

Education in the age of AI

The University of Sydney's approach to learning, graduate capability and the student experience

Generative artificial intelligence (AI) and other emerging technologies are reshaping how knowledge is created, applied, and communicated. They are also changing the nature of work and raising the standard for the human capabilities graduates must demonstrate. Universities must therefore reconsider not only how students learn, but also how capability is developed, demonstrated, and assured.

The University of Sydney's response is grounded in a simple proposition: AI does not change the purpose of the University, but it raises the standard for how that purpose is realised. The University exists to develop and assure genuine capability. In an AI-enabled world, this requires renewed focus on human capabilities such as judgement, creativity, adaptability, communication, ethical responsibility, and learning agility. It also requires qualifications that continue to provide trusted evidence of achievement.

The framework is guided by six principles:

- Human capabilities remain at the centre of education.
- Learning is grounded in connection and community.
- Trust must be designed into learning, assessment, and institutional systems.
- Academic integrity is achieved through effective design.
- Equity requires consistent access to tools, support, and capability development.
- Education must remain relevant to a rapidly changing technological and societal context.
- The framework proposes coordinated transformation across five domains.

Student capability

Graduates must develop AI fluency, judgement, and responsible use alongside deep disciplinary expertise. AI fluency extends beyond technical skills to include critical evaluation, ethical awareness, and understanding of broader societal impacts. Students should progressively develop the capability to work effectively with AI and emerging technologies while maintaining independence, critical reasoning, and professional judgement. This requires a re-interpretation of our graduate qualities.

Learning experience

Teaching and learning must move beyond content delivery toward active capability development. AI enables more personalised, interactive, and adaptive learning experiences, while increasing the importance of discussion, mentorship,

collaboration, and other relational aspects of learning. Curriculum design must become increasingly program-focused, supporting coherent pathways for capability development across a degree.

Assessment

Assessment must distinguish between developing capability and assuring it. The University's two-lane assessment framework enables AI-supported assessment for learning alongside secure assessment for assurance. Capability should be developed and assured across an entire degree through program-level assessment, progression points, foundational capability assurance, and graduation standards. Students should progress and ultimately graduate on the basis of demonstrated capability rather than simply accumulated credit.

Educator capability

AI increases the importance of educators as designers of learning, mentors, facilitators, and developers of student judgement. Educators require fluency in emerging technologies, understanding of their broader implications, and the ability to design effective AI-enabled learning environments. Professional learning must become an ongoing and embedded part of academic practice, supported by institutional recognition, workload alignment, and opportunities for leadership. This requires a re-interpretation of the education pillar of the Academic Excellence Framework.

Student experience

The implications of AI extend beyond teaching and assessment. AI provides opportunities to strengthen academic support, improve service delivery, enhance wellbeing support, and deliver more personalised employability services. However, human relationships, belonging, community, and partnership remain central to student success. Co-curricular activities, student leadership, volunteering, and other shared experiences will become increasingly important in developing the human capabilities most valued in an AI-enabled world.

Conclusion

The University of Sydney's response to AI is not one of incremental adaptation. It represents a coordinated transformation across student capability, learning experience, assessment, educator capability, and the broader student experience.

The goal is to ensure that graduates continue to develop the human capabilities that matter most, that those capabilities can be authentically demonstrated and credibly assured, and that University qualifications continue to provide trusted evidence of achievement. In an AI-enabled world, qualifications must increasingly certify demonstrated capability rather than simply the successful completion of learning activities.

Through this approach, the University can strengthen human capability, support leadership for societal benefit, and ensure that a Sydney degree remains a trusted signal of capability, character, and potential in a world increasingly shaped by AI and emerging technologies.