

Deliberate Cognitive Reclaiming

The principle

In simple terms, students identify a capability they typically offload and deliberately reclaim it. Generative AI makes it increasingly easy for students to hand cognitive tasks to a tool: generating ideas, structuring writing, summarising information, explaining concepts, solving problems or producing first drafts. This is a form of cognitive offloading, using an external tool to reduce the cognitive effort required to complete a task.

Cognitive offloading is not inherently undesirable. We routinely use calculators, search engines, calendars, notes and other technologies to reduce cognitive load. Similarly students routinely offload tasks but are they choosing to offload the designed for their education, and are they inadvertently offloading capabilities that they need to develop themselves? The answer is often yes and is the challenge for which educators have to find solutions.

For students who are still developing foundational academic and professional skills, becoming aware of this distinction may be an important part of learning to use AI effectively.

Context

This assessment approach is ideal for a skills-based module which supports other modules on a program, or on an integrated programme. However, it could be used as a supportive task on a subject module which expects the students to engage with several practical tasks.

The activity

Students are first introduced to the concept of cognitive offloading and asked to consider how they currently use generative AI.

They then undertake a short activity over approximately one week.

1. Identify

Students identify one task that they currently use AI to help them perform. It should be something that the student believes would be useful for them to be able to do independently.

Examples might include:

- generating ideas;
- structuring a piece of writing;
- summarising a reading;
- explaining a difficult concept;
- planning how to approach a problem;
- writing or debugging simple code;
- drafting professional communication.

The particular task matters less than the student's reason for choosing it.

2. Do it yourself

During the following week, students deliberately perform that task without using generative AI.

The intention is to temporarily remove the tool from one deliberately selected activity so that the student can experience what they had previously been offloading.

3. Notice

Students pay attention to what happens when they perform the task themselves.

notice & record:

- What was more difficult than expected?
- What knowledge or skills did the task actually require?
- Where did they become stuck?
- What strategies did they use instead?
- Did repeated attempts make the task easier?
- Did they discover that they were more or less able/knowledgeable than they had assumed?

4. Reflect

Students then produce a short reflection on the experience.

The reflection could be structured around questions such as:

- What had I been offloading to AI?
- Why had I chosen to use AI for this task?
- Why did I think this was something I should be able to do myself?
- What happened when I attempted it without AI?
- What did I learn about my own knowledge or capability?
- Having completed the exercise, how would I use AI for this task in future?