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Future Ready

Integrating Human Capability Standards into
Higher Education: Future-Ready Learning
Pathways



THE INSTITUTE FOR
WORKING FUTURES



“

Higher education institutions...are out of sync with the rapidly changing demands of the workforce”

Kathleen deLaski,
Who Needs Colleges Anymore, 2025

Author

Dr Marcus S. Bowles, Chair, The Institute for Working Futures Pty Ltd, & Hon. Professor, Torrens University Australia

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Integrating Human Capability Standards into Higher Education: Future-Ready Learning Pathways

Background

This paper is the first in a new Future Ready series. It builds on the success of the New Normal, Next Normal, and Future Normal series of white papers released between 2020 and 2024 by The Institute for Working Futures Pty Ltd (Working Futures™). The research has been sponsored by Capability.Co.

Executive Summary

“We all know that change occurs slowly at Oxford... but the world is changing rapidly around us, and I believe that if we stand still we will enter a period of slow but definite decline.”

Professor Louise Richardson, Vice-Chancellor of the University of Oxford

Higher education institutions are facing unprecedented scrutiny over their relevance, economic value, and alignment with workforce demands. As industry and the world of work transforms at a speed educational curriculum development cannot match, and as dropout rates rise and trust in the value of university degrees decline, universities must adapt or risk obsolescence. This white paper provides a structured approach for integrating the Working Futures™ Human Capability Standards into higher education curricula through outcomes-based education (OBE), addressing these challenges head-on. By embedding OBE principles, building lifelong learning pathways, leveraging flexible delivery and micro-credentials, and aligning curricula with labour market needs, universities can leverage their innate strengths and better serve students, industry, and society.



The Imperative for Change in Higher Education

The Future of Work and the Role of Universities

The traditional university model is under increasing pressure. Industry needs graduates with transferable, durable capabilities, but many degree programs still prioritise theoretical knowledge over the capacity transfer learning to applied practice. The gap between academic supply and workforce demand is widening. Many Australian universities are graduating less than half of their enrolled students (Bita, 2024). Surveys show high dissatisfaction among graduates and employers, particularly with regards the relevance of what has been learnt (Deloitte, 2024). Higher education institutions must rethink how they design and deliver education to ensure students acquire relevant, practical knowledge, skills, and mindset necessary to thrive in a rapidly evolving labour market.

With automation, artificial intelligence (AI), Large Language Models (LLMs) and data analytics, and digital transformation reshaping industries, many jobs that were once secure now require continuous upskilling and reskilling. Universities must shift from rigid degree structures to more dynamic, flexible learning pathways that enable students to acquire skills in a modular and progressive manner. This includes integrating interdisciplinary approaches, leveraging industry collaborations, and ensuring students can demonstrate practical competencies beyond academic credentials.



Why Human Capability Standards Matter

Human capability standards provide a framework to ensure graduates are equipped with durable, transferable skills that go beyond technical expertise. Unlike traditional competency-based models, capability standards focus on broader attributes that drive wide-scale workforce transformation and long-term career success. The top thirteen identified in the latest global research by Working Futures™ (Commercial version, HCS2025) include:

Collaboration – Working effectively with diverse teams, building constructive relationships, and communicating clearly across disciplines.

Critical Thinking – Evaluating complex issues, challenging assumptions, and making well-reasoned decisions.

Adaptive Mindset – Responding positively to change, uncertainty, and new challenges with resilience and curiosity.

Creativity – Generating novel solutions, fostering innovation, and thinking beyond conventional boundaries.

Empathy – Understanding and respecting diverse perspectives, enhancing leadership and teamwork.

Ethics – Acting with integrity, upholding professional standards, and making principled decisions.

Problem-Solving & Data Use – Analysing data to define problems and generate evidence-based solutions.

Communication – Conveying ideas clearly, persuasively, and effectively in different contexts.

Customer Focus – Anticipating and responding to the needs of clients, stakeholders, and service users.

Leadership – Inspiring and guiding others to achieve shared goals and long-term impact.

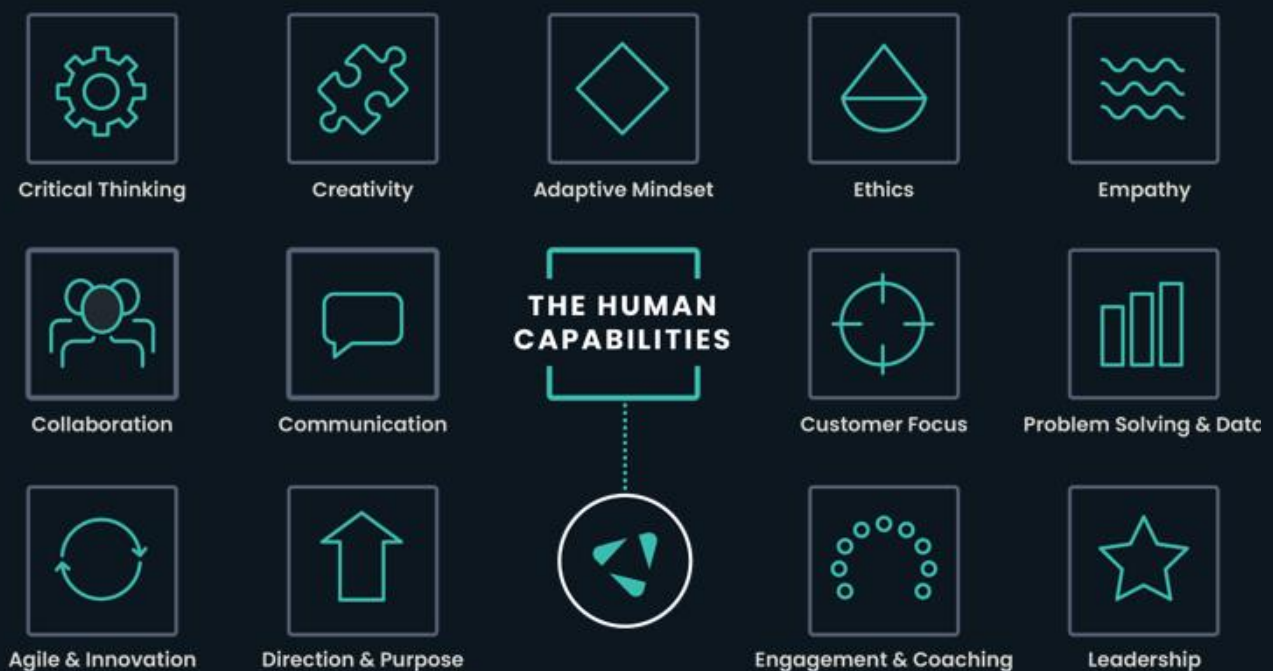
Engagement & Coaching – Supporting and developing others through mentorship and active collaboration.

Agility & Innovation – Embracing continuous learning, experimentation, and the ability to pivot in response to change.

Direction & Purpose – Strategic thinking and driving vision, direction, and long-term impact.

Embedding these into curricula ensures graduates are not only job-ready but can lead transformation and innovation.

Figure 1: Human Capability Standards Reference Framework (IWF, 2025)



Applying Outcomes-Based Education (OBE) in Universities

“What the student does is actually more important in determining what is learned than what the teacher does.” – Biggs, J. & Tang, C. (2011). Teaching for Quality Learning at University

Designing outcomes-based education

Outcomes-based education (OBE) prioritises the measurable results of learning rather than traditional content delivery. This approach shifts the focus from passive knowledge acquisition to active skill development, ensuring that students are prepared to apply their learning in real-world contexts. Grounded in models in use for over 35 years (Biggs & Tang, 1999), the key elements of quality OBE learning in universities include:

Capability Alignment – Intended learning outcomes, teaching and learning activities, and assessment tasks should be aligned to support the attainment of knowledge, skills, and the deeper abilities—in particular requisite mindsets—associated with the human capability standards.

Beyond Learning – Encourage application and reflection to not only stimulate metacognitive processes, but to trigger deep learning through active engagement rather than rote memorisation.

Graduate Learning Outcomes (GLOs)– Deploy durable, cross-curriculum, transferable, graduate attributes to ensure deep connection and alignment with human capability standards that are known to prepare graduates for employment and the future world of work. In fact, consider replacing GLOs with Graduate Capabilities (GCs) that are oriented towards social, employment, and career outcomes.

Intended Learning Outcomes (ILOs) – Clearly defined learning objectives should be mapped to GLOs and guide curriculum design.

Teaching & Learning Activities (TLAs)– Define and develop structured tasks to actively engage students in achieving ILOs, ensuring activities allow for learning through problem-solving, discussions, critical enquiry, collaboration, simulations, and/or real-world application.

Personalised Learning – Focus on identifying each student’s current strengths and inner abilities that will guide their learning and attainment of a specified capability standard. Pre-assess existing learning or proficiency, confirm gaps, shape content and TLAs to learner needs, and actively nudge or coach a student to encourage engagement, track progress, gather evidence, and reward personal achievements throughout a learning journey.

Assessment Tasks (ATs)– Use formative assessment to measure understanding and progress, and formative, outcomes-based, authentic assessment tasks tied to demonstrated skills and abilities that evidence the ILOs and GLOs/GCs to a level expected in work or professional practice.

Teaching Strategies – Promote active, problem-based learning, and applied activities tied to the deployment of skills and mindset underpinning a capability standard, not just the learning associated with knowledge transfer.

Reflection– Encourage movement from self-awareness to practice and reflection. Encourage continuous improvement to learning and practice.

Recognition– Ensure successful completion of the learning components (micro-learning) *and* attainment of the human capability are credentialled in a manner that is verified, sharable, trusted, global portable, and stack towards the qualification.

Durable Generalist Versus Discipline Specialist Skills and Abilities

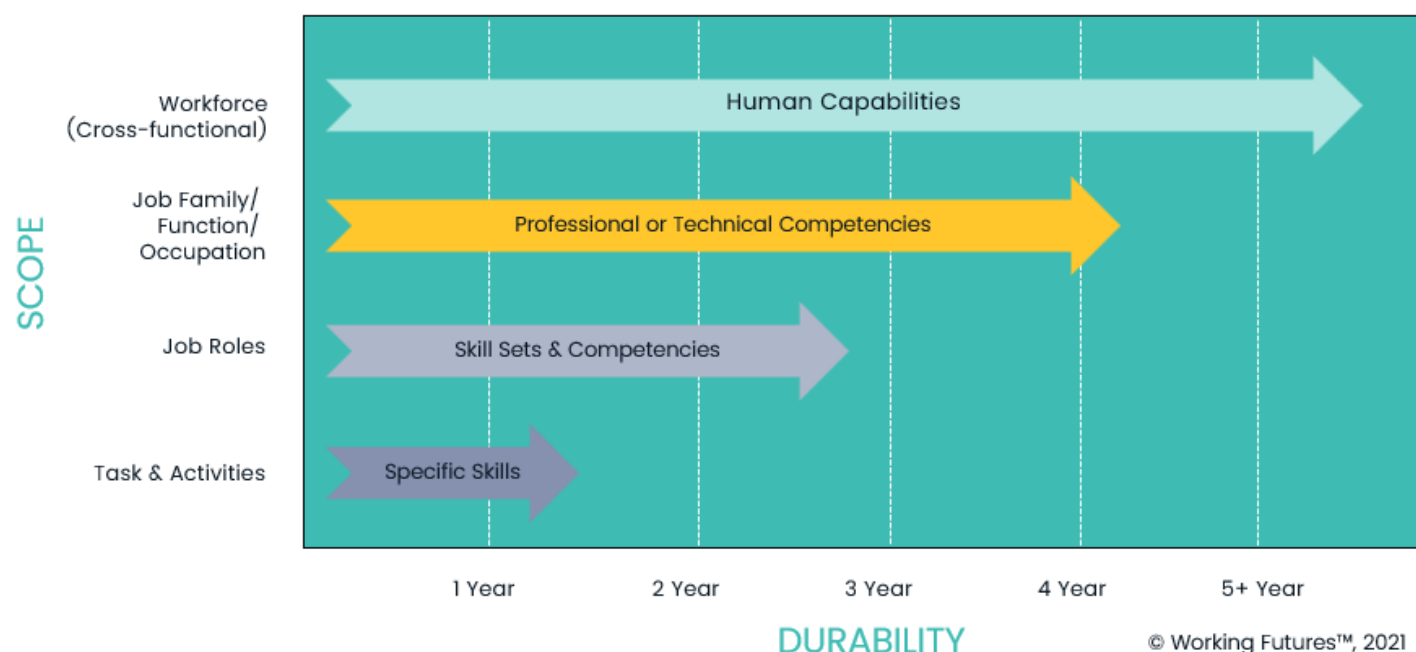
As industries evolve in the face of digital disruption, automation and AI, universities must rethink how they prepare graduates for long-term career success. Research increasingly highlights that while technical skills may secure entry into a job, it is durable, human-centric skills—such as critical thinking, creativity, collaboration, and adaptability—that drive sustained career progression and organisational impact. A Stanford Research Institute study found that 75% of Fortune 500 CEOs attribute their success to these durable skills, while only 25% credit technical knowledge (O'Connor, 2024).

Employers are actively prioritising human capability standards in hiring, with nearly seven out of ten of the most requested skills and abilities listed in job postings falling under the category of durable human capabilities (Working Futures, 2025). As AI in its many forms takes over repetitive and analytical tasks, the workforce of the future will depend on uniquely human abilities to shape job profiles and develop a future-ready workforce (Bowles, 2024). The skills, knowledge and mindsets codified into the Human Capability Standards over the past 25 years, detail what AI has not evolved to replicate: abilities such as creativity, critical thinking, empathy, and underpinning behavioural traits such as courage, authenticity, compassion, and introspection (Working Futures, 2025).

Despite this, traditional university curricula still focus heavily on knowledge transfer rather than the development of capabilities that prepare students for lifelong learning and employability. Through use of the human capability standards higher education institutions can ensure graduates are equipped with skills and abilities that remain relevant, adaptable, and highly valued across all industries, in all types of work, at any career stage.

Investing in durable capabilities is not just an academic reform; it is an economic imperative. Institutions that align curricula with industry needs will not only improve graduate employability but also reinforce the long-term relevance of higher education in an AI-driven world.

Figure 2: Dura-ability matters



Why Non-Traditional Education is the Future

The Shift Beyond Traditional Degrees

“We need authentic learning assessments if we hope to discover if students can transfer theoretical knowledge into real contexts.”

–Ghosh & Bowles (2017). Defining authentic assessment... AJMOA, 9(1), 17–31

The notion that a university degree is the only pathway to career success is increasingly being challenged. While degrees remain valuable, alternative credentials such as micro-credentials, professional credentials, digital badges, and competency-based certifications are gaining wide-scale traction among employers and schools seeking to raise their graduates' employability and career success. The growing popularity of short-term, micro-learning, and flexible or work-based and informal learning options reflects the demand for continuous skill development in an era where lifelong learning is critical.

Institutions that fail to embrace these changes risk losing relevance as more learners opt for non-traditional education models that provide direct pathways to employment. Employers are also shifting their hiring strategies, focusing more on demonstrated skills and experiences rather than formal qualifications alone

Micro-Credentials and Their Role

Micro-credentials offer a structured yet flexible approach to learning, providing value to multiple stakeholders:

For Students – They enable individuals to acquire targeted skills that align with job market demands, allowing them to upskill or reskill without committing to a lengthy degree program.

For Employers – They provide a transparent way to assess candidates' practical competencies, making hiring decisions more data-driven and skill-focused. Unlike educational credentials, employers want digital credentials that validate and attest to what a person can do, not what they have learnt.

For Universities – They expand opportunities for student engagement, increasing enrolment by catering to a broader audience, including working professionals and lifelong learners.

The Economic and Workforce Case for Change

The shift towards skills-based learning models is driven by several key trends:

Rising Dropout Rates – One in four students fail to complete their degrees, raising questions about the effectiveness of traditional university education.

Declining ROI Perception – A significant proportion of graduates express dissatisfaction with the economic return of their degrees, leading to declining trust in higher education institutions.

Demand for Alternative Learning Models – Shorter, more flexible educational pathways are becoming essential as students seek cost-effective, career-aligned learning options

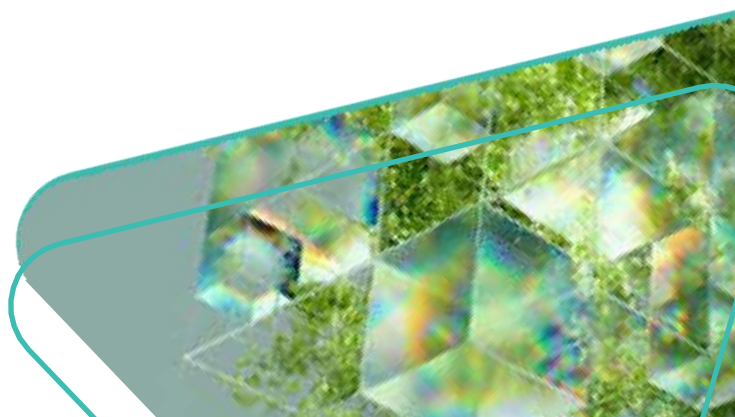
Moving Forward: Transforming Higher Education

Institutional Strategy for Capability-Driven Learning

To remain competitive and relevant, universities seeking to build future-ready curriculum could:

- **Adopt an OBE approach** – Redefine curricula intending to meet emerging needs by prioritising cross-discipline, human capabilities and applied learning and assessment.
- **Embed Human Capability Standards into GLOs**– Explicitly integrate skills such as critical thinking, adaptability, and problem-solving into all programs.
- **Adopting more flexible, cross-disciplinary models**– Universities seeking to focus on employability and industry pathways should challenge the traditional requirement of a single, discipline-specific major. Instead, institutions could allow students to construct personalised learning pathways that enhance relevance to evolving career landscapes. This could promote hybrid degrees that integrate technology, business, and other emerging disciplines with human-centred subjects.
- **Craft flexible cross-discipline courses** – for instance development of a common first-year curriculum that address human capabilities, allowing students to test different fields before committing to a major.
- **Use innovative curriculum models**– one major shift would be adopting new curriculum structures such as block models or rolling intakes. Institutions like Victoria University in Australia have successfully implemented block models, allowing students to focus on one subject at a time in intensive, shorter formats tailored to personalised learning. This model has improved engagement and retention. Rolling intakes further enhance flexibility by enabling learners, particularly those transitioning careers or in employment, to start courses throughout the year instead of adhering to fixed academic terms.
- **Implement Digital Credentialing** – Use innovative, AI-enhanced ways to verify prior learning or experience and recognise not just a student's academic achievements, but also credential human capabilities and associated skill, behaviours or competencies that employers trust and value when establishing the credibility of not just what a graduate knows but their readiness to work and long term ability to adapt and grow.
- **Shift mindsets to Learning Integrated Work (LIW)**– Establish stronger partnerships and co-create learning experiences within the workplace; moving from work integrated learning (WIL) to better reflect employee and employer expectations.

By embedding human capability standards, restructuring curricula to align with future workforce needs instead of disciplines, implementing applied learning and assessment models, and allowing for a more flexible and personalised pathway, university leaders can ensure that higher education remains relevant and accessible.



Conclusion: A Call to Action

Conclusion

“Education doesn’t need to be reformed—it needs to be transformed.”

– Sir Ken Robinson (2011). *Out of Our Minds: Learning to be Creative*, Capstone

Higher education institutions must evolve to ensure their graduates are prepared for the future workforce. By embedding human capability standards, implementing an outcomes-based education framework, providing more flexible credit and recognition pathways into qualifications, and leveraging micro-credentials, universities can better align with industry demands, enhance lifelong learning opportunities, and solidify their role as engines of economic and social mobility.

The transformation of higher education into a more flexible, capability-driven system is not optional—it is essential.

Next in the Future Ready Series

Forthcoming white papers in the 2025 series include:

2025:2 Building flexible, lifelong learning and career pathways

2025:3 The value of micro-credentials to employers



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