Embracing AI for student and staff productivity
An ACODE Whitepaper based on the ACODE 88 Workshop and Roundtables

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Executive Summary

The ACODE 88 workshop was held on Thursday 2 March 2023 with 241 registrations from 31 institutions. Attendees represented a broad range of roles from across the sector, including teaching academic staff, educational designers and technologists, directors of learning and teaching, and learning support specialist staff. In addition to activities on the day, a pre-workshop survey was distributed to institutional representatives to determine the current state of decision-making, understanding, and actions on the use of AI. The survey received 34 responses from Australasian higher education institutions, and the following recommendations were developed based on workshop discussions, roundtables and survey responses.

Recommendations

1. Embrace AI in learning, teaching, and assessment, but consider potential risks and challenges that come with it, such as academic integrity concerns and workload issues.

2. Foster a culture of transparency, collaboration, and partnership between educators, students, and AI experts, to ensure that AI is used ethically and effectively.

3. Develop evidence-based support systems and guidelines for AI use in education, and regularly update them to keep up with the latest developments and challenges.

4. Identify and provide appropriate training and professional development opportunities for educators to build their AI competencies, confidence and fluency.

5. Consider the potential impact of AI on equity and accessibility and ensure that AI solutions are designed to benefit all students, regardless of their background or circumstances.

6. Collaborate with external bodies, such as accrediting bodies and regulatory agencies, to align educational responses to AI across primary, secondary, and tertiary education sectors.

7. Continuously monitor and evaluate the impact of AI on learning, teaching, and assessment, and be open to making necessary adjustments based on the evidence.

8. Institutions prioritise assessment redesign, by adopting more authentic forms of assessment to minimise the option for students to use AI based tools in generating assessment content.

Background

As the peak Australasian Council on technology enabled learning (TEL), ACODE held a national workshop and roundtables (ACODE 88) for the tertiary sector to facilitate discussion on the challenges, strategies, tools, and opportunities as a sector for embracing Artificial Intelligence (AI) in learning and teaching, in academic integrity, and in productivity.

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Prior to the event, a survey was distributed to ACODE member institutions in Australasia, and 34 responses were received, representing 72% of the ACODE member institutions.

Pre-Workshop Survey - Response to AI (Institutional Response)

With the recent advent of AI large language models, such as ChatGPT, the ACODE 88 workshop convenors sought to gain an initial understanding of how responsive Australasian Higher Education Institutions were being in relation to pro-actively working with staff and students around the affordances of AI based tools.

Firstly the survey sought to understand which executive leadership roles were 'leading the charge' at their institutions. It was seen that 47 % of Deputy Vice-Chancellor (Academic) (n=25) and 21% of Pro Vice-Chancellors (n=7) were the most engaged with this in their institution in relation to embracing AI in learning and teaching. In response, most (74%) institutions were responding with professional development (n=25) and establishing working groups on academic integrity (n=15), with only five institutions (15%) investing in technology to mitigate integrity risks.

When asked, 'What concerns had been raised within your institution regarding the use and availability of generative AI tools (select all that apply)?' (Figure 1), all institutions were concerned about Academic Integrity (n=34), which was considered the top priority. 88% of institutions were also concerned with staff AI literacy (n=30), the ability to detect AI (n=29), and student literacy (n=28).

Many institutions (62%) indicated they had already, or were currently working on changes to academic integrity policies and processes, while a further 10 (29%) were considering it. Three institutions had not commenced any revision yet.

When using technology tools to limit academic dishonesty, Turnitin tools was dominant: Turnitin's Originality Studio (n=26), Feedback Studio (n=17), and
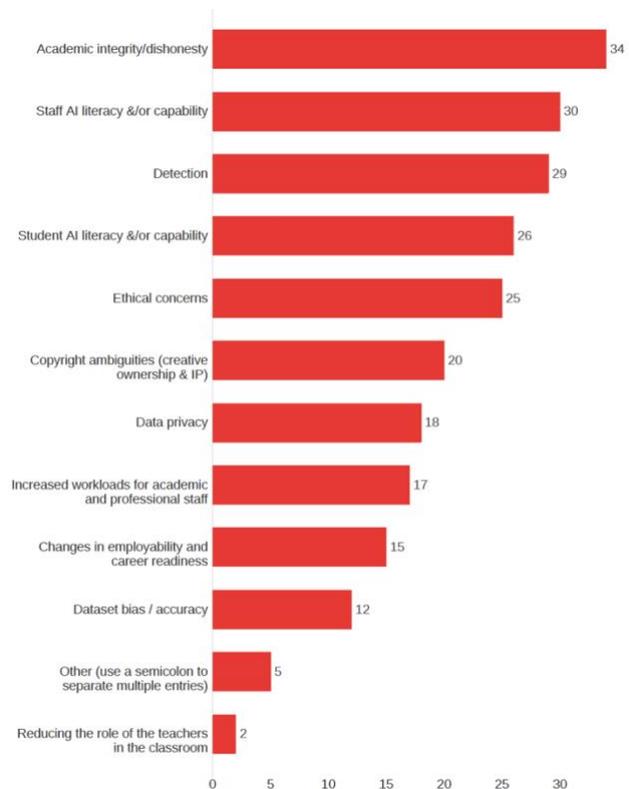

Figure 1. main concerns have been raised within our institutions

Figure 2. Opportunities for generative AI

Authorship Investigation (n=15). Manual checking (n=15), using Zoom or Microsoft Teams to supervise invigilated exams (n=12) and reviewing learning management system data (n=10) were also nominated by institutions as tools or a means for checking academic integrity of student work.

Interestingly, when asked 'What opportunities have been identified at your institution related to the use and availability of generative AI tools (select all that apply'? Most institutions (26 or 76%) nominated both incorporating student use of AI, and the use of authentic learning and critical skills (n=26). Similarly, 24 or 71% identified AI literacy as an opportunity. Institutional responses also indicated student work readiness (23 or 68%), assisting staff productivity (20 or 59%), accessibility (15 or 44%) and staff and student support (13 or 38%).

The Workshop and Roundtables

The workshop was held online via Zoom, with four sessions focusing on different aspects of AI and Academic Integrity: 1) Academic integrity in the near term; 2) Embracing AI for learning and support; 3) Embracing AI for staff productivity: and 4) Next steps as the ACODE community.

The pre-survey confirmed that this aligned with the expectations and interests of institutional representatives, who had indicated that they were looking to the workshop for ideas, and the opportunity to share, discuss and benchmark different approaches (Figure 3).

Figure 3 - What are you hoping most to get out of ACODE 88?

Top AI priority areas across the tertiary sector

In Session 1, three priority areas emerged as key areas of focus for the sector as they looked to embrace AI in teaching and learning.

1. *AI literacy* – immediate support and guidance for students and staff, followed by longer-term programs to increase the individuals' capability to understand, use, and critically assess AI processes and outputs. Without effective AI literacy prioritisation, individuals potentially misunderstand AI and do not have the skills to use it effectively in education, work and society.

2. *Equity and access* – while much of AI is open, a lot remains unknown. Intellectual property ownership, copyright, attribution, privacy are significant issues to understand, and developers of AI technology have not been transparent in how they collect and use inputted data. Clear and consistent direction from executive leadership as to how to safely incorporate these tools is required. As AI technology vendors introduce paid and subscription models of access, there is a risk that AI increases the digital divide of students and introduces new forms of inequity.

3. *Integrity of curriculum and assessment* - Academic Integrity is a major concern but we do not give students enough credit. We need to consider WHY students breach academic integrity policies instead of focusing only on HOW they do so. AI is capable of inductive logic. Designing assessments that require students to embed explicit deductive logic within their written responses reduces the ability to use tools like Chat GPT to fully complete an assessment for them. AI offers universities the opportunity to assess the (learning) process, rather than the finished product, where students show working, tracked answers, drafting, editing and the application of feedback. The development of more authentic forms of assessment and part of a redesign process was also raised.

Enablers and barriers for AI in learning, teaching and assessment

AI is now part of the technology landscape in which teaching, learning and assessment occurs. Institutions are trying to normalise generative AI, which is a disruptive challenge occurring at a rapid technology pace. As such, the sector recognises there are enablers and barriers for embracing AI.

Potential applications of AI include transformative learning experiences for diverse learners and equipping students for future work that will be AI enabled. However, there is not a single simple solution for institutions. As universities lean into AI use in learning, teaching and assessment, enablers for AI are channels through which technological change can be applied effectively. In almost equal measure there are significant barriers to effective and embedded adoption of AI in teaching, learning and assessment.

Enablers:

- Conversations with academics, professional specialists, students and industry about using AI in their practices to discuss the process, product and implementations. Conversations across disciplines create a broader understanding of how to use AI effectively and appropriately in teaching, learning and assessment.

- Involve students as partners in the use of AI. Ask students what they know about AI, encourage them to use the technology and critique the process and product of the AI output. Students will use AI, whether this is to provide feedback on a written piece, simplify complex information for neurodivergent students, or suggest a structure for a presentation they have to prepare.

- Embrace a positive outlook on AI and encourage use, critique, application and evaluation of this technology in teaching, learning and assessment. Craft policy to provide safe parameters for self-

regulated use of AI, and re-evaluate our institutional approaches to digital literacy of our students and staff.

- Use AI as a conversation starter to reimagine assessment and learning outcomes. Examine the outputs of assessment questions run through AI with academics and students to enhance digital literacy skills and for students, enhance higher order analysis and critical thinking capabilities.

Barriers:

- Change fatigue is a significant challenge as many institutions are still recovering from the impact of COVID as well as other major changes (e.g. migrating to new Learning Management Systems, organisational restructures).

- Privacy, intellectual property and ethical issues are not consistently discussed across the sector, leaving institutions to take individual approaches that may be counter effective to AI enabling learning, teaching and assessment for the future.

- AI development is largely driven by private corporations. Subscription-based paid models of access potentially widen the digital divide for students and create inequity of learning for students.

- The technological pace of change with AI is rapid, and occurs at a rate institutional policy and guidelines cannot keep up with. The pace of technological change and lack of evidence about effective AI use in teaching and learning creates uncertainty and makes capability development more challenging.

The use of AI offers different implications for different institutions and there is not one simple solution. Nor should there be. There is no singular AI tool and the applications of use vary significantly. There is a vast potential for effective use of AI in learning, teaching and assessment, and practice is largely piecemeal across the sector. Literacy in AI, and exemplars of application in disciplinary contexts are required in addition to institutional services and support to students and staff. AI needs to be integrated into the curriculum as with other learning technologies.

Strategies for addressing academic integrity and generative AI

There are numerous webinars and forums examining generative AI in academic integrity contexts, and the workshops' roundtable discussions contribute to our collective understanding of the strategies being employed across the sector. Applying strategies for addressing academic integrity and generative AI requires a tactical rather than a technological approach.

Tactical approaches for using AI in academic integrity include:

- Just-in-time guidelines for students and staff that are developed by cross-disciplinary teams.

- Advising students how to use AI effectively and appropriately.

- Encouraging staff and students to think about assessment with AI in mind, and ask the fundamental question, "What is being assessed?"

- Be aware of vendor salespeople who promise technological detection- tools that can undermine appropriate pedagogical changes to assessment.

- Provide attribution statements to assist students in acknowledging how and where they have used AI in their assessment.

Turnitin is the dominant detection technology employed across the sector, and as this technology increases its AI detection capabilities, there is a potential situation whereby AI software is detecting other AI software without human oversight with punitive outcomes for learners. The market will potentially be flooded with other tools as a response to AI. A framework is needed for institutions to evaluate these tools within their individual contexts of AI literacy programs, technology ecosystems, policies and assessment practices.

AI affordances for productivity

As institutions explore the impact of AI on curriculum, learning outcomes, course design and delivery, and assessment, opportunities arise for using AI to increase productivity. Examples shared by work attendees in the roundtable discussions are outlined below.

For *teaching staff*,

- AI can be used to generate assessment-based documents such as rubrics and learning outcomes, as a launch pad for ideas, and to automate tasks such as Excel formulae.
- AI can be used to generate meeting transcriptions, create agendas and schedules, summarise long emails and create templates for student feedback.
- Using AI with students challenges their thinking and involves them in the process of learning.

For *students*,

- AI can provide instant feedback on students' academic writing, simplify complex information for neurodivergent students or students with English as a second language, and start to scaffold information on how to approach a specific task.
- Students struggling to understand concepts in real-world applications can ask AI to provide examples to aid their understanding.
- The use of AI by students pivots them from being consumers of learning materials to creators of their own learning resources.

For *educational designers, technologists and developers*,

- AI can prepare draft transcripts of media content for bilingual delivery, generating code, creating video scripts and producing a first-draft case study based on a supplied structure of information.
- AI can also create 'how to' documents and assist with mundane tasks such as generating material for software or applications.

Post-Workshop Top Priorities

During the last session of the day, participants were asked to contribute their reflective thought to an *Answer Garden* poll, specifically "What are your top three priorities for AI?". Responses had to be restricted to 20 characters each, and each respondent was allowed three answers. Responses were collected and represented via a form of word cloud (see Figure 4) and indicated academic integrity, authentic assessment, assessment design, and AI literacy as dominant, with support for staff, literacy, equity and transparency featuring strongly. This indicated participants continued to see AI as an assessment issue and contributor to the destabilizing of authorship integrity.

Recommendations for practice

AI can support quality learning by providing students with personalised learning resources, feedback on their work and productivity in how they learn. AI processes and outputs can help students analyse, critique, and evaluate information. However, they need the skills to do these higher order skills effectively, and opportunities with guided academic instruction to discuss and challenge the big issues associated with this technology. As employers will expect graduates to have digital literacy skills with AI, using AI in learning, teaching, and assessment should be integrated within the

Figure 4. Answer Garden Wordcloud from Session 4

curriculum and openly discussed in cross-disciplinary contexts. To embrace AI in the sector requires strong executive leadership and understanding, conversations with students about how AI impacts their learning experience, and acknowledgement that AI offers opportunities to transform education.

As a community of practitioners, teachers and leaders, the roundtable discussions produced the following key recommendations for practice.

1. Embrace AI in learning, teaching, and assessment, but consider potential risks and challenges that come with it, such as academic integrity concerns and workload issues.

2. Foster a culture of transparency, collaboration, and partnership between educators, students, and AI experts, to ensure that AI is used ethically and effectively.

3. Develop evidence-based support systems and guidelines for AI use in education, and regularly update them to keep up with the latest developments and challenges.

4. Identify and provide appropriate training and professional development opportunities for educators to build their AI competencies, confidence and fluency.

5. Consider the potential impact of AI on equity and accessibility and ensure that AI solutions are designed to benefit all students, regardless of their background or circumstances.

6. Collaborate with external bodies, such as accrediting bodies and regulatory agencies, to align educational responses to AI across primary, secondary, and tertiary education sectors.

7. Continuously monitor and evaluate the impact of AI on learning, teaching, and assessment, and be open to making necessary adjustments based on the evidence.

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Conclusion

Leaders need to be part of the AI conversation creating permission within the university for extended conversations with academics and students. AI will shift the expectations of students for diverse examples of concepts, clearly written instructions on how to complete an assessment task, and personalized learning

experiences. AI will challenge institutions in their speed of adoption to technology and keeping pace with digital literacy activities and policy to provide guidance on using AI effectively.

There is not a single answer to the challenges facing institutions as AI is also impacting social interactions, behaviour, and expectations. AI may be a technology but its use in teaching, learning and assessment is not simply a technology issue. No institution is acting in isolation with respect to AI and collaboration across the sector remains vital.

One thing is for sure, AI is not going away, in fact it will continue to evolve and provide assistance to society, to hopefully build a better future. As higher education institutions embrace this thought, they can become, as they have always been, the convener of a productive future.

Resources shared during the workshop and roundtables

- https://lx.uts.edu.au/collections/artificial-intelligence-in-learning-and-teaching/resources/long-term-approaches-to-ai-literacy/
- https://teche.mq.edu.au/2023/03/from-quizzes-to-essays-a-campus-wide-assessment-update/
- https://www.industry.gov.au/publications/australias-artificial-intelligence-ethics-framework/australias-ai-ethics-principles
- https://lx.uts.edu.au/collections/artificial-intelligence-in-learning-and-teaching/
- https://beta.jisc.ac.uk/reports/artificial-intelligence-in-tertiary-education
- https://educational-innovation.sydney.edu.au/teaching@sydney/tag/artificial-intelligence/
- https://teachwell.auckland.ac.nz/resources/academic-integrity/declaration/
- https://teachwell.auckland.ac.nz/resources/assessment/ai-tools-in-coursework/
- https://time.com/6247678/openai-chatgpt-kenya-workers/
- https://beta.jisc.ac.uk/reports/artificial-intelligence-in-tertiary-education
- https://teche.mq.edu.au/wp-content/uploads/2020/05/PLACE_Framework.pdf
- https://educational-innovation.sydney.edu.au/teaching@sydney/tag/artificial-intelligence/
- https://learnprompting.org/