Critical Evaluation through the lens of Indigenous Data Sovereignty

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This paper advances a critical evaluation approach to student equity in higher education, framed through the lens of Indigenous Data Sovereignty (IDS). Rooted in emancipatory foundations, IDS provides a paradigmatic and practice-based model for transforming extractive data practices to community-led, ethically grounded evaluation. The IDS CARE Principles—Collective Benefit, Authority to Control, Responsibility, and Ethics—offers a concrete framework for participatory, culturally accountable, and justice-oriented evaluation. The paper offers an illustrative application of how these principles can be operationalised in evaluating university initiatives that support students from refugee backgrounds. While IDS offers valuable guidance, it is grounded in the specific rights, histories, and self-determination of Indigenous peoples. These principles must not be appropriated or used to replace Indigenous-led evaluation by non-Indigenous actors. Rather, this paper draws on IDS for evaluation in broader equity contexts to promote relational accountability and evaluator reflexivity. It centres evaluation on the lived experiences of those most affected and calls for a redistribution of power as a pathway to systemic change—advancing justice for the very communities that student equity policies and programs are intended to support.

Keywords: critical evaluation; Indigenous Data Sovereignty; CARE Principles; student equity; higher education; participatory evaluation; evaluation ethics; social justice; refugee-background students; justice-oriented evaluation

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Introduction

Higher education institutions are deeply embedded in the social, political, economic, and cultural life of the student communities they serve (Connell 2019). Over the past four decades, Australia's student equity policy frameworks—*A Fair Chance for All* (Department of Employment, Education and Training [DEET], 1990), the *Bradley Review* (Bradley et al., 2008), the *Behrendt Review* (Behrendt et al. 2012), and the *Australian Universities Accord* (Department of Education (Cth), 2024)—have promoted increased participation of under-represented students, including low socioeconomic status (SES), regional and remote, and Indigenous communities.

In response, significant public investment has been made through equity programs such as the Higher Education Participation and Partnerships Program (HEPPP) and related funding pools (Commonwealth of Australia, 2023). These initiatives aim to improve access and support for underrepresented students. However, while enrolment has increased, outcomes have not kept pace. Many student support programs remain unevaluated or poorly targeted, and rely on categorical definitions of disadvantage that stigmatise and fail to capture the complexities of student experience (Sellar et al. 2011).

A key issue is the lack of a critical evaluation culture. Universities rarely assess the effectiveness of their student equity programs, and when evaluations are conducted, findings are often withheld due to sector competition (Gale & Parker 2013). Moreover, there is no formal government requirement for universities to evaluate student support services, even when funded by public equity programs. Recent legislative changes require universities to have policies in place to support students (Commonwealth of Australia 2023), but still do not mandate evaluation of whether these supports are taken up by students or effective in improving participation, completion, or transition out.

This paper argues for a shift from access-focused approaches toward a more critical, justice-oriented evaluation of student equity policies and support services. Equity practice must move beyond enrolment targets to account for the diverse needs and aspirations of students. It must embed student agency, voice, and belonging, and recognise that universities are not neutral service providers, but moral and political institutions (Connell 2019; Patton 2011). At the heart of this argument is the understanding that evaluation is not simply a tool of institutional accountability, but a means of interrogating the underlying values, assumptions, and power dynamics embedded in equity policies (Mertens 2009; Schwandt 2015). A critical evaluation framework should serve not only the interests of institutions and funders, but the students whom these policies are meant to support. In doing so, it affirms student equity as a question of social justice, not just educational access or economic utility.

Defining Critical Evaluation

Ernest R. House was among the first prominent evaluation theorists to argue that evaluation should be grounded in principles of social justice (Patton 1997). He recognised that evaluation is never a neutral process—it is inherently political, shaping decisions about who benefits, who is excluded, and how resources are distributed. In higher education, where student equity programs are intended to support disadvantaged groups, both policy and evaluation processes influence whether those intended benefits are realised—or whether inequities are inadvertently reinforced.

A social justice-oriented evaluator makes judgments informed by values such as fairness, equality, and concern for the common good. As Patton (1997; 2011) argued, this orientation shifts the role of the evaluator from a neutral arbiter of merit to an agent of social transformation. Evaluation becomes not merely an instrument for assessing outcomes, but a political and ethical act that can be mobilised to support equity and dismantle structures of exclusion. Other scholarship on transformative and culturally responsive evaluation (e.g. Mertens 2009; Greene 2005; Schwandt 2015) reinforces this view, highlighting the moral responsibility of evaluators to ensure that evaluation processes are inclusive, participatory, and attentive to power imbalances. Critical evaluation confronts these power dynamics.

Despite the intent of public funding to promote student equity in higher education, structural barriers continue to limit the influence and participation of underrepresented groups. Programs are often designed by institutional actors without meaningful input from the communities they aim to support—such as students from low socio-economic, Indigenous, disability, first-in-family, or refugee backgrounds. This disconnect is exacerbated by the neoliberal, corporatised governance of universities, where decision-making is centralised, and professional development resources are predominantly Eurocentric. Support is often framed in paternalistic terms or grounded in deficit assumptions. As a result, equity programs frequently reflect the values and assumptions of dominant groups, while overlooking the lived experiences and knowledge of those who experience systemic exclusion. This exclusion not only limit access to support services but also cause harm through practices such as stigmatisation and labelling—for example, by categorising students as "at risk." Without robust, context-sensitive evaluation, these programs risk reinforcing the very disparities they are intended to address, perpetuating cycles of disadvantage in student outcomes and retention.

This paper argues that critical evaluation must be justice-oriented and grounded in ethical commitments to inclusion and transformation. Justice involves expanding people's substantive freedoms, and evaluation is a site where individuals and communities exercise their agency and participate as knowing subjects in shaping their own lives (Freire 1970; Sen 1999). Evaluators must not only assess program effectiveness but also interrogate whose voices are included, whose interests are served, and how inequality is being reproduced or disrupted. Students from disadvantaged backgrounds should not be seen merely as beneficiaries of support services but as agents capable of contributing to the transformation of their educational journeys. Justice-oriented critical evaluation thus demands tools and frameworks that reach beneath surface-level indicators—attendance rates, satisfaction scores, or participation counts—to explore the decision-making rules, accountability structures, and power asymmetries that determine who can speak, act, and be heard. This perspective positions evaluation as a site of ethical and political responsibility—a means to challenge entrenched structures and to advance student agency, voice, and belonging. As Schwandt (2015) notes, evaluative judgment is inescapably value-laden, and the task of the evaluator is to navigate that complexity with reflexivity, humility, and a commitment to justice.

This paper proposes that principles of data sovereignty, particular those of Indigenous Data Sovereignty (IDS) can inform a paradigmatic approach to critical evaluation. The next sections introduce data sovereignty and IDS, outlining its emancipatory foundations, core principles and frameworks, and exploring how it has been applied in practice, particularly in ways that align with the values and practices

of critical evaluators. The following section illustrates how IDS could be applied in evaluating refugee student support in higher education. The paper concludes by reflecting on the ethical and practical application of IDS principles to guide critical evaluation practice meaningfully.

Data Sovereignty

Data sovereignty refers to the right of individuals or communities to govern the collection, access, use, and sharing of their data in accordance with their own laws, ethics, and governance systems (Carroll et al. 2022; Ernstberger et al. 2022). Data sovereignty has emerged as a critical concept in response to the widespread centralisation of digital data and the asymmetrical power it creates between data subjects and holders. Traditionally, user data in Web 2.0 environments has been stored and managed by centralised platforms, leaving individuals and communities with minimal agency over how their data is accessed, used, and monetised (Ernstberger et al. 2022). The shift toward Web 3.0 aims to redress this imbalance through decentralised systems that re-establish user control. Central to this movement are three interrelated components: decentralised identity, decentralised access control, and policy-compliant decentralised computation. Each of these components contributes to a broader architecture aimed at reasserting user control over digital data in a secure and verifiable manner. Together, these allow individuals to not only control access to their data but also to ensure that any processing adheres to their specified terms (Ernstberger et al. 2022).

The first component, decentralised identity, refers to systems in which users independently manage their digital credentials without dependence on centralized authorities. These systems are typically underpinned by cryptographic mechanisms such as public/private key pairs and are supported by verifiable registries, such as distributed ledgers. In this model, users hold and present verifiable credentials—like proofs of age or residency—through secure digital wallets, enabling pseudonymous interactions while maintaining privacy and authenticity. Such infrastructures align with emerging standards like Decentralised Identifiers and Verifiable Credentials, allowing users to maintain granular control over how their identity attributes are disclosed and to whom (Ernstberger et al. 2022).

The second component, decentralised access control, extends user control from identity to the governance of data accessibility. It enables individuals to define and enforce dynamic, fine-grained permissions governing who may access their data, under what circumstances, and for which purposes. This approach utilises advanced cryptographic schemes such as attribute-based encryption and secret-sharing protocols. Enforcement can be delegated to decentralised systems, including smart contracts and trusted execution environments, ensuring that access rights reflect the user's explicit consent and comply with applicable legal or ethical frameworks. Decentralised access control thus not only enhances privacy and security but also enables transparency and auditability in data-sharing processes (Ernstberger et al. 2022).

The third and final component, policy-compliant decentralised computation, ensures that the processing of data—whether for analytics, machine learning, or other computational purposes—is conducted in strict adherence to user-defined policies. Crucially, this occurs without necessitating disclosure of the raw data itself. Technologies such as secure multi-party computation, homomorphic encryption, and trusted hardware are employed to enforce policy compliance throughout the data processing lifecycle. These techniques allow for verifiable computation while protecting data confidentiality and integrity, and they are increasingly essential for building trust in decentralized

ecosystems. By embedding policy constraints directly into computational workflows, this component ensures that data use remains accountable, lawful, and ethically sound (Ernstberger et al. 2022).

Collectively, these three interrelated components articulate a coherent and technically grounded vision for data sovereignty. They move beyond traditional paradigms of data control by redistributing authority from centralised platforms to individuals and communities, thereby enabling self-determined governance of identity, access, and usage in the digital domain.

Calzada (2021) further critiques the prevailing metaphor of "data as the new oil," which conceptualises data as a passive, extractable resource, and instead advocates for a reconceptualisation of data as inherently relational and embedded in social practices. In his articulation of "People-Centred Smart Cities," Calzada (2021) proposes data co-operatives as an institutional model that promotes community governance and peer-to-peer data sharing. Data co-operatives aim to reclaim digital rights and counteract the effects of surveillance capitalism by fostering trust and social capital within communities. Through these cooperative models, data becomes a collective asset governed by the very people who produce it, rather than being commodified by external entities.

The policy and governance dimensions of data sovereignty have gained increasing prominence, particularly as jurisdictions around the world respond to growing concerns over digital surveillance, data breaches, and corporate exploitation of personal and collective information. Legal instruments such as the European Union's General Data Protection Regulation (GDPR) and the California Consumer Privacy Act (CCPA) are frequently cited as landmark efforts to codify data rights and promote accountability. These frameworks foreground principles such as informed consent, transparency, and the right to be forgotten, thereby marking a significant shift toward user-centric governance in the digital sphere (Hellmeier et al. 2023).

However, despite their strengths, these regulatory approaches operate largely within an individualistic paradigm that emphasises personal data protection rather than addressing the broader structural asymmetries in global data infrastructures. They tend to overlook issues of collective rights, the centralisation of data capital among corporate platforms, and the unequal distribution of value generated through data use. As Williamson et al. (2022) argued, such state-centric or market-oriented frameworks may provide procedural safeguards, but they do little to enable meaningful community agency over how data are produced, interpreted, and applied.

Thus, while legal mechanisms like the GDPR and CCPA represent important steps toward securing data rights, a growing body of literature calls for more expansive technopolitical frameworks that embed collective rights, cultural values, and community governance into the design and implementation of data systems (Calzada 2021; Ernstberger et al. 2022). These perspectives find resonance in the Indigenous Data Sovereignty (IDS) movement, which has emerged as a powerful critique of dominant data regimes and a proposition for alternatives grounded in the rights of Indigenous peoples to govern their own data in accordance with their customs, laws, and worldviews. The literature increasingly underscores the need for governance models that go

beyond procedural compliance to embed principles of equity, self-determination, and cultural integrity as underscored in IDS. The IDS movement offers a model of data governance that is both technically robust and politically transformative.

Indigenous Data Sovereignty (IDS) movement

Emancipatory Foundations of IDS

IDS is a parallel but distinct discourse to data sovereignty. It is rooted in the collective rights of Indigenous Peoples to govern the data related to their peoples, territories, knowledge systems, and resources. IDS is grounded in an emancipatory vision of justice that reclaims Indigenous peoples' authority over knowledge, governance, and representation. At its core, IDS repositions Indigenous peoples as active agents and epistemic subjects in the production and governance of data, rather than as objects of research or state administration. As Kukutai and Taylor (2016) argued, Indigenous data sovereignty is premised on the inherent and inalienable rights of Indigenous nations to determine how data relating to their lives, communities, and territories are collected, owned, and applied. Rainie et al. (2019) extended this perspective by framing IDS as the assertion of collective and individual rights to access, interpret, and control data concerning Indigenous lands and peoples. This transformation—from passive data subjects to active co-governors of knowledge—constitutes a profoundly emancipatory act, one that challenges the epistemic and political hierarchies embedded within colonial data regimes.

The justice orientation of IDS is further evident in its critique of colonial and technocratic data regimes that have long rendered Indigenous peoples visible only through deficit frameworks. Walter et al. (2020) argue that even in the era of Big Data and Open Data, dominant infrastructures continue to disregard Indigenous agency, knowledge systems, and worldviews. This critique is emancipatory insofar as it exposes the structural power relations that shape data governance and calls for their transformation. Theoretical developments by Carroll et al. (2023) and Carroll, Duarte, and Liboiron (2024) emphasise that data sovereignty is not a technical question but a political one, grounded in epistemic justice and the redistribution of authority over knowledge production. In this sense, IDS aligns with broader decolonial movements that seek to dismantle the epistemological dominance of Western data practices and affirm Indigenous modes of relational accountability, collective benefit, and responsibility.

Finally, IDS reframes data not as neutral artefacts but as relational and strategic resources for Indigenous flourishing. The Lowitja Institute (2023) underscores that readiness for IDS is essential to redressing power imbalances in data ecosystems and ensuring that data serve Indigenous priorities rather than institutional control. From this perspective, data sovereignty becomes both a manifestation and a mechanism of justice—enabling Indigenous nations to rebuild governance structures, exercise political and cultural autonomy, and envision self-determined futures. When Indigenous peoples are custodians of their data ecosystems, they can ensure that knowledge production, policy, and innovation are aligned with their cultural values and aspirations. This form of data sovereignty reinforces the legitimacy and authority of Indigenous governance structures, enabling them to effectively plan, advocate, and lead in areas such as health, education, land management, and resource use. Hummel et al. (2021) contrasted this with European conceptions of data sovereignty, which tend to be technical and state-centred, whereas Indigenous approaches emphasise relational accountability and governance rooted in land, language, and culture. These models are not only rights-based but embedded within

broader frameworks of community-led resilience and cultural continuity. Thus, IDS is not merely a technical concern—it is a foundational element of Indigenous nation-building and resurgence. Through its emancipatory foundations, IDS embodies the intertwined principles of sovereignty, self-determination, and self-governance, affirming that control over data is inseparable from the right to live, know, and govern on one's own terms.

IDS Principles and Frameworks

IDS is articulated most clearly through the CARE Principles—Collective Benefit, Authority to Control, Responsibility, and Ethics—which explicitly centre Indigenous Peoples' collective interests in data governance (Carroll et al. 2020). These principles extend beyond the individual rights emphasised in instruments like the GDPR and instead foreground relational accountability, cultural relevance, and ethical responsibility.

Collective Benefit recognises that data should be used in ways that benefit Indigenous communities collectively, rather than serving individual or external interests. It emphasises the return of value to the community, including improved wellbeing, capacity-building, and self-determined development. For example, in the First Nations Aging Study (Mulder et al. 2022), data were mobilised not just for academic purposes but to inform local health planning, policy, and service provision—demonstrating the principle of collective benefit in action.

Authority to Control asserts Indigenous Peoples' inherent rights to govern data about their people, communities, and resources. This principle includes rights to determine how data are collected, accessed, stored, interpreted, and used. In Williamson et al. (2022), cultural burning programs are governed by Indigenous-led protocols that control environmental data use, ensuring traditional ecological knowledge is protected and respected.

Responsibility speaks to the reciprocal obligations of data users to ensure that data practices uphold Indigenous rights and values. This includes transparency, accountability, and building respectful relationships with communities. The Indigenous Research Capability Building Program at the Australian National University, for instance, supports non-Indigenous collaborators to learn and adhere to Indigenous ethical frameworks, ensuring responsibility is embedded in collaborative research (Carroll et al. 2020).

Ethics focuses on the need for data governance frameworks to reflect Indigenous ethical principles, which are often grounded in relationality, respect, and holistic wellbeing. This principle moves beyond procedural ethics to encompass community values and cultural protocols. The application of CARE by Māori communities, as documented by Carroll et al. (2022), highlighted how ethical data practices are embedded in cultural knowledge systems and local governance.

Together, these principles foreground a paradigm shift in data governance: from extractive, institutional control to community-led stewardship. They support Indigenous self-determination by ensuring that data ecosystems are not only technically secure but also socially and culturally accountable. These principles are informed by national and regional initiatives, such as the US Indigenous Data Sovereignty Network, Maiam nayri Wingara (Australia), and Te Mana Raraunga (Aotearoa/New Zealand).

As Carroll et al. (2020) explained, CARE complements rather than replaces the FAIR principles (Findable, Accessible, Interoperable, Reusable) of Data Sovereignty but does so by focusing on people and purpose rather than only technical standards of a data governance framework. The CARE Principles offer a values-based alternative, emphasising ethical use, community leadership, and Indigenous rights. Carroll et al (2020) argued that consultation is not enough—CARE requires relationships built on respect, reciprocity, and trust.

Moreover, IDS frameworks such as OCAP® (Ownership, Control, Access, Possession) - developed by the First Nations Information Governance Centre - assert a broader set of entitlements over data, encompassing not just access and consent but also governance, interpretation, and the right to define data's meaning and relevance within Indigenous contexts (FNIGC 2014; Mulder et al. 2022). This approach responds directly to the history of extractive research and data colonialism, in which Indigenous knowledge systems and community-generated data were often co-opted without consent or reciprocity (Walter & Suina 2019).

The OCAP® framework is the cornerstone of Indigenous data governance in Canada. It asserts that First Nations have the inherent right to control all aspects of data that affect their people, which includes how data are collected, protected, used, and shared. The Chiefs of Ontario, in partnership with ICES, have used OCAP® principles to establish a data governance agreement that requires permission from First Nations leadership before accessing community data (Walker et al. 2017). This governance structure ensures that data are used to serve First Nations' policy goals and are interpreted in ways that reflect Indigenous knowledge systems and priorities. OCAP® was pivotal in shaping the First Nations Aging Study, which integrated both administrative and qualitative data, including community-held stories and teachings, to produce findings that were actionable and policy-relevant. The study also implemented knowledge translation strategies that respected Indigenous languages and leadership, supporting the broader goals of sovereignty and self-determination (Mulder et al. 2022).

In Australia, the Maiam nayri Wingara (MnW) Indigenous Data Sovereignty Collective has developed a similar community-driven framework. MnW's platform is built on the assertion that Aboriginal and Torres Strait Islander peoples have the right to govern data about themselves and their communities (Maiam nayri Wingara, 2018; Kukutai & Taylor, 2016). MnW's initiatives include the development of the Indigenous Data Sovereignty Communique and the articulation of principles aligned with CARE and OCAP®, tailored for the Australian context (Carroll et al. 2020). These principles advocate for Indigenous decision-making in data governance and have influenced national research policies and ethics codes, including the AIATSIS Code of Ethics and contributions to national Indigenous voice frameworks (AIATSIS 2020; Walter 2021).

MnW's focus is on ensuring that data infrastructure, policy, and research genuinely support Indigenous aspirations and cultural integrity, advancing sovereignty not only over data but also over the narratives and institutions that shape Indigenous futures. This project demonstrated how OCAP® principles (Ownership, Control, Access, and Possession) can be expanded to include "Action" (OCAPA), affirming that data sovereignty must be tied to tangible outcomes and self-determined priorities (Mulder et al.

2022). The study employed community-engaged knowledge translation and embedded local languages, Elders' knowledge, and policy advocacy, illustrating how IDS can transform research into tools for community resilience, policy influence, and self-determination.

Empirical Illustrations of IDS

A number of Australian case studies illustrate the practical embodiment of self-determination, sovereignty, and self-governance in data-intensive domains and highlight how IDS can be integrated into national policy and research infrastructures. For example, Williamson et al. (2022) documented environmental governance practices in Australia that operationalise IDS. These include Indigenous-led cultural burning programs where local knowledge and environmental data are integrated to manage landscapes sustainably and reduce wildfire risks. Such initiatives exemplify how IDS empowers Indigenous communities to assert jurisdiction over land and resource management by combining traditional knowledge with contemporary data practices. The Indigenous Research Capability Building Program at the Australian National University supports Indigenous scholars and communities to undertake and govern their own research. This program emphasised Indigenous methodologies and data governance protocols that align with cultural values and community aspirations (Walter & Suina 2019). Sparke and McMillan (2022) examined Indigenous research sovereignties and highlight how Māori scholars in Aotearoa/New Zealand assert control through Indigenous-led research strategies, often rooted in whakapapa (genealogy), whenua (land), and mātauranga (knowledge systems). These frameworks centre community benefit and intergenerational knowledge transfer, reinforcing Indigenous governance through place-based epistemologies. Carroll et al. (2020) documented the implementation of the CARE Principles by Māori and Native American nations to safeguard Indigenous data in health and environmental projects. These communities apply CARE to ensure data governance practices are guided by collective rights and ethical stewardship rather than solely by institutional or state interests.

The First Nations Aging Study (FNAS) in Ontario, Canada (Mulder et al. 2022) offers a compelling illustration of Indigenous self-determination and sovereignty in research governance. Rather than treating First Nations as passive recipients of externally imposed inquiry, the study was co-led by the Chiefs of Ontario and grounded in full partnership with First Nations communities. Development, in this context, was not reduced to the provision of services or resources but extended to the capacity of communities to define, shape, and govern the structures through which those resources are managed. The study affirmed that genuine transformation requires meaningful participation, recognising communities as knowledge holders and decision-makers in the design, conduct, and governance of research.

From its inception, the FNAS research agenda was defined by community priorities that reflected lived experiences of ageing, frailty, and culturally safe healthcare. A First Nations Data Governance Committee oversaw all data access and research protocols, while a Knowledge Circle of Elders, language speakers, and frontline health workers co-designed the study, guided qualitative methods, and validated findings. These structures were not symbolic but substantive—embodying relational accountability, flexibility, and reciprocity. The project integrated Indigenous knowledge systems with quantitative analyses of administrative health data through a formalised data governance agreement and built enduring institutional capacity, including the establishment of a permanent research position within the Chiefs of Ontario. Importantly, its findings informed

provincial health strategies and early COVID-19 responses for Elders. The authors argue for expanding OCAP® (Ownership, Control, Access, Possession) to OCAPA—adding *Action*—to link data sovereignty with community-led impact (Mulder et al. 2022).

Funnell et al. (2020) similarly demonstrate how Indigenous data sovereignty principles can transform research practice. Using administrative data to examine end-of-life experiences in Indigenous communities, their project adapted community-based participatory research approaches to ensure that Indigenous voices, governance, and epistemologies remained central. Indigenous partners co-formulated research questions, guided analysis, and shaped dissemination processes. This approach challenged institutional control over secondary data, repositioning Indigenous communities as custodians of meaning and co-producers of knowledge.

These dynamics are also evident in the case study by Elias et al. (2004), which documents how Manitoba First Nations redefined health research and data governance by institutionalising OCAP® within major initiatives, including the First Nations and Inuit Regional Longitudinal Health Survey. Initially, federal agencies implemented participatory frameworks such as participatory action research in paternalistic ways, prompting resistance from First Nations leaders who demanded full governance authority and community-defined models. Through sustained negotiation, they secured Indigenous control over the survey, established the Assembly of Manitoba Chiefs Health Information and Research Committee, and founded the Manitoba First Nations Centre for Aboriginal Health Research. The Manitoba case reveals how Indigenous nations have transformed data regimes from within—turning research and education into tools of collective empowerment, decolonisation, and long-term self-governance.

Together, these cases exemplify how Indigenous Data Sovereignty operationalises the principles of self-determination, sovereignty, and self-governance. They demonstrate that participatory structures, when authentically enacted, transcend extractive or transactional models of research by embedding Indigenous authority throughout all stages of inquiry—from agenda-setting to dissemination and application. Participation here is not procedural; it is constitutive of justice and legitimacy. Understood in this way, evaluation and research become relational, ethical, and political acts that centre agency, challenge institutional hierarchies, and create the conditions for communities to determine not only the outcomes of knowledge production but also the terms upon which those outcomes are pursued.

Relevance of IDS in Evaluation of Student Equity Initiatives

The principles underpinning IDS offer a transformative framework for reimagining how data are used in evaluating student equity programs in higher education. While IDS emerges from the specific histories and political struggles of Indigenous peoples, its core tenets—self-determination, community governance of data, and ethical stewardship—speak directly to the challenges faced by under-represented student groups who are often subject to extractive, deficit-oriented data practices.

In many equity initiatives—particularly those targeting students from low socioeconomic background, culturally and linguistically diverse backgrounds, living in regional, rural or remote areas, first-in-family, or Aboriginal and Torres Strait Islander students —evaluation practices tend to frame students as passive recipients of support. Institutional metrics such as enrolment,

retention, and completion rates dominate, serving reporting or performance imperatives rather than reflecting the lived experiences, aspirations, and cultural strengths of the students themselves. This mirrors one of IDS's central critiques: that data systems frequently serve institutional or state interests rather than those of the people to whom the data relate. As Kukutai and Walter (2015a) argue, data are a site of power, and decisions about what is counted, how it is counted, and who interprets it are inherently political (Walter & Suina 2019; Carroll et al. 2020).

Statistical and administrative data in higher education are typically held within institutional systems that lack community oversight. Students seldom have a say in how their data are collected, interpreted, or used, and rarely participate in shaping the design of the programs and evaluations that define their success. This reproduces the hierarchies identified in IDS scholarship, where centralised data infrastructures reinforce institutional authority and marginalise community voices (Kukutai & Taylor 2016; Carroll et al. 2020).

Applying IDS to student equity therefore entails a shift from extractive and technocratic approaches toward participatory and justice-oriented ones. The IDS CARE Principles—Collective Benefit, Authority to Control, Responsibility, and Ethics—provide a coherent framework for this shift. *Collective benefit* ensures that evaluation outcomes are meaningful and useful to student communities, not merely instruments of institutional compliance. *Authority to control* recognises the right of students and their communities to shape what is measured, how it is interpreted, and who benefits from the findings. *Responsibility* underscores the importance of reciprocal, respectful relationships between institutions, evaluators, and student communities, while *ethics* demands practices grounded in justice, cultural safety, and mutual respect rather than minimal compliance. When student voices guide evaluation criteria, when data governance includes community-led oversight, and when findings are returned in culturally meaningful ways, the evaluation process becomes not only more ethical but also more effective. IDS rejects extractive or technocratic approaches to evaluation. Instead, it foregrounds participation, control, and voice as necessary components of justice. In doing so, it reframes evaluation not as an external judgment but as a collaborative and self-determined process—one that reflects the dignity, values, and aspirations of the communities involved.

This framework invites institutions to reconceptualise student equity evaluation as a process of shared governance. For example, evaluation of support services for Aboriginal and Torres Strait Islander students should not be limited to retention or completion rates but should also reflect Indigenous-defined indicators of success such as cultural safety, identity, and connection to community. Similarly, evaluations involving refugee or low-SES students should co-develop indicators with students and communities, ensure transparency in data use, and address institutional power dynamics that shape what counts as knowledge or success.

In short, IDS calls for a relational model grounded in respect, reciprocity, and shared agency—shifting the focus from *what institutions measure about students* to *what students and their communities value, define, and control*. In this way, IDS provides both a moral and methodological foundation for transforming equity work in higher education from a bureaucratic exercise into a genuinely participatory and justice-oriented practice.

Evaluating Refugee Student Support Through Indigenous Data Sovereignty: An Illustrative Application

Refugee-Background Students' Access to Higher Education

Access to higher education for refugee-background students in Australia is profoundly shaped by visa status, producing a tiered system of inclusion. Refugees with permanent humanitarian visas (e.g. Refugee, Special Humanitarian, or Protection visas) are treated as domestic students and have access to Commonwealth Supported Places (CSPs), HELP loans, Medicare, and social welfare. By contrast, those on Temporary Protection Visas (TPVs), Safe Haven Enterprise Visas (SHEVs), bridging visas, or awaiting asylum decisions are classified as international students, required to pay full tuition fees and excluded from financial support. For many who have completed their schooling in Australia, these policies make university study effectively unattainable. This fragmented system reflects policy misalignment between migration and higher-education frameworks, where visa status determines educational entitlement rather than equity need (Molla 2021; Détourbe & Goastellec 2018). It exemplifies what White (2017) calls the "banality of exclusion" and what Coram (2009) describes as institutionalised disregard disguised by meritocratic fairness.

In response, some universities have introduced fee-waiver scholarships for asylum seekers and temporary visa holders, often driven by advocacy from groups such as Refugee Education Australia. While commendable, these initiatives are discretionary and reach only a small number of students (Murray & Gray 2021). Moreover, they focus almost exclusively on access rather than persistence or success, neglecting the financial, academic, and psychosocial supports required for meaningful participation (Ramsay et al. 2016).

The broader advocacy landscape reinforces this service-delivery model. Programs such as the Refugee Education Special Interest Group (SIG) established through Equity Practitioners in Higher Education Australasia (EPHEA), Multicultural Youth Advocacy Network (MYAN), and the Refugee Council of Australia aim to improve coordination and "best practice" support. Yet their language of advocacy "for and on behalf of" refugees risks reproducing paternalistic logics, speaking *about* rather than *with* students. The framing of "best practice" further homogenises refugee-background students with other culturally and linguistically diverse cohorts, obscuring the specific consequences of displacement, precarious visa status, and exclusion.

Even well-intentioned initiatives, such as SIG webinars that encourage students to "find their voice" in scholarship applications, individualise structural inequities by implying deficits of motivation or preparedness. Likewise, staff-training modules that emphasise the "different needs" of refugee students can re-inscribe them as problems to be managed rather than knowledge-holders with resilience and community resources (Harris et al., 2015; Lenette, 2016).

Such assimilationist and deficit narratives reappear in explanations of limited participation, retention, or employment outcomes that emphasise trauma or individual shortcomings, deflecting attention from the structural barriers that shape refugee-background students' educational experiences. Some scholars instead call for capability-expanding policies that recognise prior learning, support transition, and ensure opportunities for success (Molla & Brook, 2019). Yet most institutional funding still targets access pathways rather than retention, progression, or employment (Mestan 2022).

This brief overview illustrates how higher education policy and practices position refugee-background students as subjects for integration rather than agents of transformation. Their prior education, multilingualism, and community knowledge are acknowledged only superficially, often celebrated rhetorically but rarely embedded in institutional practice. Consequently, access and participation remain contingent on institutional discretion rather than systemic entitlement. While staff involved in student support may act with goodwill, they are often complicit—albeit unintentionally—in reproducing deficit and assimilationist logics by speaking for refugee students rather than enabling them to speak for themselves. These practices reinforce paternalistic modes of inclusion that sustain, rather than challenge, the structural inequities they seek to redress.

These systemic inequities highlight the need for a justice-oriented rethinking of how refugee-background students are represented, supported in higher education, and how these support initiatives could be evaluated. Integrating principles from IDS offers a pathway toward more ethical and participatory approaches. IDS reframes data and evaluation as shared spaces of governance, insisting that affected communities—not institutions—should define what constitutes meaningful success, what evidence matters, and how findings are used. Applying this logic to refugee-background student equity requires co-developing evaluation frameworks that centre student voice, ensure community oversight of data use, and return results in ways that are culturally meaningful and beneficial. In doing so, evaluation shifts from an instrument of compliance to a practice of justice—supporting self-determination, belonging, and the collective capability of refugee communities within higher education.

Applying IDS CARE Principles

The IDS **CARE Principles - Collective Benefit, Authority to Control, Responsibility, and Ethics -** offer a practical framework for reimagining evaluation with refugee-background students. Applying these principles re-centres power, accountability, and meaning-making within the communities to whom the data relate. In refugee-background student contexts, this means that evaluation must not only measure outcomes but also serve as a mechanism of empowerment, reciprocity, and protection.

Collective Benefit ensures that evaluation produces tangible, community-defined value rather than serving institutional compliance. **Authority to Control** recognises the right of refugee students and their communities to determine what is evaluated, how data are used, and under what conditions. **Responsibility** highlights the evaluator's obligation to act with transparency, reflexivity, and sustained accountability to participants. Finally, **Ethics** demands a commitment to dignity, cultural safety, and the active prevention of harm. Together, these principles shift evaluation from a bureaucratic process of institutional measurement to a collaborative practice of justice.

The following table maps how each CARE principle could be applied to an evaluation of refugee-background student programs. It outlines the underlying assumptions, provides explanations for these assumptions, and suggests how each principle can be operationalised through data collection, analysis, and dissemination. These practices are guided by values of participation, co-governance, and respect with the aim of addressing structural barriers, challenge racism, and mitigate the risks associated with deficit-based data narratives.

Table 1: Application of CARE Principles to Evaluating Refugee-Background Student Initiatives

CARE Principle	**Assumptions of the Principle**	**Explanation of assumptions**	**Application of principle in evaluation practice**
Collective Benefit	Evaluation should create tangible benefits for the community, not just for institutions.	Evaluation should inform improvements in services, support advocacy, and align with the aspirations of refugee-background students.	Data Collection: • Participatory methods such as student-led focus groups. • Ethnographic methods offer a rich, ethical approach to understanding the activities, actors, and context within a community. Evaluators incorporate these methods both in the preparatory phase—by engaging with the community of students from refugee-background before implementing the evaluation—and during the evaluation itself, to ensure that interpretations are grounded in lived experience and cultural context. Data Types: • Community-defined indicators of inclusion, wellbeing. • Co-create metrics of success beyond enrolment/completion (e.g., confidence, social participation). Disaggregated & Contextual Data: • Collect data on intersecting factors such as visa status, education history, and focused on contextual and cultural history of displacement, settlement location to tailor analysis. Dissemination: • Findings shared in accessible formats and languages, co-owned by communities.
Authority to Control	Control includes decisions about what is evaluated, how, and for what purpose, as well as consent and data access	Refugee-background students and their communities have the right to determine how data about them is used.	Governance: • Refugee-background student advisory group guides the evaluation. Methods: • Co-design of surveys/interview/observation protocols with students Data Use: • Consent-based sharing and restricted secondary use.

			• Protocols for Data Access: Develop MOUs that stipulate student community-led review of data requests. Metadata: • Include provenance, purpose, and usage conditions tied to students' community-defined protocols.
Responsibility	Evaluators and institutions have a duty to be accountable to the communities involved. Evaluators must engage in critical self-reflection and remain aware of how their own cultural backgrounds, values, and institutional affiliations shape their perspectives, interactions, and the knowledge they produce.	Responsibility entails ongoing communication with communities involved in the evaluation. Evaluators develop cultural competence and recognise their own cultural biases towards students from various backgrounds. Evaluators ensure transparency in all stages of evaluation.	Data Analysis: • Emphasis on refugee-background students' interpersonal and cultural-institutional aspects of family lives and interconnection of the individual, social, and educational processes. • Inclusive sensemaking workshops with students and their communities. Methods: • Evaluator's reflexive practices and positionality statements. Transparency: • Clear communication of how data is used. Data Management & Accountability: • Shared data infrastructure with audit trails. • Community-led ethics boards review all stages of evaluation. • Ongoing reporting to students and their communities on how data influenced program changes.
Ethics	Evaluation must be guided by principles of respect, dignity, and do no harm, rooted in cultural safety.	Ethical evaluation recognises power imbalances and ensures evaluation processes protect rights, safety (cultural, psychological, political), and narratives of students and their communities.	Ethics Review: • Community ethics protocols respected. Data Handling: • Anonymisation and protection from misuse. Dissemination: • Avoiding deficit framing and ensuring positive storytelling. • Protective Practices: Implement safeguards to avoid data misuse (e.g., framing refugee-background students or their communities as burdens on systems).

			Collective & Individual Interests: • Ensure students' privacy rights are balanced with their community interest in supportive and non-stigmatising data use.

Operationalising the IDS CARE principles requires embedding community partnership throughout every stage of the evaluation lifecycle. Co-design must move beyond symbolic or performative inclusion toward genuine collaboration. A persistent challenge is that co-design is often reduced to post hoc consultation, where refugee-background students are invited to provide feedback on pre-determined frameworks rather than participate in shaping them (Ferrero et al. 2020; Harris et al. 2021; Lenette 2019). Such practices risk tokenism—treating participation as a procedural requirement rather than a genuine exercise of voice and agency. Students may be included to satisfy diversity objectives or to validate institutional designs but are rarely given the scope to articulate their own priorities, define success, or challenge the underlying assumptions that structure evaluation. When co-design is reduced to reaction rather than creation, it reinforces rather than transforms existing hierarchies.

Authentic co-design, by contrast, requires engaging refugee-background students and community partners from the outset to jointly determine aims, indicators, and methodologies. Participatory techniques such as storytelling workshops, narrative inquiry, and participatory mapping allow students to articulate what meaningful inclusion and success look like in their own terms, ensuring that evaluation frameworks are contextually grounded and culturally responsive.

Community governance is central to this process. Establishing advisory or governance structures that include refugee-background students, alumni, and advocates provides continuous oversight and shared decision-making authority. These structures can be formalised through Memoranda of Understanding or governance charters that specify responsibilities around data access, interpretation, and dissemination. Such arrangements safeguard against institutional appropriation of student narratives and uphold accountability to those most affected by the evaluation.

Ethical and culturally safe consent processes are also fundamental. Consent materials should be linguistically and culturally accessible, reflecting the diversity of literacy levels and experiences of bureaucratic mistrust among refugee-background communities. Consent should be understood as a relational process—negotiated and revisited over time—rather than a single administrative step at the point of data collection. Participants must retain the right to withdraw or to redefine how their data are used, consistent with the IDS principle of authority to control.

Relational accountability and reflexivity further reinforce the integrity of evaluation. Evaluators must engage critically with their own positionality and institutional affiliations, acknowledging how their assumptions shape interpretation and power relations. Regular feedback loops and sensemaking workshops enable participants and community representatives to review and validate findings, ensuring that interpretations remain grounded in lived experience.

Dissemination must also prioritise reciprocity and co-ownership of knowledge. Findings should be returned to communities through accessible and dialogic formats—such as collaborative presentations, translated summaries, or visual storytelling—that facilitate advocacy and strengthen institutional responsiveness. Dissemination, in this sense, is not the endpoint of evaluation but an ongoing relationship built on transparency, respect, and mutual benefit.

Transformative Potential of IDS

The proposed application of the IDS **CARE Principles** directly addresses the paternalistic and assimilationist practices that have long characterised institutional approaches to refugee-background students. As discussed earlier, initiatives framed around advocacy "for and on behalf of" students, or training programs that emphasise their "different needs," risk reproducing hegemonic relationships of care and control—speaking *about* rather than *with* students, and positioning them as objects of intervention rather than agents of transformation (Harris, Marlowe & Nyuon, 2015; Lenette 2016). Likewise, "best practice" frameworks often homogenise refugee-background students with other culturally and linguistically diverse cohorts, obscuring the specific conditions of displacement, precarious legal status, and systemic exclusion that shape their educational experiences (Molla 2021; Détourbe & Goastellec 2018). The CARE framework, developed through the Global Indigenous Data Alliance, provides a principled means of reversing these dynamics by grounding evaluation in collective benefit, relational accountability, and self-determination (Carroll et al. 2020).

By embedding **Collective Benefit, Authority to Control, Responsibility,** and **Ethics** into evaluation practice, institutions can move beyond paternalistic advocacy toward genuine partnership. The principles foreground the redistribution of voice and authority, ensuring that refugee-background students define the priorities, parameters, and purposes of evaluation. This approach reframes evaluation as a dialogic and participatory process—one in which refugee-background students are co-creators of knowledge and governance rather than recipients of institutional benevolence. In doing so, the CARE framework not only challenges the hegemony of institutional knowledge production but also operationalises self-determination and epistemic justice as practical dimensions of evaluation (Kukutai & Taylor 2016; Walter & Suina 2019).

The application of the CARE principles encourages evaluators to engage deeply and respectfully with refugee-background students and their communities—to listen, learn, and approach knowledge production as a reciprocal process. It cautions against the tendency to stereotype or homogenise experiences, reminding evaluators to recognise both commonalities and diversity within and across groups. This can be achieved through diverse and flexible data collection methods that capture shared patterns while also attending to difference. Mixed-method and longitudinal approaches, coupled with participatory sense-making, enable evaluators to understand how experiences of displacement, resilience, and belonging evolve over time. Such approaches affirm epistemic diversity and recognise that refugee-background students contribute distinct ways of knowing, narrating, and interpreting their educational journeys (Carroll et al. 2020; Walter et al. 2020).

In practice, applying IDS CARE principles reinforces values of self-determination, respect, and reciprocity. These values strengthen relationships between evaluators and stakeholders, repositioning evaluation as a collaborative and empowering process rather than an extractive one. Through this framework, the hierarchical and paternalistic logics of "helping" or "managing" refugees are replaced

by practices that cultivate autonomy, dignity, and shared accountability. In this way, the CARE principles transform evaluation from an institutional tool of oversight into a mechanism of relational justice—one that validates lived experience and restores authority to those whose stories have too often been mediated by others (Walter & Suina 2019; Kukutai & Walter 2015).

Ultimately, this discussion underscores that evaluation is not a neutral or technical exercise but a political and ethical act that reflects the distribution of voice, recognition, and power within educational systems (Schwandt 2015). Embedding IDS-informed principles within evaluations of programs for refugee-background students enables a shift from compliance-driven accountability toward transformative justice—where data and evidence serve as instruments of self-determination, community advocacy, and collective empowerment (Carroll et al. 2020; Kukutai & Taylor 2016).

Conclusion

Historically, representation of under-represented students in the higher education sector has been based on extractive data practices that often fail to reflect students' own values, cultural contexts, or their conceptions of wellbeing and educational success. This paper has drawn on the concept of Data Sovereignty, and specifically the Indigenous Data Sovereignty (IDS) CARE principles to advocate for evaluation approaches that involve students and their communities directly - allowing them to define how and when data should be used to benefit them.

While concepts like consent, anonymisation, and privacy are used in mainstream data governance, IDS perspectives introduce additional rights—such as the right to define one's own identity, the right to associate, and the right to reclaim data narratives. These rights reflect a desire not merely to protect data, but to transform the colonial frameworks that continue to shape the contemporary experiences of Indigenous communities. These ideas also hold relevance for other equity student groups. As illustrated in this paper, students from refugee backgrounds often experience similar forms of institutional exclusion and cultural homogenisation, even within initiatives that are intended to support them. Data users, including evaluators, have a responsibility to create space for these rights to be recognised and supported throughout the evaluation process.

The rationale for IDS—centring data as a tool for self-determination, resisting deficit discourses, and reclaiming authority over knowledge—thus has direct application in higher education student equity programs. It challenges universities to move from performative equity to transformative justice by embedding sovereignty, cultural safety, and ethical data governance into their evaluation practices. This not only makes evaluation more meaningful and empowering for students from disadvantaged backgrounds—it also repositions data as a site for liberation rather than control.

IDS perspectives offer guidance to critical evaluation for social justice particularly when rooted in the following elements. First, agency-focused approaches that foreground the structural inequities shaping educational participation and outcomes. Second, recognition that discrimination and inequality are systemic, not individual failures—affecting students from disadvantaged backgrounds despite formal access gains. Third, acknowledgement that evaluation is a political activity—shaped by the assumptions, identities, and power held by institutions providing the

support and evaluators themselves. Fourth, understanding that knowledge is not neutral—it is socially and culturally embedded, and evaluators must reflect on whose knowledge is prioritised and for what purpose.

Critical evaluation, then, is not simply a technical process of measuring outcomes—it is an ethically charged, socially embedded, and potentially transformative practice. Knowledge production can either reinforce existing inequities or serve as a resource for collective empowerment. The real transformative potential of evaluation lies not in collecting more data, but in applying it to challenge structural inequalities and inform meaningful change in policy and practice. The ethical principles embedded in IDS—particularly those within the CARE framework—can and should inform evaluations across all contexts where groups are positioned at the margins. Ownership and control are inextricably linked to broader conversations about rights, interests, and power of those shaped by these structural conditions. Questions of access and use must be informed by whether the data in question is understood as exclusive, shared, or community-held.

In closing, it is important to acknowledge that IDS is grounded in the specific histories, rights, and ongoing experiences of Indigenous peoples, particularly in settler-colonial contexts such as Australia. As such, drawing on IDS principles in evaluation practice requires cultural sensitivity and a clear recognition of their origins. These principles should not be used to replicate or appropriate Indigenous evaluation models, nor should they be applied by non-Indigenous evaluators in place of authentic Indigenous-led evaluation. The proposition of this paper to engage IDS principles in broader evaluation contexts of student equity in higher education is intended to strengthen evaluation practice by promoting critical reflection, respect, relational accountability, and justice. In doing so, evaluation can evolve beyond a tool of measurement to become a transformative process of shared learning, empowerment, and systemic change.

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