



Submission to the House Standing Committee on
Employment, Education and Training inquiry into
the use of generative artificial intelligence in the
Australian education system

Australasian Academic Integrity Network

July 2023

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Background

This submission has been prepared by the Australasian Academic Integrity Network ([AAIN](#)).

The AAIN was established through Deakin University in 2020 and brings together over 550 academic and professional staff in 118 higher education institutions in Australia and New Zealand. Members work in a diverse range of roles linked to student academic integrity policy, practice and research. The focus of the AAIN is on sharing good practice and resources, seeking advice from other institutions, developing shared understanding and effective responses to new and emerging threats to academic integrity, and supporting benchmarking of institutional academic integrity approaches and performance. The AAIN hosts an annual Academic Integrity Forum, with over 1200 registrations for each of the 2021 and 2022 events.

This year, the AAIN has published two resources relevant to the focus of the current Parliamentary Inquiry:

- [AAIN Generative Artificial Intelligence Guidelines](#) (March 2023)
- [Summary of Institutional Responses to the Use of Generative Artificial Intelligence](#) (May 2023).

This submission incorporates responses from AAIN members on each of the Terms of Reference (TOR) gained through a survey of all members and a series of working groups. The submission also draws on the two AAIN publications above.

Summary

The arrival of generative AI has significant implications for education and will require rethinking of the way we teach and assess students in all disciplines. Used effectively, generative AI tools have the capacity to enhance teaching, learning and assessment, and to provide training in tools graduates will need in the workplace. Students and educators need a more comprehensive understanding of the capabilities, limitations and permissible uses of generative AI, and of the threats to learning and academic integrity. To realise the benefits of generative AI, systematic approaches to access, regulation and training for students and staff are essential.

Many educators will need time and support to adapt to this new world, to change the 'what' and 'how' of their teaching and assessment. Traditional educational approaches based on the acquisition and demonstration of knowledge will be replaced by more active, engaging and personalised learning experiences. Students will need support to build their AI literacy to use generative AI in a productive and ethical manner to support their learning, both in the broad sense and in relation to the AI tools that will form part of their professional practice after graduation. Meeting these needs and challenges will require a coherent national agenda, with appropriate funding to support a range of initiatives, including ongoing research into the use and impact of generative AI in education.

The unauthorised and inappropriate use of generative AI in the preparation of student work for assessment is a significant risk and threatens the value placed on degrees by the community. Mitigation of this risk requires clear guidelines and support for students and staff, effective institutional policies and procedures related to academic integrity and a reconceptualization of how we ask students to demonstrate their learning and achievement of course learning outcomes. This has implications for the accreditation and registration requirements of professional bodies.

There are also broader risks associated with the use of generative AI in education. These technologies present a fundamental challenge to how we access, construct and reconstruct

knowledge. Generative AI could have an impact on the development of writing, critical thinking, and other academic skills. Current experience is that the outputs of generative AI are frequently inaccurate and can reinforce biases and stereotypes.

Generative AI has the potential to support the learning of students experiencing social disadvantage and poorer educational outcomes. These benefits can only be realised if equity in access to generative AI tools and the digital skills and resources necessary to use them effectively is ensured.

While the use of generative AI in education has become prominent only relatively recently, there are many examples of good regulation, governance, policy and guidance in Australia and internationally to support the Australian Government and the education sector in working to maximise the benefits of generative AI for educators and students and mitigate its risks.

The AAIN is presenting 19 recommendations to the Committee for its consideration.

Term of Reference 1

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.

Generative artificial intelligence (AI) is a transformative technology with potential to improve educational outcomes when used appropriately. Further education on responsible and ethical uses of this technology and sufficient resourcing is needed to realise the benefits of generative AI.

Benefits for students

- Development of cognitive skills, critical thinking, and information literacy
- Increased digital and AI literacy and experience in the use of generative AI tools to enhance employability
- Tailored, adaptable, personalised learning experience and feedback based on individual needs
- Better access to feedback on learning
- 24/7 access to educational resources and personalised tutoring e.g. summaries to simplify complex concepts in documents and key texts and practice assessment questions
- Assistive technology to enhance equity for students with diverse learning needs.

Benefits for educators

- Tools to promote higher order learning
- Efficiencies in curriculum and learning design including design of rubrics, formative and multi-modal assessment tasks, exemplars and generation of practice assessment questions
- Tools to support learning design for equity, access and student engagement, and the design of interactive and engaging learning activities
- Improved capacity to analyse student performance and support for the provision of detailed and tailored feedback
- Assistance with everyday writing tasks and organisation of learning materials
- Professional development opportunities including digital and AI literacy.

Students and educators need a more comprehensive understanding of the capabilities, limitations and permissible uses of generative AI. Staff development, including induction and continuing professional development is required for effective integration of generative AI into learning and teaching. Realisation of the benefits of generative AI will also require effective and systematic leadership at sector and institutional levels, regulatory frameworks, and consideration of accessibility for students and staff.

The assumption that generative AI will benefit students and educators and improve learning outcomes for students is yet to be supported by clear evidence. Resourcing is needed at all levels across the sector – by regulatory and peak bodies as well as higher education providers – for ongoing monitoring and research into the effectiveness and impact of generative AI in learning, teaching and assessment.

Term of Reference 2

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

The educational landscape is continually evolving, and the integration of generative AI tools in education has a potential positive impact on the future of teaching, assessment, and work. In such a dynamic environment, many educators need time and resources to adapt to recent developments, and guidance and support to fundamentally change the ‘what’ and ‘how’ of education. Similarly, students will need to be adaptive and flexible in response to change. Key areas where generative AI will have an impact on the future of education include the nature and focus of education, the role and work of educators, the nature of assessment, graduate capabilities, equity and integrity.

Transitioning to new approaches to teaching, learning and assessment that leverage the benefits of generative AI will take time and require significant investment in resources, support and training for educators and students. A nationally coordinated approach with clear leadership is essential to achieve maximum benefits and mitigate risks. The higher education sector is not alone in addressing impacts of generative AI on education. Higher education students enter from a range of educational pathways including the secondary schooling system and vocational education and training (VET). A coherent and cohesive national agenda encompassing all levels of education is required if Australia is to respond effectively to new technologies. Collaboration between key regulatory and peak bodies, including TEQSA, ASQA, Universities Australia, the Independent Higher Education Association (IHEA) and TAFE Directors Australia (TDA) is necessary to ensure consistent capability development and innovative practices.

The nature and focus of education

Traditional models of education will increasingly be made obsolete by generative AI, and transmission of knowledge will cease to be the starting point for education. This will necessitate a shift away from traditional educational learning, teaching and assessment approaches, to focus more on disciplinary knowledge and practice, critical thinking and reflection. This has the potential to transform student learning and experience. At the same time, the potential for bias, mis- and disinformation inherent in generative AI models requires a systematic approach to building and reinforcing students’ AI literacy, critical reading and critical thinking skills.

The role and work of educators

Generative AI tools require a redefinition of the role and work of educators, necessitating a shift towards teaching practices that support active, engaging and personalised learning, and new practices to assess student learning while ensuring academic integrity. While technology can support many aspects of teaching and assessment, students still require role models and opportunities for interaction, something that can be difficult to achieve at scale in subjects with large enrolments (in some cases in excess of 1,000 each term). The arrival of generative AI tools will accelerate changes to educator roles and strengthen the need for educators to provide guidance and mentorship, and to foster critical thinking and creativity. Educators will require knowledge and skills to use generative AI effectively as their roles continue to evolve.

The nature of assessment

Generative AI tools have the potential to revolutionise learning, teaching and assessment through personalised learning experiences, rich learning environments and new learning pathways. It is critical to balance the benefits of generative AI with the need to preserve the authenticity and

originality of student work. This will require teaching and assessment practices that build understanding of generative AI and its application in the design and conduct of assessment while also addressing threats to, and vulnerability of assessment.

Graduate capabilities

As generative AI becomes embedded in work and society, higher education providers need to prepare students for a future with AI through curriculum and assessment. With the rapidly advancing capabilities of generative AI, the United Nations Educational, Scientific and Cultural Organisation (UNESCO) calls on institutions to carefully consider the 'skills, outlooks and competencies' that should be cultivated to prepare our students for a rapidly changing world (Giannini, 2023, p.4). The future workforce needs to be capable of rapidly adapting to changes in the technological landscape, addressing privacy concerns and maintaining data integrity.

Any national recommendations on generative AI in higher education that focus on assurance of graduate capabilities should be developed in consultation with accreditation and registration bodies given their role in curriculum, assessment and assurance of learning. The significant impact of the authorised and unauthorised use of generative AI in higher education may require a review of accreditation requirements and processes for authenticating student achievements and ensuring academic integrity.

Equity and integrity

Effective integration of generative AI in learning, teaching and assessment will require clear guidelines and policies to address equity issues, ensure integrity of assessment processes, promote appropriate use of generative AI, address limitations of the technology, maintain standards, and protect intellectual property and student privacy.

Term of Reference 3

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

A frequently cited risk arising from the inappropriate or unauthorised use of generative AI is to the integrity of student assessment, and the capacity of institutions to assure employers, and the community more broadly, that their graduates have achieved the intended learning outcomes of their programs. This presents a potential threat to the reputation of the higher education sector and the value of credentials.

Beyond integrity, generative AI has implications for access to knowledge, and the construction and reconstruction of knowledge. This places an enormous responsibility on Australia's educational communities to develop meaningful strategies to better understand the implications of generative AI for knowledge building, and to ensure students develop a critical appreciation of what counts as knowledge across all disciplines and professional fields.

Risks and challenges for learning, teaching, and assessment

- The need to reconceptualise learning, teaching, and assessment design to meet the opportunities and threats posed by generative AI is a significant challenge for staff professional development and support programs, and for curriculum development and approval processes. Across the sector, providers are only just beginning to design appropriate and effective responses.
- Educators will need to review what is assessed, whether knowledge or the process of learning is assessed, and revise learning outcomes. This will require further review of the ways in which knowledge is assessed in different disciplines. A broader implication is that the higher education sector will need to collectively rethink the nature and purposes of assessment.
- Expectations of acceptable use and forms of knowledge production vary across disciplines. Staff in teaching and assessment roles may also have different expectations.
- Levels of understanding, knowledge and skills related to the use of generative AI vary among staff and students and across cohorts. Threshold standards of AI literacy are recommended for higher education staff and students.
- Generative AI may promote a shift towards oral assessments or other forms of assessment with administrative and practical resourcing implications. These forms of assessment may also be less appropriate to meet diverse learning needs.
- Generative AI may have a negative impact on the development of writing and academic skills, knowledge acquisition and application and critical thinking. The widespread use of AI tools could influence the development of social and interpersonal skills and lead to dependence on generative AI to solve complex problems without considerations of the potential limitations of or risks associated with generated content. Generative AI also has potential implications for student civic development and democratic engagement, given the process of generating material through generative AI without broader personal or professional engagement, and the potential of AI generated material to reinforce biases and stereotypes.
- Institutional guidelines are needed to protect the privacy of student data and their intellectual property.
- Generative AI has potential to contribute to work insecurity and reductions in the education workforce.

Risks and challenges for academic and research integrity

- Provision of clear and consistent standards for using generative AI, guidelines for acceptable and unacceptable use and development of AI literacy are key challenges for higher education providers.
- The need for institutional academic integrity policies and documentation to provide clear guidance to students and staff in the appropriate and inappropriate use of generative AI is increasingly evident. The [AAIN publication](#) released in March 2023 provides initial guidelines. The [AAIN publication](#) released in May 2023 summarises institutional responses to the use of generative AI and provides examples of good practice.
- Strategies and resourcing are needed to address significant risks of misuse and falsification by students claiming the outputs of generative AI as their original work. The capacity of the sector to identify inappropriate use of generative AI is currently limited, particularly given the emergent nature and widespread accessibility of generative AI tools and large size of many higher education classes. While a number of companies have software that is designed to detect work generated by AI, these tools are still in early stages of development. Where they are used, they may not provide educators and institutions with robust evidence of breaches of academic integrity. Many universities have made the decision not to use detection tools until they are more mature.
- Inappropriate use of generative AI in assessment tasks may pose risks to the reputations of individual students, institutions, and the sector. Students' professional careers may be at risk.

Risks and challenges for access to and construction of knowledge

- Risks of factual inaccuracies and biases in AI-generated work including the tendency for generative AI to produce plausible but incorrect responses, and its inability to join discrete concepts in ways that appear to be logical may have an impact on student learning or conceptions of knowledge in different fields of study. Outputs from generative AI tools may reinforce bias, prejudice, and misinformation as 'truth'. Detecting inaccuracies may be difficult due to systems, processes, and limitations of existing software.
- Biases within generative AI models may produce factual inaccuracies about Indigenous peoples, cultural practices and equivalent issues affecting other cultural groups.
- Any development of generative AI standards in Australia should include reference to Indigenous Cultural and Intellectual Property (ICIP) as well as Indigenous Data Sovereignty (IDS). Risks that Indigenous knowledges and intellectual property will be incorporated into generative AI and used without appropriate attribution or acknowledgement should be minimised. The sector standard for ICIP is Terri Janke's [True Tracks](#) and for IDS, [Maiam Nayri Wingara](#)
- Standards for the safe and secure use of generative AI tools in relation to intellectual property, and the potential for data and privacy breaches including online data tracking have not yet been established. Likewise consistent standards for the storage of personal data and interactions with generative AI have not yet been established.
- Generative AI tools create potential risks for transnational exposure of data which may have future implications for data regulation.
- The use of generative AI to produce artifacts that appear to meet learning outcomes or provide evidence of knowledge and skills has potential to undermine the reputation of higher education. A lack of public confidence in the development of knowledge and skills and assurance of learning could undermine the value of qualifications.
- Many staff and students lack a detailed understanding of how generative AI models operate. This includes understanding the centrality of 'temperature' in generative AI models. Temperature

determines the plausibility of responses produced by generative AI from the knowledge it has stored from different devices and information sources, and how this knowledge frames the plausibility of its outputs on a scale between factual information and creativity. Each generative AI tool has a particular 'temperature' between 0 and 1, which for Chat GPT is reported to be 0.7, indicating a level of 'creativity' in its outputs.

- The use of generative AI in institutional systems and processes may create redundancies, and a divided workforce in relation to new skills and literacies.
- Higher education providers may not yet have established clear privacy and permissions guidelines relating to the use of generative AI tools in higher education contexts, for example in relation to the submission of student information or work into generative AI tools. Standards and/or guidelines are needed for the use of student work and sensitive information.
- Guidelines and processes to support academic and research integrity may need to be more closely integrated in response to generative AI, especially in terms of what constitutes appropriate and ethical practice in sourcing and acknowledging information.

Term of Reference 4

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

Students from all backgrounds, including disadvantaged backgrounds (Non-English Speaking Background (NESB), Low Socioeconomic Status (SES), regional and remote and Indigenous students) will need to be able to access and use generative AI tools effectively to achieve the learning goals of higher education and attain qualifications. The association between socioeconomic disadvantage and low performance is statistically significant (OECD, 2019). Generative AI can be used to improve learning, teaching and assessment in ways that reduce disadvantage, for example through personalised approaches that cater to different learning needs. However, this requires equitable access to tools and technologies, and digital and AI literacies to use these tools for learning..

Access to generative AI tools depends on students' financial circumstances which may limit access to hardware and software requirements, education and training programs. Although free access to some generative AI tools may have some impact on democratisation, students from lower-income backgrounds may still face challenges in accessing these technologies. This may lead to a two-tier system, potentially increasing inequities among students. Inclusive approaches to teaching and support and equitable access for all students is key. The [HEPPP](#) (Higher Education Participation and Partnerships Program) provides a potential framework to address the disadvantage in relation to digital and AI literacy and digital access

As generative AI tools mature and set subscription or purchase costs, higher education providers may need to purchase institutional licences to provide access to students and staff, in the same way that access is currently provided to generalist software, such as the Microsoft Office suite, and specialist software such as statistical analysis, modelling software, CAD software, and software for creative arts such as music production. The potential costs and scale of regular use of generative AI tools in the future is unknown and a consideration for providers and the sector more broadly.

Term of Reference 5

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

Robust institutional policies and practice in Australian higher education in response to generative AI, including those that relate to learning, teaching, assessment and academic integrity, will be informed and shaped by international guidelines and frameworks, government policy, regulatory guidance, quality indicators, and sector level policy and practice.

As noted earlier, the AAIN has taken a proactive approach and developed two key documents in relation to the use of generative artificial intelligence in higher education in Australia. The first is guidelines for institutions, teaching staff, students, and academic support staff. The second is a summary of institutional policy changes and guidance/support documents for staff and students. These are listed below in the section *Sector policies, guidelines and position papers*.

International guidelines and frameworks

Globally, efforts to develop frameworks and establish committees to provide guidance and insights on generative AI are increasing. The Australian higher education sector can leverage and learn from international collaborations, guidelines and frameworks.

Examples of international guidelines and frameworks:

- Organisation for Economic Co-operation and Development (OECD), 2019. [Recommendation of the Council on Artificial Intelligence](#).
- OECD, 2022. [OECD Framework for the Classification of AI systems](#).
- OECD, 2023. [AI language models: Technological, socio-economic and policy considerations](#)
- United Nations Educational, Scientific and Cultural Organisation (UNESCO), 2022: [Recommendation on the ethics of artificial intelligence](#)
- UNESCO, 2021. [AI and education: Guidance for policy-makers](#).
- University of Montreal, 2019. [Montreal declaration responsible AI](#)

Government policy and guidance

Higher education providers are each grappling with developing their own policies and procedures on using generative AI in teaching and learning. To reduce complexity and leverage the combined experience of higher education providers, policies and procedures on generative AI in higher education need to be informed by government policies that:

- address data security risks, privacy and confidentiality
- consider the need for AI literacy across the workforce (Dwivedi et al. 2023)
- promote ‘responsible development, deployment, and evolution of [generative AI to] promote wellbeing among humans and in society’ in line with United Nations Sustainable Development Goals (Dwivedi et al. 2023)
- are both responsive and resilient in the context of ongoing technological advancement
- are developed in collaboration with key stakeholders including higher education and the public and private sector.

Good practice examples of Australian and international government policy are:

Australia

- Department of Industry, Science, Energy and Resources, 2023. [Safe and responsible AI in Australia: Discussion paper](#).
- Department of Industry, Science, Energy and Resources, 2019. [Australia's Artificial Intelligence Ethics Framework](#)
- Australian Government Australian Research Council, 2023. [Policy on use of generative artificial intelligence in the ARC's grants programs](#)

International

- Canadian Artificial Intelligence and Data Act (AIDA)
- European Union, 2022. AI Act
- HM Government, UK., 2021. National AI Strategy
- National Institute of Standards and Technology (US), 2023. AI Risk Management Framework
- National Science Foundation (US). The National Artificial Intelligence Research Resource Task Force
- United States Government, 2022. Blueprint for an AI bill of rights

Regulation, regulatory guidance and quality indicators

There is a global lack of comprehensive and coordinated regulations in this domain, prompting UNESCO to call for development of 'checks, rules and regulations' (Giannini 2023, p.4). The European Union's proposed legislation and the Canadian Artificial Intelligence and Data Act seek to regulate the risks of 'high-impact' AI. Australia should follow these leads to consider overall regulations on the use of generative AI.

Across the higher education sector, updated regulatory guidance on generative AI is needed in:

- The [Higher Education Standards Framework \(Threshold Standards\) 2021](#)
- [TEQSA Guidance Notes](#), especially those listed below.
- [ASQA guidance](#)

The Department of Education may also need to consider the implications of generative AI for [Quality Indicators of Learning and Teaching \(QILT\)](#).

Examples of current resources are:

Australia

- TEQSA: [Good Practice Hub - Artificial intelligence](#)
- TEQSA Guidance Notes
 - Guidance note: [Academic integrity](#)
 - Guidance note: [Academic quality assurance](#)
 - Guidance note: [Admissions](#) (coursework)
 - Guidance note: [Course design](#) (including learning outcomes and assessment)
 - Guidance note: [Research and research training](#)
 - Guidance note: [Technology-enhanced learning](#)

International

- Quality Assurance Agency for Higher Education (UK) (QAA), 2023. [Maintaining quality and standards in the ChatGPT era](#).
- Quality Assurance Agency for Higher Education (UK) (QAA), 2023. [The rise of artificial intelligence software and potential risks for academic integrity: Briefing paper for higher education providers](#)
- UNESCO, 2021. [AI and education: guidance for policy-makers](#)

Sector level policies, guidelines and position papers

Higher education policies and practice in relation to generative AI can be informed by good practice in the fields of:

- Learning analytics, including research, position papers and activities of the Society for Learning Analytics Research (SOLAR) that consider responsible use of data, ethics, equity, and democracy.
- Open education, especially approaches to sharing emerging responses (Mills et al. 2023)
- Academic integrity, including core elements of exemplary academic integrity policy (Bretag & Mahmud 2016)
- Artificial intelligence and information systems, including the ethics of artificial intelligence (e.g. Jobin et al. 2019; Susarla et al. 2023).

Relevant examples are:

- Australian Academic Integrity Network, 2023. [AAIN Generative AI guidelines](#)
- Australasian Academic Integrity Network, 2023. [Summary of Institutional Responses to the use of Generative Artificial Intelligence](#)
- Australasian Council on Open, Distance and eLearning, 2023. [Whitepaper: Embracing AI for student and staff productivity](#)
- Australian Council of Learned Academies: Bell F, Burgess J, Thomas J, Sadiq S. (2023). [Generative AI: language models and multimodal foundation models. Rapid response information report](#).
- University of Technology: Solomon L, Davis N., (2023). [The state of AI governance in Australia](#).

International

- AdvanceHE, 2023. [Higher education in the era of AI](#).
- Committee on Publication Ethics (COPE), 2023. [Artificial intelligence and authorship](#)
- European Network for Academic Integrity (ENAI). 2023. [ENAI Recommendations on the ethical use of Artificial Intelligence in Education](#). (Foltynek et al. 2023)
- Jisc National Centre for AI, 2023. [A generative AI primer](#)
- Stanford University, 2023. [Artificial intelligence index report](#)
- USA Department of Education, Office of Educational Technology, 2023. [Artificial intelligence and the future of teaching and learning insights and recommendations](#).

Institutional generative AI policy and practice

Institutional policy and practice in higher education needs to:

- recognise support and resourcing required for the implementation of new digital tools (Esteve-Mon et al. 2022)

- be sufficiently flexible to accommodate ongoing development of generative AI
- consider the implications of generative AI for intellectual property (Umeh, 2023)
- incorporate enterprise-level policies and guidelines for assessing and approving the implementation of new AI tools in a variety of business contexts, with reference to accessibility and equity.

Relevant examples are:

Australia

- UTS: [Artificial Intelligence Operations Policy](#) and [Procedure](#)

International

- Stanford University: [Generative AI Policy Guidance](#)

Institutional policy and guidance on generative AI in learning, teaching and assessment

Good practice examples of higher education provider policies or policy guidance on generative AI are provided below, together with good practice examples of guidance for staff and students on generative AI in learning, teaching and assessment. These examples illustrate the range of institutional positions on the use of generative AI, from zero tolerance to promoting ethical use of generative AI. Many institutions place responsibility on individual educators to determine appropriate use of generative AI within their subjects.

In developing institutional policies and guidance on the use of generative AI in teaching, learning and assessment, higher education providers need to consider:

- measures that maintain learning quality and assessment standards
- impacts on and risks of generative AI for academic integrity (Foltynek et al., 2023)
- the implications for curriculum of increasing industry and other uses of generative AI
- different uses and requirements across different academic areas and disciplines of study
- resource implications of exploring, developing, implementing and reviewing guidelines and changes
- guidance for students on appropriate and inappropriate use of generative AI, including how to acknowledge the use of generative AI
- guidance and professional learning for staff on generative AI tools, AI literacy, assessment design, academic integrity and communicating with students about generative AI
- responsive regulation that is sensitive to student, staff and industry needs and is non-punitive (Ayres and Braithwaite, 1992)
- an understanding of how students are using generative AI (e.g. Skeat & Ziebell, 2023)
- scaffolded development of AI literacy (Cardon et al., 2023; Long & Magerko, 2020; Ng et al., 2021)
- clear expectations regarding the use of generative AI, including inappropriate use that could constitute academic misconduct.
- core elements of exemplary academic integrity policy (Bretag & Mahmud, 2016).

Relevant examples are:

Australia

- Examples of staff guides on assessment design and academic integrity, guiding discussions with students, and further readings: [Australian National University](#), [Federation University Australia](#), [Monash University](#), [University of Melbourne](#), [University of New South Wales](#), [University of Sydney](#).
- Examples of academic integrity or student conduct policies covering the unauthorised or inappropriate use of AI, including in definitions of academic misconduct: [Deakin University](#), [Edith Cowan University](#), [La Trobe University](#), [Monash University](#), [Murdoch University](#), [University of South Australia](#), [University of Western Australia](#), [Western Sydney University](#).
- Student-facing advice on the appropriate use of AI: [Charles Darwin University](#), [University of Adelaide](#), [Curtin University](#), [Edith Cowan University](#), [Flinders University](#), [James Cook University](#), [Macquarie University](#), [RMIT](#), [University of Queensland](#), [University of Wollongong](#).
- Examples of guides for citing and referencing AI: [Australian Catholic University](#), [University of Adelaide](#), [Deakin University](#), [Federation University Australia](#), [Griffith University](#), [La Trobe University](#), [Queensland University of Technology](#), [University of Western Australia](#), [Victoria University](#).
- The practice of viva-style 'confirmation checks' is in place at some institutions including Curtin University and the University of Newcastle and is being explored across the sector as a means of ensuring that students have met learning outcomes. The Curtin guidance note on confirmation checks is provided as an appendix in this [AAIN publication](#).

International

- Examples of staff guides: [The University of Utah](#); [Montclair State University](#); [University of Washington](#)
- Student-facing advice on the appropriate use of AI: [Boston University](#); [University of York](#)

Term of Reference 6

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

Key to the AAIN's recommendations is the need to establish clear leadership and regulative authority in relation to the use of generative AI in education. For the higher education sector, this leadership and authority naturally sits with the Department of Education, TEQSA, ASQA, Universities Australia, the Independent Higher Education Association (IHEA) and TAFE Directors Australia (TDA).

The Higher Education Standards Framework (Threshold Standards) 2021 provides explicit guidance in relation to academic and research integrity, corporate and academic governance, and oversight of education, course design, assessment, learning resources, infrastructure, integrity of awarding qualifications, etc. These standards apply to a variety of contexts, risks and issues and require updating with reference to generative AI.

Recommendations

- R1 That TEQSA, as the national body for regulating and assuring the quality of higher education providers, assumes national leadership in developing standards and frameworks to guide and support the higher education sector in maintaining academic integrity in the context of generative AI. This aligns with TEQSA's national leadership in the promotion of academic integrity and effective responses to other threats to integrity through its publications, partnerships and professional development activities.
- R2 The House Standing Committee on Employment, Education and Training (the Committee) should consider whether AI tools that explicitly (and as their primary business model) market or provide cheating services are within the purview of the TEQSA Act in relation to the provision of contract cheating services.
- R3 That the Department of Education undertakes a review of the Higher Education Standards Framework (Threshold Standards) 2021 to ensure effective sector-wide responses to the use of generative AI in higher education, in consultation with key stakeholders, including Universities Australia, bodies representing non-university providers and key experts in this field.
- R4 That the Committee considers the significant shift that the integration of generative AI technologies in education represents for educators and makes recommendations regarding the need to invest in this workforce transformation. In particular, the Committee should recommend investment by government and the higher education sector in the reconceptualization of teaching, learning and assessment to leverage the benefits of generative AI and address the risk posed to assessment integrity and potential data security and privacy issues. Options for developing resources, guidelines and training for educators at a national level need to be considered.
- R5 That the Committee recommends a national agenda for ongoing research and collaboration and educational initiatives that seek to maximise the benefits of generative AI across different disciplines, address risks, evaluate the impact of generative AI on learning, and support development of AI literacy among staff and students.
- R6 That the Committee recommends future initiatives, programs and projects addressing the use of generative AI in the education sector incorporate consultation with academics and

researchers from a range of discipline areas, as well as key stakeholders outside the education sector, especially professional associations, accreditation bodies, registration bodies and employers.

- R7 That the Committee's findings and recommendations provide the basis for a coherent and cohesive national approach to the use of generative AI that covers all levels and types of education providers, from primary school through to the higher education sector.
- R8 That the Committee makes recommendations to higher education providers on the curation and sharing of best practice, including case studies and exemplars to build capability and awareness of ways to engage with generative AI.
- R9 That the Committee makes specific recommendations addressing current and anticipated intellectual property issues related to the use of generative AI by students and staff, which includes issues under relevant Australian and international laws and intellectual property agreements.
- R10 That any development of generative AI standards in Australia include reference to Indigenous Cultural and Intellectual Property (ICIP) and Indigenous Data Sovereignty (IDS) and that risks that Indigenous knowledges and intellectual property will be incorporated into generative AI and used without appropriate attribution or acknowledgement are minimised.
- R11 That the Committee highlights the need for a diverse range of interested parties and stakeholders to be included in future decisions and actions related to the use of generative AI, in particular the perspectives of those who may be underrepresented in government and education decision-making bodies, including students, people from Aboriginal and Torres Strait Islander and culturally and linguistically diverse backgrounds, those experiencing social and economic disadvantage, and people with disabilities.
- R12 That the Committee considers equity of access to generative AI and the ways that institutional policies and resource allocation for AI will impact on student capabilities, opportunities and outcomes.
- R13 That the Committee provide recommendations to higher education providers regarding licensing agreements for relevant generative AI tools to ensure ready access for students and staff.
- R14 That the Committee consider any inequities in access to basic infrastructure in Australia including access to and costs associated with internet and mobile telephony services, and how these will impact any recommendations for the use of generative AI in education, including levels of government investment required.
- R15 The Parliamentary Inquiry recommend the use of the current [HEPPP](#) (Higher Education Participation and Partnerships Program) to address the needs of students experiencing social disadvantage in relation to digital skills and digital access to generative AI tools.
- R16 That the Committee make recommendations on national regulation of the use of generative AI in the Australian context, where its use in education is just one aspect of its broader use in Australian society.
- R17 That the Committee recognise that evolution of generative AI in the education system is in its early stages, with AI developing at an exponentially rapid rate, and guide the formulation

of a strategic vision for Australia's management, regulation and effective use of generative AI in this rapidly changing environment.

- R18 That Australia follow international leads to consider national regulation on the use of generative AI.
- R19 That any national recommendations on generative AI in higher education be developed after broad consultation with key stakeholders, including accreditation and registration bodies given their role in curriculum, assessment and assurance of learning.

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