Co-creating our institutional response to the advances in generative AI with our students

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AI and Education

The developments in generative artificial intelligence (AI), and particularly the release of ChatGPT4 in March 2023, signalled both challenges and opportunities for the sector, with seemingly equal potential to support student learning or undermine it (Malinka et al, 2023; Sullivan et al, 2023). Some of the more negative implications were quickly picked up by the media, such as: 'Can students pass using AI tools at uni?' (Shearing and McCallum, 2023). Many discussions within universities seemed to mainly focus on academic integrity, fuelling the fear and anxiety of both staff and students in the already stressful melting pot of university assessments. But as discussed by Farrokhnia (2023), the challenges and limitations of AI present an opportunity for us to reflect on our educational practices through dialogue between staff and students to identify where AI can enhance learning and where it can block or diminish it.

Student-Staff Partnership at UCL

ChangeMakers is a well-established initiative at UCL which supports students and staff to work together on projects to enhance education, It has been running for nearly a decade and supported around 500 partnership projects. Student-staff partnerships are an expansive approach to educational enhancement, where everyone involved in the partnership has something unique to offer which is equally valued and necessary to the process (Matthews, 2017; Cook-Sather, 2014). This enables us as an institution to provide an antidote to the

consumerist view of education, instead enabling students to partner with us and reimagine their own roles within the university (NUS, 2014). Through the ChangeMakers initiative, UCL has a framework for student-staff partnerships embedded within its vision and strategy (UCL, 2023) which has developed a strong culture of empowering staff and students to work together.

Supporting students and staff to work in partnership to respond to the challenges presented by AI through Co-Creator projects

In April 2023, the ChangeMakers team was given some extra funding by our Vice-Provost (Education and Student Experience) to facilitate dialogue between students and staff through which they could explore the challenges and opportunities presented by the advancements of generative AI tools like ChatGPT. About this time, we attended numerous sessions about the developments in generative AI, which helped inform our approach. We learnt that staff were genuinely curious about how students were using AI and where they needed to support them. Students, on the other hand, wanted clarity on what they could use and to be able to explore how it could aid their learning, without risk of being labelled as 'lazy' or, worse, as a cheater. From this, we decided the real value of this initiative would be supporting staff and students to constructively explore AI together within their disciplinary settings to counter some of the negative and polarising conversations that focused on cheating.

UCL had already established an AI Experts group, with four key workstreams (Policy, Assessment Design, Opportunities and Learning Support) so we drew on their expertise to help shape the initiative to ensure it offered genuine value to staff. We decided it was important to devise a 'menu' of 'mini-projects' that staff could quickly get up and running with their students, given funding needed to be spent by the end of July, meaning projects only had a few months to run. These mini-projects were based around the principles of cocreation to start conversations with students in order to learn together about AI. As defined by Bovill et al, 'co-creation of learning and teaching occurs when staff and students work collaboratively with one another to create components of curricula and/or pedagogical approaches' (2016, p 196).

The mini-projects were offered under 4 themes:

- Assessment
- Feedback
- Learning Support
- Exploring AI

Within these themes, we provided 2-3 suggestions for what those projects might involve. This was partly to help staff quickly put together a viable project, but also to ensure those who were new to working in partnership with students were creating projects that foregrounded the importance of dialogue and co-creation with students, whilst providing flexibility to adapt these ideas to their local needs.

The mini-projects also had 5 stages to them:

- 1. Discussing
- 2. Investigating
- 3. Understanding
- 4. Co-Creating
- 5. Reporting

Again, providing a structure for how the projects might run, helped staff quickly design a good project with co-creation at the heart of it.

Staff submitted a brief online form identifying which theme their project fitted under, what they wanted to do, what they would be co-creating and how they would be working with students. The application forms were reviewed by the ChangeMakers team, and Faculty Learning Technology Leads (FLTLs) for each faculty looked at the applications from staff in their faculty. The ChangeMakers team ensured there was a good partnership approach within the projects and the FLTLs were able to give feedback on the pedagogy around Al. Students were given a stipend of £600 for 40 hours work, or £300 for 20 hours work (roughly equivalent to London Living Wage plus holiday pay). We also provided a small amount of funding to pay for other costs like subscriptions to Al tools.

Engagement with the AI Co-Creator projects

Despite launching the opportunity late in the academic year (June 2023), we received positive feedback from staff and good engagement:

"An amazing opportunity to confront the creative scope of the technology with students" (UCL Staff Partner).

We received 67 applications from across all 11 UCL faculties. Of these, we funded 61 projects. One project was turned down because they did not want to work with students. The other 5 projects we turned down were from staff who had submitted multiple applications and we asked them to select just one in the interest of fairness. After we had agreed which projects we were running, staff could then recruit students. Two-thirds of staff opted to do that themselves, and we provided guidance on inclusive recruitment practices. The other third asked us to recruit students for them. We put out a general expression of interest to students via standard recruitment channels (student newsletters and opportunities forums) and received 125 applications for 26 roles. Students were asked to identify their interests in exploring AI, and we matched them with projects based on their interests and disciplinary areas. Students who were not matched with projects were directed towards the Student Union AI Society.

We received applications from students across all our 11 faculties, so these were not just students who had expertise in computing or AI already, but students who were genuinely curious about the impact AI might have on their education. We asked them to provide a brief statement of why they were interested in the role, and these provided a rich insight into how students were feeling about AI, ranging from tentative and curious to concerned and bewildered, but a common theme was that they all wanted more exposure to it.

Summary of findings from the projects

Learning across the projects as an institution was important. To do that, we offered optionality in how teams wanted to report on their projects, but with guidance around producing short, informal, recorded conversations. The rationale for this was that it

foregrounded the discursive, 'learning together' values that underpinned the design of the projects. It also meant that we could host these short learning conversations on our blog, so that others could listen, and that we were helping share any learning more widely. Whilst many projects did opt to record a short video, around half the projects preferred either a short written report, PowerPoint slides or another format of their choice.

We also conducted a short survey to help us quickly surface some 'top learnings' from the projects and identify areas of concern that remained. The findings from this case study particularly have been drawn from the survey, and augmented with findings and quotes from the longer reports and videos. This has mainly been done in the interest of speed, and should therefore be treated as preliminary findings. In the spirit of the projects, we have used ChatGPT 3.5 as a starting point to summarise across the learnings, but the initial summary has been further developed by the authors of the case study.

Top learnings

There is not the space in this case study to delve into the findings across the projects in detail, but here we provide a summary of some of the key learnings that are emerging across the projects:

- Al tools can be useful for paraphrasing, simple summaries, and connecting
 concepts: Most projects summarised the responses Al gave as 'simple', 'generic',
 'non-specific'. However, they were felt to be effective in being concise and in quickly
 making basic connections between concepts.
- 'Underwhelming': Quite a few students felt underwhelmed or even disappointed in the AI tools they tried, especially given all the hype. Students who used more specialist AI tools with a limited, specific purpose tended to have a better experience and get more out the tools (e.g., Midjourney for image creation, or Gen-1 for video creation).

- Al tools require time and effort to use well: Linked to the above, many students
 reported that the Al tools required more time and effort, especially in fact-checking
 the responses given, as they knew they could not be relied upon. This tended to take
 more time rather than save it.
- Trepidation: Students continued to express that they would be unlikely or unwilling
 to use AI in their formal summative assessments. This was partly due to concerns
 about being called out for cheating, but also because the tools do not demonstrate
 enough value at the moment.
- Brainstorming, ideas generation and aiding the early stages of some assignments:
 There was more interest in using AI for formative assessment, to break 'writers block', to kick-start ideas or to use early on in certain research or assessment processes e.g., for structuring essays, generating images, aiding with visual presentation of materials.
- Prompt crafting and prompt 'templates': The ability and skill to create good prompts
 is key to using AI tools, in particular LLMs (large language models), successfully. In
 most cases, the prompts require multiple stages of refinement and for users to
 challenge the responses from the AI tool.
- Severe limitations in handling and generating images or graphics: A number of
 teams looked at how AI could either generate images (e.g., for clinical teaching) or
 handle analysis that involved images (tables and graphs or diagnosis). For the
 purposes of creating an image to communicate a general feeling, notion, or concept,
 the tools did quite well, but there were severe limitations in scientific accuracy and
 the ability to analyse images/graphics.
- Support for EFL (English as a foreign language) students: There was a growing
 consensus that AI was a useful tool to help students build confidence in grammar
 and syntax, with some caution around loss of individual 'voice' that needs thinking

through.

- Human interaction essential (for learning and AI): There is strong agreement
 between the various findings that humans remain central to using AI well. Further, it
 was encouraging (and unsurprising) to hear that students are keen to engage in the
 learning process where it has real value to them, and not find substitutes for it.
- Cautious optimism: Although the project exposed many limitations of AI, this in itself
 provided some reassurance and also an opportunity to identify where it could be
 used effectively, how we need to support students in using it and how assessments
 could be re-shaped and shifted towards higher order learning. The projects started to
 identify areas where AI could aid the learning process which, no doubt, will be
 explored in greater depth.

Main concerns

As well as the key learnings, we wanted to give teams an opportunity to pull out their ongoing concerns. These start to frame some of the trickier challenges presented by AI that will require continued discussion and co-creation between students, staff and institutions. Concerns included:

- Academic integrity: this remained a concern, despite the limitations identified in the
 projects. In particular, that a lack of student knowledge about AI might inadvertently
 lead to academic misuse of the tools.
- Training of students: Training and raising the literacy of students in using AI was seen
 to be crucial here, as well as continuing conversations about students' use of AI, the
 ethics of it, and discussing some of the grey areas.
- Something lost from the learning process: Al's tendency towards generic responses and a concern about the over-reliance on Al to perform certain tasks meant that

some teams and individuals were concerned about the impact on learning and the need to ensure students remain independent and critical learners.

- Bias of staff against AI: A concern that this could affect perceptions of student work, even when students do use it appropriately and in line with institutional policy and guidance.
- Increasing inequity: Many expressed a concern that the premium AI tools often incur a cost which could price some students out of using them and heighten further existing inequalities in education.
- An abundance of AI tools: There is an expectation that the number of AI tools would grow exponentially, but many would be replicating what others were doing, making it harder to distinguish which tools were genuinely useful and worth paying for.
- Anxiety amongst students (and staff?): Linked to the point above, there was a
 feeling that students and staff needed guidance and support to help prevent
 them being overwhelmed by AI, to know whether (and how much) they should use it
 and in what circumstances, and to know how to keep up with all the AI tools that are
 emerging.
- Transparency: there remained an ongoing concern about the lack of transparency of AI regarding how users are trained, its cost (environmental, societal, ethical), which data they are trained on, its bias and how data is used (privacy).

Working together in partnership

Overall, project teams rated the experience 9.14/10 (based on a response rate of 26% to our survey). Through the project reports and videos, all teams reflected on the value and shared learning gained through the projects, with praise for the timeliness of the initiative. Of those who responded to the survey, we asked what it was they particularly valued about the

experience and 75% of those mentioned discussions, dialogue, collaboration, co-creation, and working with, and learning from, their staff/student partners:

"I particularly valued the co-creation element to this project - we can certainly learn A LOT from our students in terms of tech and AI" (Respondent, evaluative survey).

Respondents also mentioned valuing the opportunity to learn more about AI tools, build their confidence with AI, develop research/project skills and experiment and try new things out. Three respondents mentioned the speed and ease of the opportunity that enabled them to quickly address a current issue.

Student perspective

For students, the projects offered them three key things:

- 1. Working on something that was current and where the insights gained would make a difference.
- 2. Closer connections with a member of staff.
- 3. Developing their skills: project management, research, leadership, communication, etc.

"I loved getting the opportunity to work with someone more experienced on a real-life problem. It helped give me direction" (Survey respondent, student).

Staff perspective

For staff, working with students helped them in four key areas:

- 1. Developing a better understanding of how students are using AI and what their views are on it.
- 2. A safe space to experiment with AI in collaboration with students to further develop their own knowledge and use of the tools.
- 3. Insights into the limitations and opportunities of AI tools that would help them shape curricula and assessments.
- 4. How students need to be supported to effectively navigate and use AI tools in their programmes, including teaching and discussing using these tools in some of the grey areas around ethics, bias and responsible use.

"The project provided valuable insights into the limitations of AI tools, which should guide future course redesigns, focusing more on analytical and decision-making skills specific to various scenarios rather than repetitive and less challenging aspects" (Staff reflection, AI Co-Creator report).

Reflection: success and what we would do differently

The scheme has been a huge success, despite the speed with which we had to get it up and running. It has solidified something in our minds about the value of an institution investing in student-staff partnership through a centrally managed and run scheme: that we are always in a good position to respond at speed if we need to, because it is something that is threaded through our 'business as usual' activity. 'ChangeMakers' is a known term within the community, especially amongst staff who provide continuity between student cohorts, and will communicate these opportunities to their students.

Providing the menu of mini projects was helpful, although this is more anecdotal, based on the amount of support we needed to give. Most projects that came through were time-bound and aligned with the projects we suggested, with tweaks and details that made them relevant to the staff and students undertaking them. I suspect, but have no proof, that if we had left the door wide open for suggestions, we might have had a lot of project outlines that would not have worked in the timeframe and over the summer period. In particular, we pushed back on collecting more data and focused the projects on *doing* something (cocreation). This meant there was a lot of practical learning, as can be seen through the project reports and reflective videos.

More time and funding would always help, but, that said, we have our regular ChangeMakers projects – with themes of both enhancement and innovation – through which teams can continue to explore AI. This particular initiative was always badged as an opportunity to kick-start collaboration between staff and students around AI. It has also been encouraging to see how many students want to be involved in something that affects them right now in their education, but where they can also see it will impact their future careers. For us, looking at how we can support students to carry out pedagogical research within their disciplines on current issues affecting Higher Education could be a really interesting direction for UCL.

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