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Integrating GenAI in higher education: The critical voices shaping pedagogy and integrity

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The adoption of Generative Artificial Intelligence (GenAI) in Higher Education offers opportunities for innovation but also presents challenges for teaching and learning (T&L). Understanding its impact requires perspectives from discipline academic staff, academic integrity officers (AIOs), students, and industry partners. This study uses data from a two-year T&L project at the University of South Australia (UniSA), including surveys of 1,000 students, 80 discipline academic staff, and 19 AlOs, plus industry advisors, to capture perceptions two years after GenAl's widespread yet gradual adaptation. Academic staff across disciplines remain uncertain about GenAl's effects on student work, raising concerns about critical thinking, engagement, feedback, and the attainment gap. Students' experiences of GenAl vary across academic units: STEM and Education Futures students see benefits in generating insights and organising ideas. In contrast, Clinical & Health Sciences and Business students are more cautious. Nonnative English speakers report higher perceived benefits from using GenAI. To safeguard Academic Integrity, AIOs recommend prioritising assessment redesign (88.2%) and ethical discussions with students (76.5%) over detection tools (39.5%). Markedly, while 90% of AIOs reported investigating GenAl-related misconduct, only 21% felt confident in their ability to detect it. Industry partners indicate their practices are evolving, with growing emphasis on skills like critical thinking (22%), problem-solving (18%), and adaptability (12%), emphasising the need for real-world assessments that foster these skills in academic settings. These findings highlight the need for a comprehensive institutional approach that includes assessment redesign, clear guidance, staff training, and ethical discussions to ensure responsible GenAI use while helping students develop essential skills. Strengthening the partnership between academia and industry can better align curricula with evolving employment requirements and prepare graduates for the changing workplace landscape.

Keywords: Generative AI, Higher Education, Academic Integrity, Stakeholder Perspectives, Integration, Curriculum Design

Introduction and Background

The whirlwind arrival of generative AI (GenAI) tools in late 2022 sent shockwaves through industries and Higher Education alike. It is a disruptive force, plain and straightforward, reshaping job markets, altering industry expectations, and fundamentally redefining what constitutes a "competent graduate." While artificial intelligence (AI) writing tools have existed for decades – from ELIZA in 1966 (Weizenbaum, 1966) through the gradual evolution of natural language generation (NLG) via machine learning and deep learning – the November 2022 release of GPT-3.5 marked a pivotal moment. The widespread accessibility and capabilities of GenAI tools have prompted an urgent rethink of how we approach education and academic practices. The literature identifies a coherent, theory-informed "critical voice" regarding GenAI adoption in higher education that challenges passive institutional responses to GenAI integration, particularly the reliance on

Future-Focused:

Educating in an Era of Continuous Change

detection-led integrity regimes rather than pedagogical transformations (Luo, 2024; Hau, 2025). This perspective fundamentally seeks to problematise surveillance-oriented approaches, moving beyond a narrow definition of the GenAl "problem" as simply the loss of originality, to the deeper question of higher education's purpose in the GenAl era (Hau, 2025). The critical voice highlights structural and ethical shortcomings, emphasising the need for critical Al literacy attentive to equity and political economy (Kramm & McKenna, 2023), while interrogating external influences such as vendor/business-model logics (Driessens & Pischetola, 2024). Consequently, these viewpoints necessitate fundamental institutional shifts away from surveillance and policing (Rudolph et al., 2024). Counter-hegemonic positions advocate for the rejection of detection as the governing principle of integrity, instead advancing robust assessment redesign (Ardito, 2025) and reframing institutional purposes toward transformative learning and ethical engagement with the limits of Al (Selwyn, 2024). This could only be achieved through a collective thinking approach among the different stakeholders involved in the process.

GenAl technology presents both enormous opportunities and considerable challenges for everyone involved in Higher Education. Students, for example, can benefit from personalised learning experiences, improved writing support, and more efficient research methods – skills vital for future employment (Chan & Hu, 2023). Generally, both students and discipline-specific academic staff accept GenAl's use for brainstorming and general task assistance. However, concerns persist about students becoming over-reliant on GenAl, potentially stifling critical thinking and problem-solving abilities (Luo, 2024) alongside ethical concerns regarding accuracy, data privacy and the impact on personal growth (Drydakis, 2024). For educators and academic integrity professionals, GenAl offers potential benefits like automated feedback on assignments (Escalante et al, 2023). However, it simultaneously complicates the detection of academic misconduct, as traditional plagiarism detection methods are inadequate for detecting GenAl-produced content. These tools generate original, human-quality content, making it nearly impossible for educators to reliably distinguish between genuine student work and GenAl-generated submissions (Perkins et al., 2024). This leaves academic integrity officers (AlOs) scrambling to adapt their investigative techniques while existing anti-plagiarism software, including Turnitin, and even newer GenAl detection tools, often demonstrate limited effectiveness (Bordalejo et al., 2025)

Industry, meanwhile, recognises GenAI as the "next big thing," predicting enhanced global productivity – with Goldman Sachs, for instance, projecting a 1.5% increase in global productivity growth and a 7% rise in global GDP – and a major transformation of work processes (Vargas-Hernandez et al., 2024). However, this efficiency has a downside. GenAl's ability to automate tasks such as drafting contracts and writing code could eliminate many entry-level positions. This poses a challenge for graduates seeking to gain crucial early-career experience and risk widening the skills gap between universities' outputs and employers' demands (Brown, 2023; Jung et al., 2024). Industry 5.0, which focuses on integrating human ingenuity with GenAI, further accelerates this transformation. Consequently, to remain competitive and relevant, graduates must become GenAl literate, capable of both utilising and critically evaluating GenAl tools (Li, 2022). Despite the far-reaching implications of GenAI, surprisingly little multi-stakeholder research exists on how students, academic staff, academic integrity investigators, and industry partners can work together to align curricula with workforce demands and maintain academic integrity in this new landscape. Specifically, realworld studies on effective university-industry partnerships in curriculum development are scarce. Furthermore, while interest in GenAI within Higher Education is growing, research examining the challenges faced by those investigating academic misconduct lags significantly. A systematic comparison of student perceptions across different academic units and disciplines – STEM, Business, Health Sciences, etc. – is also noticeably absent. This significant research gap necessitates a focused investigation to inform effective strategies for navigating the complexities of the GenAI era.

This paper, therefore, argues for a comprehensive study into the multifaceted implications of GenAl integration in Higher Education. Our research aims to address these gaps by exploring the perspectives of key stakeholders – university students and academic staff across disciplines who are directly engaged in teaching and learning processes, alongside AlOs and industry partners who shape institutional policies and graduate qualities – to develop strategies for effective collaboration, skill development, and the preservation of academic integrity. Thus, insights from experienced industry leaders, an understanding of the evolving roles of AlOs, and the diverse perspectives of students across various disciplinary contexts in Higher Education are pivotal to shaping key frameworks and policy directions.

Future-Focused:

Educating in an Era of Continuous Change

As illustrated in Figure 1, the research explores four key stakeholder groups to address the multidimensional impact of GenAI in Higher Education. This comprehensive approach aims to bridge emerging skill gaps, enhance graduate employability, and safeguard the integrity of academic attainment in the evolving GenAI landscape. The insight generated will inform both educational strategies and workforce policies. The Research Questions (RQs) are centred on integrating these diverse stakeholder views:

RQ1: What are the perceived opportunities, challenges, and concerns of key stakeholders (industry, academic staff, AlOs, students) regarding the integration of GenAl in Higher Education?

RQ2: How do disciplinary differences influence stakeholder perceptions and preferences regarding GenAl usage and assessment design?

RQ3: What strategies do key stakeholders recommend for curriculum redesign, policy reform, and ethical education to safeguard academic integrity and enhance graduate employability in the GenAl era?

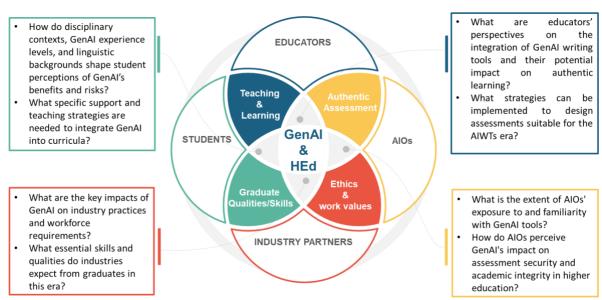


Figure 1. Stakeholders and guiding research questions for investigating GenAl integration in Higher Education.

Methodology

This paper synthesises four interconnected research projects that explore the use and integration of generative AI (GenAI) in Higher Education and industry. We used a mixed-methods design that combines Qualtrics-administered surveys, interviews, and stakeholder feedback to ensure comprehensive insights. Thus, Figure 1 presents the conceptual framework that emerged from synthesising the empirical data from these studies.

Quality and ethics

This study was conducted almost two years after the release of ChatGPT. We surveyed different stakeholder groups: academic staff, students, academic integrity officers (AIOs), and industry professionals. All surveys addressed consistent themes, including skill requirements, policy gaps, and educational strategies. Qualitative data (e.g., interview transcripts, open-ended responses) were analysed by identifying recurring themes, while quantitative data (Likert scales, closed-ended responses) were analysed using statistical methods.

We emphasised voluntary participation, confidentiality, and participants' right to withdraw at any time. Pilot testing was conducted, and we implemented Qualtrics-driven quality controls, including checks for straightlining responses. To enhance validity, we also triangulated data across stakeholder groups. By integrating perspectives from educators, AIOs, industry advisors, and students, this methodology provides practical insights for curriculum development, policy reform, and improving graduate employability. The study

Future-Focused:

Educating in an Era of Continuous Change

was approved by the Human Research Ethics Committee of the University of South Australia (Ethics Protocol 205545).

Critical voices were identified through both quantitative and qualitative data in this study. In survey responses, participants indicating strong concern, disagreement, or opposition to GenAl integration (e.g., were coded as representing critical perspectives). For example, Clinical & Health students expressed the most vigorous opposition due to ethical concerns, while academic staff demonstrated significant uncertainty about GenAl adoption. Similarly, recurring themes in open-ended responses and interviews focused on risks, challenges, inadequate current support systems, and the need for structural change were categorised as "critical voices". This included AIOs discussing the limitations of detection tools and their challenges in investigating suspected GenAI misconduct cases.

Survey Administration

The flowchart depicting the survey pathway is shown in Figure 2 and briefly described as follows.

Survey Administration

TERVIEW Industry Industry **AIOs Students** Educators Advisory Survey Survey Survey Survey Group June - July Aug - Sept Dec May - July June - July 2023 2024 2024 2024 2024

Figure 2. Survey Administration & Timeline

Industry Advisory Board Interviews (December 2023): We conducted Semi-structured interviews with UniSA's STEM Industry Advisory Board (7 participants, hybrid format) to evaluate GenAl's impact on future job requirements, skill demands, and industry practices. We used open-ended questions to explore opportunities, challenges, and evolving non-technical competencies such as critical thinking and adaptability. Student Survey (May-July 2024): The survey was distributed via the Executive Dean's offices across all academic units to capture student perceptions of GenAl's impact on learning and assessment. A total of 1014 students commenced the survey, with ~60% completing it. Both online and on-campus learners participated. Academic Staff survey (June-July 2024): The survey was distributed via the Executive Dean's offices to all discipline academic staff involved in teaching and/or supervising across seven academic units at UniSA. There were 80 respondents. The survey combined Likert-scale, yes/no and open-ended questions to assess. AIO Survey (June-July 2024): The survey was completed by 19 Academic Integrity Officers (AIOs) across UniSA's seven academic units. It blended Likert-scale, yes/no, and open-ended questions to assess GenAl's impact on academic integrity, policy gaps, investigation challenges, and training needs. A pilot study (3 AIOs) refined clarity and structure. Data quality checks addressed incomplete responses and ambiguities. Industry Partner Survey (August-September 2024): Distributed via university-industry networks, this survey captured perspectives from 40 professionals on GenAl's influence on skills, job roles, and graduate readiness. Sections included demographic profiling, AI knowledge assessment, and Likert-scale evaluations of technological impacts. A pilot (4 professionals) streamlined question relevance.

Results and Discussion

As GenAl becomes integrated across sectors, universities must effectively incorporate these technologies into their curricula and strategies to ensure students are job ready. Industries increasingly require graduates who can work with GenAl but with essential communication and critical thinking skills. This presents an existential challenge for universities: ensuring the validity of their qualifications by equipping the students with both necessary technical skills and human-centric competencies.

Future-Focused:

Educating in an Era of Continuous Change

This section examines the empirical perspectives of four stakeholder groups: industry partners, discipline academic staff, academic integrity officers, and students regarding GenAl integration into university education. By addressing what to integrate (e.g., problem-solving with GenAl, ethical guidelines) and how to implement it (e.g., revised assessments, interdisciplinary collaboration, industry input), this section highlights strategies to balance technological advancement with the development of critical thinking, ethical reasoning and workforce readiness in our rapidly changing world. Exploring ways that GenAl is currently used in Higher Education will help in evaluating its effective application.

Industry perspective: Curriculum Integration

Approximately 66% of Industry participants indicated that using GenAI tools in the workplace will place greater emphasis on non-technical skills (Figure 3), potentially impacting the future job market negatively. Industry experts highlight that while GenAI excels at information retrieval, a future-focused world will require students to have human or "soft" skills over purely technical skills. This view aligns with recent studies advocating for flexible curricula that balance technical and non-technical skills to prepare graduates for GenAI-driven job markets (Faizan et al., 2024).

Universities should integrate problem-solving using GenAl into their curriculum, focusing on evaluating outputs and developing higher-order thinking skills. Industry partners also emphasised that while data analysis remains essential, there is a growing importance for communication, adaptability and teamwork skills, even in GenAl-driven roles.

There was also consensus amongst industry partners that Higher Education Institutions should embed GenAl technologies into student learning and skills development, while being mindful that these tools negatively influence critical thinking skills. Respondents identified a need for courses that integrate industry-relevant skills and provide students with the opportunity to develop, test and demonstrate these skills both within the curriculum and external settings such as placements.

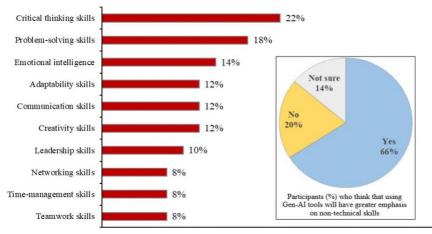


Figure 3. The Critical non-technical skills for Graduates in the future job market

Notably, the Industry survey and focus group discussions highlighted several strategies to bridge the gap between university and industry, aimed at equipping students with both theoretical knowledge and practical skills for the GenAl era. These strategies included offering specialised courses, implementing practical GenAl projects, and establishing joint university-industry seminars. Participants also highlighted that existing programs like mentorships, internships and work-integrated learning would be valuable for integrating academic learning with real-world application. This aligns with Jung et al. (2024), who argue that in response to shifting job market demands, Higher Education Institutions should reassess their pedagogical approaches. Furthermore, focus group discussions underscored the importance of co-developing curricula that help students transfer technical skills while addressing critical thinking, ethical reasoning and career preparation. Such approaches ultimately help graduates rebuild confidence in the competitive job market (Shi & Wang, 2025).

Future-Focused:

Educating in an Era of Continuous Change

Discipline Academic Staff Perspective: Teaching and Evaluation

The majority of academic staff (54%) allowed students to use GenAl tools in their courses, as shown in Figure 4, and a high proportion (54%) observed a change in student performance (Figure 5). Academic staff recognised the need to build students' confidence in using GenAl as a learning tool. They reiterated that educators must provide clear guidelines, including examples of ethical and appropriate GenAl use within their course. Some respondents felt that marking rubrics needed adjustment to reflect GenAl integration.

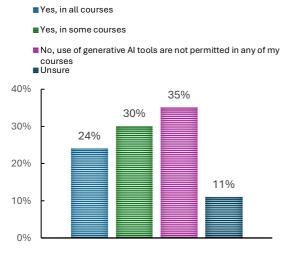


Figure 4. Academic Responses to Allowing GenAl Use in Their Courses

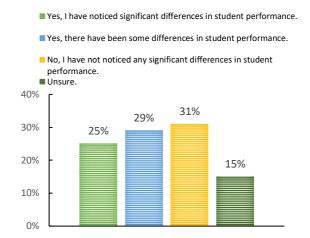


Figure 5. Noticed Differences in Student Performance Since the Introduction of GenAl

Academic staff focused on the assessment types that need to change, overwhelmingly believing that authentic, real-world, in-person assessments are required – assessments that scaffold learners through the learning process. There were disciplinary differences in assessment preferences across academic units: STEM prioritised face-to-face exams to test problem-solving and technical skills, whereas Health and Human Sciences preferred case studies where theory was applied to real-world clinical situations (Figure 6). Most respondents believed in demonstrating to students how to be accountable while using GenAI in academic contexts.

Another integration strategy identified is course design, which includes ethical use of GenAI with examples and guidance as key components. Examples of ethical use included developing assessments that allow students to find information while requiring them to have learned the foundational content – for instance, using scaffolded tasks over several weeks linked to the weekly coursework. While students from the Business discipline indicated they would favour more adaptive integration of GenAI, Education Futures leaned towards more controlled containment and cautious experimentation. This aligns with (Lu et al., 2024), who recommended embedding GenAI into course design alongside ethical instruction and usage examples.

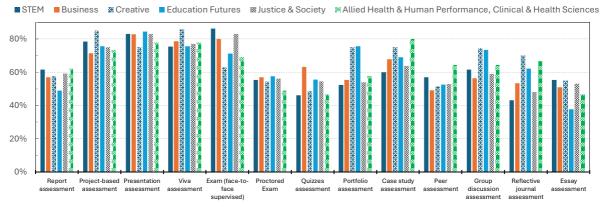


Figure 6. Assessment preferences by unit specialisation

Future-Focused:

Educating in an Era of Continuous Change

Student perspective: Learning and guidelines

Figure 7 shows students' perspectives on the permissibility of GenAl tools across academic units. The majority of the students believed that GenAl should be integrated (18% plus 54%) and unrestricted, but with cautious guidelines. There were disciplinary differences regarding the preference for "cautious guidelines", with students from Allied Health, Human Performance, and Business most prominently favouring this approach. A group of students felt that GenAl tools should not be permitted, citing academic integrity concerns. Clinical Health students expressed the strongest opposition, citing ethical concerns specific to medical and healthcare education.

Students generally felt that universities should integrate GenAI into the courses and learning while providing guidance and examples on appropriate use within their discipline or courses. They identified deploying GenAI for primarily two purposes in undergraduate coursework: understanding concepts and brainstorming (or generating ideas). Some students viewed these tools as helpful supplementary aids for clarifying complex topics and for improving writing.

Students highlighted the need for universities to establish clear rules for using GenAl in their specific contexts, demonstrating what appropriate use looks like. They also emphasised the need for workshops, training, or masterclasses demonstrating how to use GenAl, with clear expectations and limitations. Additionally, they believed there should be a specific introduction to tools that are useful in specific disciplines or courses. Students' ethical concerns (e.g., academic integrity, over-reliance on GenAl, algorithmic bias, and equitable access) and their confusion from mixed messaging are notable critical views that necessitate the push for clear, discipline-specific guidelines, training, and equity measures.

Overall, students felt confused by mixed messaging but believe that clarification, integration, and examples are necessary for effective GenAl use.

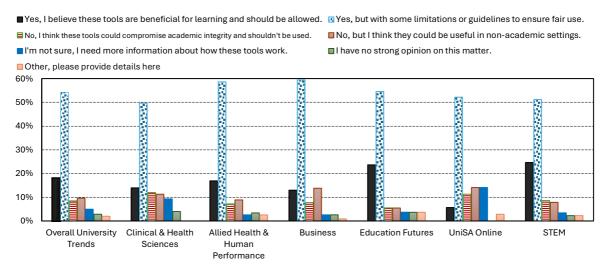


Figure 7. Students' perspectives on the Permissibility of GenAl Tools across academic units

Academic Integrity Officers (AIOs) Perspective: Challenges in investigating GenAI-related misconduct

The study examined AlOs' perspectives on GenAl-related academic misconduct and the challenges they faced in their investigation. In the survey responses, an overwhelming 90% of AlOs (17 out of 19 respondents) reported investigating GenAl-related academic misconduct cases, highlighting concerns about GenAl's impact on academic integrity. AlOs were also asked to what extent they believe academic misconduct cases have increased since the emergence of GenAl tools. Their responses confirmed a rise in cases: 8 out of 12 participants reported that instances of misconduct had either doubled, tripled, or quadrupled, as shown in Figure 8. AlOs attributed this rise to students not being adequately informed by universities about the ethical and permissible use of GenAl tools.

Future-Focused:

Educating in an Era of Continuous Change

Given that 90% of respondents reported investigating suspected cases of GenAl-related academic misconduct, we further explore the challenges faced by AIOs by examining their personal evaluation of their success rate in investigating such misconduct. We defined success as investigations that resulted in confirmed misconduct, as opposed to deadlock or no misconduct outcomes. As shown in Figure 9, 8 out of 17 AlOs (47%) reported a medium success rate, while 5 out of 17 (29%) reported a low success rate. Only 4 out of 17 (24%) reported a high success rate, illustrating the inherent complexity of such investigations for AIOs. This finding denotes a critical voice that necessitates the policy shift toward ethical education and assessment redesign, with 88.2% of respondents supporting such a position.

AlOs emphasised that GenAl literacy should be integrated into teaching and learning, following clear ethical guidelines on appropriate and inappropriate use. They recommended implementing a dedicated and compulsory first-year course covering writing, researching, referencing and ethical GenAI use. There was also a recommendation for motivational video messages to be sent to students to emphasise the value of authentic learning by contrasting the job readiness and career prospects of authentic learners with those who are overly reliant on GenAI, while connecting future work to learning.

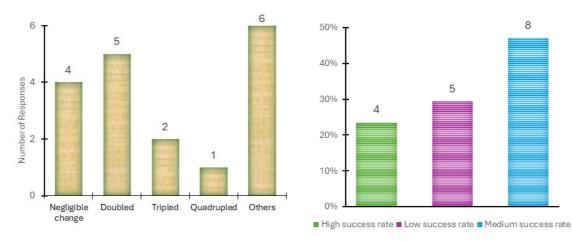


Figure 8. Academic Integrity case numbers since the emergence of GenAI tools

Figure 9. AIOs' success rates for Gen AI-related academic misconduct investigations

8

Ethical Considerations from Multi-Stakeholders for GenAl Integration in Higher Education

Students, discipline academic staff, academic integrity officers (AIOs), and industry stakeholders raised overlapping but distinct ethical concerns about the use and integration of GenAI in education and professional contexts.

Students highlighted four main concerns. First, academic integrity: GenAI was perceived as a threat to assessment fairness and the value of qualifications. Second, over-reliance: students feared GenAl could erode critical thinking, technical skills, and professional judgment. Third, bias and misinformation: concerns included opaque data sources, unreliable outputs, and the risk that GenAI may reinforce pre-existing prejudices. Fourth, equity and access: paid tools and limited digital access could deepen educational disadvantage. Discipline academic staff shared these concerns and stressed that GenAI, if not appropriately scaffolded, could widen performance gaps and limit deep learning. They observed that students may use GenAl to bypass genuine engagement, reducing the development of independent thinking and diminishing the originality of submitted work. There was also concern that students often trust GenAl outputs without evaluating their accuracy or appropriateness.

AlOs emphasised that ethical education should take priority over detection. They recommend assessment redesign, integration of GenAl ethics into coursework and clear guidance for students. The difficulty of detecting GenAl use, coupled with differing views of acceptable practice, highlights the need for explicit policy, staff training and coordinated processes to ensure fair and credible assessment. Industry stakeholders acknowledged GenAl's potential for efficiency and productivity but emphasised ethical risks. These concerns

Future-Focused:

Educating in an Era of Continuous Change

aligned with those raised in education, including bias, data privacy, intellectual property, and the erosion of human judgment. Over-reliance on GenAl was seen as a workforce risk if graduates lack the critical thinking and ethical reasoning needed to make informed decisions in real-world contexts. Governance frameworks and ethical training were considered essential to ensure the responsible integration of GenAl in the workplace.

Conclusion

The integration of GenAl into Higher Education requires a multi-pronged and collaborative approach that bridges industry expectations, pedagogical responsibility, student needs, and ethical accountability. Industry stakeholders emphasise the value of professional skills such as communication and adaptability, even as technical competencies evolve. Academics are advocating for transparent guidelines and assessment practices that prioritise authentic, scaffolded learning over tasks that risk over-reliance on GenAl tools. While students are broadly supportive of GenAl integration in their learning, they seek more explicit discipline-specific guidance and training, including support in understanding ethical boundaries regarding its use.

GenAl is a decisive factor shaping graduate capability and institutional credibility. This study shows that all stakeholder groups, industry, academic staff, students, and academic integrity officers, welcome its potential but fear the loss of critical thinking, professional practice skills, and ethical judgment. Universities must therefore move from cautious observation to deliberate action.

First, institutions must map GenAI learning outcomes across each program. Foundational courses should build disciplinary knowledge before students engage deeply with GenAI tools. Mid-level subjects should focus on evaluating GenAI outputs. At the same time, capstone experiences should require students to apply GenAI in complex, real-world tasks that involve synthesis, professional judgment, and independent decision-making. This vertical scaffold addresses the over-reliance and surface learning raised by both students and staff. Such uncertainty and disciplinary differences inform the need for Discipline-Specific Guidelines and targeted staff training.

Second, assessment must be redesigned to include authentic and iterative tasks that require students to demonstrate understanding at each stage of the learning process, making it difficult to rely on GenAl without genuine engagement. Rubrics should reward students for explaining how and why they used GenAl tools, rather than focusing solely on the final outcome. Alongside this, staff need targeted professional development to build confidence in evaluating GenAl-enabled work and to support students through constructive guidance rather than enforcement.

Third, clear, discipline-specific guidelines are needed. Students asked for concrete examples of acceptable practice and training sessions that show both the power and the limits of GenAl. AlOs emphasised that ethical education, not detection, is the most potent deterrent to misconduct. Policies should therefore focus on transparent expectations, consistent processes, and proactive messaging that links learning to future professional responsibility. This should be a priority, considering the challenges in misconduct detection when associated with GenAl misuse.

Fourth, equity cannot be an afterthought. Paid GenAl tools and variable internet access threaten to widen existing gaps. Institutions should provide campus licences for core tools, embed digital-literacy modules, and monitor for disparate impacts across student cohorts.

Finally, the industry's call for graduates with strong communication, adaptability, critical thinking and teamwork skills highlights that human capabilities will shape who contributes meaningfully in a GenAl-rich workplace. Embedding these professional practice skills alongside technical proficiency ensures that graduates remain capable, confident, and relevant in a technology-driven world. Also, it informs the necessary curriculum redesign through vertical scaffolding and enhancing capstone experiences.

Future research directions should include longitudinal studies tracking how program-level GenAI embedding and mapping influence graduate performance and employability; investigations into the effectiveness of equity measures, particularly for students with limited digital access; and development of discipline-specific metrics for GenAI literacy. Acting on these recommendations will help universities harness GenAI to deepen learning rather than diminish it, ensuring graduates remain critical, creative, and ethically grounded contributors to an AI-enabled society.

Future-Focused:

Educating in an Era of Continuous Change

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Reference list

- Ardito, C. G. (2025). Generative AI detection in higher education assessments. *New Directions for Teaching and Learning*, 2025(182), 11–28. https://doi.org/10.1002/tl.20624
- Bordalejo, B., Pafumi, D., Onuh, F., Khalid, A. K. M. I., Pearce, M. S., & O'Donnell, D. P. (2025). "Scarlet Cloak and the Forest Adventure": a preliminary study of the impact of AI on commonly used writing tools. *International Journal of Educational Technology in Higher Education*, 22(1), 6. https://doi.org/10.1186/s41239-025-00505-5
- Brown, R. (2023). *The AI Generation: How universities can prepare students for the changing world.*Demos. https://dera.ioe.ac.uk/id/eprint/40381/1/The-AI-Generation-2.pdf
- Chan, C. K. Y., & Hu, W. (2023). Students' voices on generative AI: perceptions, benefits, and challenges in higher education. *International Journal of Educational Technology in Higher Education*, 20(1), 43. https://doi.org/10.1186/s41239-023-00411-8
- Driessens, O., & Pischetola, M. (2024). Danish university policies on generative Al. *MedieKultur: Journal of media and communication research*, 40(76), 31–52. https://doi.org/10.7146/mk.v40i76.143595
- Drydakis, N. (2024). Artificial intelligence, capital, and employment prospects. *Oxford Economic Papers*, gpae005. https://doi.org/10.1093/oep/gpae005
- Escalante, J., Pack, A., & Barrett, A. (2023). Al-generated feedback on writing: insights into efficacy and ENL student preference. *International Journal of Educational Technology in Higher Education*, 20(1), 57. https://doi.org/10.1186/s41239-023-00425-2
- Faizan, M., Huang, Q., Riaz, N., & Saif, U. (2024). From academia to industry: A framework to securely implement big data and AI to predict college graduates' employment trajectories. *International Journal of Science and Research Archive*, 11(2), 708–723. https://doi.org/10.30574/ijsra.2024.11.2.0497
- Hau, M. F. (2025). Writing with machines? Reconceptualizing student work in the age of Al. *Frontiers in Communication*, 10. https://doi.org/10.3389/fcomm.2025.1598988
- Jung, J., Wang, Y., & Sanchez Barrioluengo, M. (2024). A scoping review on graduate employability in an era of 'Technological Unemployment'. *Higher Education Research & Development*, 43(3), 542–562. https://doi.org/10.1080/07294360.2023.2292660
- Kramm, N., & McKenna, S. (2023). Al amplifies the tough question: What is higher education <i>really</i>for? *Teaching in Higher Education*, 28(8), 2173–2178. https://doi.org/10.1080/13562517.2023.2263839
- Li, L. (2022). Reskilling and Upskilling the Future-ready Workforce for Industry 4.0 and Beyond. *Inf Syst Front*, 1–16. https://doi.org/10.1007/s10796-022-10308-y
- Lu, Q., Yao, Y., Xiao, L., Yuan, M., Wang, J., & Zhu, X. (2024). Can ChatGPT effectively complement teacher assessment of undergraduate students' academic writing? *Assessment & Evaluation in Higher Education*, 49(5), 616–633. https://doi.org/10.1080/02602938.2024.2301722
- Luo, J. (2024). A critical review of GenAI policies in higher education assessment: A call to reconsider the "originality" of students' work. *Assessment & Evaluation in Higher Education*, 1–14. https://doi.org/10.1080/02602938.2024.2309963
- Perkins, M., Roe, J., Postma, D., McGaughran, J., & Hickerson, D. (2024). Detection of GPT-4 Generated Text in Higher Education: Combining Academic Judgement and Software to Identify Generative AI Tool Misuse. *Journal of Academic Ethics*, 22(1), 89–113. https://doi.org/10.1007/s10805-023-09492-6
- Rudolph, J., Mohamed Ismail, F. M., & Popenici, S. (2024). Higher Education's Generative Artificial Intelligence Paradox: The Meaning of Chatbot Mania. *Journal of University Teaching and Learning Practice*, 21(06). https://doi.org/10.53761/54fs5e77
- Selwyn, N. (2024). On the Limits of Artificial Intelligence (AI) in Education. *Nordisk tidsskrift for pedagogikk og kritikk*, 10(1). https://doi.org/10.23865/ntpk.v10.6062
- Shi, W., & Wang, D. (2025). Empirical research on the application of AI mock interviews in enhancing graduate perceived employability: a case study in Hangzhou, China. *Education and Information Technologies*, 1–24. https://doi.org/10.1007/s10639-025-13525-5

Future-Focused:

Educating in an Era of Continuous Change

Vargas-Hernandez, J. G., Castañeda-Burciaga, S., Guirette-Barbosa, O. A., & Vargas-Gonzàlez, O. C. (2024). Critical Analysis of Emerging and Disruptive Digital Technologies in an Era of Artificial Intelligence (AI). In F. Adedoyin & B. Christiansen (Eds.), Generative AI and Multifactor Productivity in Business (pp. 1–21). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3693-1198-1.ch001

Weizenbaum, J. (1966). ELIZA—a computer program for the study of natural language communication between man and machine. *Communications of the ACM*, 9(1), 36–45. https://doi.org/10.1145/365153.365168

Abdelaal, M.S. Abd-Elaal, E-S., Janssen, A. Smith, E. & Diaby, A.L. (2025). Integrating GenAI in higher education: The critical voices shaping pedagogy and integrity. In S. Barker, S. Kelly, R. McInnes & S. Dinmore (Eds.), *Future-focused: Educating in an era of continuous change*. Proceedings ASCILITE 2025. Adelaide (pp. 188-198). https://doi.org/10.65106/apubs.2025.2639

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