



Enhancing civic engagement and Indigenous knowledge integration in Australian universities: a framework for strengthening ‘Closing the Gap’ and addressing national Indigenous research priorities

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Abstract

Australian universities operate within a national context defined by ongoing disparities in Indigenous outcomes, as outlined by the ‘Closing the Gap’ framework. This paper argues that a fundamental change is necessary in how these institutions conceptualise and practice civic engagement, as well as moving towards incorporating Indigenous knowledges. By analysing existing Indigenous Strategy and Indigenous Research Strategies across Australian universities alongside an Indigenous rights-based approach (IRBA), this paper presents a comprehensive framework for universities to move beyond superficial reconciliation towards genuine decolonial transformation. Embedding Indigenous intellectual agency, establishing community-led governance, and adopting ethical, rights-based methodologies, including culturally responsive artificial intelligence (AI), can help universities better contribute to ‘Closing the Gap’ targets, align with national Indigenous research priorities, and authentically meet the research needs of Indigenous peoples and communities. It is also crucial to recognise that non-Indigenous scholars and researchers have the capacity and responsibility to create spaces for Indigenous knowledges within their disciplines, working collaboratively with Indigenous colleagues to address the disparities outlined in ‘Closing the Gap’ strategies and Productivity Commission reports.

Keywords Engagement · Indigenous · Indigenous research strategy · Indigenous rights-based approach · Strategy

Introduction: Beyond Performative Reconciliation

Australian universities have increasingly recognised their responsibility to address historical injustices and ongoing inequities affecting Indigenous peoples (Behrendt, 2021; Fredericks, 2008; Moreton-Robinson, 2015; Nakata, 2007). However, despite

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numerous policy frameworks, strategies, and initiatives, progress toward ‘Closing the Gap’ targets remains inconsistent and often inadequate (Productivity Commission, 2024; Universities Australia, 2022). This paper argues that meaningful progress requires a paradigm shift from performative reconciliation to transformative action, grounded in Indigenous rights, knowledge systems, and governance.

The comparative review of Indigenous strategies across 20 Australian universities reveals that while institutions widely align with national frameworks such as the Universities Australia Indigenous Strategy, the Australian Institute of Aboriginal and Torres Islander Studies (AIATSIS) Code of Ethics, and National Health and Medical Research Council (NHMRC) guidelines, significant implementation gaps persist. These include limited time-bound key performance indicators (KPIs), inconsistent faculty-level accountability, underdeveloped research translation pathways, and fragmented community governance mechanisms. These limitations are not unique to individual institutions but reflect broader structural and policy conditions shaping how universities engage with Indigenous peoples, knowledge, and research.

Australian universities operate within a national policy and research environment that increasingly frames Indigenous outcomes as a matter of structural reform, shared decision-making, and institutional accountability (Coates et al., 2023; Fredericks & Bargallie, 2020; Gunstone, 2009). The National Agreement on Closing the Gap positions mainstream institutions as responsible for reforming governance, data practices, and engagement with Indigenous peoples, particularly through Priority Reforms focused on shared decision-making and Indigenous control over data and knowledge (Coalition of Peaks, 2020). Independent review by the Productivity Commission confirms that ‘business as usual’ approaches—characterised by aspirational commitments without structural change—have failed to deliver meaningful outcomes, citing weak accountability and limited power-sharing as persistent barriers (Productivity Commission, 2024).

Indigenous higher education scholarship reinforces these critiques, demonstrating that Indigenous knowledge systems are routinely marginalised within Western institutions unless supported by Indigenous-led governance and research authority (Battiste, 2013; Nakata, 2007; Smith, 2012). Principles of Indigenous Data Sovereignty further challenge universities to move beyond procedural ethics toward institutional research strategies that embed Indigenous control, relational accountability, and community benefit across the research lifecycle (Kukutai & Taylor, 2016; Walter et al., 2013). These expectations are reinforced by Australia’s National Science and Research Priorities, which elevate Aboriginal and Torres Strait Islander knowledge systems as foundational to national research capability (Department of Industry, Science and Resources, 2024).

While Smith (2012) writes from a Māori context, *Decolonizing Methodologies* has been foundational to Indigenous research methodology scholarship in Australia, shaping critical approaches to knowledge production and frequently cited across Australian higher education literature (Coates et al., 2023; Moreton-Robinson, 2015; Rigney, 1999). Its critique of extractive Western research paradigms, particularly the positioning of Indigenous peoples as objects rather than agents of research, resonates directly within Australian contexts, where similar colonial dynamics have structured academic inquiry. Although the volume advances an international agenda,

it includes Australian contributors and has informed initiatives such as the Maianayri Wingara Indigenous Data Sovereignty Collective, which operationalises Indigenous data governance principles in Australia (Lovett et al., 2019; Walter et al., 2013). Similarly, while Battiste (2013) writes from a Canadian Mi'kmaw perspective, her critique of “cognitive imperialism” has been widely taken up in Australian Indigenous education scholarship, aligning with Nakata's (2007) work on the cultural interface and the complexities of knowledge production in Indigenous–Western encounters.

This paper proposes a comprehensive framework for enhancing civic engagement and integrating Indigenous knowledge in Australian universities, drawing on standout practices identified in a comparative analysis and anchored in an Indigenous Rights-Based Approach (IRBA) (Anderson & Ma Rhea, 2018; Anderson et al., 2025). The framework addresses five interconnected domains: governance and leadership, research methodologies and ethics, curriculum transformation, community partnerships, and institutional accountability. Critically, it recognises that both Indigenous and non-Indigenous scholars have essential roles to play in this transformation, with non-Indigenous academics having the capacity and responsibility to create spaces for Indigenous knowledges within their disciplines rather than placing this burden solely on Indigenous colleagues.

Theoretical framework and research standpoint: Indigenous rights-based approach

The Indigenous rights-based approach (IRBA) (Anderson & Ma Rhea, 2018; Anderson et al., 2025) offers the theoretical basis for this framework, prioritising Indigenous rights—rather than needs—at the centre of university engagement. IRBA relies on the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), highlighting self-determination, Free, Prior, and Informed Consent (FPIC), and Indigenous data sovereignty as essential principles.

IRBA challenges colonial research paradigms described as extractive, deficit-focused, epistemically violent, and paternalistic. Instead, it promotes research methods that prioritise Indigenous knowledge systems, benefit communities, and establish transparent engagement protocols. This approach acknowledges Indigenous peoples as ‘First Knowers and Scientists’ rather than research subjects or data sources.

The shift from ‘culturally aware’ to ‘culturally accountable and ‘Indigenous-led’ research represents a fundamental reorientation of power relations within academic institutions. It requires universities to move beyond superficial inclusion toward genuine partnership, co-design, and shared authority in research, teaching, and governance. Within this framework, non-Indigenous scholars play a vital role in creating space for Indigenous knowledges by actively identifying disciplinary gaps, advocating for structural change, and utilising their institutional privileges to support Indigenous-led initiatives. This shared responsibility is essential for effectively addressing the disparities highlighted in ‘Closing the Gap’ strategies and Productivity Commission reports.

We are a research team comprising an Indigenous researcher from the Walpiri and Murrinpatha peoples of the Northern Territory, a Pitta Pitta descendant Indigenous Research Excellence Officer from Kalkadoon Country, and a non-Indigenous researcher with expertise in Indigenous higher education who contributes an external perspective on systemic challenges within the sector. Grounded in an Indigenous rights-based approach, our collaboration centres Indigenous authority, self-determination, and knowledge sovereignty, while engaging non-Indigenous researchers in their shared responsibility to support equitable, accountable, and ethically governed research. Through this integrated standpoint, we aim to strengthen inclusive dialogue and advance collaborative approaches to knowledge production that uphold Indigenous rights and community priorities.

Methodology

Search strategy

Bringing together Indigenous and non-Indigenous standpoints, the study investigates how Australian universities embed Indigenous research strategies within institutional governance to provide strategic direction for strengthening Indigenous academic success, and how these research strategies and activities are aligned with each university's overarching Strategic Plan. The study employs secondary data as part of a desktop review of institutional practices (Jayawardena et al., 2020). This approach is both cost-effective and time-efficient, while enabling systematic synthesis of existing knowledge, identification of research gaps, and the development of comprehensive overviews (Tricco et al., 2018). The review focused on Indigenous research strategies at the institutional level, analysing publicly available information from 43 Australian university websites collected between January and March 2025.

This comparative review draws on institutional Indigenous research strategies sourced from public university documentation, including stand-alone research strategy and Indigenous research strategy frameworks and components embedded within broader Indigenous or reconciliation plans.

Search terms

The search protocol aimed to identify and examine the Indigenous strategies, Indigenous research strategies and reconciliation plans that Australian universities use to integrate Indigenous research strategy into their governance and to provide strategic research direction for Indigenous success. Each university website's search function was used to apply specific search terms, including "Aboriginal and Torres Strait Islander", "Indigenous", "Indigenous research", "Indigenous strategy", "First Nations", "First Peoples", and "Reconciliation". These terms were searched individually and in target combination, such as "Aboriginal and Torres Strait Islander" and

“strategy”, or “research strategy” and “Indigenous”, or “First Nations” and “research strategy”.

Data management

Data were recorded in a spreadsheet containing hyperlinks to the relevant sources and shared with the research team to enable a thorough and systematic analysis of all identified materials. We examined the websites of 43 Australian universities. Of these, 20 universities ($n=20$) publicly present an Indigenous research strategy on their websites, while the remaining 23 universities either present only a general Indigenous strategy, do not have a distinct Indigenous research strategy, or do not present a current Indigenous research strategy. Accordingly, this paper focuses on the Indigenous research strategies of the 20 Australian universities (Table 1).

Data analysis

Data analysis was conducted through a structured, manual coding process undertaken by the research team. Each strategy was assessed using a structured template

Table 1 List of reviewed indigenous research strategies

University	Research strategy title
University of Technology Sydney (UTS)	NgaraNgun Indigenous Research Strategy
University of Melbourne (UniMelb)	Indigenous Research Framework 2023–2027
Monash University	Indigenous Research Action Plan
Central Queensland University (CQU)	First Nations Research Strategy
Western Sydney University (WSU)	Indigenous Research Strategy
University of Queensland (UQ)	Aboriginal and Torres Strait Islander Research and Innovation Strategy
University of South Australia (UniSA)	Aboriginal Research Strategy
Flinders University	Indigenous Research Strategy
Notre Dame University	Nulungu Strategic Plan (Research)
University of Canberra	Indigenous Leadership Strategy (with research pillars)
Macquarie University	Indigenous Research Plan
Murdoch University	Student and Education Strategy (research embedded)
University of Tasmania (UTAS)	Strategy for Aboriginal Engagement (SPA-E) 2021–2024
Charles Sturt University (CSU)	First Nations 3-Year Strategy (includes research)
Deakin University	Indigenous Strategy 2023–2028 (includes research)
University of New South Wales (UNSW)	Indigenous Strategy 2021 (includes research)
Australian National University (ANU)	Reconciliation Action Plan 2024 (includes research)
University of Southern Queensland (USQ)	Research Strategy 2017–2020
RMIT University	Indigenous Research Plan
Queensland University of Technology (QUT)	Indigenous Australian Research Strategy

with the following criteria: “strategy framework type”, “national policy alignment”, “contextual frameworks”, “strategic themes and actions”, “governance and leadership”, “accountability and measurability”, “innovative approaches”, “strengths and gaps”, “recommended actions”, “transferable practices”, and “standout elements and impact highlights”.

Following initial coding, the data were analysed using the predefined criteria to identify recurring patterns and clusters across institutions. Codes that captured similar concepts within a single criterion (e.g., governance and leadership) or recurred across multiple criteria (e.g., links between strategic themes and actions and accountability and measurability) were iteratively reviewed and consolidated into broader analytical categories through an inductive process informed by thematic analysis principles (Elo et al., 2014). This process enabled synthesis across the criteria while maintaining their analytical integrity, supporting a systematic comparison of how Indigenous research strategies were structured, governed, and articulated across institutions.

The following section presents the key findings that emerged from this analysis, highlighting the current landscape of University Strategy, common frameworks, defining Indigenous knowledge to move beyond rhetoric to disciplinary integration, bridging community-based research models, addressing emerging challenges of Indigenous knowledge and artificial intelligence, and presenting an implementation roadmap from strategy to action, drawing on what we found across the 20 Australian universities examined.

Findings

Current landscape: comparative analysis of university strategies

Strategy framework types

The comparative review identified four main types of strategic frameworks employed by Australian universities:

1. *Stand-alone Indigenous Strategies* (9 universities): Comprehensive university-wide plans dedicated to Indigenous priorities, often including research, education, leadership, and community engagement (e.g., Victoria University, Charles Sturt University, RMIT, University of South Australia).
2. *Indigenous Research Strategies* (7 universities): Focused strategies targeting Indigenous research leadership, governance, ethical practice, and community-informed innovation (e.g., Flinders, Western Sydney University, Macquarie, Monash, University of Technology Sydney, University of Queensland, University of Melbourne).
3. *Integrated Strategies within University-Wide Frameworks* (8 universities): Embedded Indigenous components within institutional strategies such as strategic plans or academic portfolios (e.g., Deakin, University of New South Wales, University of Tasmania, Australian National University).

4. *Reconciliation Action Plans (RAP) with Strategic Objectives* (6 universities): RAPs that include actions reflecting strategic direction in Indigenous access, leadership, and curriculum transformation, though often lacking the operational depth of stand-alone frameworks (e.g., Australian National University, La Trobe, Murdoch).

Many institutions implement hybrid approaches, blending elements from multiple models. This diversity reflects both the maturity of Indigenous engagement and varied institutional contexts. However, the most effective strategies explicitly acknowledge the role of non-Indigenous academics and staff in creating space for Indigenous knowledges and perspectives, rather than placing this responsibility solely on Indigenous colleagues.

Strategic pillars and common commitments

Most university strategies share four key pillars:

1. *Indigenous student success and access*: Universities prioritise increasing Indigenous student enrolment, retention, and graduation through culturally responsive pathways, dedicated support centres, scholarships, and transition programs.
2. *Staff recruitment, development, and leadership*: Institutions aim to expand the number and seniority of Indigenous academic and professional staff through targeted positions, leadership fellowships, and professional development pathways.
3. *Indigenous knowledges, curriculum, and research*: Strategies focus on curriculum Indigenousisation, decolonising pedagogy, and developing Indigenous-led or co-designed research that respects cultural protocols and encourages community-informed innovation.
4. *Community partnerships and engagement*: Universities aim to build enduring, respectful relationships with Indigenous communities through co-designed initiatives, research collaborations, local advisory groups, and community governance models.

Some institutions add a fifth pillar focused on governance and infrastructure, particularly where Indigenous research institutes or cultural hubs are central to delivery (e.g., Western Sydney University, University of Melbourne).

While these pillars provide a foundation for action, their effectiveness depends on shared responsibility between Indigenous and non-Indigenous stakeholders. Non-Indigenous scholars and administrators have the capacity and agency to identify opportunities for Indigenous knowledge integration within their disciplines and administrative functions, rather than waiting for Indigenous colleagues to initiate these conversations.

Governance and accountability

Most strategies are led by a Pro or Deputy Vice-Chancellor (Indigenous), reflecting the growing recognition of the need for Indigenous leadership at senior levels. However, responsibility across the broader university community varies considerably, with many institutions lacking precise mechanisms for faculty-level accountability.

Accountability is monitored through various methods, including KPIs (e.g., Western Sydney University's parity metrics), community feedback mechanisms (e.g., Notre Dame), and structured performance frameworks (e.g., the University of Tasmania, the University of Sydney, and the University of New South Wales). However, only a small number of universities provide detailed implementation tools, transparent funding models, or faculty-level accountability structures.

The most effective governance models recognise that while Indigenous leadership is vital, non-Indigenous academics and administrators must also share responsibility for creating spaces that embrace Indigenous knowledges and perspectives. This collective accountability is essential for addressing the systemic barriers highlighted in Productivity Commission reports and for making genuine progress towards 'Closing the Gap' targets.

A structural tension pervades many of the governance recommendations presented in this framework: the institutional mechanisms most effective at creating space for Indigenous leadership, including dedicated senior positions, Indigenous research institutes, and faculty-embedded professorships, are simultaneously instruments of the institutional power they are designed to challenge. This is not a reason to abandon these mechanisms; the comparative analysis confirms that they produce measurable improvements in Indigenous research outcomes. It is, however, a reason to hold them accountable to a higher standard of genuine power transfer. Positions without decision-making authority are representations, not structural change. Leadership without resource control is performance. The framework's effectiveness ultimately depends on whether these mechanisms redistribute institutional authority or merely diversify who exercises it on the institution's terms.

Innovative practices

The comparative analysis identified several standout practices that offer transferable models for enhancing Indigenous knowledge integration and civic engagement:

- *Western Sydney University*: Creation of an Indigenous Research Institute and co-design ethics protocols
- *Central Queensland University*: Jawun and Jilbay Higher Degree Research (HDR) academies and Research Readiness framework
- *University of Technology Sydney*: NgaraNgun relational strategy and ethics dashboards
- *University of Melbourne*: Six-pillar thematic integration with Murmuk Djerring
- *Monash University*: Dual-track Indigenous-led research pathways
- *RMIT*: Nation-based storytelling and digital archives

- *University of Queensland*: Impact-driven Indigenous Research Hubs across faculties

These innovative approaches demonstrate the potential for transformative change when Indigenous knowledge systems, leadership, and community partnerships are genuinely centred in university operations. Notably, many of these successful initiatives involve collaborative efforts between Indigenous and non-Indigenous scholars, with non-Indigenous academics actively creating space for Indigenous knowledges within their disciplines rather than placing this burden solely on Indigenous colleagues.

A Framework for enhanced civic engagement and Indigenous knowledge integration

Building on the comparative analysis and guided by IRBA principles, this paper proposes a comprehensive framework for enhancing civic engagement and Indigenous knowledge integration in Australian universities. The framework comprises five interconnected domains, each with specific strategies and implementation mechanisms that recognise the shared responsibility of Indigenous and non-Indigenous stakeholders.

Domain 1: Indigenous-led governance and leadership

Strategic objective: Transform institutional governance to ensure Indigenous leadership, decision-making authority, and cultural accountability across all levels of the university.

Implementation Strategies:

1. *Establish Indigenous governance mechanisms:* Create Indigenous advisory councils with decision-making authority, ensure Indigenous representation on university councils and academic boards, and appoint Indigenous leaders to senior executive positions.
2. *Develop Indigenous leadership pathways:* Implement targeted recruitment, retention, and promotion strategies for Indigenous staff, with clear career progression pathways and leadership development opportunities that foster a sense of belonging and support.
3. *Embed cultural accountability:* Implement the Indigenous Rights and Cultural Accountability Framework (IRCAF), which moves beyond individual staff “competency” to institutional “accountability” through three phases: Foundational consciousness, applied accountability, and transformative leadership.
4. *Allocate dedicated resources:* Commit a minimum of 5% of the university’s operating budget to Indigenous initiatives, recognising Indigenous knowledge as a competitive advantage and core business investment.
5. *Engage non-Indigenous leadership:* Ensure non-Indigenous leaders actively create space for Indigenous perspectives in governance structures, using their

institutional influence to advocate for structural change rather than placing this responsibility solely on Indigenous colleagues.

Universities such as the University of New South Wales (UNSW) have demonstrated the effectiveness of embedding Indigenous ways of knowing, being, and doing into institutional policies and practices through Indigenous leadership and reciprocal community partnerships. For instance, at UNSW this is operationalised through an Indigenous Strategy led by a senior Indigenous executive (Deputy Vice-Chancellor Indigenous), which adopts a “whole-of-university approach” to embedding Indigenous priorities across education, research, and employment (UNSW, 2021). This approach moves beyond ad hoc consultation by integrating Indigenous considerations across institutional activities, supporting more coordinated research efforts and closer alignment with Indigenous community priorities.

Domain 2: Ethical research methodologies and Indigenous data sovereignty

Strategic objective: Transform research practices to privilege Indigenous knowledge systems, ensure ethical engagement, and uphold Indigenous data sovereignty.

Implementation strategies:

1. *Establish Indigenous research hubs:* Create dedicated Indigenous research centres or institutes at both university and faculty levels to lead research development, support Indigenous academics, and coordinate interdisciplinary co-research.
2. *Implement ethical research protocols:* Formalise integration of AIATSIS and NHMRC frameworks across research processes, with mandatory training, internal audits, and Indigenous-led ethics advisory committees.
3. *Uphold Indigenous data sovereignty:* Develop and implement Indigenous data governance protocols ensuring sovereignty, access, and control over data by communities, adhering to CARE Principles (Collective Benefit, Authority to Control, Responsibility, Ethics).
4. *Develop Indigenous research performance dashboards:* Create digital platforms to monitor key research metrics, such as Indigenous-led grants, HDR enrolments, research outputs, and community partnerships, disaggregated by faculty and updated annually.
5. *Promote disciplinary responsibility:* Encourage non-Indigenous researchers to identify opportunities for Indigenous knowledge integration within their disciplines, actively creating space for these perspectives rather than waiting for Indigenous colleagues to initiate these conversations.

Universities are increasingly shifting from extractive research practices to collaborative, community-led research that respects Indigenous intellectual property and cultural protocols. At the University of Melbourne, the Ngarrnga program applies a design-based research approach to embed Indigenous knowledge systems within curriculum and research practice, supporting sustained engagement

with Indigenous perspectives (Hogarth, 2026). The program is underpinned by principles including relationality and the recognition of Indigenous Cultural and Intellectual Property, and employs a design-based research approach involving iterative analysis, design, development, and implementation in real-world educational settings. These successful initiatives often involve non-Indigenous researchers who recognise their capacity and responsibility to create space for Indigenous knowledges within their disciplines.

Domain 3: Research-led curriculum transformation and Indigenous knowledge integration

Strategic objective: Embed Indigenous knowledges, perspectives, and pedagogies across all disciplines and levels of study.

Implementation strategies:

1. *Develop a rights-based curriculum framework:* Implement a three-tiered approach, comprising foundational units that introduce Indigenous knowledges and histories, discipline-specific integration of Indigenous perspectives, and advanced units focused on rights-based professional practice.
2. *Support faculty capability building:* Provide professional development, resources, and mentoring to enable non-Indigenous staff to integrate Indigenous knowledges into their teaching in a manner that is appropriate and respectful.
3. *Establish curriculum review processes:* Create Indigenous-led curriculum review committees to assess and enhance the integration of Indigenous knowledges across programs and courses.
4. *Implement Elder-in-residence programs:* Bring Indigenous Elders and knowledge holders onto the university campus to share their cultural knowledge, provide guidance, and support the integration of authentic expertise.
5. *Foster disciplinary leadership:* Encourage non-Indigenous academics to take the initiative in identifying opportunities for integrating Indigenous knowledge within their disciplines, recognising their capacity and responsibility to create these spaces rather than placing this burden solely on Indigenous colleagues.

A national movement is underway to indigenise curricula across all disciplines (Asmar et al., 2011; Behrendt et al., 2012; Universities Australia, 2017), integrating Aboriginal and Torres Strait Islander perspectives, histories, and knowledge systems into teaching and learning. Initiatives include professional development for educators, detailed guidelines for Indigenous cultural and intellectual property, and resources co-designed with Indigenous communities (AIATSIS, 2020; Behrendt et al., 2012). The most effective examples involve non-Indigenous academics who actively create space for Indigenous knowledges within their disciplines, helping to address disparities highlighted in ‘Closing the Gap’ strategies (Anderson et al., 2025).

Particularly, at the University of Melbourne, the Indigenous Research Framework (2023–2027) supports embedding Indigenous knowledge across disciplines and

promotes interdisciplinary integration with other knowledge systems (University of Melbourne, 2023). Complementary initiatives such as Ngarrngga apply design-based research to develop and implement curriculum resources, with progress monitored through an evidence base and annual reporting to institutional governance bodies (Hogarth, 2026).

Domain 4: Reciprocal community partnerships and engagement

Strategic objective: Establish genuine, reciprocal partnerships with Indigenous communities that respect sovereignty, ensure mutual benefit, and contribute to community priorities.

Implementation strategies:

1. *Formalise community governance mechanisms:* Establish structures such as Indigenous community advisory boards, research roundtables, and regional knowledge exchanges to inform university priorities and assess outcomes.
2. *Implement Free, Prior, and Informed Consent (FPIC) protocols:* Develop and apply FPIC protocols for all research, teaching, and engagement activities involving Indigenous communities or their knowledge.
3. *Strengthen research translation and impact:* Require knowledge-sharing plans for all research outputs, detailing how results will be translated to Indigenous communities, policy makers, and sectoral stakeholders.
4. *Develop place-based engagement strategies:* Craft localised engagement plans that acknowledge the unique histories, cultures, and priorities of the Indigenous nations on whose traditional lands the university is situated.
5. *Share engagement responsibility:* Ensure non-Indigenous academics and administrators take active roles in building community relationships, rather than relying solely on Indigenous colleagues to establish and maintain these connections.

Successful integration relies on sustained partnerships with Indigenous communities, continuous evaluation, and adaptable strategies that respond to feedback and evolving needs. Initiatives such as UNSW's Global Indigenous Knowledge Exchange support Indigenous-led research and governance, promoting mutual knowledge exchange and adopting global best practices. This approach moves beyond ad hoc consultation by institutionalising ongoing engagement, strengthening relationships and enabling research agendas to be more closely aligned with Indigenous priorities. These initiatives highlight the importance of shared responsibility between Indigenous and non-Indigenous stakeholders in addressing the disparities outlined in Productivity Commission (2024) reports.

Similarly, University of Melbourne's Indigenous Research Framework (2023–2027) embeds reciprocal partnerships through requirements for co-designed research, early engagement with Indigenous communities, and recognition of Indigenous knowledge holders' authority in setting research priorities (University of Melbourne, 2023). These partnerships are operationalised through institutional protocols and seed funding that support relationship-building and

collaborative project development, ensuring research aligns with community-defined priorities. Progress is monitored through an institutional evidence base and annual reporting, providing ongoing evaluation of partnership quality and research impact.

Domain 5: Institutional accountability and transformation

Strategic objective: Ensure institutional accountability for Indigenous engagement through transparent reporting, measurable outcomes, and systemic transformation.

Implementation strategies:

1. *Develop KPI dashboards with timelines:* Create measurable, time-bound indicators for strategic outcomes across all key pillars, integrated into internal reporting cycles and accessible to stakeholders.
2. *Implement faculty-specific operational plans:* Require each faculty to develop tailored implementation plans aligned with Indigenous engagement benchmarks and resourcing commitments.
3. *Establish an annual community evaluation:* Implement processes that enable Indigenous communities to evaluate university performance against strategic commitments and provide feedback for improvement.
4. *Integrate Indigenous strategy into core business:* Embed Indigenous engagement into core strategic planning cycles, institutional KPIs, annual budget allocations, and staff performance frameworks.
5. *Distribute responsibility:* Ensure accountability mechanisms recognise the shared responsibility of Indigenous and non-Indigenous stakeholders, with explicit expectations for non-Indigenous academics and administrators to create space for Indigenous knowledges and perspectives.

Universities are aligning their strategies with Closing the Gap targets, particularly in areas of educational attainment, employment, and health outcomes for Indigenous Australians. Institutional plans often explicitly reference Closing the Gap, setting measurable goals for the recruitment, retention, and success of Indigenous students. The most effective accountability frameworks recognise that non-Indigenous scholars and administrators have the capacity and responsibility to create spaces for Indigenous knowledges within their disciplines and administrative functions.

At Western Sydney University, accountability is operationalised through parity-based benchmarking of Indigenous student outcomes against non-Indigenous cohorts, providing quantitative indicators of progress (Universities Australia, 2019). Institutions such as the University of Tasmania further embed accountability through performance frameworks that integrate Indigenous strategy targets into institutional KPIs and reporting cycles. At the same time, sector-wide approaches emphasise the importance of incorporating Indigenous community perspectives into evaluation processes, highlighting that robust accountability requires both quantitative benchmarking and qualitative, community-informed assessment, typically reviewed through annual reporting mechanisms.

The definitional paradox: Indigenous knowledge sovereignty and academic validation

A fundamental tension arises when trying to clearly define Indigenous knowledge systems within Western academic discourse: the necessary frameworks have not yet been developed in forms recognised and validated by academic peer review. This paper critiques the lack of systematic, discipline-specific explanations of how Indigenous knowledge systems operate within and challenge Western academic paradigms. However, that very lack creates a methodological dilemma for scholars attempting to cite such frameworks. This is not an oversight but a structural consequence of the epistemic conditions this paper examines. An Indigenous rights-based approach (IRBA) illustrates why this paradox exists and how universities must respond.

Why comprehensive definitions don't exist: IRBA analysis

IRBA presents Indigenous knowledges as sovereign intellectual traditions, whose legitimacy does not stem from Western academic validation but from their inherent authority established through thousands of years of observation, practice, and transmission within specific Indigenous nations, lands, and languages (Anderson & Ma Rhea, 2018; United Nations, 2007). Article 31 of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) affirms Indigenous peoples' rights to maintain, control, protect, and develop their cultural heritage, traditional knowledge, and traditional cultural expressions (United Nations, 2007, Art. 31.1). This means Indigenous peoples and communities, not academic institutions, hold authority over how their knowledge systems are defined, shared, and represented.

The absence of thorough, peer-reviewed, discipline-specific definitions of Indigenous knowledges in academic literature highlights three related issues IRBA identifies:

1. *Universities have not created the conditions for Indigenous definitional work:* A systematic explanation of how Indigenous knowledge systems function within disciplines requires protected research time, institutional infrastructure, and Indigenous-led governance, all of which current university structures fail to provide (Moreton-Robinson, 2015; Nakata, 2007). Indigenous academics deal with what Trudgett (2014) calls 'cultural load', but which we more accurately describe as 'colonial load': the structural burden of managing institutions' responsibilities to address colonial legacies while also handling disproportionate teaching and service demands. This leaves little capacity for the deep intellectual work required to articulate disciplinary knowledge.
2. *Western academic validation systems are epistemically incompatible with Indigenous knowledge sovereignty:* Indigenous knowledge systems function through community validation, Elder authority, and proven effectiveness across generations, not through Western peer review by disciplinary experts. While Shawn Wilson's (2008) 'Research is Ceremony' presents this from an Opaskwayak Cree perspective, the same epistemological principles underpin Indigenous Australian

research methodology scholarship (Martin, 2008; Rigney, 1999; Smith, 2012). IRBA's principle of Free, Prior, and Informed Consent (FPIC) affirms that Indigenous communities, not researchers, decide what knowledge is shared and how it is portrayed (Anderson et al., 2025). Expecting Indigenous knowledges to conform to Western citation practices as a condition of academic legitimacy constitutes the epistemic violence this paper critiques.

3. *Indigenous knowledges are Nation-specific, not universally definable*: There is no singular 'Indigenous knowledge'; rather, there are diverse knowledge systems belonging to hundreds of distinct Aboriginal and Torres Strait Islander nations, each with unique languages, territories, and intellectual traditions (Nakata, 2007). Comprehensive academic definitions would require extensive, nation-by-nation documentation led by each community; work that cannot be achieved by individual papers or researchers, and that many communities may choose not to undertake within Western academic frameworks.

What does exist: evidence of the problem

What the academic literature currently provides is not comprehensive disciplinary definitions but rather:

- Critiques of Western knowledge hegemony that identify epistemic marginalisation without providing discipline-specific alternatives (Fredericks, 2008; Moreton-Robinson, 2015; Nakata, 2007).
- Methodological frameworks for ethical research that acknowledge Indigenous knowledge sovereignty without claiming to define knowledge systems comprehensively (AIATSIS, 2020; Smith, 2012; Martin, 2008).
- Specific examples of Indigenous knowledge domains that demonstrate complexity and disciplinary sophistication, among them, Bill Gammage's (2011) *The Biggest Estate on Earth*, which documents the ecological knowledge systems through which Aboriginal peoples shaped the Australian continent over tens of thousands of years; Deborah Bird Rose's (1996) and Jessica Weir's (2009) work on relational Country ontologies; and Irene Watson's (2014) scholarship on Aboriginal peoples' legal traditions as legitimate and distinct jurisprudence, represent not marginal additions to Western disciplines but foundational challenges to their assumptions. These examples illustrate complexity and sophistication while representing only fragments of broader, nation-specific systems (Behrendt, 1995; Gee et al., 2014).
- Calls for integration from policy bodies that lack the epistemological grounding to guide implementation (Behrendt et al., 2012; Universities Australia, 2017).

The absence of comprehensive citations is evidence of the problem being analysed, not a failure of the analysis.

IRBA's resolution: institutional transformation, not academic definition

IRBA clarifies that the solution is not for this paper (or any single academic work) to provide comprehensive definitions of Indigenous knowledges across all disciplines. Such an approach would:

- appropriate Indigenous intellectual authority.
- impose Western frameworks onto knowledge systems that exist independently of academic validation.
- place colonial load on Indigenous scholars to translate their traditions into terms legible to Western institutions.

Instead, IRBA demands institutional transformation that creates conditions for Indigenous scholars to lead disciplinary knowledge articulation work if and when communities choose to undertake it, on terms that respect Indigenous data sovereignty and knowledge protocols. This requires:

- Protected research time for Indigenous academics, freed from disproportionate service burdens (see Sect. "[Strategies for definitional clarity and disciplinary integration](#)", Strategy 3).
- Indigenous research institutes and infrastructure specifically designed to support deep knowledge work (see Sect. "[Beyond critical race theory to disciplinary knowledge investigation](#)", Strategy 1).
- Alternative evaluation frameworks that recognise Indigenous knowledge production, community-engaged scholarship, and non-traditional research outputs (see Sect. "[Strategies for definitional clarity and disciplinary integration](#)", Strategy 4).
- Indigenous governance over how knowledge is defined, shared, and represented within university contexts (see Sect. [4.2.1](#), Domain 1, Strategy 1).

The Paradox as proof

The definitional paradox this section addresses, being asked to cite comprehensive frameworks that don't exist because universities haven't created conditions for their development, proves the argument this paper makes. Before universities can meaningfully 'integrate' Indigenous knowledges, they must first support the institutional transformation necessary for Indigenous scholars to lead disciplinary knowledge articulation work, if communities choose to undertake it, under conditions that respect Indigenous intellectual sovereignty, data governance, and knowledge protocols.

The comparative analysis presented in Sect. "[Current landscape: comparative analysis of university strategies](#)" demonstrates how 20 Australian universities' strategies fail to address this foundational challenge, perpetuating what we term 'integration without transformation'—rhetorical commitments unsupported by the epistemic and structural changes IRBA demands.

Defining Indigenous knowledges: moving beyond rhetoric to disciplinary integration

A critical gap in current university approaches to Indigenous knowledge integration is the lack of substantive definitional work that articulates how Indigenous knowledges operate within specific disciplinary contexts. While institutional policies frequently acknowledge the importance of Indigenous knowledges, they rarely provide frameworks for locating these knowledge systems within Western academic structures. This definitional ambiguity creates a circular pattern where universities repeatedly commit to integration without establishing the intellectual foundations necessary for meaningful implementation.

The definitional challenge

The term “Indigenous knowledges” is often employed as a monolithic concept in university strategies and policies, obscuring the rich diversity, complexity, and specificity of knowledge systems developed by hundreds of distinct Aboriginal and Torres Strait Islander nations. This homogenisation represents a form of epistemic violence that undermines the very integration universities claim to pursue.

As the comparative analysis reveals, while 20 Australian universities align with the Universities Australia Indigenous Strategy and reference Indigenous knowledges in their strategic documents, few have undertaken the rigorous intellectual work of defining how these knowledge systems manifest within specific disciplines. This definitional vacuum perpetuates what might be termed “knowledge integration without knowledge recognition”; a superficial approach that fails to engage with the epistemological foundations of Indigenous intellectual traditions.

Beyond critical race theory to disciplinary knowledge investigation

The integration of Indigenous knowledges requires moving beyond general frameworks of critical race theory (CRT) or cultural awareness toward deep disciplinary knowledge investigation led by Indigenous scholars. CRT is a framework that examines how racism is structurally embedded in legal, educational, and social systems, emphasising that racial inequality is systemic rather than individual and must be challenged through critical analysis of power and institutions (Crenshaw et al., 1995; Ladson-Billings & Tate, 1995). While CRT focuses on exposing and transforming inequities within existing systems, an Indigenous rights-based approach (IRBA) centres Indigenous sovereignty, land rights, and self-determination, often questioning the legitimacy of those systems as products of colonialism (Anderson & Ma Rhea, 2018; Anderson et al., 2025). Thus, CRT seeks structural reform, whereas IRBA calls for decolonisation and the reassertion of Indigenous authority. This represents a shift from treating Indigenous knowledge as supplementary content to recognising it as a sophisticated intellectual tradition with its own methodological approaches, verification systems, and theoretical frameworks.

For example, in environmental sciences, this means moving beyond tokenistic references to “Caring for Country” to engage with complex Indigenous ecological

knowledge systems that encompass intergenerational observation, sustainable resource management principles, and relational ontologies that challenge Western nature-culture binaries. “Caring for Country” is not a metaphor but a lived practice that entails reciprocal responsibilities between people, land, waters, and ancestral law, constituting an ethical and ontological framework for sustaining life (Rose & Bates, 1996; Weir, 2009). More broadly, Indigenous ecological frameworks challenge Western nature-culture binaries by rejecting the dualism that separates humans from the natural world; instead, they position humans as embedded within dynamic, more-than-human relationships (Plumwood, 2002; Watts, 2013). While Plumwood (2002) critiques this human-nature divide as a product of Western rationalism that underpins ecological crisis, Watts (2013) advances “place-thought”, where land itself is alive, thinking, and agentic, inseparable from human existence. Together, these perspectives reframe ecology as a network of reciprocal relationships among humans and non-humans, rather than a hierarchy between society and nature. Similarly, in legal studies, rigorous engagement entails recognising Indigenous legal traditions and governance systems as authoritative in their own right, rather than treating Indigenous peoples merely as subjects of Western law. Indigenous legal traditions encompass systems of law grounded in kinship, community authority, and processes such as negotiation and restitution, as demonstrated in studies of Aboriginal dispute resolution (Behrendt, 1995). However, these systems are frequently misunderstood or reshaped within State policy frameworks, reflecting a broader disconnect between Indigenous knowledge systems and their interpretation in dominant institutions (Morphy & Morphy, 2013). This disciplinary specificity calls for intellectual leadership from Indigenous scholars who can explain how Indigenous knowledges function within and reshape disciplinary paradigms. However, as the comparative analysis shows, few universities have established research environments that support this type of deep knowledge work. It is also essential to recognise that non-Indigenous scholars have both the capacity and the responsibility to create spaces for this work by acknowledging the need for Indigenous knowledges within their disciplines, advocating for structural changes, and utilising their institutional privilege to support Indigenous-led initiatives.

Creating environments conducive to Indigenous knowledge discovery

The current research environments in most Australian universities remain inhospitable to the discovery and articulation of Indigenous knowledge. This inhospitality manifests in several ways:

1. *Epistemological barriers*: Dominant Western research paradigms frequently overlook Indigenous methodologies as legitimate forms of knowledge production, thereby creating barriers to publication, grant funding, and academic recognition.
2. *Structural constraints*: Heavy teaching and service burdens placed on Indigenous academics, often referred to as “cultural load” but more accurately understood as “colonial load”, limit time available for deep intellectual work.

3. *Disciplinary silos*: Traditional disciplinary boundaries can fragment Indigenous knowledge systems, which typically operate through interconnected, holistic frameworks rather than isolated specialisations.
4. *Evaluation metrics*: Conventional academic metrics often prioritise publication in high-ranking journals, which may not adequately value Indigenous knowledge systems or methodological approaches.

To address these barriers, universities must create dedicated intellectual spaces for articulating Indigenous knowledge and perspectives. Standout examples from the comparative analysis include Western Sydney University's Indigenous Research Institute and the University of Melbourne's Indigenous Knowledge Institute, which provide institutional infrastructure specifically designed to support the development of Indigenous knowledge across various disciplines.

Non-Indigenous scholars have a critical role in addressing these barriers by utilising their disciplinary expertise and institutional position to identify opportunities for integrating Indigenous knowledge, advocating for structural changes, and creating spaces that welcome Indigenous epistemologies. This shared responsibility is essential for effectively addressing the disparities highlighted in 'Closing the Gap' strategies and Productivity Commission reports.

Strategies for definitional clarity and disciplinary integration

To move beyond rhetorical commitments to substantive integration of Indigenous knowledges, universities should implement the following strategies:

1. *Discipline-specific knowledge mapping*: Commission Indigenous scholars to lead collaborative projects mapping Indigenous knowledge systems within specific disciplines, articulating methodological approaches, key concepts, and points of intersection or divergence with Western paradigms.
2. *Indigenous intellectual leadership*: Establish Indigenous Research Professor positions within faculties to lead disciplinary knowledge development, mentor emerging Indigenous scholars, and guide curriculum transformation.
3. *Protected research time*: Implement workload models that protect Indigenous academics from excessive service burdens and provide dedicated time for deep intellectual work.
4. *Alternative evaluation frameworks*: Develop promotion and grant assessment criteria that recognise Indigenous knowledge production, community-engaged scholarship, and non-traditional research outputs.
5. *Transdisciplinary knowledge hubs*: Create spaces that transcend disciplinary boundaries to support the development of holistic Indigenous knowledge while facilitating its translation into discipline-specific contexts.
6. *Non-Indigenous disciplinary advocacy*: Encourage non-Indigenous scholars to identify opportunities for integrating Indigenous knowledge within their disciplines, utilising their institutional position to advocate for structural changes that create space for Indigenous epistemologies.

These strategies require substantial investment but are essential for moving beyond superficial integration toward genuine epistemic transformation. Indigenous leadership scholarship emphasises that inclusion alone is insufficient if existing structures remain unchanged; instead, transformation requires reshaping institutional logics and decision-making processes rather than incorporating Indigenous perspectives into unchanged frameworks (Gram-Hanssen, 2021).

The most effective approaches acknowledge that while Indigenous leadership is vital, non-Indigenous scholars have the ability and duty to create spaces for Indigenous knowledges within their disciplines. This collective intellectual effort is essential for tackling the disparities faced by Indigenous peoples in society, as emphasised in ‘Closing the Gap’ strategies and Productivity Commission reports.

Moving forward: from definition to transformation

The definitional work of articulating Indigenous knowledges within disciplinary contexts is not merely an academic exercise but a necessary foundation for transformative change. Without this intellectual groundwork, universities risk perpetuating what might be termed “integration without transformation”, adding Indigenous content without challenging underlying epistemological assumptions or power structures.

As universities adopt the broader framework proposed in this paper, they must focus on creating conditions that allow Indigenous scholars to lead the definitional work that underpins their strategic commitments. This involves moving beyond mere rhetoric of inclusion to build authentic intellectual partnerships that acknowledge Indigenous knowledge systems as complex and evolving traditions capable of transforming disciplines and tackling contemporary challenges.

By supporting Indigenous scholars in articulating how their knowledge systems operate within and across disciplines, universities can move beyond circular conversations about integration to substantive engagement that advances both Indigenous research priorities and broader societal goals. Critically, this work cannot be left solely to Indigenous scholars; non-Indigenous academics have the capacity and responsibility to create spaces for Indigenous knowledges within their disciplines, contributing to the intellectual effort needed to address the disparities highlighted in ‘Closing the Gap’ strategies and Productivity Commission reports.

Institutional translation of community-based research models: bridging community-based research models and institutional structures

A key challenge in adopting Indigenous knowledge frameworks in universities is translating community-based research models, especially those created by the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS), into academic settings. While AIATSIS offers strong ethical guidelines and research protocols rooted in Indigenous ways of knowing, being, and doing, applying these within university structures often faces major obstacles due to fundamental differences in operational approaches, timelines, and accountability systems.

The translation challenge

AIATSIS research models emphasise relationship-building, community governance, and reciprocal knowledge exchange processes that often operate on timeframes and through mechanisms that conflict with conventional university research structures. These models prioritise community benefit and cultural protocols over academic outputs and institutional metrics, creating tensions when universities attempt to implement them without modifying their underlying systems and processes.

Universities aim to adopt AIATSIS guidelines, but they struggle to fit a relational, circular process into linear institutional frameworks. The outcome is often a superficial adoption that maintains institutional power while claiming to follow Indigenous protocols.

This translation gap manifests in several ways:

- *Temporal misalignment:* AIATSIS models emphasise ongoing relationship-building before starting research, whereas university timelines focus on quick project initiation, ethics approval, and completion.
- *Governance incongruence:* Community-led governance models often conflict with hierarchical university decision-making structures and risk management frameworks.
- *Evaluation disparities:* AIATSIS emphasises community-defined measures of success and benefit, whereas universities usually focus on academic output, grant income, and institutional recognition.
- *Resource allocation:* Community-based research necessitates flexible, relationship-focused resource allocation that often conflicts with the rigid university budget cycles and expenditure policies.

Strategies for enhancing institutional fit

To address these challenges, universities must develop specific mechanisms for translating community-based research models into institutional contexts while preserving their integrity and purpose. Effective strategies include:

- *Develop institutional translation frameworks:* Create structured processes for adapting AIATSIS guidelines to university contexts, explicitly addressing tensions between institutional requirements and Indigenous research protocols. These frameworks should identify points of flexibility within university systems and establish alternative pathways that accommodate community-based approaches.
- *Implement dual governance structures:* Establish research governance mechanisms that incorporate both institutional and community authority, with clear protocols for resolving conflicts and prioritising Indigenous decision-making in matters affecting Indigenous knowledge and communities.
- *Reform ethics and grant processes:* Redesign institutional ethics and grant processes to accommodate the relational and iterative nature of community-

based research, including extended timeframes for relationship-building, flexible milestone reporting, and recognition of community-defined outcomes.

- *Create institutional buffer zones*: Establish dedicated units or positions that mediate between community-based research practices and institutional requirements, protecting the integrity of Indigenous research while navigating university systems.
- *Develop alternative evaluation metrics*: Implement evaluation frameworks that recognise and value the distinctive characteristics and outcomes of community-based research, including relationship quality, community benefit, and knowledge translation beyond academic publications.

Exemplars of effective translation

The comparative analysis identified several universities that have made progress in addressing the institutional fit challenge:

- *University of Technology Sydney*: Development of the “Relational Research Framework” that adapts institutional processes to accommodate community timeframes and governance structures.
- *Western Sydney University*: Creation of “Research Translation Protocols” that explicitly address the interface between AIATSIS guidelines and university research management systems.
- *Charles Darwin University*: Implementation of “Dual Governance Pathways” for Indigenous research that establishes parallel approval and oversight mechanisms aligned with both institutional and community requirements.

Addressing emerging challenges: Indigenous knowledge and artificial intelligence

The integration of AI technologies into university research and administration presents both opportunity and risk for Indigenous knowledge systems. Scholars have documented how artificial intelligence (AI) can function as a form of double colonisation, encoding Western epistemologies into systems that appear neutral while marginalising Indigenous ways of knowing and undermining cultural and intellectual property sovereignty (Duarte, 2017; Rainie et al., 2017). Building on the Indigenous Protocol and Artificial Intelligence Position Paper (Lewis et al., 2020), this framework proposes an approach grounded in Indigenous data sovereignty and the CARE (Collective Benefit, Authority to Control, Responsibility, and Ethics) Principles (Carroll et al., 2023). As universities increasingly adopt AI technologies in research, teaching, and administration, ensuring these technologies respect and uphold Indigenous rights and knowledge systems becomes critical. This framework proposes an Indigenous AI approach built on four pillars:

- *AI designed with Indigenous knowledge systems*: Ensure AI development incorporates Indigenous epistemologies, ontologies, and axiologies, recognising diverse ways of knowing, being, and relating.
- *AI for relationality and reciprocal engagement*: Create AI systems that promote genuine relationships and mutual exchange instead of just transactional or extractive interactions.
- *AI upholding Indigenous data sovereignty*: Implement governance frameworks ensuring Indigenous peoples maintain control over data about their communities, lands, and cultural knowledge.
- *Ethical AI lifecycle helper role*: Position AI as a helper or facilitator rather than an authority, with Indigenous oversight throughout the AI lifecycle from design to deployment.

This approach aligns with the ‘Indigenous Protocol and Artificial Intelligence Position Paper’ (Lewis, 2020) and tackles the emerging challenges of ensuring that new technologies support, rather than undermine, Indigenous knowledge systems and sovereignty. Both Indigenous and non-Indigenous technologists have vital roles in this work, with non-Indigenous developers having the capacity and responsibility to create space for Indigenous perspectives in AI development, rather than placing this burden solely on Indigenous colleagues.

Implementation roadmap: from strategy to action

To translate strategic vision into practical action, universities should take a phased approach that acknowledges the shared responsibility of Indigenous and non-Indigenous stakeholders.

Phase 1: Foundation building (Year 1)

- Establish Indigenous governance structures,
- Develop faculty-specific operational plans,
- Implement FPIC protocols,
- Conduct baseline assessments of Indigenous engagement,
- Engage non-Indigenous academics in identifying opportunities for integrating Indigenous knowledge within their respective disciplines.

Phase 2: Capacity development (Years 2–3)

- Roll out professional development programs,
- Establish Indigenous research hubs,
- Implement curriculum review processes,
- Develop performance dashboards,
- Support non-Indigenous academics in creating space for Indigenous knowledges within their disciplines.

Phase 3: Systemic transformation (Years 4–5)

- Integrate Indigenous knowledge across all disciplines,
- Implement a comprehensive community evaluation,
- Establish sustainable funding models,
- Develop sector leadership in Indigenous engagement,
- Embed shared responsibility between Indigenous and non-Indigenous stakeholders.

This phased approach facilitates the gradual development of capacity, relationships, and systems while sustaining momentum towards transformative change. It acknowledges that although Indigenous leadership is crucial, non-Indigenous academics and administrators have the ability and duty to foster spaces for Indigenous knowledge within their disciplines and administrative roles.

Implications and conclusion: toward genuine transformation

This paper's intellectual contribution is not to resolve the definitional gap by providing comprehensive frameworks, which would be both inappropriate and impossible, but rather to:

- Name the gap and explain its structural causes through IRBA analysis
- Demonstrate the consequences of this gap through comparative analysis of 20 university strategies that commit to 'integration' without epistemic foundations
- Propose institutional transformations necessary to enable Indigenous scholars to lead definitional work under conditions that respect knowledge sovereignty

The examples developed in Sect. "[Beyond critical race theory to disciplinary knowledge investigation](#)", such as 'Caring for Country' as sophisticated ecological knowledge (Rose, 1996; Weir, 2009; Gammage, 2011), Indigenous legal traditions as legitimate jurisprudence (Behrendt, 1995; Watson, 2014), and Social and Emotional Wellbeing as a holistic health framework (Gee et al., 2014), illustrate the complexity and disciplinary rigour of Indigenous knowledges without claiming to comprehensively define them. These examples demonstrate why universities must transform: Indigenous knowledges challenge fundamental disciplinary assumptions and cannot be reduced to 'content' added to unchanged Western frameworks.

Shared responsibility: non-Indigenous scholars' role

IRBA establishes that addressing this definitional challenge cannot be solely the responsibility of Indigenous scholars. Non-Indigenous academics have both the capacity and obligation to:

- Recognise epistemic gaps in their disciplines and advocate for transformation without requiring Indigenous colleagues to justify knowledge legitimacy (Leonardo & Porter, 2010; Moreton-Robinson, 2015)
- Create institutional space using their positions and structural privilege to establish pathways for Indigenous knowledge integration, recognising that advocacy is institutional work, not personal goodwill (Leonardo & Porter, 2010)
- Share accountability for addressing disparities outlined in Closing the Gap strategies and Productivity Commission reports as institutional responsibility, not solely Indigenous staff work (Coalition of Peaks, 2020)

This shared responsibility prevents IRBA implementation from becoming another form of colonial load placed on Indigenous peoples while maintaining Indigenous authority over knowledge governance.

The framework outlined in this paper offers a comprehensive approach to boosting civic engagement and incorporating Indigenous knowledge within Australian universities. By moving beyond mere performative reconciliation towards a rights-based transformation, universities can make meaningful contributions to Closing the Gap targets while also fulfilling their civic responsibilities to Indigenous communities.

The comparative analysis of current university strategies uncovers both promising innovations and ongoing gaps. By adopting the highlighted practices such as Indigenous research institutes, relational governance models, and community-led evaluation, while tackling common implementation challenges, universities can foster more equitable, respectful, and effective engagement with Indigenous knowledge systems and communities.

Ultimately, genuine transformation requires more than just strategic documents or isolated initiatives. It calls for a fundamental shift in how universities think about knowledge, research, teaching, and community engagement: recognising Indigenous intellectual sovereignty, prioritising Indigenous leadership, and embedding accountability at all levels of the institution. Through this approach, Australian universities can become authentic partners in addressing Indigenous research priorities and promoting social justice.

Genuine transformation requires more than structural incorporation. The institutions in this comparative analysis that have made the deepest progress are those that have accepted the uncomfortable implication of their own governance frameworks: that authentic Indigenous authority means allowing Indigenous leadership to make decisions that reshape institutional identity, not merely decisions that can be accommodated within existing frameworks. This is the difference between structural reform and performative change, and it is where the accountability mechanisms proposed in Domain 5 are ultimately tested.

It is crucial to recognise that this transformative work cannot be the responsibility of Indigenous scholars and communities alone. Non-Indigenous academics and administrators have both the ability and duty to create spaces for Indigenous knowledges within their disciplines and administrative roles, leveraging their institutional positions to advocate for structural reforms that embrace Indigenous epistemologies. This collective intellectual effort is vital for effectively addressing the disparities

faced by Indigenous peoples in society, as emphasised in ‘Closing the Gap’ strategies and Productivity Commission reports. Only through this collaborative approach can universities meet their civic obligation to contribute meaningfully to a more equitable and just society.

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Declarations

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References

- Anderson, P. J., & Ma Rhea, Z. (2018). Rights-based Indigenous education in Australia: Evidence-based policy to pedagogy. In M. Barnes, M. Gindidis, & S. Phillipson (Eds.), *Evidence-based learning and teaching: A look into Australian classrooms* (pp. 205–216). Routledge.
- Anderson, P., Diamond, Z. M., Pham, T., Baeza Peña, A., Tapia, C., Blue, L., & Howe, W. D. (2025). Indigenous rights-based approaches to decolonising research methodologies in settler colonial contexts. *Frontiers in Research Metrics and Analytics*, 10, 1553208.
- Asmar, C., Page, S., & Radloff, A. (2011). Dispelling myths: Indigenous students’ engagement with university. *AUSSE Research Briefings*, (10). <https://research.acer.edu.au/ausse/2/>
- Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS). (2020). *AIATSIS Code of Ethics for Aboriginal and Torres Strait Islander research*. Australian Institute of Aboriginal and Torres Strait Islander Studies.
- Australian National University (ANU). *Reconciliation action plan 2024*. <https://www.anu.edu.au/about/reconciliation-action-plan>
- Benesiinaabandan, S., Brown, M., Cheung, M., Coleman, M., Cordes, A., Davison, J., Duarte, K., Garba, I., Hudson, M., Kapua’ala Pavel, K., Lin, B., Reiland, R. L., Rissman, R., Sanchez, A., Tobi, R., & Whaanga, H. (2020). *Indigenous protocol and artificial intelligence position paper*. Initiative for

- Indigenous Futures and the Canadian Institute for Advanced Research (CIFAR). <https://spectrum.library.concordia.ca/id/eprint/986506/>
- Battiste, M. (2013). *Decolonizing education: Nourishing the learning spirit*. Purich Press
- Behrendt, L. (1995). *Aboriginal dispute resolution: A step towards self-determination and community autonomy*. Federation Press.
- Behrendt, L. (2012). *Indigenous Australia for dummies*. Wiley.
- Behrendt, L., Larkin, S., Griew, R., & Kelly, P. (2012). *Review of higher education access and outcomes for Aboriginal and Torres Strait Islander people – Final report*. https://docs.education.gov.au/system/files/doc/other/review_final_report_2012.pdf
- Behrendt, L. (2021). *Indigenous Australia for dummies* (2nd ed.). For Dummies.
- Carroll, S. R., Garba, I., Figueroa-Rodríguez, O. L., Holbrook, J., Lovett, R., Materechera, S., ... & Hudson, M. (2023). The CARE principles for indigenous data governance. *Open Scholarship Press Curated Volumes: Policy*.
- Central Queensland University (CQU). *First Nations research strategy*. <https://www.cqu.edu.au/about-us/indigenous-engagement/policies-cultural-resources/first-nations-research-strategy-2023-2028>
- Charles Sturt University (CSU). *First Nations 3-year strategy* (includes research). <https://www.csu.edu.au/first-nations-strategy>
- Coalition of Peaks. (2020). *National agreement on Closing the Gap*. Australian Government. <https://www.closingthegap.gov.au/national-agreement>
- Coates, S., Trudgett, M., & Page, S. (2023). Indigenous Institutional Theory: A new theoretical framework and methodological tool. *The Australian Educational Researcher*, 50(3), 903–920.
- Crenshaw, K., Gotanda, N., Peller, G., & Thomas, K. (Eds.). (1995). *Critical race theory: The key writings that formed the movement*. The New Press.
- Deakin University. *Indigenous strategy 2023–2028*. <https://www.deakin.edu.au/indigenous-strategy-2023-2028>.
- Department of Industry, Science and Resources. (2024). *Australia's national science and research priorities*. Australian Government. <https://www.industry.gov.au/publications/national-science-and-research-priorities-2024>
- Duarte, M. E. (2017). *Network sovereignty: Building the internet across Indian country*. University of Washington Press.
- Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs, H. (2014). Qualitative content analysis: A focus on trustworthiness. *SAGE Open*. <https://doi.org/10.1177/2158244014522633>
- Flinders University. *Indigenous research strategy*. <https://www.flinders.edu.au/about/indigenous/indigenous-research-strategy>
- Fredericks, B. (2008). Making an impact: The work of Australian Indigenous health researchers. *Australian Aboriginal Studies*, 2, 2–15.
- Fredericks, B., & Bargallie, D. (2020). Situating race in cultural competency training: A site of self-revelation. *M/C Journal*. <https://doi.org/10.5204/mcj.1660>
- Gammage, B. (2011). *The biggest estate on earth: How Aborigines made Australia*. Allen & Unwin.
- Gee, G., Dudgeon, P., Schultz, C., Hart, A., & Kelly, K. (2014). Aboriginal and Torres Strait Islander social and emotional wellbeing. *Working Together: Aboriginal and Torres Strait Islander Mental Health and Wellbeing Principles and Practice*, 2, 55–68.
- Gram-Hanssen, I. (2021). Individual and collective leadership for deliberate transformations: Insights from Indigenous leadership. *Leadership*, 17(5), 556–575. <https://doi.org/10.1177/1742715021996486>
- Gunstone, A. R. (2009). *Unfinished business: The Australian formal reconciliation process*. Australian Scholarly Publishing.
- Hogarth, M. (2026). Ngarrngga: An approach to Indigenous education for all Australians. *The Australian Educational Researcher*. <https://doi.org/10.1007/s13384-025-00942-1>
- Jayawardena, N. S., Ross, M., & Grace, D. (2020). Exploring the relationship between Australian university websites and international student enrolments. *International Journal of Educational Management*, 34(10), 1527–1557. <https://doi.org/10.1108/IJEM-02-2019-0068>
- Kukutai, T., & Taylor, J. (Eds.). (2016). *Indigenous data sovereignty: Toward an agenda*. ANU Press. <https://doi.org/10.22459/CAEPR38.11.2016>
- Ladson-Billings, G., & Tate, W. F. (1995). Toward a critical race theory of education. *Teachers College Record*, 97(1), 47–68.

- Leonardo, Z., & Porter, R. K. (2010). Pedagogy of fear: Toward a Fanonian theory of 'safety' in race dialogue. *Race Ethnicity and Education*, 13(2), 139–157. <https://doi.org/10.1080/13613324.2010.482898>
- Leonardo, Z., & Porter, R. K. (2020). Pedagogy of fear: Toward a Fanonian theory of 'safety' in race dialogue. *Critical Race Theory in Education*, 13(2), 189–207.
- Lovett, R., Lee, V., Kukutai, T., Cormack, D., Rainie, S. C., & Walker, J. (2019). Good data practices for Indigenous data sovereignty and governance. In A. Daly, S. K. Devitt, & M. Mann (Eds.), *Good data* (pp. 26–36). Institute of Network Cultures.
- Macquarie University. *Indigenous research plan*. <https://www.mq.edu.au/indigenous-research-plan>
- Martin, K. (2008). *Please knock before you enter: Aboriginal regulation of outsiders and the implications for researchers*. Post Pressed.
- Monash University. *Indigenous research action plan*. <https://www.monash.edu/about/indigenous/strategy/indigenous-research-action-plan>
- Moreton-Robinson, A. (2015). *The white possessive: Property, power, and Indigenous sovereignty*. University of Minnesota Press.
- Morphy, F., & Morphy, H. (2013). Anthropological theory and government policy in Australia's Northern Territory: The hegemony of the "mainstream." *American Anthropologist*, 115(2), 174–187.
- Murdoch University. *Student and education strategy*. <https://www.murdoch.edu.au/indigenous-strategy>
- Nakata, M. (2007). *Disciplining the savages, savaging the disciplines*. Aboriginal Studies Press.
- Notre Dame University. *Nulungu strategic plan (research)*. <https://www.notredame.edu.au/nulungu-strategic-plan>
- Plumwood, V. (2002). Environmental culture: The ecological crisis of reason. *Human Ecology Review*, 10(1), 77–81.
- Productivity Commission. (2024). *Review of the National Agreement on Closing the Gap*. Australian Government. <https://www.pc.gov.au/inquiries-and-research/closing-the-gap-review/report>
- Queensland University of Technology (QUT). *Indigenous Australian research strategy*. <https://www.qut.edu.au/indigenous-australian-research-strategy>
- Rainie, S. C., Lee Schultz, J., Briggs, E., Riggs, P., & Palmanteer-Holder, N. L. (2017). Data as a strategic resource. *International Indigenous Policy Journal*, 8(2), 1–29.
- Rigney, L. I. (1999). Internationalization of an Indigenous anticolonial cultural critique of research methodologies: A guide to Indigenist research methodology and its principles. *Wicazo Sa Review*, 14(2), 109–121.
- RMIT. *University Indigenous research plan*. <https://www.rmit.edu.au/indigenous-research-plan>
- Rose, D. B., & Bates, B. (1996). *Nourishing terrains: Australian Aboriginal views of landscape and wilderness*.
- Smith, L. T. (2012). *Decolonizing methodologies: Research and Indigenous peoples* (2nd ed.). Zed Books.
- Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., Levac, D., et al. (2018). PRISMA extension for scoping reviews (PRISMA-ScR): Checklist and explanation. *Annals of Internal Medicine*, 169(7), 467–473. <https://doi.org/10.7326/M18-0850>
- Trudgett, M. (2014). Supervision provided to Indigenous Australian doctoral students: A black and white issue. *Higher Education Research & Development*, 33(5), 1035–1048.
- United Nations. (2007). *United Nations Declaration on the Rights of Indigenous Peoples*. UN General Assembly.
- Universities Australia. (2017). *Indigenous strategy 2017–2020*. <https://www.universitiesaustralia.edu.au/wp-content/uploads/2019/06/Indigenous-Strategy-v16-1.pdf>.
- Universities Australia. (2019). *Indigenous strategy first annual report*. <https://universitiesaustralia.edu.au/wp-content/uploads/2019/06/20190304-Final-Indigenous-Strategy-Report-v2-2.pdf>
- Universities Australia (2022). *Indigenous strategy 2022–2025*. <https://universitiesaustralia.edu.au/wp-content/uploads/2022/03/UA-Indigenous-Strategy-2022-25.pdf>
- University of Canberra. *Indigenous leadership strategy*. <https://www.canberra.edu.au/about-uc/indigenous-leadership-strategy>
- University of Melbourne (2023). *Indigenous research framework 2023–2027*. <https://www.unimelb.edu.au/indigenous/governance/indigenous-strategies-and-reports/documents/indigenous-research-framework-2023-2027>
- University of New South Wales. (2021). *UNSW Indigenous strategy 2021*. https://www.indigenous.unsw.edu.au/sites/default/files/documents/UNSW%20Indigenous%20Strategy%202021_web.pdf

- University of Southern Queensland. (2017). Research strategy 2017–2020. <https://www.unisq.edu.au/research/research-ethics/atsi-strategy>
- University of Queensland (UQ). *Aboriginal and Torres Strait Islander research and innovation strategy*. <https://research.uq.edu.au/uq-aboriginal-and-torres-strait-islander-research-strategy>
- University of South Australia (UniSA). *Aboriginal research strategy*. <https://www.unisa.edu.au/about/aboriginal-research-strategy>
- University of Southern Queensland (USQ). *Research strategy 2017–2020*. <https://www.unisq.edu.au/research/research-ethics/atsi-strategy>
- University of Tasmania (UTAS). *Strategy for Aboriginal engagement (SPA) 2021–2024*. <https://www.utas.edu.au/about/aboriginal-engagement/strategy>
- University of Technology Sydney (UTS). *NgaraNgun Indigenous research strategy*. <https://www.uts.edu.au/about/indigenous-australia/ngarangun-indigenous-research-strategy>
- Walter, M., Andersen, C., Kukutai, T., & Gabel, C. (2013). *Indigenous statistics: A quantitative research methodology*. Routledge.
- Watson, I. (2014). *Aboriginal peoples, colonialism and international law: Raw law*. Routledge.
- Watts, V. (2013). Indigenous place-thought and agency amongst humans and non-humans (First Woman and Sky Woman go on a European world tour!). *Decolonization : Indigeneity, Education & Society*, 2(1), 20–34.
- Weir, J. K. (2009). *Murray River country: An ecological dialogue with traditional owners*. Aboriginal Studies Press.
- Western Sydney University (WSU). *Indigenous research strategy*. <https://www.westernsydney.edu.au/indigenous-research-strategy>
- Wilson, S. (2008). *Research is ceremony: Indigenous research methods*. Fernwood Publishing.

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