative AI technologies in the creation of this manuscript.

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