SUBMISSION TO THE INQUIRY INTO THE USE OF GENERATIVE ARTIFICIAL INTELLIGENCE IN THE AUSTRALIAN EDUCATION SYSTEM

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CHARLES STURT UNIVERSITY | CQUNIVERSITY | FEDERATION UNIVERSITY AUSTRALIA | SOUTHERN CROSS UNIVERSITY
UNIVERSITY OF NEW ENGLAND | UNIVERSITY OF SOUTHERN QUEENSLAND | UNIVERSITY OF THE SUNSHINE COAST

ABOUT REGIONAL UNIVERSITIES NETWORK

The Regional Universities Network (RUN) is a national collaborative group of seven regional Australian universities: Charles Sturt University, CQUniversity Australia, Federation University Australia, Southern Cross University, University of New England, University of Southern Queensland, and University of the Sunshine Coast.

This submission reflects the positions of RUN institutions, and in doing so, also aims to represent the views of those students and communities which RUN universities serve; the one-third of Australians who live outside of metropolitan centres in Regional, Rural and Remote (RRR) locations.

OVERVIEW

There is demonstrated potential for generative AI to be a powerful and beneficial tool in higher education. The use of these tools can be used to increase efficiency in institutions as well as improve the experience of students. However, their ethical use and integration into universities requires a proactive and thoughtful approach.

RUN member institutions are already tackling issues raised by generative AI through the review of academic and integrity policies and changes to assessment practices, as well as through the education of staff and students.

RUN endorses the submission provided by Universities Australia (UA), and reiterates the importance for institutions to retain the autonomy to act quickly and have flexibility in decision making regarding generative AI. This is a rapidly evolving area, and the use of AI in educational contexts should not be banned or limited through rapid poorly considered reactions.

Broad, society-wide regulation such as the proposed AI Act in the European Union could be a model to help guide the safe and responsible use of AI. For higher education providers, the continued provision of flexible and responsive best practice guidelines through TEQSA (Tertiary Education Quality and Standards Agency) will help support institutions to integrate generative AI.

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The strengths and benefits of generative AI tools for children, students, educators and systems and the ways in which they can be used to improve education outcomes.

Beneficial uses in learning and teaching have the potential to enhance student experiences as well improve productivity for academic and professional staff. Generative AI enabled university chat bots can help guide students through enrollment and provide instant, natural language responses to enquiries. Using generative AI to automate routine tasks such as answering frequently asked questions can also alleviate workload for academic and professional staff, allowing more time to be spent on higher level work. Other potential beneficial applications include use by students as a study aid and by teaching staff to help tailor course materials. Beyond this, the adoption of generative AI across a range of sectors – including health, engineering, social services and creative industries[1] – means that the use of these tools will be an expectation of students entering the workforce.

However, the effective use of generative AI tools requires that both students and staff are educated in their use. This includes an understanding of the limitations of the technology, social benefits and risks,[2] as well as guidance in their practical use.

Universities have a key role to play in education around generative AI to ensure that students are not only workforce ready but have the skills in critical thinking and analysis to use tools effectively and ethically. RUN universities acknowledge the necessity of education to leverage the benefits of generative AI and reduce risk and are taking steps to ensure their ethical use and integration. This includes integration at the course level, such as discussion and critical analysis of AI output, to university-wide education programs.

The future impact generative AI tools will have on teaching and assessment practices in all education sectors, the role of educators, and the education workforce generally.

RUN member universities have responded quickly to the potential impact of generative AI on teaching and assessment. This has included updating academic integrity policies where needed and ensuring that guidelines for acceptable use are clearly communicated to students.

While some universities have made the decision that generative AI tools are not permitted to be used in assessment unless stated otherwise, at other institutions use is permitted if appropriately acknowledged and within acceptable limits. Additionally, RUN universities acknowledge that the appropriate use of generative AI can depend on discipline and level of study, and understand certain industries and fields may have a greater demand for AI use in future careers, such as in marketing, customer operations and software development.[3] In response, universities are, where applicable, embedding appropriate and ethical use of generative AI into the curriculum.

The ability for institutions to proactively respond to advancements in generative AI and make decisions regarding its use is considered crucial by RUN member institutions, however members also emphasise the importance of TEQSA in providing sector-wide best practice guidance.

[1] Australia's Chief Scientist, "Generative AI: Language Models and Multimodal Foundation Models," Rapid Response Report, accessed July 11, 2023, https://www.chiefscientist.gov.au/sites/default/files/2023-06/Rapid%20 Response%20Information%20Report%20-%20Generative%20AI%20v1_1.pdf.

[2] Selasi Kwashie, "Artificial Intelligence Needs Legislation, Standards and Society-Wide Education," Charles Sturt University, May 2023, accessed June 26, 2023, https://news.csu.edu.au/opinion/artificial-intelligence-needs-legislation,-standards-and-society-wide-education.

[3] McKinsey, "The Economic Potential of Generative AI: The Next Productivity Frontier," June 2023, accessed June 26, 2023, https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/the-economic-potential-of-generative-ai-the-next-productivity-frontier.

CASE STUDY
AI AT UNE

The University of New England has implemented a proactive approach to AI integration across the university, which includes:

1. An audit of assessment design ahead of Term 1 2023 to stress test against generative AI tools.

2. Creation of an assessment framework to guide development of both AI inclusive and exclusive assessments.

3. AI education program, including webinars attended by 250+ UNE staff.

4. Appointment of dedicated AI integration lead to drive ethical AI incorporation across the university.

The risks and challenges presented by generative AI tools, including in ensuring their safe and ethical use and in promoting ongoing academic and research integrity.

RUN member universities are addressing many of the risks associated with generative AI in approaches to learning and assessment. One challenge facing universities is detecting students' use of generative AI to ensure any use is in line with institutional policies. In response, universities report redesigning assessment practices to demonstrate understanding and authenticity of work, such as focusing more on oral and authentic assessment.[4]

AI systems have been shown to exhibit biases that stem from their programming and the datasets they are trained on, which may be incomplete or discriminatory. As well as reproducing false, biased or misleading information, the technology can "hallucinate" fabricated details or sources.[5] In addition, the use of AI raises legal and ethical questions around privacy, defamation, and intellectual property.[6] While developers like OpenAI are introducing strategies to mitigate these issues[7], there is a role for universities in ensuring students have the skills to critically engage with and evaluate the output of generative AI tools as well as make ethical choices about their use.

RUN members also recognise the role for universities in informing development of generative AI and aim to contribute to public debate surrounding ethical use and development as well as bias mitigation.

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[4] Stephen Dobson, "Why Universities Should Return to Oral Exams in the AI and ChatGPT Era," CQUniversity Australia, accessed June 26, 2023, https://www.cqu.edu.au/news/863161/why-universities-should-return-to-oral-exams-in-the-ai-and-chatgpt-era.

[5] Weise, Karen, and Cade Metz. "The Issue with AI Chatbots Hallucinating." New York Times. May 1, 2023, accessed June 26, 2023, https://www.nytimes.com/2023/05/01/business/ai-chatbots-hallucination.html

[6] Selasi Kwashie, "Artificial Intelligence Needs Legislation, Standards and Society-Wide Education," Charles Sturt University, May 2023, accessed June 26, 2023, https://news.csu.edu.au/opinion/artificial-intelligence-needs-legislation,-standards-and-society-wide-education.

[7] OpenAI, "How should AI systems behave?" OpenAI Blog. Accessed July 10, 2023, https://openai.com/blog/how-should-ai-systems-behave.

How cohorts of children, students and families experiencing disadvantage can access the benefits of AI.

Generative AI has the potential to support students through tutoring-like support, feedback, and prompt guidance. Teachers and students can also use these tools to develop learning activities tailored to different learning styles, preferences, and abilities. They can also be used to improve accessibility for students with different linguistic backgrounds.

RUN universities acknowledge the need to ensure that the benefits of generative AI are accessible across cohorts of students and recognise potential barriers. For example, 2021 Australian Digital Inclusion Index shows an accessibility divide between regional and metropolitan areas,[8] and a lack of digital equity continues to be a barrier for some students. Such a divide has the potential to have wide ranging impacts on the capacity of students to engage with these technologies. Additionally, international students arriving from countries like China where generative AI tools are banned will lack prior experience and thus there are additional considerations to be considered in their implementation of university curriculum.

While tools like ChatGPT are widely available and freely accessible, students have already reported purchasing subscriptions to ChatGPT Plus, and these tiered subscription models for generative AI tools may raise equity issues. The eventual availability of enterprise level AI integration may mitigate some of these issues.

RUN member universities recognise there is a need to educate students in the effective use of generative AI tools and provide a safe space for learning and experimentation, as well as ensure that any tools that may eventually be required for student participation are made available to all students.

International and domestic practices and policies in response to the increased use of generative AI tools in education, including examples of best practice implementation, independent evaluation of outcomes, and lessons applicable to the Australian context.

RUN member universities have been watching with interest the progress of the European Union Artificial Intelligence (AI) Act, the first piece of legislation of its kind worldwide.

The AI Act proposes categorising the uses of AI according to the perceived level of risk, with each category subject to different legal obligations.

The EU has been proactive in establishing regulations to address the ethical and societal implications of generative AI, and this could be an approach for Australia to consider.

Recommendations to manage the risks, seize the opportunities, and guide the potential development of generative AI tools including in the area of standards.

RUN members recognise that universities have a responsibility to help educate students and staff on the safe and ethical use of generative AI tools as well as ensure the integrity and authenticity of assessment. The provision of best practice guidelines and advice through TEQSA would support universities to implement proactive approaches, particularly in areas such as assessment, academic integrity, ethics and data security.

RUN member universities also emphasise the need for institutions to act quickly and have flexibility in decision making regarding generative AI, and would not be supportive of strict regulation specific to higher education environments. However, a broad, society-wide regulatory framework for AI such as the risk-based model proposed in the EU could help to mitigate some of the challenges and risks of the technology.

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[8] Australian Digital Inclusion Index: 2021, Melbourne: RMIT, Swinburne University of Technology, and Telstra, accessed July 10, 2023, https://www.digitalinclusionindex.org.au/download-reports/ https://h3e6r2c4.rocketcdn.me/wp-content/uploads/2021/10/ADII_2021_Summary-report_V1.pdf