

GenAI is Shaping the Future of Work: What does this mean for curriculum transformation and preparing students for the future world of work?

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Global Overview

Generative AI (GenAI) is poised to transform job roles and enhance labor productivity globally (World Economic Forum, 2024). It has been predicted that the monotonous tasks will increasingly be taken over by AI tools and more importantly, professional fields that require cognitive, specialised skill sets will experience the most changes due to embedding GenAI tools into work routines (Mandala Partners & [Future Skills Organisation](#), 2023). The adoption of GenAI in workplaces hinges on two uncertainties: the level of trust in GenAI and its technological advancements (World Economic Forum with PwC, 2024). Trust involves employees' confidence in GenAI and their trust in their organization, technology providers, and government.

Leading organisations in the uptake of GenAI follow two key strategies (World Economic Forum with PwC, 2024):

1. **Enable:** Establishing a vision, strategy, and guiding principles.
2. **Engage:** Adopting GenAI to benefit the organization, including cultural and managerial changes and upskilling employees.

Key terms include:

- **Productivity growth through automation:** Creating more efficient workflows with GenAI (Mandala Partners, 2023).
- **Job augmentation:** Using GenAI to enhance human capabilities through collaboration (World Economic Forum with PwC, 2024).
- **Adaptation:** humans play a QA role, checking, interpret, validate or combine GenAI outputs (Mandala Partners, 2023)

Working with GenAI is an emerging field, with the literature focusing on early adopters and cautioning against broad generalizations. The uptake of GenAI varies significantly among companies, with data-driven organizations leading the way (Yu & Qi, 2024). The importance of ethical practices is emphasised, reminding

organisations and employees that ultimately, they are responsible for their services and products. Ensuring human oversight of GenAI outputs is illustrated in the New York Times case study, see Appendix A.

Organizations are mindful of risks such as privacy violations and reputational damage. Effective use of GenAI depends more on human elements than technology, requiring thoughtful and responsible leadership. For examples on GenAI guidelines in workplaces, see Appendix A.

Transforming workplaces with GenAI

Generative AI (GenAI) is poised to significantly reshape workplaces by embedding itself into workflows. The socio-technical interactions will be transformed. It is important to prioritise human experience over purely technical implementation (KPMG, 2024). This transformation requires:

- Reimagining job roles
- Upskilling employees in new ways of working
- Developing a clear and forward-looking people strategy

KPMG's 2024 survey of 225 U.S. executives underscores the importance of aligning GenAI adoption with workforce planning.

Productivity Gains and Cultural Shifts

GenAI can automate routine, lower-value tasks, enhancing productivity without reducing employment (Yu & Qi, 2024). However, this shift may reduce opportunities for human relationship-building, potentially altering workplace dynamics and culture.

Organisational Challenges and Adoption Trends have been reported by Deloitte's Q4 2025 State of Generative AI in the Enterprise report (Rowan et al., 2025). It identifies several barriers to adoption:

- The rapid pace of technological change outstripping organizational readiness
- Regulatory uncertainty and risk management concerns
- Persistent mistrust in GenAI and its outputs

Despite these challenges, adoption is growing in sectors such as IT, cybersecurity, marketing, and customer service. Key findings include:

- Only 40% of the workforce currently has access to GenAI tools
- Of those, 60% use them daily
- 78% of surveyed organizations plan to increase GenAI investment

Outlook to the future

Long-term attention will be focused on scalability, data quality, training, and the development of agentic and multiagent AI systems.

Deloitte (Singla et al., 2024) provides sector-specific insights with case studies across industries including consumer products, energy, financial services,

technology, and media. While informative, these examples may quickly become outdated due to the fast-evolving nature of GenAI.

McKinsey's AI in the Workplace Report 2025 (Mayer et al., 2025) presents a more optimistic view:

- GenAI adoption rose 50% from 2023, reaching 65%
- Employees are generally positive and eager to improve their AI-related skills
- Adoption is strongest in marketing, sales, and product development
- 92% of companies plan to increase AI investment, particularly in the Asia-Pacific region and China

However, workforce planning remains complex due to uncertainty around how quickly AI may shift skill demands, requiring rebalancing and retraining.

Mayer et al. (2025) conclude their report on empowering employees to work with GenAI with these questions:

For business leaders:

- Is your strategy ambitious enough? Do you want to transform your whole business? How can you reimagine traditional cost centers as value-driven functions? How do you gain a competitive advantage by investing in AI?
- What does successful AI adoption look like for your organization? What success indicators will you use to evaluate whether your investments are yielding desired ROI?
- What skills define an AI-native workforce? How can you create opportunities for employees to develop these skills on the job?

For employees:

- What does achieving AI mastery mean for you? Does it extend to confidently using AI for personal productivity tasks such as research, planning, and brainstorming?
- How do you plan to expand your understanding of AI? Which news sources, podcasts, and video channels can you follow to remain informed about the rapid evolution of AI?
- How can you rethink your own work? Some of the most innovative ideas often emerge from within teams, rather than being handed down from leadership. How would you redesign your work to drive bottom-up innovation?

Perceived Risks

The use of GenAI in workplaces has also prompted critical discussions regarding its implications for employee well-being, productivity, and ethical considerations (Lozie et al., 2024). A KPMG survey (2024a) found that there is a risk of increased job insecurity and limited opportunities for professional development and increase in anti-social behaviour. KPMG recommended a discussion on what constitutes

meaningful work in times of Gen AI. Lozie et al., (2024) indicated that while GenAI can enhance efficiency and job satisfaction, it also poses risks related to ethical considerations and work-life balance, necessitating a careful examination of its implementation in organizational settings. Workers need to be able to monitor and oversee GenAI outputs for fairness, safety and explainability as well as be assured about accuracy and scalability (Mayer et al., 2025).

A risk that pervades the reviewed literature is to limit human centricity and perceived sense of autonomy. There needs to be a specific focus on the future nature of the workforce, the human-machine interface, and the new capabilities needed. Deeper understanding is required of the challenges rooted in GenAI tools regarding diversity, equity, and inclusion to anticipate potential pitfalls and to enable a future on solid footing with all the positive contributions that AI has to offer (Baum, 2023). Baum cautions that GenAI that is not connected with compassion, humanity and justice can risk enormous challenges. She recommends the following best practices for addressing GenAI in the workplace:

- Take a human approach
- Collaborate with tech and engineering teams
- Conduct ongoing bias audits
- Develop policies to guide usage of GenAI
- Provide training and development

The Australian Context

The Australian Federal Government has released its National AI Capability Plan ([Australian Government](#), 16.12.2024) to provide regulatory certainty. Its four objectives,

- (1) grow investment,
- (2) strengthen AI Capabilities,
- (3) Boost AI skills, and
- (4) Secure economic resilience,

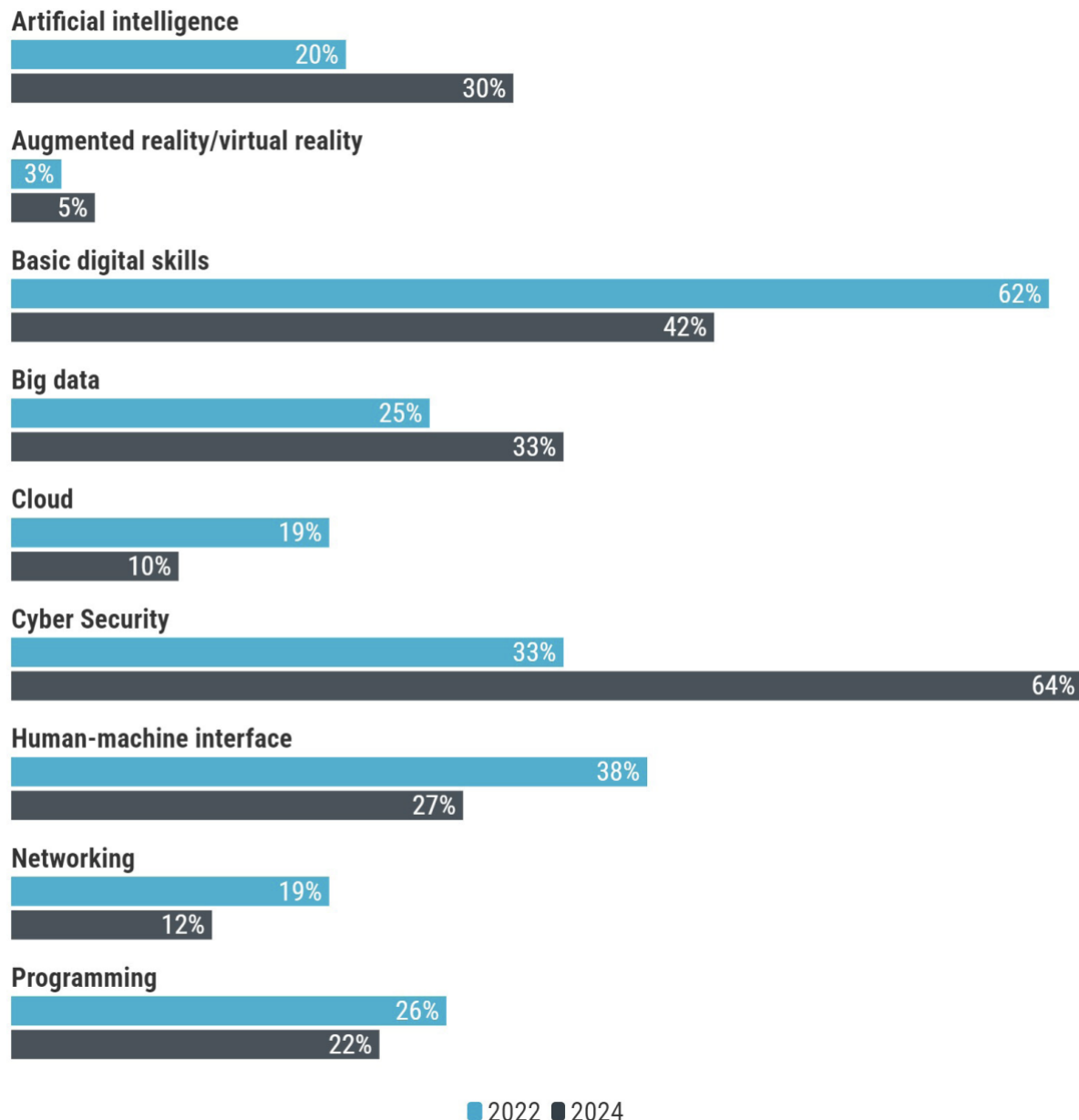
are centered on economic wellbeing and says very little about human wellbeing. AI skills (3) are listed as AI literacy and identifying needs for upskills and (re)training. However, under economic resilience (4) there is mentioning of the rights of communities and workers to make “AI work for us and not the other way around”.

The Australian Industry Group (Ai Group) is a peak national employer organisation representing over 60,000 businesses across Australia. Ai Group lobbies the government and is an ally of Work-Integrated Learning Australia. Ai Group conducted a survey about the technology adoption in Australian Industry (Wilson & Dowling, 2024) painting the macro-economic picture for GenAI uptake in Australian Business

sector workplaces. According to the survey, the most significant drivers of GenAI are national regulations and workforce development. Market conditions such as uncertainties, changing customer expectations, and workforce constraints make GenAI use a complex undertaking. Workforce constraints comprise three elements: workforce availability (30%), wage costs (27%) and knowledge and skills (22%). There are no 'off-the-shelf' GenAI products and half of the surveyed businesses are experimenting with GenAI because it is still unclear how best to integrate GenAI into work productivity; and this approach is costly.

The Centre for Education and Training of the Ai Group conducted a survey about the impact of GenAI, exploring what it might mean for workforces, jobs and skills (Centre for Education & Training, 2024). The results confirm that basic digital skills remain a high priority, however, cyber security skills are the number one digital skill and there is less demand for programming, networking and cloud skills. A detailed breakdown of digital capabilities is illustrated in the Table 1 below (Centre for Education & Training, 2024, 2). The survey also found that 41% of survey participants have not yet engaged with GenAI. Echoing the global trend, large business are leading the utilization of GenAI. The key message from the survey highlights “a lack of human skills and capabilities is preventing many businesses from embracing and utilizing AI technology” (Centre for Education & Training, 2024, 5). To unlock this gap, better understanding of the opportunities, closing skills gaps and stronger organisational leadership is required.

Table 1: Digital Capabilities (Centre for Education & Training, 2024, 2)



A national robotics strategy consultation by Ai Group (McGrath & Wilson, 2023) developed a typology of digital skills needed in Australia, see Table 2. The report recommends work-integrated learning programs should become the norm in university programs in the hope that students bring new knowledge and digital skills into workplaces. In addition, it mentions upskilling older workers through rapid and flexible short, stackable training options and fluid credentials. All these recommendations are already implemented in FEIT.

Table 2: A typology of digital skills for Australian Industry (McGrath & Wilson, 2023)

Leadership skills

Developing digital-at-the-core vision, strategy and risk
Mapping technology architectures for manufacturing
Decision-making using real-time data
Analysing and interpreting data for informed decisions
Aligning a rapidly up-skilled workforce with strategy
Building intelligent, adaptive and agile operations
Collaborating internally and externally to create new value
Moving to sustainable, circular business models
Ensuring safety awareness through protocols and regulations

Technical skills

Complex data engineering, architecture, and analytics
AI/machine learning/mobile machinery
Blockchain technology
Cloud computing
Cyber security
Augmented Reality/Virtual Reality
Logistics/supply chain management; sourcing and procurement; asset management
Environmental monitoring; energy management use and procurement
Advanced maintenance and diagnostics
Remote operations
Marketing and customer experience analysis

Generic/human skills

Cross-functional teaming
Creativity
Analytical thinking
Complex problem solving /trouble shooting in production
Adaptability
Active learning - learning new skills quickly
Resilience

This [Conversation article](#) “Beyond the Hype: what workers really think about workplace AI assistance” by Ekandjo (2025) sheds light on the gap between AI promises and the workplace realities. Participants in the study were pleasantly surprised of unexpected benefits such as a calming, supportive bot helping to remind of tasks and physical wellbeing. However, Ekandjo also found that her participants felt AI assistants were oversimplifying the complex nature of work tasks and flows. The Wiley Network has published a Cybersecurity Guide (Edwards & Weaver, 2024) to illustrate safe ways of using GenAI, offer over 1300 actionable recommendations and more than 70 ready-to-use KPIs. In what follows, is an attempt to translate the changing business and workplace landscape into implications for the higher education sector and more specifically into strengthening students’ sense of employability.

What is known about preparing students for the world of work?

A report by Mandal Partners & Future Skills Organisation (2023) highlighted that the “primary impact on the training system will be at university level because they typically have highest skills requirements and greater exposure to GenAI”. Therefore, universities face the greatest need to make changes. There are three performance modes that are impacted by GenAI: automate, augment and adapt (Felten, 2023). However, these reports do not drill down into the complex integration of GenAI into discipline-specific skills.

A recent systematic review of Australian higher education students and graduates’ work readiness research (Orr et al., 2023) did not refer to preparing graduates to work with GenAI. It only referred to **social intelligence** but not measuring skills to

work with artificial intelligence. This omission highlights that the discourse of preparing students to work with GenAI is still an emerging topic in curricula. Key skills for graduates are the ability to adapt to workplace demands and constraints. WIL has been highlighted to students to practise transferring technical skills learnt in the classroom and labs into the messy realities of workplaces.

The recent TEQSA toolkit for “GenAI strategies for Australian Higher Education: emerging practice” ([TEQSA](#), 2024) provides key takeaway messages and examples for students, external partners, professional accreditation bodies and universities.

Implications for educating GenAI work-ready graduates:

Work readiness is a multidimensional construct (Orr et al., 2023) that requires consistent and principled conceptualisation of professional practice pedagogy as well as alignment with assessment practices. Graduates need to be able to translate what they learn in the classroom (and that includes GenAI ethical and professional conduct and capabilities) to their career roles in situated workplaces.

To become work-ready includes the following strategies and GenAI can be integrated into these:

- Preparing students to deal with misunderstandings and avoid adverse consequences (Hager & Holland, 2006). Helping students to practise this capability by adopting critically and ethically emerging practices with GenAI.
- Preparing students for the transition from textbooks (best practice ideas out of context) to messy realities of workplaces with all their constraints and opportunities of working with GenAI (good practices in particular contexts). The emphasis needs to be on specific workplace contexts.
- Creating safe environments on campus to try out practices, make mistakes and ask questions so they can develop skills that they can transfer to their chosen industry.
- Specifically, preparing graduates to work with GenAI requires critical, ethical, effective, professional and responsible attributes.

ACEN research into graduates’ self-perception of being prepared well for the world of work found that “work-based WIL experiences during undergraduate study continue to be associated with the highest rates of full-time graduate employment” (ACEN, 2023). This research supports the important role WIL in preparing students for a future world of work with GenAI.

There are many interdependencies in course curricula including external professional accreditation requirements, workplace expectations and academic learning outcomes. Working, teaching, learning and assessing with GenAI intersects many different priorities, interests and expectations. However, the ***common themes across them include efficiency, ethics, privacy and a regard for social wellbeing in the workplace.***

Students need to be prepared to demonstrate ethical, personal, organisational, policy, social and environmental awareness on the impacts of GenAI in diverse contexts. Appendix A contains examples of GenAI guidelines and policies of some workplaces. Within their discipline, teaching staff can set activities for students to explore GenAI policies of their host destination as preparation before going on work-based WIL, e.g. internships.

Implications of what WIL students can bring to workplaces

The research discussed above highlights that there is a wide range from no uptake to emergent practices with GenAI in workplaces. Australian companies are lagging in the introduction and integration of GenAI practices (Ai Group, 2023; Ai Group 2024). Particularly affected are small to medium enterprises. Well-prepared students with GenAI capabilities and critical understanding of the ethical and professional implications of the use of GenAI can benefit companies. WIL students can bring their knowledge and collaborative, inclusive practices of GenAI use to workplaces. This is an opportunity for students to lead the way into future practices that are underpinned by principles and knowledge of safety, privacy and wellbeing in the workplace. Workplaces that participate in WIL programs can make the most of having students by giving them a voice and when their work environment is conducive for reflection and reimagining other ways of practicing collectively.

Guidance for preparing students to work with GenAI tools

Delegates from the 2024 CRADLE WIL Symposium have created a guide for WIL and GenAI with resources for each of the three WIL partners: students, WIL practitioners at universities and external partners who supervise students in their workplace. The resources consist of a string of specific questions tailored to each WIL partner. At UTS we will customise this guide for more nuanced and profession specific contexts. The fact that the guide consists of a string of questions highlights the importance of dialogue and creating emergent practices with GenAI collectively within given contexts.

GenAI is already part of the education conversation, most prominently in academic learning, assessing and academic integrity. It is timely, to expand this discussion into working with GenAI by bringing GenAI into WIL context. The following actions are recommended:

With colleagues and course team:

- Start a conversation with relevant colleagues GenAI use in the workplace
- Join WILN@UTS to stay up-to-date and contribute to the pan-university WIL good practice guides and exemplars
- Share the CRADLE GenAI in WIL guide

With external WIL partners:

- Share the CRADLE GenAI in WIL guide
- Discuss GenAI in industry advisory meetings. How are the workplaces of your external WIL partners changing due to GenAI? Should content and learning outcomes be made more relevant to GenAI transformations?
- Conduct a survey with all external WIL partners to capture current practices and suggestions for change.
- Connect with your accreditation body to stay up-to-date
- Conduct workshops about GenAI with all WIL stakeholders, including alumni, to identify opportunities and challenges
- Co-design an action plan for using GenAI in WIL and work-based WIL

With students:

- Workshop the CRADLE GenAI in WIL guide
- Engage in a conversation about UTS guidelines and policies relating to GenAI and specifically in the context of WIL
- Conduct a survey or workshop to capture student assumptions and understandings of opportunities and pitfalls learning and working with GenAI
- Integrate student feedback in developing GenAI guidelines for work-based WIL
- Embed reflections/assessment components of GenAI use in work-based WIL

Conclusion

GenAI is transforming job roles and boosting productivity by automating, augmenting and adopting routine tasks. However, its adoption depends on trust and technological advancements. While GenAI can enhance efficiency, it poses risks such as privacy violations, ethical concerns, and impacts on employee well-being, work-life balance and how to relate to others. In Australia, the National AI Capability Plan focuses on investment, skills, and economic resilience but lacks emphasis on equity and well-being. Effective GenAI use requires responsible leadership and ethical practices. Preparing students and employees to work with GenAI involves deliberate leadership in developing and integrating ethical, effective, and professional attributes to navigate modern workplace complexities. There is an opportunity for WIL partnerships leading the way in developing future GenAI practices in workplaces; and this requires strategic leadership.

Disclaimer

I initially used CoPilot to create a paper structure. All I ended up using from that was one reference. I used CoPilot to draft the Conclusion which I edited minimally. I used the new UTS Library bot, Beta, to identify the pertinent literature and I used 3 literature sources from that. All the Ai Group reports were obtained from Anne Younger.

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Appendix A: Examples of GenAI Policies in workplaces

Below are examples to highlight the importance of knowing and understanding GenAI uptake in specific discipline areas. A particular focus was on checking ethical handbooks, ethical standards; mitigate risk, bias or inaccuracy.

New York Times (NYT) Journalism:

The New York Times (NYT) newspaper has Principles for using GenAI in the newsroom. NYT states that Gen AI is a powerful tool that can assist journalists, and it can increase accessibility by creating digitally voiced articles.

NYT declares that journalist talent remains the competitive edge; journalists can use GenAI but with human guidance and everything must be reviewed by editors. Ultimately, journalists are responsible for their writing.

Transparency and working ethically is and remains the first principle for journalism; readers must be able to trust any service.

SAGE Publishing GenAI policies

Please find the SAGE GENAI policies here

<https://lx.uts.edu.au/blog/2024/12/09/2025-practising-inclusion-micro/>

NYT article about the future of coding:

- Beginners in coding find it hard to find work because beginner's level can be covered by GenAI and senior coders rather code themselves than having to check inferior GENAI work.
- Entry coders need a broader range of skills. GENAI makes it more difficult for beginner software engineers to find employment. However, employers keep insisting that Math and coding background is still required.
- The advice to students is to just keep learning.
- The key question raised is "How to align machine behaviour with human values?"
- The gift of GENAI is the gift of showing us the human weaknesses and limitations. GENAI benefits include reducing human bias and increasing efficiencies.
- We have not had an ethical framework for the internet, so what hope is there of one for GenAI?
- Everything about GenAI is speculation; nothing is definitive. For the moment, the advice is to treat GENAI like a tool.

<https://www.nytimes.com/2024/11/24/business/computer-coding-boot-camps.html?smid=nytcore-ios-share&referringSource=articleShare>

Superagency: By the numbers

Employees are more ready for the change than their leaders imagine



3×

more employees are using gen AI for a third or more of their work than their leaders imagine; more than 70% of all employees believe that within 2 years gen AI will change 30% or more of their work

1.4×

more likely for millennials to report extensive familiarity with gen AI tools than peers in other age groups; they are also 1.2× more likely to expect workflows to change within a year



Companies need to move fast—employees trust their leaders to balance speed and safety



47% of the C-suite say their companies are developing gen AI tools too slowly, even though 69% started investing more than a year ago



1.3×

more likely for employees to trust their own companies to get gen AI deployment right than they are to trust other institutions

Companies are investing in gen AI but have not yet achieved maturity

92%

of companies plan to invest more in gen AI over the next 3 years



1%

believe their investments have reached maturity



Leaders need to recognize their responsibility in driving gen AI transformation



2.4×

more likely for C-suite to cite employee readiness as a barrier to adoption vs their own issues with leadership alignment, despite employees currently using gen AI 3× more than leaders expect



48%

of employees rank training as the most important factor for gen AI adoption; yet nearly half feel they are receiving moderate or less support

McKinsey
& Company

(Mayer et al., 2025b)