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Indigenous knowledge in Higher Education in South Africa: Prospects and challenges

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ABSTRACT

The integration of Indigenous Knowledge Systems (IKS) into higher education has become a central issue in debates over transformation and decolonisation in South Africa. Although national policies and frameworks support the recognition and inclusion of Indigenous Knowledge, its meaningful integration within higher education institutions remains a challenge. This study examined the prospects and challenges associated with incorporating IKS into South African higher education. The study used a narrative review of scholarly and policy literature, drawing on electronic databases including ERIC, Google Scholar, Scopus and Sabinet. Thematic analysis identified recurring themes related to policy reform, curriculum transformation, community engagement, epistemological tensions and institutional frameworks guiding the integration of Indigenous Knowledge. The findings indicate that higher education institutions have made progress in promoting IKS through curriculum redesign, policy development, research initiatives, and community partnerships. These efforts have contributed to institutional transformation and the promotion of knowledge diversity. However, the integration process remains constrained by the dominance of Western epistemological traditions, limited institutional capacity, inadequate human and financial resources, and concerns about intellectual property rights and knowledge ownership. The study argues that the successful integration of IKS requires a holistic and sustainable approach that goes beyond curriculum reform to include institutional culture, governance, research practices and community participation. It concludes that while progress has been made, sustained commitment is needed to advance epistemic justice and ensure the meaningful inclusion of IKS within South African higher education.

Keywords: Decolonisation, Epistemic Justice, Higher Education, Indigenous Knowledge Systems, IKS, University Transformation.

INTRODUCTION

Indigenous Knowledge Systems (IKS) have become an important focus of scholarship in South African higher education. Their growing prominence is closely linked to post-apartheid national transformation

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efforts.[1] Universities have been called upon to remedy historical exclusion and to produce knowledge that speaks to local realities. Within this context, Indigenous Knowledge is increasingly recognised as a legitimate intellectual tradition with the potential to contribute to teaching, research and community engagement.[2]

South African higher education has widely debated curriculum transformation, particularly in relation to decolonisation and epistemic justice. From the mid-2010s, students and academics increasingly challenged the dominance of Eurocentric knowledge frameworks in higher education programmes.[3] These conversations explain that the education system established during colonial times ignored African ways of thinking and presented Western knowledge as if it were applied to all people. As a result, much of the content taught at universities relates closely to African pasts, languages, cultures, or everyday experiences. New academic writing describes this problem as the ongoing unfair treatment of knowledge within institutions of higher learning.[4]

In South Africa, recent policy changes have made it easier to include Indigenous Knowledge in education.[5] Government plans now recognise IKS as important for helping communities, addressing the environment, supporting health projects, and keeping cultural traditions alive. Universities have responded by setting up research roles, academic courses and partnerships with local communities that focus on indigenous ways of knowing. These actions show that higher education institutions are beginning to take indigenous scholarship seriously, providing opportunities for postgraduate learning and spanning different fields.

Even with these positive steps, Indigenous Knowledge is still not fully part of university teaching. Studies show that it is usually placed on the edges of courses rather than being central to them.[6] Indigenous Knowledge is often offered as optional classes or short programmes instead of being included in core subjects. This limited presence makes it harder for Indigenous Knowledge to bring real change and keeps the existing hierarchy of knowledge in place.

The way universities are organised also makes it difficult to fully include Indigenous Knowledge. Many universities lack enough qualified lecturers, suitable learning materials or teaching methods to properly support it.[7] When programmes exist, they are usually confined to certain departments and do not influence the wider university culture. This separation prevents collaboration across subjects and limits the overall impact of Indigenous Knowledge initiatives.

There are still challenges in understanding how knowledge is understood. Indigenous Knowledge is often shared through talking, everyday experiences, spiritual practices and community activities.[8] These ways of sharing knowledge do not always fit university systems that prefer written

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[1] Hassan O Kaya, "Integration of African Indigenous Knowledge Systems into Higher Education in South Africa: Prospects and Challenges," *Alternation* 20, no. 1 (2013): 135–53.

[2] Josie Arnold, "Walking in Both Worlds: Rethinking Indigenous Knowledge in the Academy," *International Journal of Inclusive Education* 21, no. 5 (2017): 475–94; Mary McAteer and Lesley Wood, "Decolonising Knowledge: Enacting the Civic Role of the University in a Community-Based Project," *South African Journal of Education* 38, no. 4 (2018): 1–10; Paul Sillitoe and Mariella Marzano, "Future of Indigenous Knowledge Research in Development," *Futures* 41, no. 1 (2009): 13–23.

[3] Julie Cupples and Ramón Grosfoguel, *Unsettling Eurocentrism in the Westernized University* (Routledge, 2018); Savo Heleta, "Decolonisation of Higher Education: Dilemmas and Contradictions," *South African Journal of Higher Education* 30 (5):(2016):1–12.

[4] F. Maringe, "Colonization and Epistemic Injustice in Higher Education," *Routledge*, 2023; Bunmi Isaiah Omodan, "Unveiling Epistemic Injustice in Education: A Critical Analysis of Alternative Approaches," *Social Sciences & Humanities Open* 8, no. 1 (2023): 100699; Sharon Stein, "The Persistent Challenges of Addressing Epistemic Dominance in Higher Education: Considering the Case of Curriculum Internationalization," *Comparative Education Review* 61, no. S1 (2017): S25–50.

[5] O. C. Hoppers, "Indigenous Knowledge and the Integration of Knowledge Systems," *Indigenous Knowledge and the Integration of Knowledge Systems: Towards a Philosophy of Articulation*, 2002, 2–22.

[6] Troy Heffernan, "The Invisible Barriers of Structured and Structuring Structures for Marginalized Students and Academics in Higher Education," *The Bloomsbury Handbook of Bourdieu and Educational Research*, 2024, 283–92.

[7] Joshua Abah, Percy Mashebe, and Desalu Dedayo Denuga, "Prospect of Integrating African Indigenous Knowledge Systems into the Teaching of Sciences in Africa," *American Journal of Educational Research* 3, no. 6 (2015): 668–73; Yalalem Assefa and Shireen Jamal Mohammed, "Indigenous-Based Adult Education Learning Material Development: Integration, Practical Challenges, and Contextual Considerations in Focus," *Education Research International* 2022, no. 1 (2022): 2294593; Cláudio Da Silva, Fátima Pereira, and José Pedro Amorim, "The Integration of Indigenous Knowledge in School: A Systematic Review," *Compare: A Journal of Comparative and International Education* 54, no. 7 (2024): 1210–28.

[8] S. Baderan, " Exploring the Lived Meaning of Oral Tradition Among Indigenous Youth through a Phenomenological Approach in a Changing Cultural Landscape," *Humanexus: Journal of Humanistic and Social Connection Studies* 1, no. 11 (2025): 440–49; Florence Akumu Juma, "Recapturing the Oral Tradition of Storytelling in Spiritual Conversations with Older Adults: An Afro-Indigenous

texts and standard scientific methods. Therefore, Indigenous Knowledge can be overlooked or misunderstood in formal academic settings.

Ethical and management issues make these difficulties even greater. Concerns about who owns the knowledge, obtaining community permissions, and sharing benefits are often not fully considered in research partnerships.[9] Without proper protections, universities may continue using knowledge in ways that take from indigenous communities, as has happened in the past. Even though these challenges are serious, there are also great opportunities. Including Indigenous Knowledge can improve research across different subjects, strengthen links with communities and make university work more relevant to society.[10] It can also help students feel a stronger sense of identity, belonging and pride in their culture, especially in academic spaces that have often excluded them.

In this context, the paper draws on existing studies and documents to explore the opportunities and challenges of including IKS in South African universities. By reviewing the available literature and policy materials, the study aims to show progress, ongoing structural challenges, and how universities can achieve meaningful and lasting change.

LITERATURE REVIEW

The integration of IKS into higher education in South Africa has attracted sustained scholarly attention over the past two decades.[11] This interest is closely tied to national transformation imperatives and global calls for epistemic diversity in universities. Literature in this field examines both the opportunities created by policy recognition and the structural constraints that continue to shape implementation.

Policy and institutional recognition of Indigenous Knowledge

Early post-apartheid reforms created an enabling environment for the development of Indigenous Knowledge within formal institutions. National policy frameworks positioned IKS as a strategic knowledge resource linked to innovation, social development and heritage preservation.[12] This policy recognition encouraged universities to establish dedicated programmes, research centres and community partnerships. Scholars note that such institutionalisation marked an essential shift from the historical marginalization of Indigenous Knowledge within formal education structures.

Recent studies indicate that several universities have introduced Indigenous Knowledge into teaching and research through formal qualifications, short courses and postgraduate supervision.[13] These developments are seen as progress toward epistemic inclusivity. Institutional platforms such as research chairs and interdisciplinary centres have also expanded the scope of scholarly engagement.[14] This growth has increased publication outputs, student enrolment in IKS programmes and collaborative projects with local communities.

Approach," *Religions* 13, no. 6 (2022): 563; Julian A Robbins and Jonathan Dewar, "Traditional Indigenous Approaches to Healing and the Modern Welfare of Traditional Knowledge, Spirituality and Lands," *International Indigenous Policy Journal* 2, no. 4 (2011): 1–17.

[9] Vanessa Andreotti, Cash Ahenakew, and Garrick Cooper, "Epistemological Pluralism: Ethical and Pedagogical Challenges in Higher Education," *AlterNative: An International Journal of Indigenous Peoples* 7, no. 1 (2011): 40–50; Osia Livhuwani Munyangane, "An Ubuntu Perspective on Community Engagement in Indigenous Knowledge Systems Research: Insights from South Africa," *F1000Research* 15 (2026): 1504..

[10] Benjamin Gowon Ahule and Josephine Oragbai, "Decolonizing The Social Sciences: Integrating Indigeneous Knowledge For Sustainable Development," *Journal of Emerging Trends in Economics and Management Sciences* 16, no. 3 (2025): 124–37; Kassu Jilcha, Biniyam Bekele, and Gezahegn Tesfaye, "Indigenous Knowledge Integrated System for Sustainable University Industry Linkage and Community Development.," *Knowledge Management & E-Learning* 17, no. 1 (2025): 171–205.

[11] Hassan O Kaya and Yonah N Seleti, "African Indigenous Knowledge Systems and Relevance of Higher Education in South Africa," *International Education Journal: Comparative Perspectives* 12, no. 1 (2013).

[12] Department of Science and Technology, "Indigenous Knowledge Systems (IKS) Policy," *Government of South Africa*, 2004.

[13] Arlene Harvey and Gabrielle Russell-Mundine, "Decolonising the Curriculum: Using Graduate Qualities to Embed Indigenous Knowledges at the Academic Cultural Interface," *Teaching in Higher Education* 24, no. 6 (2019): 789–808; Catherine Manathunga, *Intercultural Postgraduate Supervision: Reimagining Time, Place and Knowledge* (Routledge, 2014); Ronicka Mudaly, "Towards Decolonising a Module in the Pre-Service Science Teacher Education Curriculum: The Role of Indigenous Knowledge Systems in Creating Spaces for Transforming the Curriculum," *Journal of Education (University of KwaZulu-Natal)*, no. 74 (2018): 47–66.

[14] Harvey and Russell-Mundine, "Decolonising the Curriculum: Using Graduate Qualities to Embed Indigenous Knowledges at the Academic Cultural Interface."

Curriculum transformation and decolonisation

Curriculum reform remains one of the most visible entry points for integrating Indigenous Knowledge.[15] The decolonisation discourse has pushed universities to interrogate the dominance of Eurocentric content and to reconsider whose knowledge is represented in teaching. [16] Scholars argue that incorporating indigenous perspectives can improve curriculum relevance, particularly for students from historically marginalised communities.

Empirical research shows that integrating Indigenous Knowledge can support contextual learning, cultural affirmation and critical thinking. The inclusion of local agricultural knowledge, healing practices and environmental management systems has been shown to enrich disciplinary teaching. [17] Such integration promotes knowledge pluralism by exposing students to multiple epistemologies.

However, the literature also highlights uneven curriculum transformation. In many cases, Indigenous Knowledge appears as supplementary content rather than reshaping disciplinary foundations. This "add-on" approach limits its transformative potential. Scholars caution that without a structural curriculum redesign, integration risks remaining symbolic.

Research, innovation, and community engagement

Another major prospect lies in research and innovation. Indigenous Knowledge contributes to locally grounded solutions in biodiversity conservation, climate adaptation, traditional medicine and food security. Universities have increasingly partnered with communities to document, validate and apply indigenous practices within scientific and development frameworks.[18]

Community-engaged research has strengthened the co-production of knowledge. It recognises indigenous communities not merely as research participants but as knowledge holders and collaborators.[19] This approach aligns with participatory and socially responsive research paradigms. The literature suggests that such partnerships enhance universities' legitimacy in local contexts and contribute to sustainable development. [20] Despite these gains, tensions remain over knowledge ownership and benefit sharing. Concerns persist that universities may extract Indigenous Knowledge without equitable returns to communities, which has led to calls for stronger ethical frameworks, intellectual property protections and community consent protocols in IKS research.[21]

Epistemological tensions and knowledge hierarchies

A central theme in the literature concerns epistemological conflict. Universities traditionally privilege written documentation, empirical verification and laboratory validation.[22] Indigenous Knowledge, by contrast, is often transmitted orally and embedded in spirituality, cultural practice and lived experience.[23]

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[15] Benkosi Madlela, "Prospect and Challenges of Integrating Indigenous Knowledge Systems into the Natural Science Curriculum in Schools," *EUREKA: Social and Humanities*, no. 3 (May 31, 2023): 3–19, https://doi.org/10.21303/2504-5571.2023.002867.

[16] Heleta, " Decolonisation of Higher Education: Dilemmas and Contradictions."

[17] Ibnu Fitrianto and Muhammad Farisi, "Integrating Local Wisdom into 21st Century Skills: A Contextual Framework for Culturally Relevant Pedagogy in Rural Classrooms," *International Journal of Post Axial: Futuristic Teaching and Learning*, 2025, 109–21.

[18] Megan S Adams et al., "Toward Increased Engagement between Academic and Indigenous Community Partners in Ecological Research," *Ecology and Society* 19, no. 3 (2014).

[19] Jilcha, Bekele, and Tesfaye, "Indigenous Knowledge Integrated System for Sustainable University Industry Linkage and Community Development."

[20] Adams et al., "Toward Increased Engagement between Academic and Indigenous Community Partners in Ecological Research."

[21] Fraser Needham and Rauna Kuokkanen, "Reshaping the University: Responsibility, Indigenous Epistemes, and the Logic of the Gift," *Canadian Journal of Political Science* 42, no. 2 (2009): 549; Michelle Pidgeon, "Pushing against the Margins: Indigenous Theorizing of 'Success' and Retention in Higher Education," *Journal of College Student Retention: Research, Theory & Practice* 10, no. 3 (2008): 339–60.

[22] Kathy Luckett and Margaret A L Blackie, "Beyond Epistemology: The Challenge of Reconceptualising Knowledge in Higher Education," *Teaching in Higher Education* 27, no. 8 (2022): 1018–26; Simon Susen, "Epistemological Tensions in Bourdieu's Conception of Social Science," *Theory of Science* 33, no. 1 (2011): 43–82.

[23] Marie Roue and Douglas Nakashima, "Indigenous and Local Knowledge and Science: From Validation to Knowledge Coproduction," *The International Encyclopedia of Anthropology*, 2018, 1–11.

Scholars argue that this mismatch creates challenges for validation. Indigenous Knowledge may be judged against criteria that do not reflect its epistemic foundations.[24] As a result, it risks being misrepresented, simplified or dismissed. Decolonial scholars frame this as a continuation of colonial knowledge hierarchies within contemporary academia.[25] There are ongoing debates about how universities can develop inclusive validation frameworks without appropriating or distorting indigenous epistemologies. Proposed approaches include transdisciplinary research models, community peer review and culturally grounded pedagogies.

Institutional and capacity constraints

Implementation barriers are also institutional. Studies report shortages of trained academics to teach Indigenous Knowledge within university settings.[26] Indigenous expertise resides in communities rather than in academia, creating staffing and curriculum-delivery gaps. Resource limitations further complicate integration.[27] Developing teaching materials, translating oral knowledge into academic formats, and facilitating field-based learning require sustained institutional investment. Where funding is limited, IKS initiatives struggle to scale beyond pilot programmes. Institutional culture can also act as a barrier. Resistance may emerge from disciplinary gatekeeping, perceptions of academic rigour or a limited understanding of indigenous epistemologies. These dynamics slow the pace of reform and maintain IKS's marginal position.

Student experience and knowledge relevance

Emerging scholarship highlights the impact of including Indigenous Knowledge on student learning. Studies show that students often experience greater belonging and a stronger sense of identity when curricula reflect their cultural contexts.[28] This is particularly relevant in rural-origin and first-generation student populations. Indigenous Knowledge integration also supports applied learning.[29] Students are exposed to community-based problem-solving, local innovation systems, and culturally embedded practices.

Synthesis of literature gaps

While the literature confirms growing institutional recognition of Indigenous Knowledge, it also reveals persistent structural contradictions. Policy frameworks are progressive, yet institutional practice remains fragmented. Curriculum reform is visible, but often superficial. Research partnerships exist, yet ethical governance frameworks remain underdeveloped. Therefore, a consolidated analysis that examines both enabling conditions and structural constraints shaping IKS integration is needed. A secondary data synthesis provides an opportunity to bring together dispersed evidence, identify patterns, and clarify future directions for transforming higher education in South Africa.

METHODOLOGY

Study Design

This study used a qualitative narrative review design based on secondary data sources. A narrative review was selected because the manuscript aims to provide a critical and interpretive synthesis of

[24] John Briggs, "Indigenous Knowledge: A False Dawn for Development Theory and Practice?," *Progress in Development Studies* 13, no. 3 (2013): 231–43.
[25] Roue and Nakashima, "Indigenous and Local Knowledge and Science: From Validation to Knowledge Coproduction."
[26] M B Ogunniyi, "The Challenge of Preparing and Equipping Science Teachers in Higher Education to Integrate Scientific and Indigenous Knowledge Systems for Learners: The Practice of Higher Education," *South African Journal of Higher Education* 18, no. 3 (2004): 289–304.
[27] Kaya, "Integration of African Indigenous Knowledge Systems into Higher Education in South Africa: Prospects and Challenges"; Rachael Kipkoech, "Integrating Indigenous Knowledge Systems in Higher Education in Kenya: A Possibility, Impossibility or A Mirage?," *Journal of Research and Innovation in Higher Education* 5, no. 2 (2024): 27–54.
[28] Carlton J Fong et al., "Indigenous Cultural Development and Academic Achievement of Tribal Community College Students: Mediating Roles of Sense of Belonging and Support for Student Success.," *Journal of Diversity in Higher Education* 16, no. 6 (2023): 709.
[29] Caleb Mandikonza, "Integrating Indigenous Knowledge Practices as Context and Concepts for the Learning of Curriculum Science: A Methodological Exploration," *Southern African Journal of Environmental Education* 35, no. 1 (2019): 1–16.

existing scholarship rather than to statistically aggregate findings.[30] The topic of IKS integration in higher education involves conceptual, policy, institutional and epistemological dimensions that require analytical depth. A narrative approach allows engagement with diverse forms of literature, including empirical research, conceptual analysis and policy frameworks.[31] Specifically, a narrative review of the literature was undertaken to critically examine scholarly and policy debates on IKS in South African higher education.

Table 1: Eligibility Criteria

Element	Inclusion Criteria	Exclusion Criteria
Context	Studies focusing on IKS in South African higher education	Studies conducted outside South Africa
Education Level	Studies conducted within universities and higher education institutions	Studies focusing only on primary or secondary education
Study Focus	Studies addressing Indigenous Knowledge integration, curriculum transformation, decolonisation, policy or epistemological debates	Studies unrelated to Indigenous Knowledge or not linked to higher education
Type of Sources	Peer-reviewed journal articles, academic book chapters and official policy documents	Opinion pieces, blogs, newspapers and non-scholarly publications
Language	Publications available in English	Publications not available in English without translation
Time frame	Studies published between 2014 and 2026	Studies published before 2014

Search Strategy

A structured literature search was conducted to identify studies on the integration of IKS in higher education, with a specific focus on South Africa. Electronic databases searched included Google Scholar, Scopus, Sabinet and ERIC. These databases were selected to ensure coverage of interdisciplinary scholarship in education, social sciences and transformation studies. The search covered publications produced between 2014 and 2026.

Combining keywords and related concepts developed the search terms. Boolean operators (AND, OR) were used to refine the search. Search terms include:

- ("Indigenous Knowledge Systems" OR "African Indigenous Knowledge") AND ("Higher Education" OR "Universities") OR ("Curriculum decolonisation" OR "Decolonisation of higher education") OR ("Knowledge integration" OR "Epistemic justice") AND ("South Africa").

Additional manual searches of reference lists and relevant policy documents were conducted to identify further studies.

Data Sources

Secondary data were drawn from peer-reviewed journal articles, academic book chapters, policy documents and scholarly commentaries relevant to Indigenous Knowledge in higher education. Electronic databases consulted included Google Scholar, Scopus, SAbinet and ERIC, which were selected to ensure coverage of interdisciplinary scholarship across education, the social sciences, higher education transformation studies, and related fields. In addition, official government policy documents were reviewed to contextualise institutional and regulatory developments influencing Indigenous

[30] Rossella Ferrari, "Writing Narrative Style Literature Reviews," *Medical Writing* 24, no. 4 (2015): 230–35; Edna Terezinha Rother, "Systematic Literature Review X Narrative Review," *Acta Paulista de Enfermagem* 20 (2007): v–vi.

[31] Cheryl M Theile and Andrea L Beall, "Narrative Reviews of the Literature: An Overview," *American Dental Hygienists' Association* 98, no. 1 (2024): 78–82.

Knowledge integration in South African universities. Sources were identified through purposive and snowball searches of the literature, prioritising scholarly relevance and contextual fit.

Data Analysis

Data analysis followed a thematic synthesis approach. Selected sources were read repeatedly to identify recurring patterns, debates and conceptual arguments.[32] The key themes were coded inductively and then organised into broader analytical categories. These categories included policy recognition and institutional support, curriculum reform and decolonisation, research and community engagement, epistemological tensions, institutional capacity constraints and governance challenges. The analysis aimed to distinguish between prospects and challenges shaping the integration of Indigenous Knowledge within universities. Attention was paid to identifying areas of convergence and divergence across studies. The thematic structure was aligned with the study objective and later interpreted through the chosen theoretical framework.

Study Characteristics

Table 2 summarises the sources reviewed for this paper. The literature was drawn predominantly from South African scholarship, with several sources from the broader Southern African and Global South contexts included for comparative insight. The reviewed literature comprised conceptual analyses, empirical studies, policy reviews and book chapters, reflecting the interdisciplinary nature of Indigenous Knowledge scholarship in higher education. Collectively, the studies addressed issues related to curriculum reform, institutional transformation, epistemological debates and governance frameworks shaping the integration of IKS. The diversity of methodological approaches and thematic focus areas provided a comprehensive evidence base to analyse both enabling conditions and structural constraints that influence

[32] Muhammad Naeem et al., "A Step-by-Step Process of Thematic Analysis to Develop a Conceptual Model in Qualitative Research," *International Journal of Qualitative Methods* 22 (2023): 16094069231205788.

Table 2: The characteristics of the included studies

Author (Year)	Setting	Study Focus	Design	Outcomes Findings
Abah *et al.*[33]	Africa	Integration of Indigenous Knowledge in Science Teaching	Conceptual Review	Highlighted the potential of Indigenous Knowledge to enhance science relevance but noted curriculum and teacher preparedness barriers.
Heleta[34]	South Africa	Decolonisation of higher education	Conceptual analysis	Identified epistemic violence, Eurocentrism and structural inequalities as barriers to transformation.
Kaya[35]	South Africa	Integration of IKS in higher education	Literature review	Reported policy progress, but persistent challenges in institutional and curriculum integration challenges.
Kgope[36]	South Africa	Indigenous pedagogy (Credo Mutwa)	Case analysis	Demonstrated pedagogical tensions when integrating indigenous epistemologies into formal curricula.
Madlela & Ngakane[37]	South Africa	Curriculum decolonisation	Book chapter Conceptual	Found uneven curriculum reform and institutional resistance to decolonial transformation.
Masenya et al.[38]	South Africa	Curriculum design and delivery	Review	Identified structural, pedagogical and policy misalignment affecting curriculum responsiveness.
Masuku et al.[39]	South Africa	Education system transformation	Review	Highlighted systemic inequalities and institutional reform gaps.
Mekoa[40]	South Africa	IKS in higher education institutions	Conceptual analysis	Identified ideological, political and institutional barriers limiting integration.

[33] Abah, Mashebe, and Denuga, "Prospect of Integrating African Indigenous Knowledge Systems into the Teaching of Sciences in Africa."
[34] Heleta, " Decolonisation of Higher Education: Dilemmas and Contradictions."
[35] Kaya, "Integration of African Indigenous Knowledge Systems into Higher Education in South Africa: Prospects and Challenges."
[36] Tebogo Victoria Kgope, "The Indigenous Knowledge System of Credo Mutwa: A Pedagogical Challenge in Higher Education in South Africa," *Curriculum Perspectives* 43, no. Suppl 1 (2023): 95–103.
[37] Benkosi Madlela and Bonny Ngakane, "Prospects and Challenges of Decolonisation of the Curriculum in South African Higher Education Institutions," *The South African Higher Education Transformation Journey: Thirty Years after Democracy*, 2025, 151–69.
[38] Malesela Jim Masenya, Sethuthu Lucky Vuma, and Medwin Dinkwanyane Sepadi, "Higher Education Context and Policy: Large Class Pedagogical Complications.," *Pakistan Journal of Life & Social Sciences* 23, no. 2 (2025): 386.
[39] Thokozani Masuku, Mandisi Matyana, and Sandile Mkhwanazi, "A Critical Review of Education System in South Africa: Prospects and Challenges," *International Journal of Research in Business and Social Science (2147-4478)* 14, no. 7 (2025): 537–44.
[40] Itumeleng Mekoa, "Challenges and Opportunities for IKS in Higher Education Institutions in South Africa: Politics, Ideological, Institutional Cultures and Structural Dimensions," *Indilinga African Journal of Indigenous Knowledge Systems* 14, no. 1 (2015): 12–24.

Muyambo, Bhuda & Sithole[41]	Zimbabwe	IKS integration in higher education	Empirical review	Found policy recognition, but weak institutional implementation and epistemological tensions.
Ndlovu & Woldegiorgis[42]	Global South	Knowledge production & epistemic freedom	Conceptual analysis	Critiqued neoliberal influences constraining epistemic plurality in universities.
Seleke *et al.* (2025).	South Africa	IKS in technology education	Empirical study	Reported curriculum inclusion efforts alongside teacher capacity challenges.
Viriri *et al.*[43]	Zimbabwe	Decolonisation (Education 5.0)	Policy analysis	Identified innovation prospects, but structural and institutional barriers.
Ncube *et al.*[44]	Southern Africa	Government support for IK	Policy review	Found growing policy support but weak implementation mechanisms.
Department of Science & Technology (2004)	South Africa	IKS national policy	Government policy document	Established legal and institutional recognition of Indigenous Knowledge.
Brock-Utne [45]	Africa	Decolonisation of Knowledge	Book chapter Conceptual	Argued for epistemic justice and Africanisation of university knowledge systems.
McAteer & Wood[46]	South Africa	Community-based knowledge projects	Case study	Demonstrated civic engagement and co-production of Indigenous Knowledge.

Note: While the review focused on South African higher education, selected regional and Global South studies (Muyambo *et al*.; Viriri et al.; Ncube et al.; Ndlovu & Woldegiorgis; Brock-Utne; Abah et al.) were included for comparative insight. The Indigenous Knowledge Systems Policy was retained due to its continuing national relevance.

[41] T. Muyambo, M T Bhuda, and P M Sithole, "Researching Indigenous Knowledge (Ik) in Higher Education in Zimbabwe: Prospects and Challenges," *South African Journal of Higher Education* 39, no. 5 (2025): 229–53.
[42] Sibonokuhle Ndlovu and Emnet T Woldegiorgis, "Neoliberal Labyrinth: Epistemic Freedom and Knowledge Production in Higher Education in the Global South," *Transformation in Higher Education* 9 (2024): 412.
[43] Eunitah Viriri, Nobuhle Ndimande-Hlongwa, and Albert Mufanechiya, "Decolonising Higher Education in Zimbabwe: Prospects and Challenges of Education 5.0," *Journal of African Education* 5, no. 1 (2024): 37.
[44] Inesisa Ncube et al., "Government Support for Indigenous Knowledge for Sustainability in Southern Africa," *South African Journal of Information Management* 27, no. 1 (2025): 1–11.
[45] Birgit Brock-Utne, "Decolonisation of Knowledge in the African University," in *Knowledge and Change in African Universities: Volume 1–Current Debates* (Springer, 2017), 161–81.
[46] McAteer and Wood, "Decolonising Knowledge: Enacting the Civic Role of the University in a Community-Based Project."

Prospects of Indigenous Knowledge Integration in Higher Education

The reviewed studies collectively highlight several enabling conditions for integrating IKS into higher education. These prospects emerge primarily from policy recognition, curriculum reform initiatives, community-engaged scholarship and expanding debates on epistemic transformation.

Policy Recognition and Institutional Support

One of the most significant prospects lies in the formal recognition of Indigenous Knowledge at the national policy level. The Indigenous Knowledge Systems Policy established a legislative and institutional framework for protecting, promoting and developing Indigenous Knowledge in South Africa.[47] This policy provides universities with a regulatory basis for incorporating IKS into research agendas, innovation strategies, and curriculum design.

Subsequent scholarship confirms that institutional discourse around IKS has gradually shifted from marginal acknowledgement to formal engagement. Kaya notes that universities have increasingly created platforms for IKS scholarship, including research centres and academic programmes.[48] Mekoa similarly observes the growing institutional awareness of IKS as a legitimate field of inquiry, although its implementation remains uneven.[49] At a broader regional level, Ncube et al. identify expanding governmental support mechanisms for Indigenous Knowledge governance in Southern Africa, suggesting a strengthening of the policy environment conducive to higher education engagement.[50]

Curriculum Reform and Decolonisation Initiatives

Curriculum reform represents another important prospect. Decolonisation debates have pressured universities to reassess the dominance of Eurocentric knowledge systems. Heleta argues that the dismantling of epistemic violence requires deliberate restructuring of curricula to include diverse knowledge traditions.[51] Similarly, Madlela and Ngakane highlight the renewed emphasis on curriculum transformation within South African higher education institutions, noting that decolonisation discourse has opened institutional space for indigenous epistemologies.[52]

Empirical work further demonstrates the practicality of curriculum integration efforts. Seleke et al. report on attempts to incorporate Indigenous Knowledge into technology education, illustrating emerging models of curriculum responsiveness.[53] Abah et al. argue that integrating Indigenous Knowledge into science education can enhance contextual relevance and student engagement.[54] Although their study adopts a continental lens, its findings resonate with South African curriculum reform objectives.

Masenya et al. also point to evolving curriculum design strategies that aim to align higher education with contemporary social realities.[55] These developments signal a growing recognition that Indigenous Knowledge can enrich disciplinary content and support locally grounded learning.

Community Engagement and Knowledge Co-Production

Another prospect lies in the expanding role of community-engaged scholarship. Universities are increasingly encouraged to move beyond extractive research models and toward collaborative knowledge production. McAteer and Wood demonstrate how community-based projects can enact the

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[47] Department of Science and Technology, "Indigenous Knowledge Systems (IKS) Policy."
[48] Kaya, "Integration of African Indigenous Knowledge Systems into Higher Education in South Africa: Prospects and Challenges."
[49] Mekoa, "Challenges and Opportunities for IKS in Higher Education Institutions in South Africa: Politics, Ideological, Institutional Cultures and Structural Dimensions."
[50] Ncube et al., "Government Support for Indigenous Knowledge for Sustainability in Southern Africa."
[51] Heleta, " Decolonisation of Higher Education: Dilemmas and Contradictions."
[52] Madlela and Ngakane, "Prospects and Challenges of Decolonisation of the Curriculum in South African Higher Education Institutions."
[53] Benjamin Seleke et al., "Revitalizing Teacher Development Programs for Indigenous African Languages at a South African University: Insights from Qualitative Research," *TWIST* 20, no. 1 (2025): 258–73.
[54] Abah, Mashebe, and Denuga, "Prospect of Integrating African Indigenous Knowledge Systems into the Teaching of Sciences in Africa."
[55] Masenya, Vuma, and Sepadi, "Higher Education Context and Policy: Large Class Pedagogical Complications."

university's civic role by valuing local knowledge and fostering reciprocal learning.[56] Such initiatives strengthen the legitimacy of Indigenous Knowledge within academic spaces and enhance university-community relationships.

Kgope illustrates how indigenous pedagogical traditions, such as those associated with Credo Mutwa, present opportunities to rethink classroom practice and knowledge transmission.[57] These engagements challenge conventional teaching models and open space for culturally grounded pedagogies. Collectively, the literature suggests that meaningful integration is more likely where Indigenous Knowledge holders are recognised as partners rather than subjects of study.

Research, Development and Epistemic Reframing

The reviewed studies also highlight broader epistemic and research-related opportunities. Ndlovu and Woldegiorgis argue that higher education institutions in the Global South are increasingly engaging in debates on epistemic freedom and knowledge pluralism.[58] This intellectual shift creates conceptual space for recognising Indigenous Knowledge as a legitimate contributor to scholarship.

Muyambo et al., examining the Zimbabwean context, similarly observe that policy recognition of Indigenous Knowledge has stimulated academic inquiry and institutional discussion.[59] Although implementation challenges remain, their findings indicate growing scholarly attention to indigenous epistemologies within higher education research. Brock-Utne further contends that decolonising knowledge systems in African universities requires repositioning indigenous epistemologies at the centre of academic discourse.[60] This broader continental perspective reinforces the argument that Indigenous Knowledge integration is not only a curriculum matter but part of a larger epistemic transformation.

Synthesis of Prospects

Across the reviewed studies, several consistent prospects emerge: stronger policy frameworks, increased discourse on curriculum reform, expanded community engagement initiatives, and growing recognition of epistemic plurality. These developments indicate that Indigenous Knowledge integration is no longer peripheral within higher education debates. Instead, it occupies a visible and increasingly legitimised position within institutional transformation agendas. However, a critical reading of the evidence reveals important limitations that temper optimism. Policy recognition has not consistently translated into structural change, as most universities continue to operate IKS programmes as peripheral offerings rather than embedding them within core disciplinary frameworks.

Furthermore, the reviewed studies predominantly draw on conceptual and policy analyses rather than empirical outcome data, making it difficult to assess the depth of transformation achieved. The prospects identified in this body of literature are thus better understood as enabling conditions than as evidence of accomplished integration. Realising their transformative potential will require sustained institutional investment, accountability mechanisms, and the active participation of indigenous communities in curriculum design and governance. Without these elements, the risk of rhetorical reform where discourse advances faster than institutional practice remains significant.

Challenges of Indigenous Knowledge Integration in Higher Education

Despite growing recognition of IKS in higher education, the reviewed studies reveal persistent structural, epistemological and institutional challenges that continue to constrain meaningful integration. These challenges operate across curriculum design, institutional culture, governance frameworks and knowledge validation systems.

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[56] McAteer and Wood, "Decolonising Knowledge: Enacting the Civic Role of the University in a Community-Based Project."
[57] Kgope, "The Indigenous Knowledge System of Credo Mutwa: A Pedagogical Challenge in Higher Education in South Africa."
[58] Ndlovu and Woldegiorgis, "Neoliberal Labyrinth: Epistemic Freedom and Knowledge Production in Higher Education in the Global South."
[59] Muyambo, Bhuda, and Sithole, "Researching Indigenous Knowledge (Ik) in Higher Education in Zimbabwe: Prospects and Challenges."
[60] Brock-Utne, "Decolonisation of Knowledge in the African University."

Tokenism and Symbolic Inclusion

One of the most frequently cited challenges is the tendency toward symbolic rather than substantive integration. Indigenous Knowledge is often included at the margins of academic programmes without reshaping core disciplinary frameworks. Kaya observes that while universities have introduced IKS modules and research initiatives, these remain peripheral to mainstream curricula.[61] This limited inclusion weakens transformative potential and risks presenting Indigenous Knowledge as supplementary rather than foundational. Madlela and Ngakane similarly argue that curriculum decolonisation efforts are uneven and frequently rhetorical.[62] The structural redesign of the curriculum does not always match institutional commitments. Masenya further notes that curriculum delivery models often remain rooted in Western pedagogical traditions, limiting the depth of Indigenous Knowledge incorporation.[63]

Power Dynamics and Epistemological Hierarchy

Epistemological inequality remains a central barrier. Heleta frames the marginalisation of Indigenous Knowledge as a continuation of epistemic violence rooted in colonial education systems.[64] Western epistemologies continue to dominate university knowledge validation frameworks, shaping legitimate scholarship. Ndlovu and Woldegiorgis extend this argument by highlighting how neoliberal knowledge production systems reinforce epistemic hierarchies within Global South universities.[65] Institutional pressures linked to global rankings, publishing norms and funding structures often privilege Western research paradigms over indigenous epistemologies.

Brock-Utne similarly contends that African universities continue to reproduce colonial knowledge systems through language, curriculum and research frameworks.[66] These epistemological hierarchies make it difficult to position Indigenous Knowledge as equal within academic discourse.

Intellectual Property and Ethical Concerns

Governance and ethical challenges also shape the integration of Indigenous Knowledge. The documentation, teaching, and research uses of Indigenous Knowledge raise questions about ownership, consent, and benefit-sharing. Ncube et al. highlight the importance of government support structures in regulating access to and the sustainability of Indigenous Knowledge across Southern Africa.[67] Policy frameworks, such as the Indigenous Knowledge Systems Policy, aim to address these concerns through protective legislation and governance structures.[68] However, implementation gaps remain. Universities often lack clear institutional protocols to guide ethical engagement with knowledge holders and communities, thereby risking knowledge extraction without equitable recognition or compensation.

Limited Academic Capacity

Human resource constraints represent another significant barrier. Mekoa identifies shortages of academically trained personnel capable of teaching Indigenous Knowledge within university systems.[69] Indigenous expertise resides largely within communities rather than in formal academia, creating institutional capacity gaps. Seleke et al. similarly report challenges in teacher preparedness in technology education contexts where Indigenous Knowledge integration is attempted.[70] Educators may

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[61] Kaya, "Integration of African Indigenous Knowledge Systems into Higher Education in South Africa: Prospects and Challenges."
[62] Madlela and Ngakane, "Prospects and Challenges of Decolonisation of the Curriculum in South African Higher Education Institutions."
[63] Masenya, Vuma, and Sepadi, "Higher Education Context and Policy: Large Class Pedagogical Complications."
[64] Heleta, " Decolonisation of Higher Education: Dilemmas and Contradictions."
[65] Ndlovu and Woldegiorgis, "Neoliberal Labyrinth: Epistemic Freedom and Knowledge Production in Higher Education in the Global South."
[66] Brock-Utne, "Decolonisation of Knowledge in the African University."
[67] Ncube et al., "Government Support for Indigenous Knowledge for Sustainability in Southern Africa."
[68] Department of Science and Technology, "Indigenous Knowledge Systems (IKS) Policy."
[69] Mekoa, "Challenges and Opportunities for IKS in Higher Education Institutions in South Africa: Politics, Ideological, Institutional Cultures and Structural Dimensions."
[70] Seleke et al., "Revitalizing Teacher Development Programs for Indigenous African Languages at a South African University: Insights from Qualitative Research."

lack the training, pedagogical models or curriculum resources needed to effectively embed indigenous epistemologies in teaching practice. Abah et al. extend this concern in science education, noting that educators often struggle to balance scientific and IKS practices due to limited institutional support and training frameworks.[71]

Institutional Resistance and Structural Constraints

Institutional culture itself can act as a barrier to integration. Resistance may emerge from disciplinary gatekeeping, perceptions of academic rigour or a limited understanding of indigenous epistemologies. Kaya notes that institutional structures often prioritise conventional research outputs and methodologies, making institutionalisation of alternative knowledge systems challenging.[72] Muyambo et al. report similar patterns in Zimbabwean universities, where policy recognition has not translated into sustained institutional reform.[73] Structural inertia, resource limitations and governance ambiguities continue to slow implementation. Viriri et al. further highlight that higher education reform frameworks, such as Education 5.0, face operational challenges despite their progressive ideological foundations. These findings reinforce the broader regional pattern of policy–practice misalignment.[74]

Synthesis of Challenges

In the reviewed literature, the integration of Indigenous Knowledge is constrained by intersecting structural and epistemological barriers. Symbolic curriculum inclusion, entrenched knowledge hierarchies, governance complexities, limited academic capacity and institutional resistance collectively hinder transformative implementation. While policy frameworks and intellectual discourse signal progress, institutional systems often remain anchored in historically dominant epistemologies. A critical assessment of the evidence suggests that these challenges are not simply logistical or resource-related but are fundamentally political: they reflect contested power relations over whose knowledge counts, who controls curriculum decisions, and how academic legitimacy is defined and maintained. The persistence of these barriers across multiple studies and national contexts, including South Africa, Zimbabwe and other parts of the Global South, suggests that they are systemic rather than incidental. Importantly, the reviewed studies tend to identify challenges but do not consistently offer empirically tested solutions, thereby creating a gap in the literature. Understanding these constraints is critical to advance meaningful integration. Addressing them requires coordinated institutional reform, capacity development, ethical governance structures and sustained commitment to epistemic plurality within higher education.

DISCUSSION

This study examined the prospects and challenges shaping the integration of IKS in South African higher education through a narrative synthesis of secondary data. The findings reveal a complex landscape characterised by policy progress, growing intellectual recognition and emerging curriculum initiatives alongside persistent structural, epistemological and institutional barriers.

From a policy perspective, the review confirms that South Africa has established a supportive governance framework for the recognition of Indigenous Knowledge. Instruments such as the Indigenous Knowledge Systems Policy provide legislative and institutional grounding for universities to engage with indigenous epistemologies in research and teaching.[75] This policy recognition has contributed to the gradual institutionalisation of IKS through academic programmes, research platforms

[71] Abah, Mashebe, and Denuga, "Prospect of Integrating African Indigenous Knowledge Systems into the Teaching of Sciences in Africa."
[72] Kaya, "Integration of African Indigenous Knowledge Systems into Higher Education in South Africa: Prospects and Challenges."
[73] Muyambo, Bhuda, and Sithole, "Researching Indigenous Knowledge (Ik) in Higher Education in Zimbabwe: Prospects and Challenges."
[74] Viriri, Ndimande-Hlongwa, and Mufanechiya, "Decolonising Higher Education in Zimbabwe: Prospects and Challenges of Education 5.0."
[75] Department of Science and Technology, "Indigenous Knowledge Systems (IKS) Policy."

and community partnerships.[76] Regional policy analyses similarly suggest strengthening governmental support for Indigenous Knowledge governance across Southern Africa.[77]

Curriculum reform emerged as another visible site of progress. Decolonisation debates have compelled universities to interrogate entrenched Eurocentric content and pedagogical traditions. Heleta argues that dismantling epistemic violence requires restructuring curricula to include diverse knowledge systems.[78] Madlela and Ngakane also highlight growing institutional commitment to curriculum transformation.[79] Empirical evidence demonstrates the practical integration of initiatives, particularly in professional and technical disciplines.[80] Studies focusing on science education also show that Indigenous Knowledge can enhance contextual learning and relevance.[81]

Community-engaged scholarship represents an additional area of opportunity. Universities are increasingly encouraged to collaborate with indigenous communities in knowledge production. McAteer and Wood illustrate how community-based projects enact universities' civic role while validating local knowledge systems.[82] Pedagogical engagements grounded in indigenous traditions further demonstrate possibilities for culturally responsive teaching.[83]

Despite these prospects, structural challenges remain deeply embedded. Symbolic inclusion continues to characterise many institutional efforts. Indigenous Knowledge is frequently situated in elective modules rather than embedded in disciplinary cores.[84] Curriculum reform, while rhetorically embraced, often lacks structural depth.[85]

Epistemological tensions also persist. Heleta frames the marginalisation of Indigenous Knowledge as a continuation of epistemic violence rooted in colonial education systems.[86] Ndlovu and Woldegiorgis extend this critique by demonstrating how neoliberal knowledge regimes reinforce epistemic hierarchies in Global South universities.[87] Brock-Utne similarly argues that African universities continue to reproduce colonial knowledge structures through language, curriculum, and research systems.[88]

Institutional capacity constraints further limit integration. Mekoa identifies shortages of trained academics capable of teaching Indigenous Knowledge within universities.[89] Educator preparedness challenges are also evident in curriculum implementation contexts.[90] Comparable findings in science education highlight tensions in balancing scientific and indigenous epistemologies.[91]

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[76] Kaya, "Integration of African Indigenous Knowledge Systems into Higher Education in South Africa: Prospects and Challenges"; Mekoa, "Challenges and Opportunities for IKS in Higher Education Institutions in South Africa: Politics, Ideological, Institutional Cultures and Structural Dimensions."

[77] Ncube et al., "Government Support for Indigenous Knowledge for Sustainability in Southern Africa."

[78] Savo Heleta, "Decolonisation of Higher Education: Dismantling Epistemic Violence and Eurocentrism in South Africa," *Transformation in Higher Education* 1, no. 1 (2016): 1–8.

[79] Madlela and Ngakane, "Prospects and Challenges of Decolonisation of the Curriculum in South African Higher Education Institutions."
Seleke et al., "Revitalizing Teacher Development Programs for Indigenous African Languages at a South African University: Insights from Qualitative Research."

[81] Abah, Mashebe, and Denuga, "Prospect of Integrating African Indigenous Knowledge Systems into the Teaching of Sciences in Africa."

[82] McAteer and Wood, "Decolonising Knowledge: Enacting the Civic Role of the University in a Community-Based Project."

[83] Kgope, "The Indigenous Knowledge System of Credo Mutwa: A Pedagogical Challenge in Higher Education in South Africa."

[84] Kaya, "Integration of African Indigenous Knowledge Systems into Higher Education in South Africa: Prospects and Challenges"; Malesela Jim Masenya, "Empowerment and Access to Opportunities in South Africa: Can Gender Equality Be Achieved?," *International Journal of Research in Business and Social Science (2147- 4478)* 12, no. 7 (October 28, 2023): 405–12, https://doi.org/10.20525/ijrbs.v12i7.2797.

[85] Madlela and Ngakane, "Prospects and Challenges of Decolonisation of the Curriculum in South African Higher Education Institutions."

[86] Heleta, " Decolonisation of Higher Education: Dilemmas and Contradictions."

[87] Ndlovu and Woldegiorgis, "Neoliberal Labyrinth: Epistemic Freedom and Knowledge Production in Higher Education in the Global South."

[88] Brock-Utne, "Decolonisation of Knowledge in the African University."

[89] Mekoa, "Challenges and Opportunities for IKS in Higher Education Institutions in South Africa: Politics, Ideological, Institutional Cultures and Structural Dimensions."

[90] Seleke et al., "Revitalizing Teacher Development Programs for Indigenous African Languages at a South African University: Insights from Qualitative Research."

[91] Abah, Mashebe, and Denuga, "Prospect of Integrating African Indigenous Knowledge Systems into the Teaching of Sciences in Africa."

Governance and ethical concerns add another layer of complexity. Policy frameworks exist to regulate protection and benefit sharing; however, implementation gaps remain.[92] Regional governance analyses emphasise the need for stronger institutional mechanisms to safeguard indigenous intellectual property and community rights.[93]

Comparative regional scholarship reinforces these structural patterns. Muyambo et al. report policy recognition but weak institutional implementation in Zimbabwean universities.[94] Viriri et al. similarly identify operational constraints within decolonisation-driven higher education reforms.[95] These convergences suggest that challenges in Indigenous Knowledge integration extend beyond national boundaries and reflect broader postcolonial institutional legacies.

Collectively, the findings position Indigenous Knowledge integration within a transitional institutional space. Policy discourse and transformation rhetoric signal commitment to epistemic reform, yet operational realities reveal uneven implementation. Addressing this policy–practice gap requires a systemic transformation that includes curriculum redesign, institutional culture change, ethical governance frameworks, and sustained partnerships with indigenous communities.

RECOMMENDATIONS

This review's findings carry significant implications for policy, institutional practice, research development and community engagement within South African higher education. Addressing the identified challenges while consolidating emerging prospects requires coordinated, sustained intervention across these domains.

Policy Implications

At the policy level, the review affirms that South Africa has established a foundational governance framework for the recognition of Indigenous Knowledge. Instruments such as the Indigenous Knowledge Systems Policy provide legislative direction for the protection and promotion of indigenous epistemologies.[96] However, the findings indicate a persistent gap between policy intent and institutional implementation. Therefore, strengthening monitoring and accountability mechanisms is critical to ensure that policy commitments translate into measurable institutional change. There is also a need for more explicit regulatory guidance on intellectual property protection, benefit sharing and ethical research engagement involving Indigenous Knowledge holders. Regional governance analyses emphasise that without enforceable frameworks, universities risk perpetuating extractive knowledge practices. Policy refinement should therefore prioritise institutional compliance, ethical safeguards and funding incentives that support Indigenous Knowledge integration initiatives.

Institutional Implications

Higher education institutions play a central role in operationalising the integration of Indigenous Knowledge. The review highlights the need for structural reform rather than symbolic reform. Universities should move beyond elective modules toward embedding indigenous epistemologies within mainstream disciplinary curricula. Curriculum transformation must involve programme redesign, inclusive pedagogies and interdisciplinary collaboration. Institutional capacity development is equally critical. Shortages of academically trained personnel capable of teaching Indigenous Knowledge remain a major barrier. Universities should invest in staff development programmes, joint teaching models involving community knowledge holders and recruitment strategies that recognise indigenous expertise. Institutional cultures must also evolve to value epistemic plurality and challenge entrenched hierarchies within knowledge production systems.

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[92] Department of Science and Technology, "Indigenous Knowledge Systems (IKS) Policy."
[93] Ncube et al., "Government Support for Indigenous Knowledge for Sustainability in Southern Africa."
[94] Muyambo, Bhuda, and Sithole, "Researching Indigenous Knowledge (Ik) in Higher Education in Zimbabwe: Prospects and Challenges."
[95] Viriri, Ndimande-Hlongwa, and Mufanechiya, "Decolonising Higher Education in Zimbabwe: Prospects and Challenges of Education 5.0."
[96] Department of Science and Technology, "Indigenous Knowledge Systems (IKS) Policy."

Research Implications

The review demonstrates growing scholarly interest in Indigenous Knowledge, yet research gaps remain. Future studies should prioritise empirical investigations examining the impact of Indigenous Knowledge integration on student learning, institutional transformation and community development outcomes. Comparative and interdisciplinary research is particularly needed to explore integration models across faculties and institutional types. There is also a need for research frameworks that respect indigenous epistemologies without forcing them into conventional Western validation models. Scholars argue for transdisciplinary methodologies and participatory research approaches that centre indigenous voices. Strengthening ethical governance structures in Indigenous Knowledge research will be essential to building trust and legitimacy.

Community Engagement Implications

Community partnerships emerged as a key enabling condition for meaningful integration. Universities must reposition indigenous communities as knowledge partners rather than research subjects. Collaborative knowledge production, co-teaching models and community-based research initiatives can improve epistemic inclusivity and social relevance. Pedagogical engagement with indigenous knowledge holders also presents opportunities to transform classroom practice and knowledge transmission. Sustained engagement requires institutional investment, ethical partnership frameworks and recognition of community intellectual contributions. These implications point to the need for systemic transformation rather than incremental reform. Policy recognition provides an enabling foundation, but institutional commitment, research innovation and community collaboration will ultimately determine the depth and sustainability of Indigenous Knowledge integration in higher education.

CONCLUSION

This review examined the integration of IKS in South African higher education by synthesising evidence from policy documents, conceptual scholarship and empirical studies. The findings indicate that Indigenous Knowledge has gained increasing recognition within national policy frameworks and institutional discourse. Curriculum reform initiatives, decolonisation debates and community-engaged scholarship collectively demonstrate a growing commitment to epistemic inclusivity. Universities are gradually establishing platforms for indigenous research, interdisciplinary teaching and collaborative knowledge production. These developments position Indigenous Knowledge as a meaningful contributor to socially relevant scholarship and institutional transformation.

However, the review also highlights persistent structural and epistemological constraints that limit substantive integration. Indigenous Knowledge often remains symbolically included rather than structurally embedded within mainstream curricula. Institutional resistance, limited academic capacity and governance gaps continue to shape implementation challenges, as do intellectual property concerns. Deep-rooted knowledge hierarchies further complicate validation and acceptance within educational systems. Addressing these barriers requires systemic reform encompassing curriculum redesign, staff development, ethical research governance and sustained partnerships with indigenous communities. Meaningful integration will depend on universities' ability to move beyond rhetorical commitment toward operationalising epistemic plurality within higher education.

BIBLIOGRAPHY

Abah, Joshua, Percy Mashebe, and Desalu Dedayo Denuga. “Prospect of Integrating African Indigenous Knowledge Systems into the Teaching of Sciences in Africa.” *American Journal of Educational Research* 3, no. 6 (2015): 668–73.

Adams, Megan S, Jennifer Carpenter, Jess A Housty, Douglass Neasloss, Paul C Paquet, Christina Service, Jennifer Walkus, and Chris T Darimont. “Toward Increased Engagement between Academic and Indigenous Community Partners in Ecological Research.” *Ecology and Society* 19, no. 3 (2014).

Ahule, Benjamin Gowon, and Josephine Oragbai. “Decolonizing The Social Sciences: Integrating

Indigeneous Knowledge For Sustainable Development." *Journal of Emerging Trends in Economics and Management Sciences* 16, no. 3 (2025): 124–37.

Andreotti, Vanessa, Cash Ahenakew, and Garrick Cooper. "Epistemological Pluralism: Ethical and Pedagogical Challenges in Higher Education." *AlterNative: An International Journal of Indigenous Peoples* 7, no. 1 (2011): 40–50.

Arnold, Josie. "Walking in Both Worlds: Rethinking Indigenous Knowledge in the Academy." *International Journal of Inclusive Education* 21, no. 5 (2017): 475–94.

Assefa, Yalalem, and Shireen Jamal Mohammed. "Indigenous-Based Adult Education Learning Material Development: Integration, Practical Challenges, and Contextual Considerations in Focus." *Education Research International* 2022, no. 1 (2022): 2294593.

Baderan, S. " Exploring the Lived Meaning of Oral Tradition Among Indigenous Youth through a Phenomenological Approach in a Changing Cultural Landscape." *Humanexus: Journal of Humanistic and Social Connection Studies* 1, no. 11 (2025): 440–49.

Briggs, John. "Indigenous Knowledge: A False Dawn for Development Theory and Practice?" *Progress in Development Studies* 13, no. 3 (2013): 231–43.

Brock-Utne, Birgit. "Decolonisation of Knowledge in the African University." In *Knowledge and Change in African Universities: Volume 1–Current Debates*, 161–81. Springer, 2017.

Cupples, Julie, and Ramón Grosfoguel. *Unsettling Eurocentrism in the Westernized University*. Routledge, 2018.

Department of Science and Technology. "Indigenous Knowledge Systems (IKS) Policy." *Government of South Africa*, 2004.

Ferrari, Rossella. "Writing Narrative Style Literature Reviews." *Medical Writing* 24, no. 4 (2015): 230–35.

Fitrianto, Ibnu, and Muhammad Farisi. "Integrating Local Wisdom into 21st Century Skills: A Contextual Framework for Culturally Relevant Pedagogy in Rural Classrooms." *International Journal of Post Axial: Futuristic Teaching and Learning*, 2025, 109–21.

Fong, Carlton J, Sam L Owens, John Segovia, Meagan A Hoff, and Adam J Alejandro. "Indigenous Cultural Development and Academic Achievement of Tribal Community College Students: Mediating Roles of Sense of Belonging and Support for Student Success." *Journal of Diversity in Higher Education* 16, no. 6 (2023): 709.

Harvey, Arlene, and Gabrielle Russell-Mundine. "Decolonising the Curriculum: Using Graduate Qualities to Embed Indigenous Knowledges at the Academic Cultural Interface." *Teaching in Higher Education* 24, no. 6 (2019): 789–808.

Heffernan, Troy. "The Invisible Barriers of Structured and Structuring Structures for Marginalized Students and Academics in Higher Education." *The Bloomsbury Handbook of Bourdieu and Educational Research*, 2024, 283–92.

Heleta, Savo. " Decolonisation of Higher Education: Dilemmas and Contradictions." *South African Journal of Higher Education* 30 (5) (2016): 1–12.

———. "Decolonisation of Higher Education: Dismantling Epistemic Violence and Eurocentrism in South Africa." *Transformation in Higher Education* 1, no. 1 (2016): 1–8.

Hoppers, O. C. "Indigenous Knowledge and the Integration of Knowledge Systems." *Indigenous Knowledge and the Integration of Knowledge Systems: Towards a Philosophy of Articulation*, 2002, 2–22.

Jilcha, Kassu, Biniyam Bekele, and Gezahegn Tesfaye. "Indigenous Knowledge Integrated System for Sustainable University Industry Linkage and Community Development." *Knowledge Management & E-Learning* 17, no. 1 (2025): 171–205.

Juma, Florence Akumu. "Recapturing the Oral Tradition of Storytelling in Spiritual Conversations with Older Adults: An Afro-Indigenous Approach." *Religions* 13, no. 6 (2022): 563.

Kaya, Hassan O. "Integration of African Indigenous Knowledge Systems into Higher Education in South Africa: Prospects and Challenges." *Alternation* 20, no. 1 (2013): 135–53.

Kaya, Hassan O, and Yonah N Seleti. "African Indigenous Knowledge Systems and Relevance of Higher Education in South Africa." *International Education Journal: Comparative Perspectives* 12, no. 1 (2013).

Kgope, Tebogo Victoria. "The Indigenous Knowledge System of Credo Mutwa: A Pedagogical Challenge in Higher Education in South Africa." *Curriculum Perspectives* 43, no. Suppl. 1 (2023): 95–103.

Kipkoech, Rachael. "Integrating Indigenous Knowledge Systems in Higher Education in Kenya: A Possibility, Impossibility or A Mirage?" *Journal of Research and Innovation in Higher Education* 5, no. 2 (2024): 27–54.

Luckett, Kathy, and Margaret A. L Blackie. "Beyond Epistemology: The Challenge of Reconceptualising Knowledge in Higher Education." *Teaching in Higher Education* 27, no. 8 (2022): 1018–26.

Madlela, Benkosi. "Prospects and Challenges of Integrating Indigenous Knowledge Systems into the Natural Science Curriculum in Schools." *EUREKA: Social and Humanities*, no. 3 (May 31, 2023): 3–19. https://doi.org/10.21303/2504-5571.2023.002867.

Madlela, Benkosi, and Bonny Ngakane. "Prospects and Challenges of Decolonisation of the Curriculum in South African Higher Education Institutions." *The South African Higher Education Transformation Journey: Thirty Years after Democracy*, 2025, 151–69.

Manathunga, Catherine. *Intercultural Postgraduate Supervision: Reimagining Time, Place and Knowledge*. Routledge, 2014.

Mandikonza, Caleb. "Integrating Indigenous Knowledge Practices as Context and Concepts for the Learning of Curriculum Science: A Methodological Exploration." *Southern African Journal of Environmental Education* 35, no. 1 (2019): 1–16.

Maringe, F. "Colonization and Epistemic Injustice in Higher Education." *Routledge*, 2023.

Masenya, Malesela Jim. "Empowerment and Access to Opportunities in South Africa: Can Gender Equality Be Achieved?" *International Journal of Research in Business and Social Science (2147-4478)* 12, no. 7 (October 28, 2023): 405–12. https://doi.org/10.20525/ijrbs.v12i7.2797.

Masenya, Malesela Jim, Sethuthu Lucky Vuma, and Medwin Dinkwanyane Sepadi. "Higher Education Context and Policy: Large Class Pedagogical Complications." *Pakistan Journal of Life & Social Sciences* 23, no. 2 (2025): 386.

Masuku, Thokozani, Mandisi Matyana, and Sandile Mkhwanazi. "A Critical Review of Education System in South Africa: Prospects and Challenges." *International Journal of Research in Business and Social Science (2147-4478)* 14, no. 7 (2025): 537–44.

McAteer, Mary, and Lesley Wood. "Decolonising Knowledge: Enacting the Civic Role of the University in a Community-Based Project." *South African Journal of Education* 38, no. 4 (2018): 1–10.

Mekoa, Itumeleng. "Challenges and Opportunities for IKS in Higher Education Institutions in South Africa: Politics, Ideological, Institutional Cultures and Structural Dimensions." *Indilinga African Journal of Indigenous Knowledge Systems* 14, no. 1 (2015): 12–24.

Mudaly, Ronicka. "Towards Decolonising a Module in the Pre-Service Science Teacher Education Curriculum: The Role of Indigenous Knowledge Systems in Creating Spaces for Transforming the Curriculum." *Journal of Education (University of KwaZulu-Natal)*, no. 74 (2018): 47–66.

Munyangane, Osia Livhuwani. "An Ubuntu Perspective on Community Engagement in Indigenous Knowledge Systems Research: Insights from South Africa." *F1000Research* 15 (2026): 1504.

Muyambo, T., M. T. Bhuda, and P. M. Sithole. "Researching Indigenous Knowledge (Ik) in Higher Education in Zimbabwe: Prospects and Challenges." *South African Journal of Higher Education* 39, no. 5 (2025): 229–53.

Naeem, Muhammad, Wilson Ozuem, Kerry Howell, and Silvia Ranfagni. "A Step-by-Step Process of Thematic Analysis to Develop a Conceptual Model in Qualitative Research." *International Journal of Qualitative Methods* 22 (2023): 16094069231205788.

Ncube, Inesisa, Josiline Chigwada, Patrick Ngulube, and Jan R Maluleka. "Government Support for Indigenous Knowledge for Sustainability in Southern Africa." *South African Journal of*

Information Management 27, no. 1 (2025): 1–11.
Ndlovu, Sibonokuhle, and Emnet T Woldegiorgis. "Neoliberal Labyrinth: Epistemic Freedom and Knowledge Production in Higher Education in the Global South." *Transformation in Higher Education* 9 (2024): 412.
Needham, Fraser, and Rauna Kuokkanen. "Reshaping the University: Responsibility, Indigenous Epistemes, and the Logic of the Gift." *Canadian Journal of Political Science* 42, no. 2 (2009): 549.
Ogunniyi, M. B. "The Challenge of Preparing and Equipping Science Teachers in Higher Education to Integrate Scientific and Indigenous Knowledge Systems for Learners: The Practice of Higher Education." *South African Journal of Higher Education* 18, no. 3 (2004): 289–304.
Omodan, Bunmi Isaiah. "Unveiling Epistemic Injustice in Education: A Critical Analysis of Alternative Approaches." *Social Sciences & Humanities Open* 8, no. 1 (2023): 100699.
Pidgeon, Michelle. "Pushing against the Margins: Indigenous Theorizing of 'Success' and Retention in Higher Education." *Journal of College Student Retention: Research, Theory & Practice* 10, no. 3 (2008): 339–60.
Robbins, Julian A., and Jonathan Dewar. "Traditional Indigenous Approaches to Healing and the Modern Welfare of Traditional Knowledge, Spirituality and Lands." *International Indigenous Policy Journal* 2, no. 4 (2011): 1–17.
Rother, Edna Terezinha. "Systematic Literature Review X Narrative Review." *Acta Paulista de Enfermagem* 20 (2007): v–vi.
Roue, Marie, and Douglas Nakashima. "Indigenous and Local Knowledge and Science: From Validation to Knowledge Coproduction." *The International Encyclopedia of Anthropology*, 2018, 1–11.
Seleke, Benjamin, Nixon J P Teis, Nomasomi Matiso, Xoliswa Magxala, and Faith Hlungulu. "Revitalizing Teacher Development Programs for Indigenous African Languages at a South African University: Insights from Qualitative Research." *TWIST* 20, no. 1 (2025): 258–73.
Sillitoe, Paul, and Mariella Marzano. "Future of Indigenous Knowledge Research in Development." *Futures* 41, no. 1 (2009): 13–23.
Silva, Cláudio Da, Fátima Pereira, and José Pedro Amorim. "The Integration of Indigenous Knowledge in School: A Systematic Review." *Compare: A Journal of Comparative and International Education* 54, no. 7 (2024): 1210–28.
Stein, Sharon. "The Persistent Challenges of Addressing Epistemic Dominance in Higher Education: Considering the Case of Curriculum Internationalization." *Comparative Education Review* 61, no. S1 (2017): S25–50.
Susen, Simon. "Epistemological Tensions in Bourdieu's Conception of Social Science." *Theory of Science* 33, no. 1 (2011): 43–82.
Theile, Cheryl M., and Andrea L. Beall. "Narrative Reviews of the Literature: An Overview." *American Dental Hygienists' Association* 98, no. 1 (2024): 78–82.
Viriri, Eunitah, Nobuhle Ndimande-Hlongwa, and Albert Mufanechiya. "Decolonising Higher Education in Zimbabwe: Prospects and Challenges of Education 5.0." *Journal of African Education* 5, no. 1 (2024): 37.

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