Case Study 8: Kingston University

Trialling and Experimentation of AI Technologies to Support Learning, Teaching and Assessment

What issue were we trying to address and why?

Over the last two to three years Generative AI technologies have had a growing and evolving impact on higher education, with new tools being introduced throughout the academic year. Since the public release of ChatGPT, we have moved from 'unconnected' Large Language Models (LLMs) with their currency locked at a point in time, to becoming web-connected, multimodal, mobile enabled, and which encompass 'reasoning' and agentic capabilities. The ability to develop 'home grown' customised AI apps has become easier, and we have also seen the emergence of tools that seem to be particularly aligned with Higher Education learning, teaching and research, such as the Deep Research 'narrow agent' tools, and tools such as Google's NotebookLM.

There are also readily accessible tools that can generate content in any digital media, and Generative AI has become pervasive across commonly used applications and apps, including social media. This raises a whole plethora of issues for higher education, and so it is important that Higher Education maintains currency in their understanding of Generative AI and its impact and maintain some control. We argue that this can be achieved through a continual programme of trialling and experimentation, with the purpose of avoiding overreliance on single environments.

What we did

We have run software trials and experimented with AI technologies on an ongoing basis, including:

- **Trialling Chatbot tools, AI assisted marking and research assistance tools.** Involving staff from across our faculties and professional departments to ensure applicability across academic functions and disciplines, we trialled several of these tools, inviting suppliers on to campus to run sessions or demonstrate their tools. Formal evaluations were set up, including student feedback where appropriate. For all of the tools evaluated to date the feedback was positive overall but nuanced in terms of staff assessment of potential impact on student learning and existing processes.

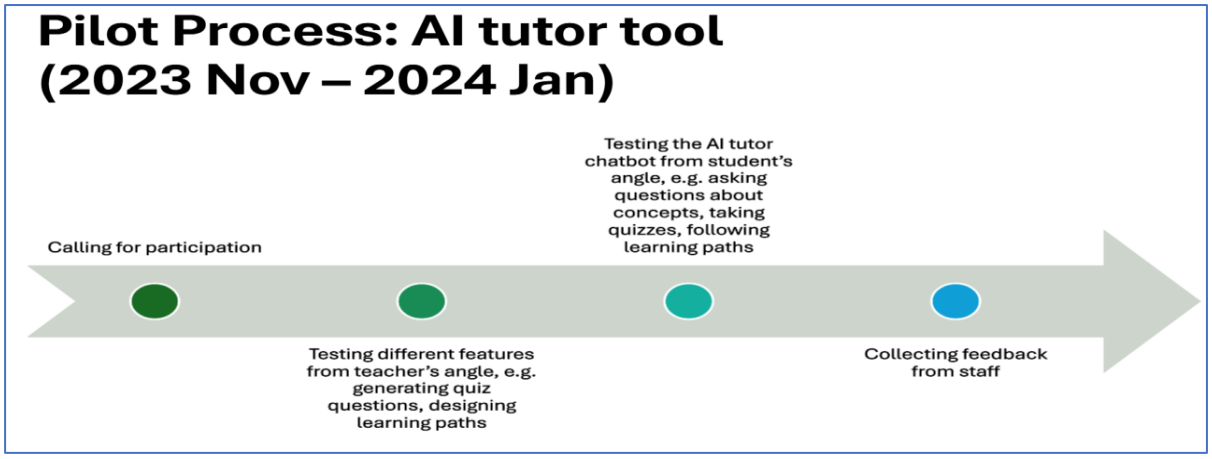

Figure 1: AI Tutor tool piloting process

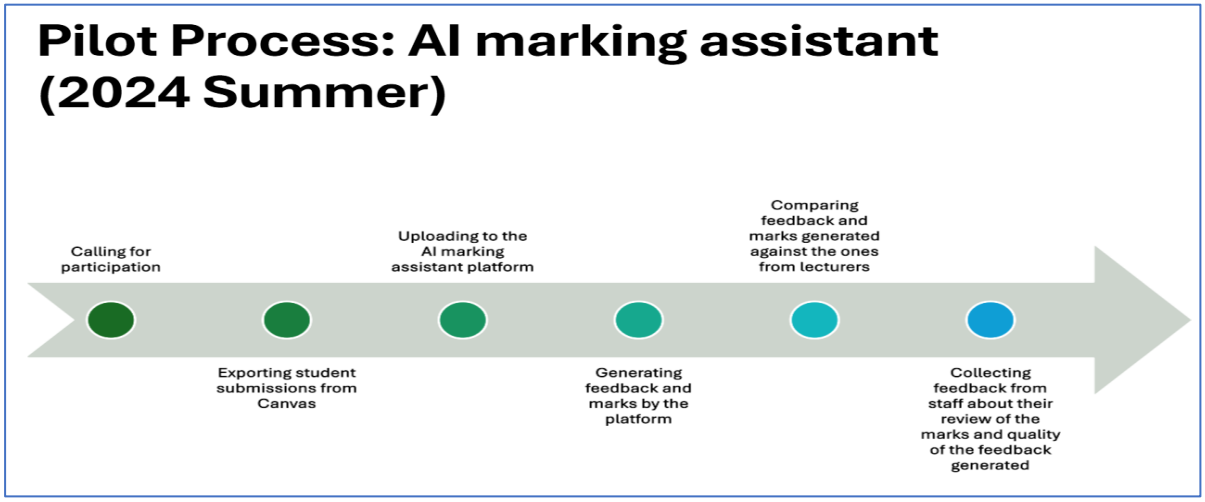

Figure 2: AI Feedback and marking assistance pilot process.

- **Experimenting: App development, implementing open source LLMs, testing beta / newly released features and capabilities.**
  This work was completed informally and involved installing open source LLMs on local devices and testing their capabilities, developing custom AI apps, and continually testing new capabilities as they emerge, including video and audio generation, deep research tools, and data analysis capabilities.

Who was involved

Wayne Leung, Learning technologist and Tim Linsey, Head of Technology Enhanced Learning, both in the Learning and Teaching Enhancement Centre, Faculty staff and student participants.

Measures of success

- Staff and student feedback and usage.

How do you plan to develop the intervention/activity?

This trialling and experimental work will continue, with a particular focus on custom AI apps and bots and importantly building on growing experimental and innovative work that is emerging from our Faculties (see case-study 4). We are currently looking at how we better support faculty colleagues in these developments and how this work is shared.