GENEVA GRADUATE INSTITUTE

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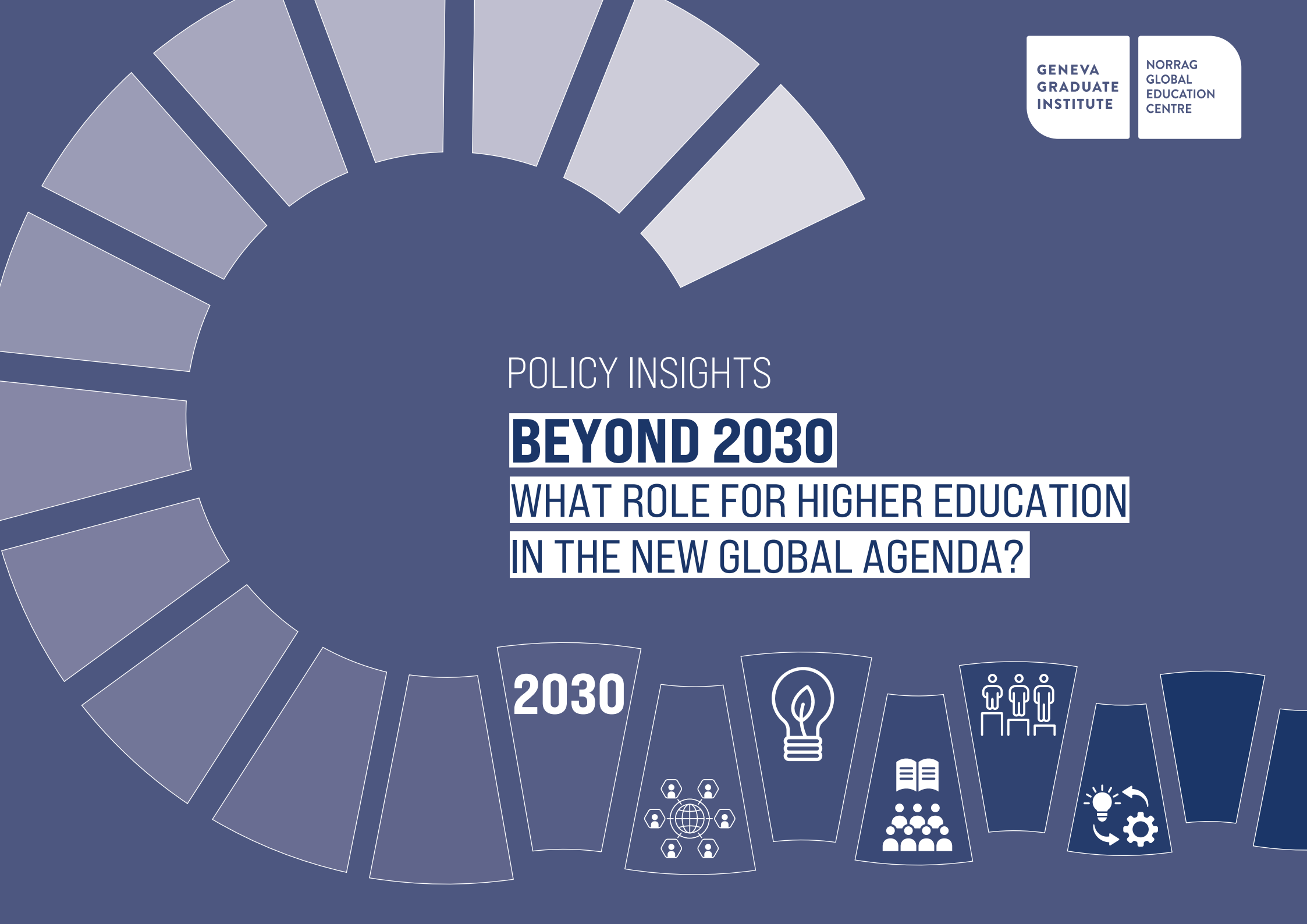
POLICY INSIGHTS

BEYOND 2030

WHAT ROLE FOR HIGHER EDUCATION IN THE NEW GLOBAL AGENDA?



ABOUT THE PROJECT

NORRAG's work on reimagining the architecture of global education governance beyond 2030 aims to surface fresh analytical perspectives and under-represented expertise toward a transformative post-2030 vision, and its consequences for education and sustainability globally. Despite real progress towards SDG4 —to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all"—the world is still far from its achievement. Worse, the conditions under which a new global agenda may be designed are significantly worse than in 2015. Building on ongoing debates around SDG 4, Beyond 2030 seeks to interrogate—and contribute to—both what the next education goal should contain, and how it should be conceptualised, governed, and co-created. Higher education institutions and actors play a dual role: as both subjects of global education policy and architects of knowledge, innovation, and public discourse. With only four years to go until the end of the SDG era, it is vital that a vigorous, critical and well-informed debate is promoted on these key issues. This publication aims to make a crucial contribution to these debates at the intersection of academia and policy making.

More information: www.norrageducation.org/beyond-2030

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ABOUT THE AUTHORS

To advance both understanding and practice, we convened 42 higher education and SDG experts from 14 countries in six continents to discuss the role of higher education in the new global agenda. A full list of the authors who contributed to this publication, including their biographies, can be found at the end of this publication. The publication is edited by Elizabeth Buckner, Associate Professor of Higher Education in the Ontario Institute for Studies in Education, University of Toronto, and Tristan McCowan, Professor of International Education at the Institute of Education, University College London. They also introduce the publication. A foreword to the publication is provided by Dr Borhene Chakroun, Director for Policies and Lifelong Learning Systems at UNESCO.

ABOUT NORRAG

NORRAG is the Global Education Centre of the Geneva Graduate Institute and is a global membership-based network of international policies and cooperation in education and training. NORRAG's core mandate is to co-produce, disseminate and broker critical knowledge and to strengthen capacity for and with academia, governments, NGOs, international organizations, foundations and the private sector who inform and shape education policies and practice, at national and international levels. Through our work, NORRAG contributes to creating the conditions for more participatory, evidence-informed decisions that improve equal access to and quality of education and training.

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FOREWORD

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In a time of rapid technological change, geopolitical uncertainties and growing global issues – including climate change, loss of biodiversity, labour market disruptions, loss of trust, scientific legitimacy crisis and attacks on academic freedom - higher education institutions' core functions of teaching, research and community engagement are more vital than ever before. Whether it is in advancing and managing technological change, combatting poverty and social exclusion, or ensuring sustainable societies and economies for future generations, higher education has a crucial role to play – alongside governments, the non-profit sector, as well as business and industry – in fashioning a world of peace and prosperity for all.

As multilateralism and international cooperation face stressors from more directions than ever, it is crucial to have globe-spanning networks and mechanisms through which the principles of collaboration and solidarity can be put into action. Universities and other higher education institutions represent a unique global asset in this respect. They meld together a commitment to freedom of inquiry and the dissemination of knowledge developed over centuries with increasingly forward-looking perspectives and ambitions.

This volume, with its question regarding the role of higher education in the agenda beyond 2030, is timely, as the UN family starts discussing the post-2030 agenda. The Pact for the Future invited the high-level political forum, under the auspices of the General Assembly, to consider in September 2027 how to advance sustainable development by 2030 and beyond. Several provisions of the Pact recognize the importance presented by science, technology and innovation.

Serious engagement of higher education institutions will depend on early preparations by thought leaders, higher education institutions, associations and networks. This needs to begin now because this is the pre-official negotiation phase where ideas and priorities are explored and where large consultations are conducted. For instance, at its August 2025 meeting, the SDG4 High Level Steering Committee (HLSC) endorsed the concept note for a phased consultation process and the guiding principles for developing the post-2030 global education agenda, tasking the 2026-2027 HLSC Sherpa Group and the SDG 4 Youth & Student Network to develop a work plan, with the support of the HLSC Secretariat. Youth consultation has already started. NORRAG is acting as learning partner.

Across the collection of articles of this volume one message and commitment stands out: higher education institutions and stakeholders should actively contribute to shaping post-2030 agenda. However, as UNESCO's recently released higher education roadmap *Transforming higher education: Global collaboration on visioning and action (2026)* notes, for higher education to be the transformative force in the world that we need it to be, higher education itself needs to be transformed.

Hence, this volume represents an excellent effort at further elaborating what some of those higher education transformations might need to be. Using the horizon of 2030 and the fashioning of the global agenda that will follow the

Sustainable Development Goals adopted by the international community in 2015 as its context, this collection of sharp, short pieces offers a plethora of rich and insightful propositions.

Also, echoing across the many contributions here are clear demands to move beyond the status quo and the weak place and role higher education is playing in the 2030 Agenda. Similarly, there is a welcome commitment to ensure that higher education does not simply respond to a changing world but becomes increasingly effective in shaping the directions of change.

As called for in the 2026 UNESCO roadmap for higher education transformation, higher education needs to become the most powerful space of future-making that it can be. In this context, universities stand at the forefront of generating knowledge and innovative solutions. For example, through the Intergovernmental Panel on Climate Change (IPCC), and the Independent International Scientific Panel on Artificial Intelligence. These examples demonstrate that academic expertise is indispensable for agenda setting.

This volume is also about actions and impacts. Across the collection of articles, a rich and relevant set of proposals of what is possible beyond 2030, new goals and targets are proposed, including a focus on ethics, alongside innovative implementation approaches such as local actions. Yet, the success of these proposals is constrained by the fragmentation of the higher education associations and networks, the weak science-policy nexus and the lack of trust between higher education, youth and local communities, in particular indigenous communities.

Hence, three priorities for collective actions stand out from this volume:

1. **Forging an Alliance of Alliances:** Since the adoption of the 2030 agenda and before, several networks have emerged and actively engaged such as the Higher Education Sustainability Initiative (HESI), the UN Academic Impact, UNESCO Chairs and UNITWINs. These associations and network provide opportunities for knowledge building and sharing, advocacy and collective actions. However, they remain fragmented, underfunded and overlapping. This volume identifies at least 27 university sustainability alliances. A quick mapping of international and regional associations identifies at least 7 organizations with overlapping memberships. There is a need for an Alliance of Alliances that can legitimately represent higher education institutions.

2. **Strengthening Policy engagement:** Increasing the relevance of higher education also speaks to the importance of strengthening the science-policy nexus as is discussed by several contributors to this volume. The research and innovation ecosystems that higher education both builds and depends on do not only play a critical economic role. In stewarding science and mobilizing knowledge, the sector also plays an irreplaceable social and policy role, where reliable evidence is put into conversation with values and objectives. At global level, the Pact for the Future offers a central place for science, technology and innovation, key features of higher education. Platforms such as NORRAG can provide an important space for higher education-policy nexus.

3. **Building global-local interplay and empowering youth:** Across this volume we see the importance of trust and respect in the relationships between higher education and local communities. This extends from combatting racism and hate speeches and structural inequalities to committing to co-construction of knowledge. It also shows results when youth are involved in defining and realizing inclusive and equitable futures. Higher education and networks need to connect with youth and students' networks not only as beneficiaries of higher education but also as co-agent and co-creator of higher education transformation.

Finally, advancing this agenda requires a global higher education area of international cooperation and solidarity. Spaces for sharing goals and values, for peer learning and co-creation, and for open science, technology transfer, and co-creation. This is exactly what UNESCO's global convention on recognition of qualifications concerning higher education, the periodic World Higher Education Conferences (WHEC) and the UNESCO Global Higher Education Policy Observatory seek to provide and advance.

Together we can deliver on the hope and promise that cooperation, solidarity and education offer as higher education is well positioned to further transform and be celebrated as a key actor for moving our world towards greater justice, prosperity and peace.

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INTRODUCTION

Elizabeth Buckner
University of Toronto, Canada
Tristan McCowan
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With a backdrop of mounting social and ecological crises, the world has now been flung into a new era of uncertainty, with the cosmopolitan hope that characterized the turn of the Millennium rapidly unravelling. Multilateralism and global cooperation are threatened at a time in which they are most needed, faced with the polycrisis of climate change, biodiversity loss, conflict, forced migration and severe inequalities. At this inauspicious moment, attention is being turned to 2030, the year that the Sustainable Development Goals (SDGs) are supposed to be achieved, and also to what might replace them. What kind of global development agenda can and should emerge?

Discussions as part of the *After 2030* project[1] have pointed to four potential scenarios[2]: postponement, amendment, replacement and abandonment. First, we could simply propose an extension on the current agenda, leaving the 17 existing goals in place and setting a new due date, say 2050. Second, we could adjust the current set of goals, leaving the basic structure in place, but creating new targets or goals, or amending existing ones. For example, Brazil has proposed an 18th SDG focusing on racism. Next, there are more radical proposals for replacing the agenda with an entirely new one. New ideas have included a nexus approach, with the diverse goals revolving around some key intersecting clusters, e.g. water, energy and food. Some have proposed removing the notion of sustainable development altogether, and replacing it with ideas of justice, repair and the pluriverse (McCowan et al. 2025). Finally, there is a scenario which would have been unimaginable in 2015 but is now a clear possibility: that we may not be able to achieve any agreement at all, and that the world will be left without a global agenda.

Higher education is strongly implicated in this agenda (Buckner et al. 2025). Universities play a key role in forming the professionals who will drive forward development agendas, producing research and technologies that will transform society for sustainable futures. Yet their role is not only in achieving the SDGs in the broader society, but also as spaces for rethinking what they should be, promoting reflection and debate, and advocating for change (McCowan 2025). This policy insights collection provides this kind of space, inviting contributions from diverse backgrounds to reflect on the post-2030 development agenda, and the role of universities within it. Through the series of contributions, it addresses the complex issues of education in the international arena, providing critical scrutiny of the current global development agenda and its framing of education, at the intersection of academia and policymaking.

The collection has a diverse range of contributors, from seasoned academics to early career researchers and students, and from varied contexts in Africa, Asia, Europe, North and South America, and Oceania. Their reflections are grouped into five thematic areas: **1) Rethinking Global Governance**[1.1] —focusing on the relationships between and structuring of the goals, and their promotion and implementation at the international level; **2) Universities as Agents of Change** – looking at the diverse ways in which universities can engage with society for sustainable futures; **3) Pedagogy, Learning, and Community** – with attention turning to students, learning and the curriculum, on campus and beyond in communities; **4) Equity, Justice, and Power** – looking at the role of global justice in current practices and possible pathways towards more equitable futures; and finally, in **5) Rethinking Paradigms** – some profound critiques of the status quo and calls for epistemic plurality that recognize indigenous knowledges.

As a whole, the contributions cluster around the 'amendment' and 'replacement' scenarios outlined above, with contributors endorsing the need for some kind of agreement, though arguing for a reimagined agenda, both in terms of the goals themselves and the positioning of higher education within them. What is certain is that a vigorous, wide-ranging and inclusive debate is needed right now; if we wait until 2030, the boat will have sailed, with a cargo and course not of our choosing. We hope that these 26 reflections will spark this debate and provide nourishment for imagining a new global agenda.

Footnotes

1. Public engagement project focusing on the role of higher education in the post-2030 sustainable development agenda, funded by the University of Toronto - University College London Strategic Partnership Fund, 2023-2025.

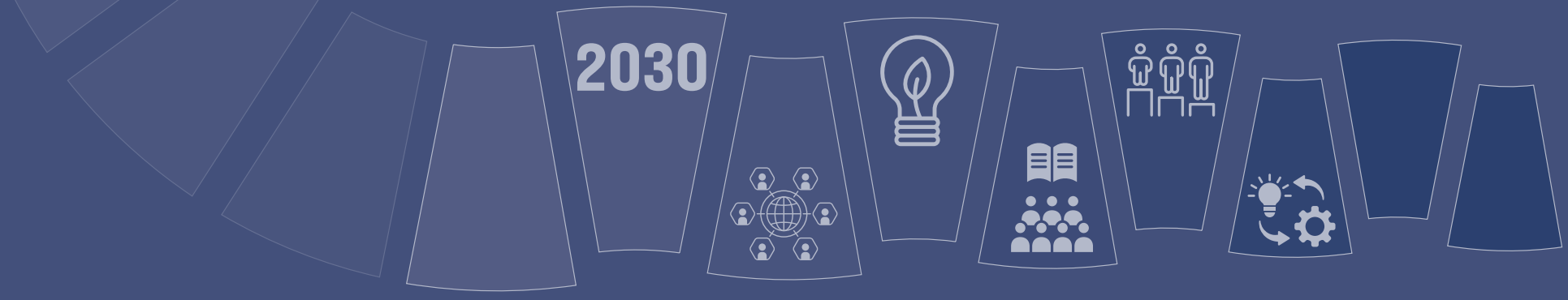
2. The initial ideas were put forward by Aaron Benavot at the CIES conference in Washington D.C., 2023.

1 RETHINKING GLOBAL GOVERNANCE

Rethinking Global Frameworks and Governance examines the ideas underpinning the SDGs, identifying possible alternatives that might guide the post-2030 agenda and the role universities could play in shaping them.

Shivam identifies five schools of thought shaping the post-2030 agenda, namely integrated scientific frameworks, governance reform, localisation, digital and circular transitions, and ethical paradigm shifts, and argues for a leaner and more enforceable system. **Hatch-Tocaimaza** argues that global challenges are better understood as predicaments than problems, calling for re-casting sustainability as capabilities and development as relational functionings grounded in reflexivity and responsibility. **McKenzie** critically examines the SDGs' universal targets and internal contradictions, arguing that future frameworks must better support locally grounded approaches to climate action.

Faul and **Laumann** synthesize research on interlinkages between the SDGs, calling for complexity-informed approaches and systems thinking that can identify clusters of goals with strong internal interdependencies. Also looking at goal interdependencies, **Sobe** focuses on the mutually reinforcing relationship between access to higher education (SDG 4.3) and research capacity (SDG 9.5), calling for stronger integration of education and innovation policy. **Huang** and **Qi** draw on China's experience to present the concept of ecological governance, which repositions universities as key actors in long-term sustainability transitions rather than external contributors. Similarly, **Zheng** calls for conceptualizing universities as co-architects within a polycentric governance ecosystem, highlighting their role in building "bridging communities" that connect local experimentation with global commitments across multiple actors and scales.



WHAT'S NEXT AFTER 2030? FIVE SCHOOLS OF THOUGHT ON THE POST-2030 AGENDA

Rowena Shivam
University College London, UK

Key takeaways:

- There are five emerging schools of thought that will influence the post-2030 agenda in whatever form it takes, namely:
  1. Integrated and science-based frameworks;
  2. Governance and power structure reform;
  3. Increased participation and localisation;
  4. Digital and circular transitions, and
  5. Ethical and legal paradigm shifts.
- There is a significant desire amongst scholars for the SDGs to be re-thought and/or re-worked into a leaner, more enforceable and more inclusive system for the post-2030 agenda.

Introduction

In 2030, the Sustainable Development Goals (SDGs) as we know them today will reach the end of their term. Since 2015, they have provided a universal and purportedly unifying framework for global development. However, with over 230 indicators and 169 targets, their complexity, uneven progress, and limited accountability have raised concerns.

Looking towards future possible replacements, there are three main pathways: (1) extend the timelines with minimal revision; (2) create a new agenda; or (3) allow the global development framework to lapse entirely (Hackenesch, Keijzer, & Koch, 2024; Klingebiel, Pérez-Pineda, & Berensmann, 2025).

This piece explores the mechanisms through which any of these three pathways may be influenced, condensing 20 key proposals from academic and policy literature into five categories: integrated and science-based frameworks; governance and power structure reform; increased participation and localisation; digital and circular transitions; and ethical and legal paradigm shifts. Together, they provide a framework to approach post-2030 global agenda development, indicating a significant desire to re-think and re-work the SDGs into a leaner, enforceable, inclusive agenda.

Integrated and Science-Based Frameworks

Several authors propose quantitative metrics and frameworks, arguing that the next agenda must be grounded in empirical thresholds and simplified structures. Scenario modelling by van Vuuren et al. (2015) and Moallemi et al (2022) illustrates that ambitious sustainability outcomes remain technically feasible but require early systemic interventions in food, energy, and education. Their work highlights the importance of systems thinking for the post-2030 agenda, as detailed by Zu's (2023) 'CLEAR framework' – Convene, Look, Engage, Act, Review – a roadmap for participatory, adaptive and reflexive systems change. It is crucial then that we move beyond isolated frameworks towards a systematic agenda post-2030. Van Vuuren et al (2022) developed a streamlined 'target space' of 36 indicators to guide such integrated modelling and policy. Cernev and Fenner (2024) developed a simple, empirical, global risk-informed framework constituting just 4 categories, 7 goals and around 20 targets for 2050. Both are promising improvements on the SDGs.

Governance, Accountability, and Global Power Structures

Despite their flaws, the SDGs did improve on the MDGs through global coverage, with governance and accountability expected of all nations. Yet, concerns remain over who is responsible for achieving such global goals. Bai (2024) critiques the SDGs' vagueness, arguing for differentiated targets for cities and different sectors, supported by accountability mechanisms like the International Sustainability Standards Board and Science-Based Targets initiative. At the geopolitical level, Hackenesch et al. (2024) stress the EU's potential to lead amid a multipolar order, while Klingebiel et al. (2025) emphasise the role of South-South Cooperation and financing reforms. Shulla and Leal Filho (2022) highlight governance reforms, especially the need for transparent monitoring and civil society participation. Together, these perspectives argue for a post-2030 framework that is both sector-specific and geopolitically realistic, balancing enforceability with inclusivity.

Participation, Inclusion, and Localisation

Another body of literature stresses the importance of bottom-up ownership of

development goals. Bonsu et al. (2020) demonstrate how social innovation and scenario thinking in education can localise goals through youth workshops, while Shulla and Leal Filho (2022) advocate integrating Indigenous peoples, local governments, and marginalised groups into planning. Zwitter et al. (2025) propose 'human flourishing'-based indicators sensitive to cultural and epistemological diversity, and Pradhan (2023) advances co-created, stakeholder-led frameworks that are both scientifically rigorous and socially relevant. These approaches highlight that the post-2030 global agenda must be adaptable to local contexts.

Circular, Technological and Digital Transitions

With the expiry of the SDGs comes potential for notable change; the post-2030 transition will be shaped by both technology and the circular economy. Schröder and Barrie (2024) argue that embedding circular economy targets into the next agenda could address resource inefficiencies whilst maintaining the current SDG structure into 2050. Froehlich (2018), on the other hand, looks into a radically different post-2030 growth landscape based on satellite technology, artificial intelligence, cryptocurrency and space inhabitation which are not limited by traditional geographies and economies. However, Gurumurthy and Chami (2019) warn that digitalisation risks exacerbating inequalities unless data is treated as a public good under principles of justice and inclusion. It should also be noted that other equity risks exist beyond data (Norrag, 2026). The post-2030 agenda must therefore have a technologically advanced worldview, embracing digital equity, innovation and circularity as systemic levers of transformation.

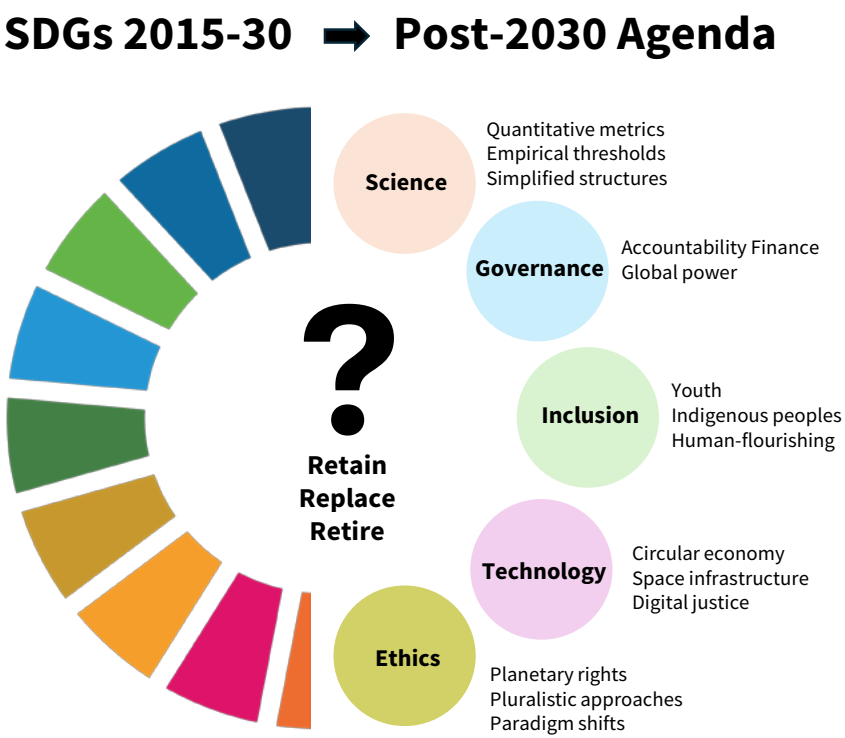
Ethical, Legal, and Post-Growth Paradigms

Finally, we return to the three post-2030 pathways presented in the introduction of this paper and question whether a global development framework is ethical at all. Mistri (2023) contends that growth-centric frameworks are incompatible with planetary justice, advocating for post-growth approaches prioritising redistribution and ecological limits. Antonescu (2016) takes this further, calling for recognising Planet Earth as a legal subject, embedding eco-centric rights into international law. Kumar et al. (2024) highlight the dangers of homogenising global frameworks and instead argue for pluralistic and decolonial approaches. These contributions point towards a paradigm shift: from growth to wellbeing, anthropocentrism to planetary rights, and universality to plurality.

Conclusion

The literature supports everything from abandoning the SDGs to transforming or replacing them. In rethinking global development beyond 2030, scholars envision a roadmap that is at once science-based, participatory, and justice-driven, capable of guiding humanity towards flourishing within planetary boundaries. They concur that the post-2030 agenda must be a leaner, enforceable and inclusive system. Until the formal process begins in 2026, it remains to be seen which influences will prevail in the post-2030 agenda.

Figure 1
SDGs 2015-30 - Post-2030 Agenda



Source: Author

JUST GOVERNANCE FOR THE POST-2030 AGENDA: ORIENTING POLICY BEYOND PROBLEMS

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Key takeaways:

- **Reframe crises as predicaments.** The role of HEIs is not to "solve" but to foster reflexivity, responsibility, and answerability in how futures are shaped.
- **Challenge the progress narrative.** SDGs and universities alike assume progress is linear, measurable, and manageable: assumptions that reproduce the predicament.
- **Treat policy as praxis.** Policy is not a technical instrument but an ethical practice of inquiry, reflexivity, and responsibility.
- **Value just governance.** Distributed leadership and governance are indispensable yet undervalued; They should be recognized as central to academic excellence.
- **Reframe the SDG agenda.** Sustainability as freedoms, development as enactment, and goals as shared responsibilities can guide HEIs after 2030.

In posing the questions—*what will succeed the SDGs in the global development agenda, and what role should higher education institutions (HEIs) have in relation to whatever emerges?*—we must also recognize that we inherit with them a set of assumptions on which the SDGs rest. Among these is the belief that progress and improvement are to be expected: that while circumstances vary, the overall arc of humanity moves toward better outcomes through learning, innovation, and organized effort. So ingrained are these assumptions in modernist institutions under historically exceptional conditions that they appear self-evident, masking the value judgments they carry (Escobar, 2012; Maxwell, 2021).

Inherited Assumptions

Assumptions about progress recur across longstanding conversations about the SDGs in the sustainability and higher education research literatures.

Consider how, in sustainability science, treating progress as linear and measurable becomes institutionalized through results-based policy logics and solutionist approaches, framing climate change as a technical problem of measurement and control and frequently reproducing inequality. Scholars of higher education make a parallel critique, pointing to how efficiency, metrics, and standardized performance indicators organize and value academic work (Sterling, 2021). Across these fields, the same fault line emerges: when progress is assumed, measured, and managed, sustainability is treated as an outcome to be achieved rather than an ongoing, value-laden practice.

From Problems to Predicaments

Rather than miscategorizing socio-ecological challenges as solvable *problems*, Pelizzon (2025) and others argue that it is more generative to understand them as *predicaments*: conditions that cannot be solved or reversed but must instead be lived with and navigated through ongoing ethical and relational commitments. Unlike problems, which presume solutions that restore a status quo, predicaments demand sustained responsiveness. Ageing offers a familiar example: no intervention can restore youth, so policy focuses on care, dignity, and the conditions for living well. Ecological collapse, systemic inequality, and today's overlapping polycrises are predicaments of broader scope but the same order.

Understanding today's polycrises as a predicament shifts attention away from technical fixes alone and toward the social, institutional, and ethical work required to live with uncertainty. What institutions ultimately do takes shape daily in how actors structure activities, allocate time and resources, interpret rules and policies, and negotiate responsibilities across administrative, teaching, research, service, and care work. In this sense, policy lives in practice, with possible futures shaped through routine decisions and inherited ways of working. Technical fixes promise control; predicaments demand judgment.

Policy as Praxis

This reframing opens an ethical-political challenge: reimagining policy and higher education in ways that respond to predicaments rather than reproduce the logics of problems. One useful lens is the *capabilities approach to justice*, which holds that justice lies not in outcomes alone but in the real freedoms people and communities have to live the lives they value (Robeyns & Byskov, 2023). In higher

education, this underscores the salience of belonging, recognition, and the capacity to contribute meaningfully. But in this conception of justice, such capabilities are not the endpoint. Their realization as *functionings* requires reflexivity, participation, and deliberation—principles aligned with what Hardy and Melville (2019) describe as policy as praxis.

Policy as praxis marks a shift from policy as technical instrument to policy as ongoing ethical practice. It places axiological questions—what we value and why—on equal footing with the ontological and epistemological domains in which professional academics are already expected to demonstrate expertise. In practice, this means treating value-based judgment as a core dimension of academic work: visible in how problems are framed, criteria defined and interpreted, trade-offs weighed, and responsibilities negotiated across teaching, research, service, and care.

Just Governance

My collaborators and I (Hatch-Tocaimaza et al., 2025) use the term *just governance* to describe ethical practices embedded in the ordinary workflows and responsibilities of academic labor, aligned with principles of authentic distributed leadership (Bolden, 2011). Faculty already govern through service, peer review, administration, and deliberation, yet this work remains systematically undervalued. A commitment to just governance insists that excellence in governance is as central to institutional purpose as teaching and research, embedding reflexivity, relational responsibility, and axiological deliberation into everyday academic practice. Distributed leadership here is not a management strategy but a lived praxis, advancing sustainability and justice through academic routines made explicit and answerable to those affected (Patel, 2015).

Recasting the SDGs

Tying these strands together, I suggest the familiar SDG triad can be re-cast. *Sustainability* is reframed as *capabilities*: the freedoms and material conditions people and communities value for themselves and for future generations. Development becomes relational *functionings*, understood as the participatory enactment of those capabilities in practice. *Goals*, in turn, become *commitments*: reciprocal responsibilities grounded in answerability rather than fixed targets. Together, this reorientation (Figure 1) points to what HEIs can model in the post-2030 landscape—Relational Capabilities Commitments (RCCs)—as a way of organizing academic life toward sustaining futures rather than managing decline.

Figure 2
A Capabilities-Based Reorientation of the SDG Framework toward Relational Capabilities Commitments (RCCs)

Source: Author

THE BENEFITS AND CHALLENGES OF GLOBAL POLICY FRAMEWORKS FOR CLIMATE AND EDUCATION

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Key takeaways:

- The SDGs have good intentions in furthering global peace and prosperity, but their sustainability action is limited by a broad and conflicting remit
- Global policy frameworks should support, rather than hold back, local climate ambition and action
- This can be achieved through a focus on holistic and interwoven approaches, versus pick and choose goals

Research should aim both to advance collective pragmatic action on education issues globally, as well as counter simplistic approaches that wash out difference with potential colonising effects. Given the tensions between these two aims, it is an imperfect path, as any global policy work necessarily seems to be. While the Sustainable Development Goals (SDGs) provide a framework to further a 'shared blueprint for peace and prosperity for people and the planet, now and into the future;' there are significant problems in how the goals are conceptualised in their detail, and enacted on the ground, including in higher education. This contribution outlines some concerns with the SDGs as a global policy framework, as well as continued hopes for the role of global policy work in advancing climate action in and through education.

As explored in a prior NORRAG article, policy can be an effective leverage point in shifting political systems and structures (McKenzie & Benavot, 2022). And global policy programs, such as the SDGs, are one means of instigating policy change at national, subnational, organisational, and institutional levels. Through their 17 goals, 169 targets and 234 unique indicators, the SDGs provide a framework for benchmarking, targeting, and monitoring progress towards 'sustainable development.' In particular, SDGs 4.7, 12.8 and 13.3 include a specific focus on climate and sustainability education. With all 193 UN Member states committed to the goals, and assessed and ranked on their progress, there is reason to hope this technique is helping make global shifts in action (and likewise with the UNFCCC and Paris Agreement, which also include target setting and reporting on climate education and communication).

However, a closer look suggests problems with the SDG framework. This includes its very broad remit, encompassing everything from Goal 8 of Economic Growth, to Goal 13 of Climate Action, to Goal 17 of Partnerships. Many Goals are in tension with one another, and yet target setting and monitoring is not harmonised across the Goals (Buckner et al., 2025). This can result in countries or institutions appearing to make progress based on reporting only on a select number of Goals (such as in the Times Higher Education Impact Rankings), or based on overall averages (such as in country reporting), which avoids or washes out lack of action in other SDGs. The Goals overall seem not to go far enough to enable achieving the overall aim of sustainability for people and the planet now and in the future, such as the Goal including a focus on ongoing 'Economic Growth,' or even the phrasing of 'Sustainable Development' itself. Promoting a global framework with embedded assumptions about continued 'development' and economic growth, is both unsustainable, and promotes culturally laden assumptions about the aspirations of human life and communities.

With Indigenous colleague Alex Wilson, we recently explored the SDGs as a form of 'wild policy' in higher education, in other words, policy that is 'not evidence-informed, but messy, unpredictable, often damaging and requiring resistance' (p. 1). We detail how the SDGs were turned to as a 'prefabricated 'wild policy' solution' (p. 6) at a university at which we both worked, in ways that eroded both more ambitious climate action and Indigenous orientations to place and sustainability. We instead point to Nunavut Arctic College as a more promising 'policy ecology,' where policy across the institution is based in a a strong Indigenous land-based understandings of Inuit Quajimajatuqangit (IQ), or Inuit knowledge:

> Unlike the unruly SDGs, from which an institution can pick and choose which Goals to prioritize, the locally developed IQ principles are holistic and interwoven – one is not possible without the others. IQ comes from the land [and] provides a policy path that Inuk administrators describe as both decolonizing and furthering environmental sustainability…" (p. 13)

In contrast to highly mobile global sustainability policy orientations, this is a local, land-based and decolonising approach to sustainability in higher education. It advances deeper level 'sustainability,' and on the terms and in the language of local community.

While it may seem that more ground-up policy approaches to global challenges may not be sufficient for the scale and urgency of the climate crisis, in reality there are many cases of local ambition and action surpassing 'messy' global targets. The challenge for a post 2030 agenda may be to provide global supports to enable local policy sovereignty and sharing. This is an approach to a global framework that could highlight and build on promising examples, versus having ambitions reduced to the lowest common denominator globally.

BEYOND TRADE-OFFS AND SYNERGIES: TOWARDS MORE ACCURATE ANALYSES OF SDG INTERLINKAGES

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Key takeaways:

- **Take Systems Thinking Seriously:** as an ancient as well as novel ontology, and move towards whole-network analyses of complex interlinkages, beyond simple trade-off/synergy matrices.
- **Focus on Systemic Leverage Points:** the SDGs that hold the greatest potential for systemic effects within specific contexts, rather than relying on global aggregates.
- **Re-Evaluate Ends and Means:** A new agenda should define the economy as a means to achieving sustainability not a goal in its own right, relegating SDG8.1 (Economy) to a means of implementation for achieving the SDGs, along with the others in SDG17 (Faul, 2018).
- **Fund Regional Knowledge Production:** Designing the next global agenda—and achieving the 2030 Agenda—requires significant funding for researchers in and from the Global South to respond to regional needs. This is not only a matter of equity but also a pragmatic requirement for accurately identifying regional leverage points.

The Sustainable Development Goals (SDGs), targets and indicators are considered to be interdependent, such that progress on one can affect progress on others. Successive waves of research methods have been used to the analyse the interlinkages between different aspects of sustainability in different ways, giving different answers to the questions:

- Which aspects of sustainability are connected?
- In what ways?
- With what implications for policy?

Narratives of trade-offs and synergies obscure systemic risks and leverage points that may differ by region, income-group, and more. Complexity-informed network analysis can detect real nexuses: clusters of goals with strong internal interdependencies that can unlock systemic advances across the entire Agenda 2030, and be used in designing the next sustainability agenda. We conducted a synthetic review of research into interlinkages between aspects of sustainability, categorising five successive methodological waves that differ in how they think about and calculate these links.

The first—conceptual—wave characterises economy, environment and society as pillars, or overlapping circles of a Venn diagram. Moving beyond this, Raworth (2017) conceptualises Rockström's (2009) planetary boundaries as an "ecological ceiling" combined with her "social foundations," redefining the economy not as an objective in itself, but rather as a means for ensuring that humanity stays within this "safe and socially just space" (p. 39).

The second wave moves to empirical analysis, with Nilsson et al. (2016) categorising interlinkages between pairs of SDGs as linear trade-offs, where action to enhance one aspect of sustainable development will result in harmful effects on another, or conversely as mutually reinforcing synergies across different aspects of sustainable development. Calculating these linear relations assumes no variability in the direction and rate of change in the relationship between one pair of SDGs.

In the third wave, O'Neill et al. (2018) conducted cross-country, cross-indicator comparisons for 150 countries on seven indicators of biophysical boundaries and 11 of social foundations. The authors conclude that most real-world relationships do not change in a simple straight-line way. Instead, effects often speed up, slow down, level off, or reverse depending on the

circumstances. Nonlinearity is the rule, not the exception, which challenges the assumptions underpinning analyses of trade-offs and synergies that underpin the majority of evidence used in policy.

Wave 4 moves from analysing interconnected pairs of SDGs (as in Waves 2 and 3) to take a systems view, reflecting the reality that several SDGs interact with each other at once, in ways that are complex, not merely complicated. Anderson et al. (2022) analyse interconnections between all 169 SDG targets, detecting the types of relations and capturing indirect as well as direct effects between all SDG targets simultaneously. This wave analyses all targets simultaneously and assumes that the direction of change of the link between different SDG targets remains the same, but that the rate of change varies (nonlinear monotonic ties).

The fifth wave of computational advances (Laumann et al., 2022) applies a novel computational approach that detects such nonlinear nonmonotonic relationships. A simple example of a nonmonotonic relationship is eating chocolate, which generates a positive feeling at first that can change to negative if you continue eating too much, with different individuals having different tipping points of amount and time. Relations between SDGs may follow similar dynamics, tipping from positive to negative (or vice versa) at different amounts and times in different contexts. The fifth wave also uses network analysis to consider relations across all SDGs simultaneously. These analyses allow the identification of tipping points, systemic interlinkages (nexuses), and goals that can be used to leverage positive or negative results across the entire system (Table 1 OR Figure 1).

Lessons on Education Interlinkages from Sub-Saharan Africa

Faul & Laumann (2024) show that global analyses obscure regional variation: while in global analyses, SDG4 (Education) usually appears in the list of top ten SDGs that would leverage gains across the system if they were achieved, in sub-Saharan Africa it is in the top three (along with SDG10 (Reduced Inequalities) and SDG11 (Sustainable Cities). If regional differences in leverage points are not accurately identified, policies will be neither cost-efficient nor effective; if power relations between Global North and South do not enable the use of evidence and solutions from and by the Global South, policies will deliver limited impact. Furthermore, their analysis demonstrates the importance of discriminating between ends and means. By repositioning SDG17 (means of implementation) and SDG8.1 (economic growth) as means (drivers) rather than end goals, education (SDG4) and poverty reduction (SDG1) goals emerge as the primary systemic levers for sustainability. Finally, in Sub-Saharan Africa, a direct link has long been assumed between SDG8 (Economy) and SDG9 (Innovation). Complexity-informed analysis reveals this relationship is actually explained away by the influence of SDG4. If decision-makers are not aware that the apparent relationship between SDGs 8 and 9 is entirely dependent on SDG4, they risk taking action based on imprecise or spurious associations.

In conclusion

The way researchers describe and analyse the interlinkages between SDGs has profound implications for decision making that takes evidence-informed action on the complex interlinkages across all goals in Agenda 2030, and the development of the next global policy agenda. The next sustainability agenda must recognise this complexity, and rebalance the extent to which traditional knowledges are incorporated into sustainability policies. Researchers and decisionmakers must remain attentive to relations of power: who sets the agenda and who is left out, whose worldview and priorities are in or out, what is measured and how, what and who are funded and who counts as an expert.

Table 1

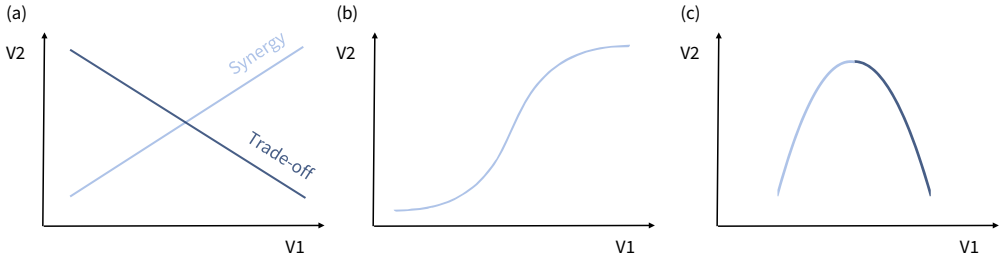
Characterising the Direction and Rate of Change in SDG Interlinkages Across Different Waves of Research

	DIRECTION OF CHANGE	RATE OF CHANGE	TYPE OF RELATIONSHIP	ANALYTICAL SCOPE
Wave 2	Same	Same	Linear	Pairwise
Wave 3	Same	Varies	Nonlinear	Pairwise
Wave 4	Same	Varies	Nonlinear	System
Wave 5	Varies	Varies	Nonlinear nonmonotonic	System

Source: Authors

Figure 3

Schema of (a) Linear Relationships (Wave 2) and (b) Nonlinear Monotonic Relationships (Waves 3 and 4) or (c) Nonlinear Nonmonotonic Relationships (Wave 5) Between Two Hypothetical Variables V1 and V2



Source: Authors

BRIDGING THE GAP BETWEEN SDGS 4.3 AND 9.5 TO CHART HIGHER EDUCATION FUTURES

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Key takeaways:

- Higher education institutions play a more pivotal role in achieving the Sustainable Development Goals than is explicitly recognized, contributing essential scientific knowledge, political will, and public support across all 17 SDGs.
- Progress on SDG 4.3 has been significant, with global higher education enrollment reaching 269 million students and gross enrollment ratios growing to 44%, though inequalities and asymmetries persist. Importantly, expanding access to higher education leads to greater knowledge creation and innovation.
- SDGs 4.3 (access to quality higher education) and 9.5 (research and development capacity) work in tandem and mutually reinforce one another. A post-2030 development agenda that does not leverage these synergies will be an impoverished agenda.

While an important role for universities and other higher education institutions was foreseen in the UN's 2030 Agenda for Sustainable Development, the higher education sector has greater importance than has been recognized. Higher education's potential to mobilize sustainable development has been obscured by a failure to make explicit the tight connections between its research and teaching missions – and a failure to fully appreciate the necessary synergies between higher education access and resilient and sustainable innovation in the social and economic sectors.

In 2015, when the SDGs were unanimously adopted by the international community there were some who already foresaw the pivotal contributions that higher education would make to the realization of all SDGs. Over the past decade – whether it is "Life below water" (SDG 14) or "Zero hunger" (SDG 2) – universities and other higher education institutions have been essential in developing the scientific knowledge, generating the political will, and building the public support for policies and activities that move us towards accomplishing these global goals. This importance of higher education can be seen in initiatives such as UN Academic Impact's UNAI SDG Hub Network and the International Association of Universities' Higher Education for Sustainable Development (HESD) Portal (IAU, n.d.; UNAI, n.d.). And, it is something that should be seen in every higher education institution, in every community worldwide.

SDG 4.3 sets the important goal of ensuring equal access to affordable quality higher education. Its gender equality provisions reflect a commitment to inclusion and equity that reverberate across the 2030 Agenda. In the last decade we have seen progress toward gender parity at the same time as the number of students enrolled in higher education globally moved from 213 million to 269 million and the global average gross enrollment ratio, which is the percentage of the typical young-adult age cohort that is pursuing higher education studies, grew from 36% to 44% (UNESCO UIS). While this progress has not erased troubling global inequalities and asymmetries, higher education expansion means that millions and millions of more people have been able to build sophisticated knowledge and skills that they can use to build flourishing futures for themselves as well as for their families, communities, countries, and regions.

At the same time, universities and higher education institutions are undeniably core to the realization of SDG 9.5, which calls for increasing the number of people employed in research and development and increasing spending levels. Today's technologically advanced world and our ongoing discoveries rely on the higher education sector. Strong research and innovation ecosystems require higher education institutions that are linked up with a range of other partners, from the private sector to the public sector and beyond – particularly when it comes to the green and circular economy transition.

Higher education platforms provide both learning opportunities and research & development. But most crucial is that is that SDG 4.3 and 9.5 work in tandem and mutually reinforce one another. As can be seen in the sprouting of tech hubs worldwide, the expansion of access to quality and affordable higher education leads to greater and more robust knowledge creation and innovation. UNESCO's 2017 Recommendation on Science and Scientific Researchers points out that to have maximum impact as a public good, scientific knowledge – like other forms of knowledge – requires open ecosystems that promote the free flow of ideas (UNESCO 2017).

Such ecosystems cannot be built effectively without higher education institutions committed to pluralism, diversity and inclusion when it comes to building the research and development workforce of tomorrow and imagining the possible. For this we need strong commitments to ensuring equitable access in the secondary to higher education transition. And we certainly also need a commitment to inclusion in the collaborations between higher education and local and regional industries and businesses. Moreover, global research and development capacity cannot be advanced without the work higher education does to seek truth and advance inquiry, for example in classrooms, academic convenings, peer-review publication norms and scholarly communities – all which compose essential infrastructure for knowledge mobilization in today's world.

The benefits of these synergies go well beyond the tech sector and the natural sciences. Research and scholarship in the social sciences, humanities and arts is crucial for tackling contemporary challenges whether they be social, political, economic or environmental. Higher education institutions train the teachers, judges, social workers, engineers, civil servants, artists, and activists who among many others keep our world going. Yet none of this can effectively happen without concurrent efforts to generate and mobilize new knowledge.

As the world looks to a sustainable development agenda post-2030 – and particularly as the global community embraces what the UN Pact for the Future describes as the hope and opportunity that advances in knowledge, science, technology and innovation can deliver a breakthrough to a better and more sustainable future for all (United Nations 2024b). Initial steps forwards for post-2030 frameworks should at a minimum include:

- developing indicators that capture the synergies between teaching and research rather than tracking them in isolation
- linking investments in higher education access with corresponding support for research capacity – and vice-versa
- ensuring coordination between science, technology and innovation policy with higher education policy in national planning

In these ways we will begin to bridge the gap between SDGs 4.3 and 9.5. And we will begin to realize the opportunity still before us to share fairly the transformative power of science, technology and education.

REPOSITIONING HIGHER EDUCATION IN ECOLOGICAL GOVERNANCE AFTER THE SDGS - INSIGHTS FROM CHINA

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Key takeaways:

- Countries can learn from China's experience with integrating higher education into ecological governance rather than positioning it outside policy systems.
- Empower universities as governance actors through aligned funding, evaluation, and planning systems.
- Formalise universities' mediating role in translating national ecological goals into local action.
- Strengthen cultural legitimacy via locally grounded curricula and research, especially in the Global South.

Rethinking Institutional Responsibility after the SDGs

As discussions turn toward what comes after the Sustainable Development Goals (SDGs), a growing concern is that many sustainability initiatives—particularly in education—have relied heavily on short-term projects, partnerships, and market-based incentives. Within Education for Sustainable Development (ESD), universities are frequently positioned as external contributors: they deliver training, conduct research, or pilot innovations, yet remain institutionally separate from the governance systems expected to sustain long-term transformation.

Much of the global sustainability architecture has been organised around target-setting, performance indicators, and partnership-driven implementation. While this has facilitated coordination, it also treats environmental objectives as discrete goals layered on top of existing development systems. By contrast, an ecological governance perspective treats environmental limits and human–nature relations as constitutive conditions shaping institutional design and long-term planning (Zhou, 2024). The distinction is therefore not one of ambition, but of governance logic: whether environmental priorities operate as add-ons or are embedded within the core architecture of public institutions.

While this project-based approach has generated valuable experimentation, it has also fragmented responsibility and weakened institutional continuity. One of the central challenges for the post-SDG agenda is therefore not only identifying new goals, but rethinking the governance arrangements needed to support ecological transition over time. In this context, the role of higher education warrants renewed attention. It is in this context that China's strategy of "Ecological Civilization"—which explicitly attempts to embed ecological goals into state governance—provides an illustrative case for examining this governance shift.

Higher Education Embedded in Ecological Governance

China's ecological civilisation strategy can be read as a concrete institutional configuration of this ecological governance logic. Rather than positioning universities outside the state as autonomous or market-oriented actors, recent policy developments have increasingly integrated higher education into national ecological governance. The central idea explored here is that governance-embedded higher education for ecological transition provides an alternative way of organising universities' public role after the SDGs.

Governance-embedded higher education for ecological transition signifies the structural integration of universities into state governance frameworks, moving beyond mere curricular or pedagogical shifts. Under this model, universities function as public institutions mandated to build long-term ecological capacity—through education, research, and knowledge translation—strategically aligned with policy requirements that link institutional evaluation to low-carbon priorities (Wei & Chen, 2024; Ma & Shi, 2024). The focus here is not immediate environmental performance, but how higher education is systematically organised within national governance to support ecological transition over time.

This integration is visible in both policy planning and administrative arrangements. A national framework such as the Action Plan for Carbon Peaking and Carbon Neutrality in Higher

Education Institutions assign universities explicit responsibilities for carbon peaking and for building capacity for carbon neutrality, including talent development, interdisciplinary research, and regional support. At the same time, administrative instruments such as the Guiding Opinions on Strengthening the Construction of Teachers incorporate ecological ethics and long-term ecological objectives into evaluation and promotion criteria, reinforcing these responsibilities at the institutional level.

This approach is grounded in policy concepts such as the widely cited "Two Mountains" formulation, which emphasises that environmental protection and economic development are not separate agendas but interconnected dimensions of modernisation. In this way, the strategy operationalises the ecological governance logic described above by embedding environmental objectives into long-term planning, coordination, and institutional responsibility, rather than treating them as supplementary sustainability targets or short-lived initiatives.

How Governance-Embedded HE Operates in Practice

Governance-embedded higher education for ecological transition is sustained through institutional mechanisms that embed ecological priorities into national education and development planning frameworks, reinforcing its role within long-term governance structures rather than through temporary initiatives.

These priorities are further consolidated through funding and evaluation arrangements that align research agendas, interdisciplinary programmes, and talent cultivation with ecological objectives. Policy requirements linking university evaluation, discipline development, and research funding to low-carbon priorities reduce reliance on optional or project-based sustainability activities, enabling universities to undertake foundational research and regional capacity-building that are poorly served by market-driven approaches (Wei & Chen, 2024; Ma & Shi, 2024). In this configuration, ecological responsibility becomes structurally embedded in institutional incentives rather than dependent on discretionary projects.

Universities also function as mediating institutions within ecological governance systems. By selectively adapting global sustainability agendas, including the SDGs, within an ecological governance framework, they translate international policy discourses into nationally and locally grounded development strategies (Xiao & Du, 2024). This translational role links scientific expertise with planning priorities and culturally embedded understandings of human–nature relations, particularly in national and regional initiatives related to low-carbon urban planning, ecological restoration, and community-based environmental governance. Rather than operating as external advocates of sustainability, universities are positioned within governance systems as knowledge institutions tasked with sustaining ecological transition over time.

Reimagining the Future of Sustainability Governance

Scepticism regarding China's environmental record, including its carbon footprint, is both widespread and justified. This article does not seek to evaluate environmental outcomes. Its contribution lies instead in examining governance design—specifically, how institutional configurations shape the long-term positioning of higher education within ecological transition.

As countries move beyond the SDGs, many face structural challenges, including constrained public financing, over-reliance on project-based implementation, and limited institutional continuity. From this perspective, the issue is not the desirability of sustainability goals, but the governance arrangements through which they are pursued. The preceding analysis suggests that ecological transition requires institutional embedding rather than episodic intervention.

China's experience with governance-embedded higher education illustrates one way in which universities can be repositioned from external sustainability partners to structurally embedded governance actors. By integrating higher education into long-term planning and accountability frameworks, this configuration redefines the public role of universities—not as institutions operating at a distance from the state, but as entities assigned structured responsibility within governance systems. This is not a model to be replicated wholesale, nor does it resolve broader debates regarding autonomy, academic freedom, or state capacity. However, it provides an analytical reference point for scholars and policymakers seeking to understand how governance structures condition the sustainability of sustainability itself in the post-SDG era.

UNIVERSITIES AS CO-ARCHITECTS OF A POLYCENTRIC GOVERNANCE ECOSYSTEM

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Key takeaways:

- Universities should position themselves as key actors in a polycentric global governance ecosystem and proactively participate in multi-stakeholder dialogue.
- Universities should establish dedicated bridging community on campus (e.g. living labs) to connect academic departments and administrative units with government agencies, community-based organizations and NGOs, international organizations, and businesses, in order to conduct research, run pilots, and develop policy recommendations around specific public goals.
- Universities should provide sustained support for bridging communities through stable funding, staffing positions, and incentive and evaluation mechanisms.
- Other stakeholders should provide institutional support and engage in co-governance of such bridging entities.

Introduction

As the United Nations shifts from goal delivery to system rewiring after the adoption of the *Pact for the Future* in September 2024, the global governance landscape is undergoing a profound transformation. This shift is codified in key documents like the Global Digital Compact—an annex to the Pact designed to establish shared principles for an open, free, and secure digital future—which signal a recognition that traditional, state-centric multilateralism is struggling to address complex planetary crises. While it is framed as an action-oriented package to adapt multilateral cooperation to today's risks and governance gaps (United Nations, 2024).

In this evolving context, higher education institutions (HEIs) face a dual imperative. They are compelled not only by external mandates from the UN and national governments but also by an internal strategic need to maintain societal relevance (Leal Filho et al., 2024). Consequently, universities are evolving from their traditional roles as distinct knowledge providers to active co-architects of problem-solving governance. This article argues that, as the Sustainable Development Goals (SDGs) agenda evolves beyond 2030, universities must become more intentional bridging institutions in a polycentric governance ecosystem—building and sustaining cross-sector, cross-border bridging communities that connect local experimentation to global commitments, especially when formal multilateral channels are constrained.

What is "Polycentric Governance"?

Wiseman's (1999) concept of polylateralism captures how contemporary diplomacy increasingly involves structured relationships between official entities and non-state actors (e.g., universities, NGOs, firms) with ongoing communication and representation, without treating them as sovereign equals. This diplomatic shift helps explain why governance is increasingly polycentric: problem-solving is distributed across multiple decision centers beyond the nation-state.

In this context, "polycentric governance" refers to the organization of action across multiple, partly autonomous decision centers (cities, regions, networks, agencies, international regimes) whose initiatives overlap and interact. The upside is experimentation, learning, and cumulative progress; the downside is fragmentation and uneven accountability if coordination and integrity safeguards are weak. This logic has been influential in climate governance debates, where scholars argue that relying solely on a single top-down treaty process is insufficient; instead, progress can emerge from nested, multi-level efforts that reinforce one another (Ostrom, 2010). Kellner et al. (2024) highlight that while polycentric governance offers resilience, it requires actors who can bridge gaps between diverse stakeholders. This is where universities and its key connectors must step in.

Operationalizing the Vision

Universities cannot replace the state or international organizations. Yet, within the context of polycentric governance, they are well-suited to creating bridging communities that convert global commitments into local capacity.

Drawing on mission-oriented innovation thinking, universities can help convene governments, firms, and civil society around a defined public goal (e.g., decarbonizing a district, reducing heat risk, improving learning outcomes), with shared metrics and iterative learning (Mazzucato, 2018). Blezer et al. (2024) note that urban living labs serve as innovation

infrastructure for local sustainability, but their impact is maximized when governance, inclusion, and data-sharing are explicit. These agreements allow universities to steward shared data infrastructures that link local action to global commitments, a key requirement for effective polycentric multilateralism.

Given the potential effectiveness and resiliency of such a governance and cooperation structure, I argue that university frameworks must establish and support the creation of bridge communities. Unlike traditional academic departments, 'bridge communities' are hybrid entities composed of university faculty, researchers, and a diverse array of external stakeholders, including international civil servants, NGO practitioners, and industry experts.

The strength of these bridges lies in their dual-support system: they are sanctioned internally by university leadership to ensure academic rigor and externally by national or local governments to ensure policy alignment and resource stability. By co-locating internal academic expertise with external operational experience, they function as the primary engines not only for knowledge production, but also for the cultivation of a shared platform among different stakeholders.

Figure 4
Universities as Diplomatic Anchors in a Polycentric Governance Ecosystem

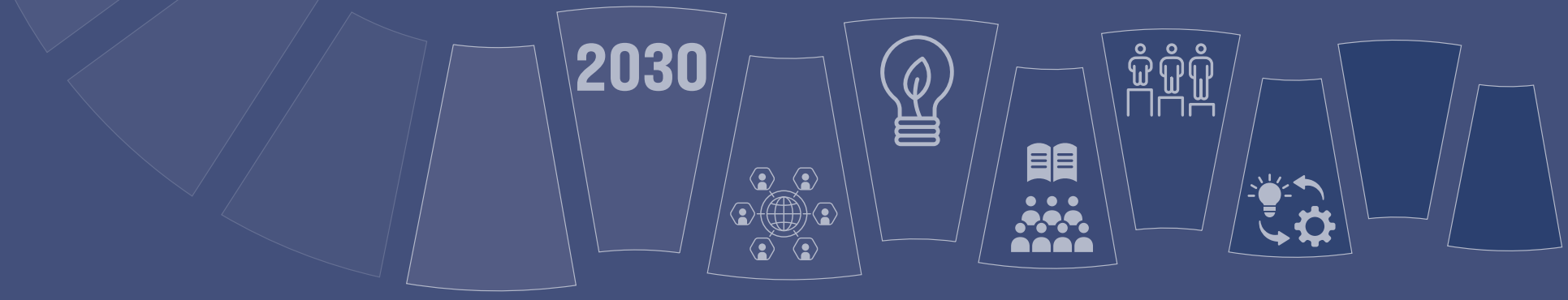
Source: Author

2 UNIVERSITIES AS AGENTS OF CHANGE

Universities as agents of change examines the role higher education institutions might play in shaping the post-2030 agenda through their unique social roles in knowledge production, governance and community engagement.

Lakhno, **Montjouridès** and **Ydesen** address the declining legitimacy of the United Nations and the widening gap between scientific research and global policy, arguing that universities must be positioned as central agents for transforming new knowledge into action. **Di Ruggiero** and **Foster** draw on a deliberative dialogue initiative to argue that universities' convening power, which allows them to bring together academics, policymakers, and civil society, can be leveraged to debate the future of the SDGs and is especially critical in the current moment of geopolitical instability and declining public trust in institutions. **Durak** shows a growing number of sustainability alliances and argues that such alliances are increasingly becoming governance actors through their role in standard-setting, while highlighting uneven participation and calling for more inclusive forms of collaboration.

Pizmony-Levy argues that university-based sustainability centers serve as institutional hubs connecting research, teaching, and community engagement while translating global frameworks into local action. **Gupta** argues that universities are positioned at the intersection of GenAI and sustainable development and must lead strategies in three areas: ethical responsibility, pedagogical innovation and institutional leadership. Finally, **Unterhalter** argues that grand declarations cannot produce change on their own; therefore, universities must actively build networks with communities of practice outside the academy to document intersecting inequalities and collectively shape a post-2030 agenda.



ADDRESSING THE SCIENCE-POLICY GAP AND THE UN SCIENTIFIC LEGITIMACY CRISIS

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Swiss Federal Institute of Aquatic Science and Technology, Switzerland
Dr Patrick Montjouridès
University of Zurich, Switzerland
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Key takeaways:

- UN Global Development Agendas must increase their scientific legitimacy, and implementation capacity, by embedding HEIs in global sustainability governance.
- At the global, regional and national level, HEIs should be positioned as conveners of innovation ecosystems, tasked explicitly with bridging research, policy, and practice.
- International and regional mechanisms should strengthen intermediary institutions and funding frameworks that connect HEI research outputs with industrial deployment.

Introduction

Within the current Sustainable Development Goals (SDGs), higher education institutions (HEIs) and academics have largely been relegated from active agents, capable of shaping the global agenda, to passive actors performing roles defined by others in processes from which they are largely excluded. Never before have HEIs produced so much knowledge about how to mitigate climate change, one of the central objectives of the SDGs — and yet the world struggles to implement it. HEIs are at the forefront of research on renewable energy, carbon capture, and new sustainability practices. Publications, patents, and technologies continue to grow at pace, yet their translation into real-world policy and industrial action remains slow. As a result, the gap between what is known and what is done is widening. This is not due to a shortage of expertise, but to the way global policy systems are structured.

To understand why academic expertise occupy such an ambivalent position in today's global policy landscape, it is not sufficient to analyse present governance arrangements alone. The disconnect between knowledge production and political action is historically produced, shaped by earlier forms of international cooperation in which scientific expertise was central to agenda setting and institutional authority. Revisiting these histories therefore makes visible how the science–policy nexus was configured, contested, and ultimately transformed over time.

In the interwar years, leading intergovernmental initiatives could claim unparalleled scientific prestige. The League of Nations' International Committee on Intellectual Cooperation (ICIC) — with figures such as Henri Bergson, Marie Curie, Albert Einstein, Jagadish Chandra Bose, and Leonardo Torres Quevedo — was created in 1922 to promote transnational exchange among scientists, artists, and thinkers in the service of mutual understanding and peace. The Paris-based International Institute of Intellectual Cooperation (IIIC) later operationalized this work and is widely regarded as a precursor to UNESCO (Grandjean, 2016; United Nations Geneva, 2025). In many ways, these efforts prefigured what we now call "science diplomacy" (Ruffini, 2017). Yet history revealed how fragile the science–policy nexus can be: the authority of scientists and advances in physics were swiftly mobilized by states during wartime — Einstein's 1939 letter warning President Roosevelt about atomic weapons helped trigger decisive government action — even as many scientists had neither control over nor participation in the political uses of their work.

Today, the UN is right to worry about its legitimacy eroding due to an inability to adequately curate and mobilize the knowledge frontier for the greater good. Across policy areas, leading UN agencies are criticized for their inability to handle the very situations for which they have been created, whether pandemics (Morawska & Milton, 2020), income inequalities (Fukuda-Parr, 2019) or climate change (Elder & Olsen, 2019). In education, the flagship report, the UNESCO Global Education Monitoring report has been shown to have limited and inconsistent engagement with academic research (Read, 2017; Smith et al., forthcoming). Similar concerns have been raised about the SDGs, particularly regarding their weak integration of scientific expertise and the persistent difficulty of translating research findings into actionable policy (Elder & Olsen, 2019; Klees, 2024; Malekpour et al., 2023).

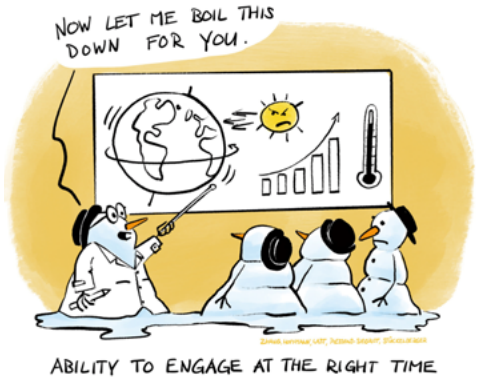
The key determinants of success in carbon dioxide removal and carbon capture, as illustrated by SDGs 7, 9, and 13, vividly demonstrate this gap. While these technologies are not the only substitute for emissions reduction, they are widely recognised as a necessary complement to other mitigation measures. Current removal rates must increase more than a thousand-fold by 2050 to meet the Paris Agreement's targets (Lamb et al., 2024) and existing technologies have yet to be scaled-up despite evidence of effectiveness and sustainability (Mikunda et al., 2021). The knowledge exists: HEIs worldwide are refining direct air capture, bioenergy with carbon storage, and working on novel removal techniques. Yet deployment remains slow and fragmented. This raises a pressing question for the post-2030 agenda: How can global UN agendas shift their integration of HEIs from knowledge generators to central agents of global sustainability transitions?

The Innovation–Implementation Paradox

The gap between scientific knowledge and policy action is often referred to as the innovation–implementation paradox. Scientific knowledge is expanding exponentially, but its uptake by policymakers and industries remains constrained. HEIs embody this paradox: They incubate technical breakthroughs, but their research often stalls at the boundary between the laboratory and the political/societal arena.

Several structural factors help explain this disconnect. First, *timelines are misaligned*. Academic research evolves over years, while policy processes often demand immediate, actionable solutions.

Figure 5
Competencies at the Science–Policy Interface



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Second, *incentives do not support translation.* Academics are primarily rewarded for publications, not for contributing to regulation, implementation, or industrial scale-up. At the same time, policymakers often face bounded rationality: too little time, limited capacity to interpret complex evidence, and competing political pressures (Cairney, 2017). The result is a structural disconnect that slows down global climate action, undermines the legitimacy of international frameworks such as the SDGs, and fuels scepticism about whether global agendas can deliver.

Third, *pathways for evidence uptake remain weak*. In many policy processes, research is introduced late, consulted selectively, or used to justify decisions already taken. Few mechanisms ensure that scientific knowledge informs agenda-setting, policy design, and implementation in a continuous way.

Fourth, *communication barriers further limit impact*. Research is often presented in technical language or academic formats that do not translate easily into policy choices, trade-offs, or delivery plans. Without dedicated intermediaries, valuable insights struggle to cross the boundary between research and action.

Fifth, *political* and organisational constraints also play a decisive role. Budget pressures, short-term incentives, and institutional silos can outweigh long-term, evidence-informed approaches, particularly when research points to disruptive or politically sensitive reforms. Finally, unequal research capacity shapes whose knowledge is heard. Perspectives from the Global South and from interdisciplinary or practice-oriented fields remain underrepresented in global policy processes, weakening both relevance and credibility (Geneva Science-Policy Interface et al., 2019).

Rethinking the Role of Higher Education Institutions

If HEIs are to help shape a credible post-2030 agenda, they must be seen not just as knowledge producers but as strategic nodes in innovation ecosystems, capable of convening diverse actors, mediating between science, policy and practice, and fostering the legitimacy and trust required for transformative change. Current models of innovation remain limited, often overlooking the role of intermediaries (Lakhno & Ortiz-Gervasi, 2024) and struggling to capture the multi-level governance dynamics and societal dimensions that increasingly define sustainability transitions.

Looking at the national level helps furthering our understanding of what may be the barriers, gaps and bottlenecks replicated and amplified at the global level. Switzerland offers a particularly relevant case. As the home of our host institutions, it has formally endorsed carbon dioxide removal as part of national climate policy through the Climate and Innovation Act (2023). In parallel, Switzerland hosts one of the highest concentrations of world-class universities per capita. Within this landscape, the ETH Domain — comprising ETH Zurich, EPFL, Eawag, WSL, Empa, and the Paul Scherrer Institute — acts as a central pillar of the national climate research and technology development ecosystem.

They stand as central catalysts among the multiplicity of actors, link the public and private world, and several of the pioneering companies are spin-offs of these HEIs. Researchers have shown that the potential of technologies coming of this Swiss ecosystem is well established and viable pathways have been demonstrated. Yet progress remains uneven, even despite the high density of research institutions: Funding gaps, fragmented regulation, and unresolved questions of social legitimacy continue to slow deployment (von Rothkirch et al., 2024).

This case illustrates a broader point. HEIs alone cannot close the gap between knowledge and action. But when positioned as conveners, translators, and boundary-spanners, they can accelerate change. They can host dialogues between international organisations, governments, industries, and communities; develop frameworks that anticipate ethical and social concerns; and ensure that climate innovations are not only technically feasible but also politically and socially legitimate.

A Way Forward Beyond 2030

Looking ahead, the post-2030 agenda should be used as an opportunity by the UN to reclaim scientific legitimacy by including HEIs at the core of its negotiation and implementation strategies. This requires moving beyond rhetorical commitments to "partnerships" and embedding universities more deeply in global policy processes.

First, HEIs should be recognised as trusted anchors of scientific credibility across the full policy cycle. Too often, academic expertise is brought in late or used selectively, limiting its influence on agenda-setting and implementation. Embedding universities more systematically in policy processes would strengthen the evidence base of global action and help restore confidence in international frameworks by grounding decisions in independent, peer-reviewed research.

Second, HEIs need to be equipped to act as innovation intermediaries, not only as knowledge producers. Misaligned timelines and incentive structures currently prevent research from moving beyond the laboratory. Governments and international organisations should therefore account for providing dedicated resources and mandates that enable universities to engage in policy design, regulatory support, and scale-up activities. By supporting these functions and adjusting incentives accordingly, HEIs can help translate research into deployment more quickly and more fairly, responding directly to the structural barriers that slow implementation.

Third, HEIs should be mobilised as strategic conveners within fragmented governance systems. Weak coordination, communication barriers, and political silos continue to limit the uptake of scientific evidence. As relatively trusted and neutral spaces, universities are well placed to bring together policymakers, industry, civil society, and communities, to translate complex knowledge into actionable options and to ensure that a wider range of perspectives, including those from the Global South, inform decision-making.

The climate crisis is too urgent for knowledge to remain in the ivory tower. If the new global agenda beyond 2030 aims to deliver, it must rethink the role of HEIs: not as peripheral actors producing knowledge in isolation, but as central agents transforming that knowledge into action.

CONVERSATIONS TO ADVANCE SUSTAINABLE DEVELOPMENT THROUGH HIGHER EDUCATION INSTITUTIONS

Erica Di Ruggiero
University of Toronto, Canada
Nicoda Foster
University of Toronto, Canada

Key takeaways:

- Higher education institutions (HEIs) need to better exercise their convening power. These crucial societal actors play an essential role in convening diverse state and non-state actors to interrogate complex challenges surfaced by the SDGs by advancing transdisciplinary collaborative research across sectors.
- HEIs must play a key role in shaping transformative actions and preparing future leaders to implement sustainable and equitable solutions globally and locally.

Introduction

The UN's 2030 Agenda for Sustainable Development outlines 17 Sustainable Development Goals (SDGs) that call for global action to foster peace and prosperity for all people and the planet while leaving no one behind. However, as the 2030 deadline looms, most, if not all the SDGs, will remain unmet (Nerini, et al., 2024; Sachs, Lafortune, & Iablonovski, 2025; United Nations, 2024). This challenge has called into question what the role of different societal actors such as higher education institutions (HEI) should be in advancing knowledge to realize these goals.

Higher education institutions (HEIs) have remained steadfast in their commitment to sustainability and the SDGs as they recognize the need for universities to form knowledge creating and mobilizing networks that help to shape the future of sustainability goals. Education, research, innovation and leadership are essential to help society address the complex challenge of the SDGs. HEIs, with their broad remit around the creation and dissemination of knowledge and their unique position within society, have a critical role to play in the achievement of the SDGs. One of the important roles that universities play is through their convening role, bringing together diverse stakeholders to address critiques of the SDGs and current approaches to achieving them, and ultimately, building buy-in for collective action. Universities are conveners – connecting academia, industry, policymakers and civil society to create partnerships and scale solutions. By aligning research, education and operations with the SDGs, universities can lead by example and inspire wider societal change. The convening power of universities can bring evidence and neutrality to crucial decision-making processes for sustainability.

Deliberative Dialogues to Advance Sustainable Development

In 2023, the University of Toronto launched the SDGs@UofT initiative to catalyze interdisciplinary research on the SDGs through its SDGs Scholars Academy, a think tank with over 180 affiliated members. The SDGs Scholars Academy launched the "Conversations that Matter" series designed as a forum for deliberative dialogue involving academia and civil society about the role of HEIs in advancing sustainable development agendas. Forty-two academics from countries such as South Africa, Spain, Pakistan, Jamaica, China, the United Kingdom, the US and India, from disciplines that included education, information, sustainability, health and law were convened and interrogated the role of HEIs. Recognizing the shifting geopolitical context, participants described HEIs as critical actors in shaping solutions and cultivating future leaders and changemakers. This moment, marked by geopolitical instability, shifting financial priorities, and the urgent need for global solutions, presents universities with a critical role in advancing sustainable development including:

- **Transformation through research:** Universities and civil society organizations are grappling with funding cuts and political interference. In some regions, this is further compounded by the loss of public trust in institutions. However, globally minded universities, hold the potential to drive transformative change through local, contextually relevant research, education, and collaboration.
- **Global Partnerships:** There is a clear call for universities to strengthen partnerships, especially across low-, middle- and high-income country regions, to collectively leverage resources, expertise across sectors

and disciplines, and opportunities for impactful research. Global collaboration, despite challenges of improving equity and sustainability, remains essential.

- **Redefining the SDGs:** Universities have the potential to inform future global goals by incorporating a broader understanding of sustainability that includes human rights, social justice, and environmental stewardship. The opportunity lies in their capacity to critically engage with and reframe the SDG framework, encouraging new ideas and directions for the future.

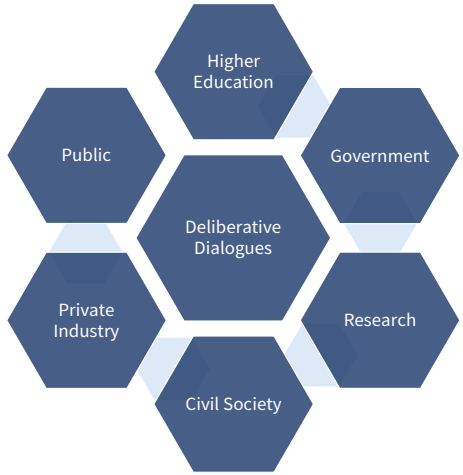
What should decision makers have in mind when navigating how HEIs can contribute to the SDGs and the post 2030 Agenda?

Universities have emerged as essential conveners, with the capacity to debate and bridge diverse perspectives and foster meaningful collaboration in sustainability efforts. Moving forward, decisionmakers should consider several factors when addressing the SDGs and ways that HEIs can contribute to the post 2030 Agenda:

- Universities have been harnessing vast amounts of data assets, and catalyze research from diverse sources including engaging with diverse Indigenous knowledge systems that can decolonize and address urgent global challenges like climate change. The results of these efforts can be leveraged to inform more transformative and transdisciplinary solutions to pressing issues within the SDG timeline.
- Universities have increasingly begun to invest resources to prioritise community engagement to facilitate collaboration between students and local communities to address social justice issues. This co-creation of contextually relevant solutions will help to bridge gaps in data to measure progress on SDGs such as SDGs 2 and 5 and empower communities with the tools they need to drive change locally.
- Universities should continue to operate as spaces for critical thought and reflection. By reimagining the future of sustainability and challenging conventional frameworks, they can lead the way in reshaping global narratives around sustainability, ensuring that the SDG agenda is more inclusive, equitable, and impactful.

HEIs should be empowered to lead boldly – acting locally, anticipating future challenges and driving progress towards the SDGs and future global policy agendas. As transformative shifts in systems and technologies accelerate, through their convening role, universities can facilitate transitions that involve multiple stakeholders. They are essential to equipping societies with the tools needed to navigate disruption and embrace sustainable futures.

Figure 6
Universities are Conveners that Can Host Deliberative Dialogues with Multiple Stakeholders to Advance the SDGs



UNIVERSITIES IN ALLIANCE: STRENGTHENING SUSTAINABILITY BEYOND 2030 THROUGH COLLECTIVE ACTION

Tugay Durak
University College London, UK

Key takeaways:

- Increase funding to support the participation of universities from the Global South in sustainability alliances.
- Sustainability Alliances must develop inclusive definitions of sustainability that encompass justice, resilience, and equity, promoting a comprehensive understanding of sustainability.
- Sustainability alliances must provide open-access benchmarking tools and training for both members and non-members.
- Strengthen sustainability alliances' policy advocacy role, linking universities with national and international sustainability strategies.
- Foster collaboration across sustainability alliances to reduce duplication and fragmentation.

The Promise and Limits of Universities

Universities play a crucial role in promoting sustainable development. Through teaching, research, and community engagement, higher education institutions (HEIs) prepare future leaders, generate new knowledge, and embed sustainability practices locally - thereby contributing to broader societal transformation.

Yet, despite bold institutional commitments, universities often struggle to move beyond aspiration. Many efforts remain fragmented, underfunded, or limited to "greening" campuses rather than addressing systemic sustainability challenges (Lim, 2024); the gap between ambition and implementation highlights the need for stronger mechanisms of collaboration.

Alliances as Collective Responses

Sustainability alliances offer one such collaboration mechanism. By joining networks, universities gain legitimacy, visibility, and benchmarking that strengthen their sustainability agendas (Lakhno & Ortiz-Gervasi, 2024). Alliances embody SDG 17 – Partnerships for the Goals, underscoring that progress requires cooperation rather than isolated initiatives.

At least 27 university sustainability alliances—with publicly accessible English-language documentation—operate at global, regional, and national levels. Membership in these alliances is institutional (universities join as organisations), while individuals typically engage through alliance activities and working groups. Global platforms include the Higher Education Sustainability Initiative (HESI), the Sustainable Development Solutions Network (SDSN), and the International Sustainable Campus Network (ISCN); regional examples include the Nordic Sustainable Campus Network (NSCN) to the Baltic University Programme (BUP); national initiatives include Italy's RUS and Austria's Alliance of Sustainable Universities. Figure 1 shows that while university sustainability alliances have existed since the early 1990s, their establishment accelerates markedly in the SDG era.

Across this landscape, alliances vary in mission and scope, but their activities can be grouped into four roles:

1. Advocacy and policy influence (e.g. supporting sustainability commitments in higher education policy)
2. Knowledge-sharing and capacity building (peer learning, conferences, tools, and training).
3. Research and innovation (collaborative research and challenge-led initiatives).
4. Education and student engagement (curriculum support and student leadership development).

These roles of university alliances are particularly valuable beyond 2030 because they address a central weakness in SDG implementation in higher education: universities often act in isolation, compete for prestige, and struggle to institutionalise sustainability across teaching, research, operations, and community engagement.

Shaping Meanings and Priorities

Beyond practice, alliances shape what "sustainability" means in higher education. Many national alliances in the Global North focus on environmental metrics, such as energy efficiency and emissions. By contrast, Global South alliances often adopt broader agendas, linking sustainability with social justice, resilience, and local development priorities (Ruiz-Mallén & Heras, 2020). Examples include PERIPERI U (Africa) on disaster risk reduction and resilience, Red Campus

Sustentable (Chile) pursuing a fair, diverse and regenerative society, and Argentina's Network of Argentine Universities for Environmental Management and Social Inclusion (UAGAIS), which frames environmental management through social inclusion and works with social actors to address community problems.

However, participation is uneven. European and North American universities dominate most alliances, while Sub-Saharan Africa, South Asia, and Small Island Developing States remain underrepresented. This imbalance risks reproducing global inequalities in whose voices shape sustainability agendas.

Alliances as Governance Actors

Alliances are increasingly acting as governance actors in higher education: they set standards, develop guidelines, and require members to document progress through reporting. The Austrian Alliance of Sustainable Universities, for example, produced a sustainability handbook that obliges member institutions to publish aligned sustainability reports (Bohunovsky et al., 2014). By linking guidance to reporting, such practices institutionalise sustainability within university governance, helping to curb "window dressing" through shared expectations, peer learning or review, and open tools that prioritise improvement over branding (Lakhno, 2024). At the same time, alliances amplify universities' voices in international forums, linking higher education more directly to global sustainability negotiations.

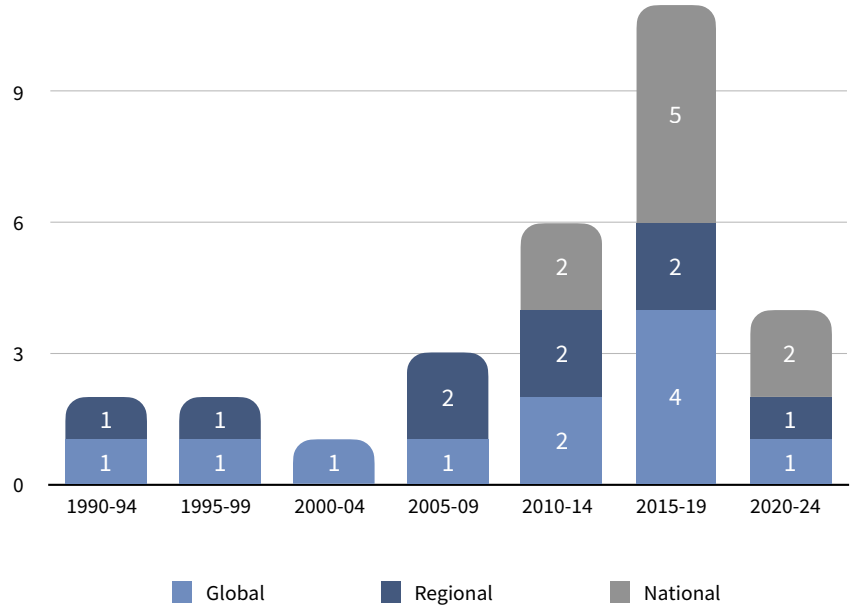
Beyond 2030: Towards Inclusive and Transformative Alliances

To achieve systemic impact, alliances must go further. Three priorities stand out:

1. **Equity in membership** – enabling universities in under-resourced regions to join and contribute.
2. **Holistic agendas** – integrating equity, decolonisation, and resilience alongside environmental concerns.
3. **Policy engagement** – using alliances as intermediaries to connect higher education with national and global sustainability policymaking.

By adopting these shifts, alliances can move from platforms of exchange to catalysts of transformation. Universities cannot deliver sustainability alone, but neither can alliances succeed if they reproduce the inequalities that sustainability itself seeks to overcome.

Figure 7
Foundation Years of University Sustainability Alliances



Source: Author

CENTERING ON SUSTAINABILITY: BUILDING LOCAL CAPACITY FOR GLOBAL GOALS

Oren Pizmony-Levy
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Key takeaways:

- The post-2030 agenda should recognize the unique structural roles that higher education institutions have in advancing sustainability: Connecting diverse actors and sectors, and facilitating exchange between global frameworks and local action.
- Higher education institutions should develop and strengthen sustainability centers as a strategic institutional response to complex, cross-cutting "wicked" problems.
- University-based sustainability centers should adopt a whole-institution approach, working simultaneously across research, teaching, campus operations, and community partnerships.

Scholars have used various metaphors to conceptualize the role of higher education. In their review of the literature, Stevens, Armstrong, and Arum (2008) identify four dominant metaphors: universities as sieves that regulate mobility and determine access to privileged social positions; as incubators that prepare competent social actors; as temples that legitimize formal knowledge; and as hubs that connect multiple social processes and institutional domains that are typically treated as separate (e.g., economy, politics, science, professions; p. 128). Relatedly, Frank and colleagues (Frank et al., 2000; Frank & Meyer, 2020) describe higher education institutions as *receptor sites* that serve as intermediaries, translating global ideas into locally meaningful practices, and vice versa.

In the face of escalating sustainability challenges and the intensifying climate crisis, I argue that higher education institutions must actively lean into these established roles—particularly those of *hub* and *receptor site*. One effective way to do so is through the creation of well-networked centers for sustainability that operate outside traditional departmental or programmatic structures. Such centers offer the institutional flexibility needed to address complex, rapidly evolving problems; they draw on diverse ways of knowing across disciplines and fields, and promote genuinely multi-, inter-, and transdisciplinary approaches to sustainability and education.

To maximize their impact, sustainability centers should adopt a *whole-school approach*, working across academic, administrative, and community-facing units. This includes supporting the development of new curricula; collaborating with stakeholders such as student organizations and mission-aligned staff to strengthen institutional sustainability performance and climate action; and "connecting the dots" among faculty and staff already engaged in sustainability work. In doing so, these centers facilitate both innovation and coordination, helping institutions move from isolated efforts to systemic transformation.

To illustrate how these centers can function as hubs that connect institutional actors, translate global goals into local action, and amplify the experiences of local actors within international discourse, I turn to a case I know well: the Center for Sustainable Futures (CSF) at Teachers College, Columbia University. Established formally in 2020, CSF grew out of informal faculty collaboration that began in 2014. The Center's mission is *"to explore new ways to transform education through original research and the exchange of ideas to empower all people to solve global and local environmental challenges."* Operating outside the formal academic structure of the university, CSF convenes students and faculty from across departments; supports the development of new courses; and collaborates with stakeholders to improve institutional sustainability performance.

At the local level, CSF maintains research–practice partnership with the NYC Public Schools Office of Energy and Sustainability to advance sustainability education (Pizmony-Levy et. al., 2021; Pizmony-Levy and Wagner, 2025). Beyond this partnership, the Center also leads additional research initiatives, including national and international public opinion studies on climate change education, and surveys of organizations engaged in climate change education and communication (e.g., Pizmony-Levy et. al, 2023). Together, these projects extend the Center's impact by generating timely evidence, informing policy and practice, and amplifying practitioner and community perspectives. CSF

disseminates this work through conferences, invited presentations, and other public outreach strategies. Its research contributes to international discourse, informing initiatives such as the 2024 OECD Teaching and Learning International Survey (TALIS).

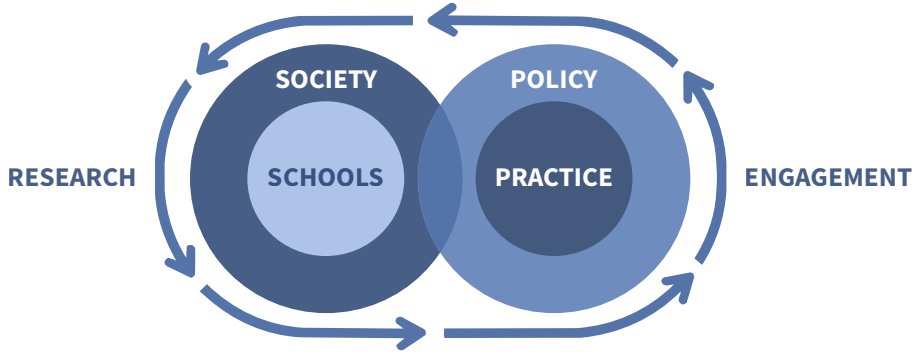
Centering sustainability requires moving beyond fragmented initiatives and embracing it as an institution-wide priority. Academic centers can catalyze this transformation. They connect research with practice, global frameworks with local action, and faculty expertise with student engagement. As higher education confronts the climate crisis, the priority is clear: invest in structures that enable collaboration, experimentation, and sustained commitment. Supporting sustainability centers is not merely administrative; it is a strategic investment in institutional and student readiness for a rapidly changing world.

Looking ahead, this argument speaks directly to the future of the global sustainable development agenda. As the international community imagines the next phase of efforts to protect our planet and improve quality of life, higher education must be central to that vision. This requires recognizing the full diversity of postsecondary institutions—not only research universities, but also teaching-focused institutions and community colleges—and understanding higher education as a cross-cutting actor across the sustainability agenda, rather than confined to a single "education" goal.

Such an agenda could build on earlier commitments by more explicitly empowering higher education institutions to take systemic roles in sustainability and climate action. Explicitly encouraging the development of well-networked sustainability centers could prompt ministries, funders, and institutions to strengthen local–global partnerships in research, teaching, and engagement. New indicators could also emphasize networks—partnerships, linkages, and cross-sector collaboration—rather than isolated outputs.

Some stakeholders will emphasize access and participation in higher education. While important, that discussion lies beyond this argument. The central claim is that future sustainability agendas must treat higher education not only as a site of teaching and learning, but as critical infrastructure for coordination, innovation, and systemic change—with sustainability centers as key organizational engines.

Figure 8
Center for Sustainable Futures (CSF) Connecting Research and Engagement for Societal Impact



Source: Center for Sustainable Futures, Teachers College, Columbia University

HIGHER EDUCATION LEADERSHIP IN PROACTIVELY (RE)IMAGINING (GENAI-MEDIATED) EQUITABLE AND SUSTAINABLE FUTURES

Achala Gupta
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Key takeaways:

- Adopt transdisciplinary frameworks that embed generative artificial intelligence (GenAI) education (beyond literacy) within the wider Sustainable Development Goals (SDGs) agenda, connecting quality education to equity, work, and justice.
- Position universities as collaborators and agenda-setters by involving them directly in the formulation of the post-2030 developmental agenda.
- Provide Higher Educational Institutions (HEIs) with resources to ensure effective GenAI education is provided to future graduates.
- Enable knowledge exchange and partnerships between HEIs and industry to co-curate the future of GenAI and of society in the years to come.

This piece advocates for and suggests policy approaches to empowering the higher education sector, moving it beyond passive adaptation and toward proactive leadership in reconfiguring equitable and sustainable futures, which are likely to be GenAI-mediated, within the post-2030 global agenda.

The global higher education sector stands at a critical juncture as new technology continues to shape everyday society, through the expansion of the relevant industry, favourable policy frameworks and enabling strategic priorities, resulting in the routine uptake of these technological advancements in increasingly socio-technical spaces around us. As the 2030 horizon of the United Nations SDGs approaches, attention is shifting to what comes next. Within this debate, a pressing question arises: how should HEIs engage with emerging technologies such as GenAI, and what role should they play in ensuring that their integration contributes to just, equitable, and sustainable futures? This question impacts most, if not all, public priorities worldwide, making this contribution pertinent. In this piece, I bring to the fore my argument that HEIs should be entrusted with greater responsibility to architect GenAI-mediated futures. Key points that contribute to this argument—and relevant policy recommendations—are outlined below.

HEIs are positioned at a critical intersection between GenAI and sustainable development

GenAI has entered the realm of everyday society with remarkable speed, offering new tools for knowledge production, creativity, and efficiency. Yet its mass adoption is fraught with tensions that mirror broader debates around sustainable development (see Bender et al., 2021). On the one hand, proponents highlight the potential of GenAI to enhance access to valuable information, reduce workloads, and bolster productivity; on the other hand, critics warn of risks such as algorithmic bias, ethical dilemmas, dependency on corporate platforms, and the potential erosion of academic integrity and human-centred learning (Awasthi & Gupta, 2025). These tensions highlight the importance of higher education to realise social and epistemic justice, particularly in preparing graduates to engage critically and inclusively with technologies that will shape the future of work and citizenship.

It is imperative to foreground the responsibility of HEIs in the future global agenda

The post-2030 agenda presents an opportunity to reposition the higher education sector as a central actor in global governance debates, particularly in relation to technology and sustainability. A transdisciplinary approach—which combines expertise from fields such as sociology, engineering, political science, and law—is essential, especially considering disciplinary variations, both in academia and in relevant industries, in how new technologies are viewed and adopted (Gupta, 2024). The integration of GenAI into curricula should not be treated solely as a discrete technical issue but connected to broader societal concerns: equity in access to education, the future of work, environmental sustainability, and the ethics of digital infrastructures. This extends the remit of SDG 4 (Quality Education) by linking it directly with SDG 8 (Decent Work and Economic Growth), SDG 10 (Reduced Inequalities), SDG13 (Climate Action), and SDG 16 (Peace, Justice, and Strong Institutions).

HEIs must move from the periphery to the central architecture of equitable futures

To ensure that GenAI supports sustainable and equitable development and growth rather than undermining them, HEIs should be provided with resources to proactively lead the strategies that address three interconnected dimensions:

1. **Ethical responsibility** – ensuring that GenAI use is critically assessed for fairness, inclusivity, and accountability, including its direct environmental cost,
2. **Pedagogical innovation** – embedding GenAI into curricula in ways that strengthen rather than diminish human creativity, critical thinking, and democratic values, thus exemplifying the use of new technology in society at large and,
3. **Institutional leadership** – positioning universities as key actors in shaping the global post-2030 agenda by linking educational practice with social, economic, and ecological sustainability.

TAKING A PLACE AT THE TABLE: REFLECTIONS ON PARTICIPATION, CONNECTION AND ROLES FOR HIGHER EDUCATION IN A NEW GLOBAL AGENDA

Elaine Unterhalter
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Key takeaways:

- Build a responsive set of international connections between higher education institutions and communities of practice outside universities to formulate post 2030 goals, document forms of intersecting inequalities and how to overcome them
- Documenting and curating information on intersecting inequalities as part of the post 2030 agenda
- Support public discussions on data and practice regarding how to support equity, inclusion, sustainability and appropriate forms of growth

Introduction

Higher education institutions were not involved in formulating the Millenium Development Goals (MDGs) and only selected academics and specialist research centres contributed, often indirectly, to discussions on the Sustainable Development Goals (SDGs).. The SDG framework has no vision on how to connect higher education institutions equitably with the communities they serve. Instead it has indicators on increasing student access and attending to training for education and health professionals, but does nor formulate a wider vision for higher education institutions . Some consequences of this gap is that the extensive SDG framework of goals, targets and indicators says nothing about the conditions of how higher education institutions connect with communities, or might consider equity, inclusion, democracy, sustainability, the responsible use of technology or considerations of how to plan for futures marked by solidarity, not hierarchy or unjust exercise of power. Since 2015 work on these issues, linked to the SDG agenda, has been done by academic researchers and selected universities in certain countries, but takes different forms in different settings, and has no common agenda with regard to some of the forces of marketization, forms of control, widening global inequalities, devastating wars, pandemics, and the destructive effects of the Anthropocene.

We have learned from more than thirty years of working with global governance in education that grand declarations, however eloquent or focussed on specific indicators cannot, simply as exhortatory texts, bring about change. People are needed to take a seat at crucial decision-making tables, and institutional processes are needed to build connections and forms of participation to plan, prepare and follow up. A national framing for this process, articulated in the SDGs, was largely associated with governments, while the oversight was given to international organisations that have come under many forms of attack in the last five years. Thus, this articulation between international organisations, national governments, and higher education institutions operating as 'stand alone' enterprises may not be the best mechanism for higher education institutions thinking globally and acting locally. A careful mapping of processes of connection between universities and a range of communities is needed in order to help understand and navigate the uncertainties of the present moment and how to address these.

The institutional form for making these connections in a landscape of unequal higher education institutions also needs consideration. Vincent Carpentier and I have written about how pressures on higher education institutions in the contemporary moment have made it difficult to respond to building equity, inclusion and sustainability, and reflect critically on forms of growth. We suggested conditions that higher education institutions would need to satisfy to support work in those directions – attention to publicness, organisational connections to communities experiencing inequalities, and a sense of the fragility and vulnerability of institutions, guiding those working within them and those supported by their work (Carpentier and Unterhalter, 2022).

While in many contexts establishing these conditions can be difficult, my own experience

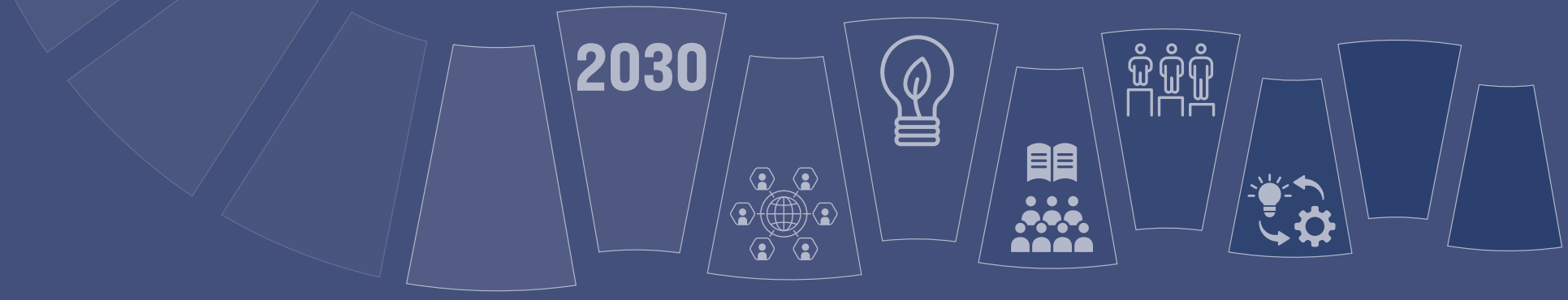
over ten years on the AGEE (Accountability for Gender Equality in Education) project (www.gendereddata.org) indicates some possibilities. AGEE entails building networks and participatory discussions about gender and education data, involving academics in universities, international organisations, national governments, civil society organisations, women's rights activists, teachers and school communities. The project has a flexible form, and one insight it has generated is that researchers linked with higher education institutions can support connection with communities of practice outside universities in different forms, including facilitating co-ordination, assisting with implementation of government policy, or providing a setting for critique and consideration of strategic priorities (UCL AGEE and UNESCO, 2025).

Grand declarations and internal institutional processes in higher education may have appeared to have programmed inclusion, equity, sustainability and forms of growth into a GPS for the future for universities. But this process has been detached from practice on the ground. In my view, higher education institutions and networks need to mobilise and co-ordinate their insights to help shape a post 2030 agenda, work on an institutional road map for the higher education sector post 2030 thinking how to address inequalities internationally. This entails researchers working with communities of practice outside the academy to make some detailed descriptions of the terrain, the forms of vehicles we are driving, the bumps in the road, and what will help us over them. In these times we need pooled efforts and managed processes to travel carefully and connectedly to take up seats at key tables.

3 PEDAGOGY, LEARNING, AND COMMUNITY

Pedagogy, Learning, and Community addresses the changes needed in teaching / learning and the curriculum in higher education, in creating transformative spaces both within the university and beyond in communities.

Lin, **Shoaib**, **Andebo**, **McHugh**, **Gomes** and **Najeeullah** argue for a wisdom-oriented approach to higher education, drawing on ideas from Confucianism and Ubuntu, replacing the instrumentalist, neoliberal agenda with a focus on inner transformation and relational awareness. **Misiaszek** also provides a critique of dominant approaches to teaching and learning, putting forward instead a proposal for ecopedagogy, rooted in Freirean ideas of developing critical awareness of environmental injustices and collective action for transformation. **Witenstein's** contribution focuses on the idea of just transitions, movements towards decarbonization that are in concert with those for social justice, asserting the key role that higher education can play in these processes. **Vendrametto** and **Jacobi** also highlight universities' relationships with communities through a case study in São Paulo, Brazil, with transformative opportunities provided for students through citizen science and social learning. The final piece by **Zaidi** turns attention to student-led initiatives, showing the importance of spaces opened by universities for participatory research and dialogue through which young people can drive forward their agendas for sustainable futures.



TOWARD GREAT LEARNING: CULTIVATING LOVE, WISDOM, AND ECOLOGICAL CONSCIOUSNESS IN HIGHER EDUCATION

Jing Lin
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Maha Shoaib
University of Maryland - College Park, United States
Pascal Andebo
University of Maryland - College Park, United States
Denise McHugh
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Virginia Gomes
University of Maryland - College Park, United States
Qimmah Najeeullah
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Key takeaways:

- **Reframe the purpose of higher education:** Position universities as spaces for cultivating wisdom, respect, ecological responsibility, and solidarity rather than serving primarily as engines for labor and markets.
- **Integrate plural knowledges and practices:** Embed contemplative pedagogy, Indigenous wisdom, place-based learning, and ecological consciousness across the school to higher education continuum to foster empathy and interconnectedness.
- **Foster cooperation, peace, joy, and soulful learning:** Replace competitive models with cooperative, heart- and spirit-centered approaches that empower learners to build solidarity and pursue the common good for both humans and the more-than-human world.

Introduction

The United Nations Sustainable Development Goals (SDGs), adopted in 2015, articulate a shared global vision for human and planetary well-being through 2030. The 17 interrelated goals seek to eradicate poverty and hunger, reduce inequality, promote gender equity, ensure quality education and health, protect the planet's ecosystems, foster sustainable economic development, and build peaceful, just, and inclusive societies. As 2030 approaches, however, the international community confronts the unmet goals of the SDGs alongside intensifying ecological collapse, widening inequality, and crises of meaning. These challenges expose the limitations of the SDGs, which recognize global interdependence but insufficiently address inner transformation, and that justice, peace and sustainability cannot be achieved without transforming how we understand self and other, and that sustainability requires a shift from material growth to wisdom cultivation. Higher education systems remain tethered to neoliberal logics, treating students as future workers and institutions as engines of economic growth. While this model has advanced research and innovation, it has also fragmented the human spirit, marginalized Indigenous wisdom traditions, and failed to equip learners with the moral, ecological, and spiritual capacities needed to sustain life on Earth.

To envision higher education's role beyond 2030, we propose a return to the spirit of Great Learning (Da Xue) from Confucian philosophy, enriched by African Ubuntu, contemplative practice, and ecological ethics. This vision calls for universities to become spaces not only of technical expertise but of inner transformation, solidarity, and planetary responsibility. Higher education must cultivate whole human beings, individuals capable of wisdom, compassion, and ethical imagination, who can lead with humility and a sense of interdependence with all beings.

From Knowledge Accumulation to Wisdom Cultivation

Higher education has long prioritized the acquisition of knowledge, often in siloed disciplines detached from the lived realities of students and communities. In the era beyond 2030, universities are called to reorient toward wisdom cultivation: integrating intellectual inquiry with contemplative practices, ethical

discernment, and relational capacities (Lin, Edwards & Culham, 2019). Wisdom is not only knowing facts but discerning what truly matters, acting with compassion, and perceiving one's place within the web of life. Meditation, storytelling, nature contact, creative arts, and cooperative learning function as technologies of connection, enabling students to resonate with others, nurture empathy, and attune to the rhythms of nature.

From Anthropocentrism to Ecological Responsibility

The climate crisis demonstrates that anthropocentric paradigms are no longer viable. Universities are called to embody Earth-centered models of education that affirm reciprocity between humans and the more-than-human world. Place-based and Indigenous approaches remind learners that knowledge is embedded in soil, water, and sky, and that responsibility to land and kin is inseparable from human dignity (Battiste, 2013; Cajete, 1994). Ubuntu philosophy underscores that "we are, because the planet is" (Tutu, 2007), affirming that the flourishing of humanity depends on reverence for non-human beings and ecosystems. Higher education needs to prepare students not only for jobs, but for stewardship, helping future leaders anchor decision-making in ecological humility, respect, and care. An example is that contemplative, holistic, experiential, and agency-focused education has been found to effectively open students' hearts to embrace nature as their own self, fostering feelings of awe and wonder for the natural world. From an embodied sense of interbeing and ecological justice, they take actions to preserve and protect nature (Kaur et al, 2023; Lin et al., 2023),

From Competition to Solidarity

Neoliberal competition in higher education, through rankings, performance metrics, and market-driven curricula, erodes cooperation and amplifies anxiety. Moving beyond 2030 requires reimagining universities as communities of solidarity, where learning is measured not by individual résumés but by collective flourishing (Freire, 1970). Curricular "gateways" such as cooperative inquiry, peace education, intergroup dialogue, and contemplative practices can transform conflict into deeper understanding and re-enchant learning as a shared journey. This shift affirms Paulo Freire's call for education as a practice of freedom rooted in dialogue, empathy, and collective agency.

Building the Foundations: Extending the Vision to Primary and Secondary Education

To ensure the success of these transformative aims in higher education, reform must not wait until university enrollment. Students arriving at universities often come from schooling systems heavily shaped by neoliberal metrics and standardized testing, leaving them unprepared for holistic and contemplative approaches. Therefore, we recommend that critical, ecological, and relational education begin earlier, starting in primary and secondary education systems, particularly in world history, social studies, and humanities curricula. By introducing frameworks that highlight interdependence, ecological stewardship, and ethical imagination before higher education, students will be better prepared to embrace these values as foundational rather than peripheral. Such alignment between secondary and tertiary education creates a continuum of learning that fosters openness, resilience, and critical consciousness across the lifespan.

Figure 9
Fostering Great Learning: Cultivating Love, Wisdom, & Ecological Consciousness in Education

Source: Author generated using ChatGPT

WHAT IS ECOPEDAGOGY AND WHY IS IT NEEDED IN HIGHER EDUCATION FOR THE POST-2030 AGENDA?

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Key takeaways:

- Higher education institutions (HEIs) need to (re)entrench critical higher education teaching that ecopedagogy offers
- HEIs need to (re)focus teaching for students' ability for critical literacy to effectively read the politics of environmental violence (i.e., ecopedagogical literacy) and research to unpack such politics at all levels of formal, informal, and nonformal education
- HEIs need to teach and research through globally diverse knowledges and ways of knowing (i.e., epistemological diversity) to foster wider understandings that lead to innovative, effective problem-solving

Introduction

Critical ecopedagogical approaches are needed to research, guide, and construct pedagogical practices for higher education (HE) post-2030. There is the need for continuous ecopedagogical reading of the SDGs, their intersectionalities, and the politics of their (possible) successes and failures going towards and beyond 2030. Reinvented from the educational work of Paulo Freire, ecopedagogy expands his literacy essence of reading the word to read the world, to "read the world as part of Earth" (Misiaszek, 2020). This is the *essence of ecopedagogy literacy* in which unsustainable actions are read through local-to-global-to-planetary perspectives.

Ecopedagogues teach for "students to critically understand how environmentally harmful acts lead to oppressions and environmental unsustainability, and the politics leading to the acts for determining what needs to be done to end them at their roots. "Politics" here is defined as the influences that lead to such actions. Ecopedagogical teaching is accomplished through democratic classroom discussions on who contextually suffers or benefits from such actions, Ecopedagogical research is rooted in determining how anti-environmental actions and the politics behind them are taught, not taught, or purposely mistaught.

Ecopedagogical teaching is action-based, with the focus of students not only learning more about unsustainable actions but also determining what counteractions are necessary to cease socio-environmental oppressions and unsustainability. Parallel goals of ecopedagogical research are grounded in restructuring education to help students determine the actions needed to achieve a more sustainable planet. For the SDGs, ecopedagogical literacy skills are vital for HE students to progress towards achieving the Goals and determine what is needed after 2030 (Misiaszek, 2021). In addition, HE must be sites that educate future teachers for contextually-appropriate ecopedagogical teaching at all educational levels.

This article focuses on two ecopedagogical aspects of that are essential for the SDGs and beyond: (1) utopia and education and (2) epistemological diversity (i.e., diverse knowledge systems and ways of knowing).

Utopia and HE Education

To progress towards achieving the SDGs, there must be hope for such progress with the Goals as being endpoints to guide actions. If students do not have hope of attaining the SDGs at any level, there is no reason for students' motivation to take them seriously. As Freire (1992) vehemently denounced all-too-common fatalistic education that falsely justifies oppressions, ecopedagogical teaching actively counters accepting socio-environmental oppressions and planetary unsustainability as "natural" (Misiaszek & González, 2024). The overall goal of ecopedagogy is for "globally all-inclusive socio-environmental justice and planetary sustainability" (Misiaszek, 2023). Meaningfully envisioning utopias rooted in this goal's success is essential for progressing towards achieving it. This mindset is essential for stepping towards achieving the SDGs and constructing what comes after them. In addition, hope is vital for dialogical problem-posing teaching in HE classrooms (Gadotti, 1996). This is because classroom dialogue on the gaps between what is currently happening and what "should be" happening for global justice, peace, and planetary sustainability cannot be

determined, to generate discussions on what is needed to shorten those gaps. The endpoint goal is seen as impossible within fatalistic teaching.

People's utopias differ, and not all self-constructed utopias are environmentally. As a critical pedagogy, ecopedagogical teaching does not impose ideologies upon students that, in turn, form their utopias. Rather, ecopedagogues provide dialogical learning spaces and teaching of literacy skills that help (re)build utopias rooted in ecopedagogy's overall goal.

Through Diverse Epistemologies

Reading environmental violence through the self's local knowledges and ways of knowing is important, as well as through diverse epistemological lenses. True reflexivity through diverse, conflictual understandings challenges students' long-held understandings are essential, especially unlearning perverse commonsense that falsely justify socio-environmental oppressions and unsustainability. Ecopedagogical teaching that meaningfully incorporates Indigenous and Global Southern epistemologies is essential for students to rethink humans' relations with each other and the rest of Nature. In particular, understanding epistemologies that reconnect humans as part of Nature - i.e., *world-Earth de-distancing* in ecopedagogical terms (Misiaszek, 2020). Such epistemological broadening is essential to challenge the deeper structural reasons why oppressions and unsustainability occur, such as neoliberalism, neocolonialism, racism, and patriarchy. Teaching and research solely through dominant epistemologies does not give students the skills to fully understand the politics of oppressions and unsustainability globally. As highly influential sites for (de)legitimizing knowledges from teaching, research, and outreach, actively broadening epistemological reflexivity for environmental problem-solving is a crucial role of HE.

Ecopedagogically Constructing After 2030

Constructing what happens post-2030 for HE work must be through ecopedagogical lenses to critically determine what is possible, what is needed, and what must be actively countered. This teaching and research include ecopedagogically reading and re-reading the local-to-global politics that help or hinder work guided by critically responding to these questions that have no simple answers or solutions. Critical, democratic, and problem-posing ecopedagogical spaces allow for students with professors to collectively determine possible pathways forward after 2030. Thus, what is needed beyond the SDGs emerges from ecopedagogical spaces.

CENTERING THE JUST TRANSITION AND THE ROLE OF HIGHER EDUCATION IN ATTAINING SUSTAINABLE FUTURES

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Key takeaways:

- Assess institutional and stakeholder roles and responsibilities through a JT by asking firstly, how have HEIs harmed and ignored communities? And secondly, what does (re)committing to such an endeavor look like in research, teaching and practice?
- Framed by a JT perspective, commit to developing a study team including stakeholders within the HEI and from external communities impacted by it, that helps transform the institution toward a 'seekers of knowledge' model from an expert-centered one.

Introduction

As I reflect on the work of the SDGs and ponder 'what's next' for future agendas and HEIs' roles within it, I consistently return to the work I have been building which roots the idea of Just Transition as a focal point or relevant framing to facilitate achieving the SDGs. In line with the SDG agenda, a Just Transition seeks a synergy between environmental and social policy and justice (Rosemberg, 2010). It involves the transition to carbon net zero in concert with climate justice toward a planet that is more socially just and sustainable (Spours & Grainger, 2024).

In considering moving the Post-2030 agenda forward, in combination with the fact that the term sustainable development is somewhat problematic, the Just Transition literature may offer a better framework than SD because it integrates and is grounded in notions of justice. While the Just Transition literature has not had much engagement with the field of higher education, I believe higher education should play an important role in entrenching the Just Transition in the future agenda. Learning opportunities abound since a number of scholars note little has been studied or applied from a Just Transition perspective in higher education contexts (Kortetmäki & Huttunen, 2022; Spours & Grainger, 2024; Wang & Lo, 2021). And just as meaningfully, the Just Transition literature has not fully appreciated what higher education has to offer.

In brief, here is how the forging of these two can be helpful with moving the Post-2030 agenda forward. Whereas there tends to be more focus within the Just Transition literature on the technical dimensions versus the social ones, higher education can offer a more integrated and balanced approach to framing their role within future Post-2030 agendas through transformative, interdisciplinary and collaborative work (which includes engaging with communities to better understand/solve problems). Higher education institutions provide a plethora of societal services/dimensions through research, practice, and the preparation of students in fields interconnected with the Just Transition dialogue. Furthermore, Just Transition literature often hews toward a more theoretical orientation, often leaving out practical and applied manifestations. Hence, a critical opportunity exists to first link the Just Transition and higher education communities, leading to studying real-world problems from a 'seekers of knowledge' orientation alongside their powerful toolkits, leading toward centering their role as responsive/responsible collaborators in a Post-2030 agenda. Blanco's provocative call toward a seeking orientation would meaningfully reorganize HEI engagement with communities, how dilemmas are researched, solutions are devised and therefore, how knowledge is produced (Blanco and Witenstein, 2024). This resetting of the way in which HEIs engage in knowledge production, grounded in a justice-oriented framework like Just Transition, marks a transformative opportunity for the Post-2030 agenda.

Taking this idea forward, I present the Just Transition as a framework first for sensemaking and for recognizing and acknowledging responsibilities, and secondly for research, practice and policy application opportunities for higher education within a Post-2030 agenda. While higher education is included in the current SDG Agenda (Chankseliani & McCowan, 2021), Post-2030 UN agendas would be remiss to not further build on the potentialities higher education institutions offer, including and beyond the quality education and lifelong learning call they are included in through SDG 4/Target 4.3.

Figure 10

Checklist of Emerging Just Transition Practices in a "Seekers of Knowledge" HEI for a Post-2030 Agenda

✓	'Listening to understand' as a community-centered approach
✓	Engaging collaborative/Participatory Action Research toward practical solutions
✓	Include informal/nonformal learning approaches in concert with lifelong learning approaches
✓	Utilize Global Citizenship Education and civic engagement-centered practices
✓	Consider training/retraining needs of stakeholders within the HEI and impacted/sustainability-invested communities

Source: Author

CO-CREATING CLIMATE ADAPTATION THROUGH UNIVERSITY–COMMUNITY PARTNERSHIPS: CITIZEN SCIENCE IN JARDIM PANTANAL

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Key takeaways:

- Localize climate education, teaching students how climate change directly impacts their own communities and how to take action locally
- Institutionalize citizen science as a pillar of school–university collaboration
- Support social learning and participatory university–community research
- Strengthen schools as resilience hubs by including public schools in municipal adaptation plans, leveraging them as community anchors for early warning systems and local mobilization.

Introduction

Universities have a key role to play in the global climate and higher education agenda in promoting territorially grounded climate action, through academic outreach, partnerships between universities and civil society organizations, and other initiatives. By integrating curriculum, extension, and participatory research in peripheral communities, students can learn by doing in real-world contexts. In a scenario of unevenly distributed climate impacts, It is essential that higher education can position itself as a central actor in locally led adaptation.

An important example of this kind of university–community partnership can be found in Jardim Pantanal, one of São Paulo's most flood-prone territories, where academic outreach and participatory research mobilize citizen science and social learning to address recurrent flooding.

The model analyzed fosters processes of social learning, climate justice, and the co-creation of contextualized solutions, overcoming the logic of unidirectional knowledge transfer. Communities cease to be mere objects of intervention and instead assert themselves as subjects and co-authors of knowledge.

This approach converges with international agendas such as the Sustainable Development Goals (SDGs 4, 10, 11, 13 and 17), UNESCO's guidelines for higher education for sustainable development, and contemporary debates on transdisciplinarity and socially responsible universities.

It links with aspects of climate justice and the strengthening the adaptive capacity of vulnerable territories, with the potential to inspire analogous experiences in Global South contexts, as it indicates how curricular innovation can reorient the role of universities, training professionals.

Climate Challenges in Jardim Pantanal as a Living Laboratory for Higher Education

Jardim Pantanal lies on São Paulo's eastern edge, where recurrent overflows of the Tietê River disrupt daily life, damage infrastructure, and expose families to chronic socio-environmental vulnerability. These floods, intensified by shifting rainfall patterns, reveal how climate change intersects with urban inequality and threaten fundamental rights, including access to education. While top-down disaster responses often overlook local specificities, this context has become a living laboratory for university-based extension and participatory research, connecting academic curricula to frontline realities.

Through partnerships between universities, civil society organizations, and the local school community, undergraduate students and faculty engage with Jardim Pantanal as a space for experiential learning, knowledge co-production, and socially oriented research. Rather than treating the territory as a passive field site, the approach frames it as a pedagogical and epistemic partner in the construction of climate responses.

Citizen Science and Social Learning in University–Community Engagement

Within this framework, university students, alongside school educators, children, and community members, participate in citizen science initiatives, systematically documenting flooding patterns, drainage conditions, and waste management practices. More than data collection, this process constitutes social learning (Jacobi et al., 2016), fostering collective

reflection, dialogue, and collaborative problem-solving across institutional and generational boundaries.

Through co-created activities, participants share lived experiences of risk and adaptation, strengthening empathy and mutual recognition. Dialogues with families and elders bring forward locally developed strategies—such as informal warning systems and improvised flood barriers—which, when articulated with academic perspectives, enable a more systemic understanding of flooding dynamics, including urban planning failures, socio-environmental injustice, and climate change. This reciprocal exchange not only enriches university learning processes but also supports the co-design of context-sensitive responses within the community's reach.

Impacts on Youth and Community

Students have expressed a growing sense of purpose and autonomy. Participating in meetings without hierarchy between experts and youth has created space for authentic engagement. The school has evolved into a hub of community mobilization and innovation, catalyzing partnerships with local NGOs and city agencies.

This experience shows that schools are not merely places of knowledge transmission—they are vital social infrastructures for resilience. By legitimizing diverse knowledge systems, fostering meaningful dialogue, and connecting local action to global climate justice agendas (Grandisoli et al., 2021; UNESCO, 2021), Virgílio de Mello Franco School provides a replicable model for other vulnerable territories.

The experience indicates that advancing the SDGs in vulnerable territories depends on territorially grounded, participatory, and youth-centered approaches that strengthen local institutions as hubs of resilience, promote the integration of education, climate action, and partnerships, and link local action to global climate justice agendas.

YOUNG PEOPLE AS RESEARCHERS FOR SUSTAINABLE DEVELOPMENT

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Key takeaways:

- Young people should be given opportunities to meaningfully participate in and lead impactful research to understand and form solutions for sustainable development.
- Higher education institutions should build equitable partnerships between young people, academics and practitioners to enable long-term change in educational institutions.

The Importance of Young People Leading Research for Sustainable Development

Academic research is key to understanding, critiquing and forming solutions for the sustainable development challenges of our time. Young people face disproportionate impacts from converging challenges that affect their education, health and livelihood opportunities. Research concerning young people's challenges has historically been conducted by adults and centred on their priorities. Young people are treated as passive participants that researchers can draw data from, and they have little influence on shaping research outcomes that will affect their everyday lives (Ozer, 2016).

Participatory research in which young people are considered meaningfully in each stage of the research process has the potential to bring impactful outcomes for sustainable development and provide capabilities for young people to act in the face of converging challenges. Higher education institutions (HEIs) must make spaces for young people to meaningfully contribute to and lead academic research for sustainable development.

Reflections on Youth-Led Participatory Research in England, Pakistan and Indonesia

In making this argument, I draw on reflections from participatory youth-led research projects which co-produced policy insights for sustainability in higher education in England, Indonesia and Pakistan from 2022 to 2025 (Zaidi et al., 2023; Zaidi, 2025). I am a student of University College London (UCL), and led the facilitation of participatory workshops, the co-production of policy brief documents and data analysis with 72 post-secondary students between the ages of 17 to 25 in London (England), Lahore (Pakistan), and Medan (Indonesia).

In Lahore and Medan, the students shared the severity of challenges they experience due to the climate crisis. In both contexts, their universities and homes were affected by severe floods. Lahore is one of the most polluted cities in the world and students mentioned they had asthmatic issues and flu-like symptoms due to the air pollution. During the time of the research, the city was under lockdown due to the dangerous levels of air pollution. They also mentioned the weather changes such as extreme rain which caused flooding and heatwaves of 50 degrees Celsius, which made it difficult to access and participate in their university. In Medan, a cyclone in November 2025 caused flooding and landslides, displacing students, staff and their families.

Students felt that the Sustainable Development Goals (SDGs) were a useful framework for education and helped them to envision solutions for their communities. For example, at ST Bhinneka University in Medan, students led projects to implement the SDGs in their communities in a compulsory Education for Sustainable Development (ESD) module. The learnings from the ESD module encouraged them to make changes in their everyday practices such as recycling.

Those in London and Lahore were more critical of sustainable development. In Lahore, participants emphasised the need to include traditional and indigenous forms of knowledge in HEIs to form solutions for a sustainable and healthy future and tackle local issues of pollution, flooding and extreme heat. In London, we felt that sustainable development could easily become a top-down approach for communities globally. They felt it is necessary that research,

policy and practice for sustainable development should consider the knowledge of local contexts and ensure meaningful participation of all stakeholders, including young people.

The Impact of Youth-Led Research with Students in London, Lahore and Medan

Importantly, the project was rooted in equitable partnerships between the lead student researcher, young people, academics, and practitioners of sustainability education. In each context, students were considered as researchers with valuable expertise. Our ideas were meaningfully considered, and we were provided the space to lead the research project and work with policymakers to implement the co-produced policy insights. We received training and mentorship in qualitative and participatory research methods. In each stage of the research process, we were considered as co-creators of the research. From the design of the data collection (i.e., participatory workshops), facilitation of the workshops, analysis and write-up of findings, to dissemination, we led and contributed to each stage of the process.

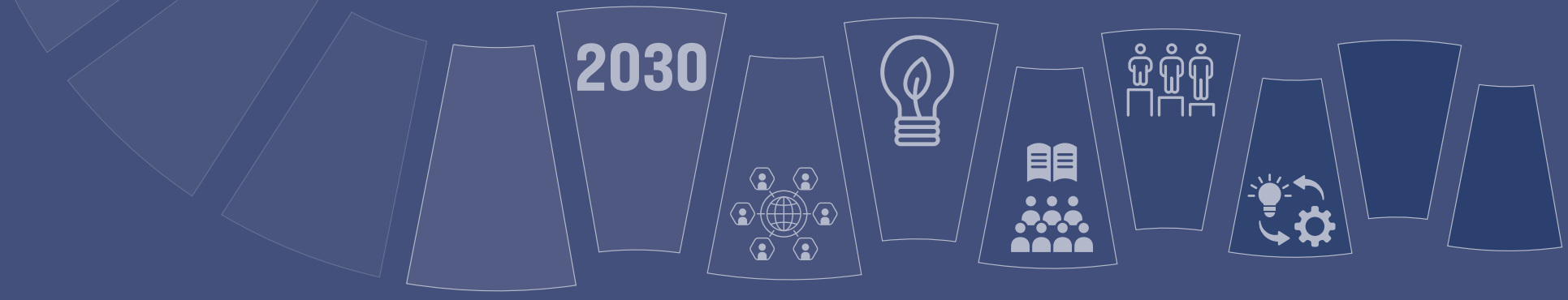
We co-produced policy briefs and research reports (Zaidi et al., 2023; Zaidi, 2025) and organised meetings with local policymakers and practitioners to share experiences and priorities for sustainability education, which has led to new policy initiatives in higher education institutions in the respective contexts. For example, I presented the research findings in Pakistan at a panel discussion with Ministry officials and heads of HEIs at Government College University Lahore. In London, we had iterative meetings with policymakers of higher education to share our experiences and the research findings which has led to the initiation of new sustainability modules for over 50,000 students. These outcomes were only possible because the project created spaces for young people to be meaningfully and inclusively involved in research and policymaking to inform and initiate changes for sustainable development. Future universities and researchers can and should learn from the success of these projects.

4 EQUITY, JUSTICE, AND POWER

Equity, Justice, and Power assesses the significant challenges of inequalities within higher education globally, and the need to address entrenched social injustices and discrimination if sustainable futures are to be achieved.

The first two pieces provide contrasting perspectives on the issue of international scholarships. **Heleta** and **Cochrane** argue that international aid to higher education should be reallocated to prioritise support for domestic higher education systems and countries in greatest need. **Chankseliani**, on the other hand, defends the positive impacts of international student mobility on students' countries of origin, conceptualised beyond narrow human capital formation and acknowledging the complexity of their post-graduation pathways.

Equity of access is the primary focus of the contribution by **Diwakar**, **Harden-Wolfson** and **Sears**, showing the need to tackle the structural oppression of groups disadvantaged by caste, race and other factors in widening participation to higher education. **Brita Phuthi** extends these discussions of race, highlighting the pernicious effects of structural racism, and the importance of initiatives to counter it from educators in South Africa and Brazil's proposal for an 18th SDG. **Kamille Beye** then turns attention to academic freedom, and the threats to it posed by recent political events in the USA, Hungary and elsewhere, restricting research agendas, curricula and social justice initiatives.



PRIORITISING THE FURTHEST BEHIND IN HIGHER EDUCATION: LESSONS FROM THE SDGS

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Key takeaways:

- Foreign aid to higher education should be reoriented away from providing international scholarships towards supporting higher education in recipient countries in need of assistance
- Selecting countries in need of assistance must be based on observable indicators of needs
- Monitoring of trends and implementation of targets must be improved so that the donors and other stakeholders can make informed decisions and changes, where necessary

Introduction

The Sustainable Development Goals (SDGs) are driven by the objectives of leaving no one behind and prioritising the furthest behind. The objectives of the Development Assistance Committee (DAC) group of bilateral donors are the same. Given this, it is expected that DAC donors would be informed by the needs of the least developed and other fragile countries when making decisions about foreign aid provision.

Our research has explored DAC aid flows to higher education to analyse whether these donors have supported countries most in need (Heleta & Cochrane, 2026). While the SDGs do not envisage any support for local higher education in developing countries, SDG 4, Target 4b calls on donors to expand the provision of international scholarships to citizens of least developed countries, African countries and small island developing states. We analysed aid flows to 92 developing countries, both in terms of the scholarship aid and aid to local higher education, focusing on countries in need of assistance as identified by DAC, and enrolments in higher education, Human Development Index (HDI) and gross national income (GNI) per capita in recipient countries.

Aid to Higher Education Before and During the SDGs

Foreign aid to higher education has been used by most donor countries as a strategic tool for geopolitical influence and its provision has been frequently driven by donor interests (Schendel et al., 2024). Donors have prioritised better off developing countries while neglecting least developed and fragile ones. Additionally, over the past few decades, most aid has been given in scholarships for individuals from developing countries to study at universities in donor countries, while higher education in recipient countries has been largely neglected (Galán-Muros, Chacón & Escribens, 2022). This has been further exacerbated during the implementation of the SDGs, with donors expanding the provision of international scholarships while scaling down aid to local institutions. As a result, higher education in least developed and fragile countries has been left behind, both by the neglect within the SDGs and by the donors' focus on scholarship aid (Heleta, Cochrane & Al-Mannai, 2025).

Aid to Higher Education: Needs or Donor Priorities

Did DAC donors, which provide a large portion of aid to higher education in developing countries, follow their own and the SDG rhetoric and support the furthest behind with their aid to higher education? Our research, focusing on the 2016-2022 period, found that developing countries not classified as countries in need of assistance by DAC have received more scholarship aid than the countries classified as those most in need. The same trends were observed in terms of the Human Development Index (HDI), higher education enrolments, and Gross National Income (GNI); countries with higher HDI, higher enrolments in higher education, and higher GNI per capita have received more scholarship aid than the countries with lower HDI, lower higher education enrolments, and lower GNI per capita. This is an indication that DAC donors have not been driven by recipients' needs but other factors when it comes to the provision of scholarship aid. On the other hand, DAC donors have provided comparatively more aid to local higher education to the countries in need of assistance, such as least developed countries or countries with low higher education enrolments. This

type of aid, however, was a small portion of the overall aid to higher education provided by DAC donors (Heleta & Cochrane, 2026).

Supporting the Furthest Behind in the Post-2030 Agenda

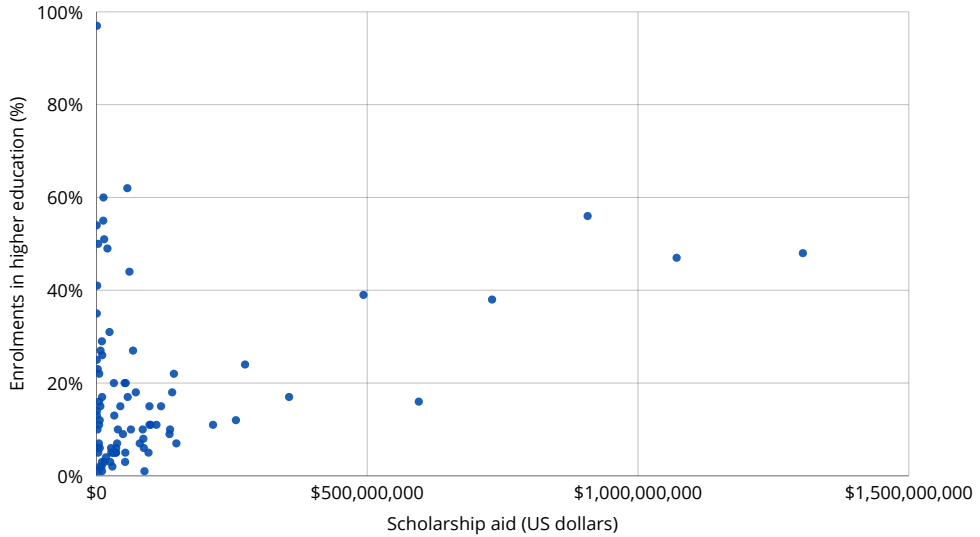
When the needs in recipient countries are not informing donors' aid provision decisions, this undermines the potential of foreign aid to support development and progress and strengthen higher education systems in countries most in need of assistance. While there is a need for a critical engagement with donors to refocus aid provision towards countries with greatest needs for the remainder of the SDG implementation, this also needs to be a priority for the post-2030 agenda.

An important finding that emerged in our research is the problematic selection of countries in SDG 4 Target 4b (international scholarships). Instead of targeting countries with the greatest needs, Target 4b groups least developed countries with upper-middle income and high-income developing countries. Similarly, this target groups countries with low HDI and low enrolments in higher education with countries with high HDI and relatively high enrolments in higher education. This goes against the SDG objective to prioritise the furthest behind.

Engagements about the role and place of higher education in the next global development agenda must learn from these shortcomings – from the prioritisation of scholarship aid in SDG 4, neglect of local higher education in developing countries, to the problematic selection of countries in Target 4b – to ensure that this is not repeated in the post-2030 global development plan.

Figure 11

Scholarship Aid to Countries Targeted by the SDG 4, Target 4b Between 2016–2022 vs Enrolments in Higher Education in Recipient Countries



Source: World Bank higher education enrolments data and OECD CRS aid data; see Heleta & Cochrane (2026)
The majority of DAC scholarship aid was provided to countries with relatively higher enrolments in higher education, while the countries with low enrolments have been largely neglected. See Heleta & Cochrane (2026) for more information.

Note

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SCHOLARSHIPS AND MOBILITY IN A NEW GLOBAL AGENDA

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Key takeaways:

- Future global goals should redefine international scholarships beyond human capital transfer and recognise mobility as a formative process that shapes how individuals engage with institutions and public life.
- Post-2030 frameworks should move beyond linear host-to-home assumptions and support policies of institutional openness that enable contribution from multiple locations.
- Governments and institutions should remove barriers and provide support so that internationally educated graduates can apply their learning, stay connected across borders, and contribute meaningfully to public life.
- For mobility to support development, responsibility must be shared across sending, host, and third countries through a triangular framework that widens opportunity and improves institutional reception.
- Shifting the focus from enrolment numbers to meaningful engagement requires a post-2030 global agenda to track the conditions that shape mobility: funding and return pathways in sending countries; visa and scholarship conditions, inclusion, wellbeing, and protection in host countries; and recognition and labour-market access in third countries.

International

The Sustainable Development Goals (SDGs) mention international scholarships only once, under Target 4.b: 'By 2020, substantially expand globally the number of scholarships available to developing countries...'. While well-intentioned, this framing is conceptually thin. It treats mobility as a technical investment in human capital, not as formative process that shapes how individuals engage with institutions and public life.

This narrow view matters. It rests on an outdated theory of change: that development occurs when graduates return home with skills acquired abroad. Yet mobility rarely follows such linear paths. Some graduates do not return. Others remain abroad but contribute transnationally. Those who do return may find systems too inert or mistrustful to absorb what they bring. Meanwhile, much scholarship aid, especially from Western donor states, never leaves the donor countries, raising questions about who ultimately benefits (Rensimer & McCowan, 2023). Other state-led scholarship programmes, including China's government-funded schemes that bring international students to study in Chinese universities, are structured differently in geographic terms but operate under similarly national institutional logics. In both models, mobility is organised around state strategies rather than around a genuinely shared global framework.

These issues are sharpened by political shifts. Across leading destinations, international students are caught in anxieties about migration, security, and economic strain. Canada, Australia, the US, and the UK have all imposed restrictions: capping numbers, raising financial thresholds, limiting post-study work, banning dependants, revoking visas, increasing visa fees, and cutting scholarship budgets. These moves risk undermining the intellectual and civic contributions that international graduates make, while recasting mobility as a threat rather than an opportunity (Chankseliani, 2025).

Yet these pressures strengthen rather than weaken the case for mobility. The question is not whether it matters, but how to make it work differently.

Evidence from large-scale research, including 704 interviews across 70 countries, shows that internationally educated individuals contribute to public health, inclusive education, democratic engagement, gender equity, and poverty reduction. Their impact unfolds through five mechanisms: reflexive agency (meaning judgement and informed action), civic

understanding, knowledge translation (meaning the adaptation of ideas and methods from one context to another so they can work in practice), transnational social relations, and intercultural understanding (Chankseliani, Akkad, et al., 2025; Chankseliani, Kwak, Akkad, et al., 2025; Chankseliani, 2026). These mechanisms are formed through international study and become consequential when institutional space allows them to be exercised.

Figure 12
Impact of International Education: Five Mechanisms

REFLEXIVE AGENCY
Judgement, comparison, and informed action shaped by responsibility and by reasoning under constraint, cultivated through the contrasts and disruptions of international study.

CIVIC UNDERSTANDING
An expanded awareness of injustice and responsibility in public life that emerges through comparative exposure.

KNOWLEDGE TRANSLATION
Adapting ideas and methods from one context to another so they can be intelligible and usable in practice.

TRANSNATIONAL SOCIAL RELATIONS
Cross-border ties that provide support and clarity and help sustain engagement when local reception is uncertain.

INTERCULTURAL UNDERSTANDING
The ability to navigate and interpret difference in civic and institutional settings with relational sensitivity.

Source: Chankseliani et al. (2025)

Quantitative studies confirm this pattern. In 43 low- and middle-income countries, outbound student mobility was associated with long-term reductions in poverty (Kwak & Chankseliani, 2024). A complementary qualitative study found that returnees often channel their international experience into reforming public institutions, expanding access to services, and reshaping how poverty is defined and addressed in policy frameworks. Outcomes are contingent, however. Institutional inertia, political suspicion, and lack of reintegration support often block returnees' initiatives (Chankseliani, Kwak, Hanley, et al., 2025). Access to mobility also remains skewed toward the privileged, which limits its redistributive potential (OECD, 2022).

Making Mobility Work: A Triangular Commitment

The SDG model imagines a linear process in which students move from home to host and development gains flow back on return. Mobility, and associated gains, in practice are far less contained. Graduates contribute from many locations, and their influence reaches across borders as well as within them. These gains, however, are unevenly distributed. Mobility can widen opportunity, yet it can also deepen workforce shortages in certain occupations in systems with limited capacity to retain graduates.

A future global framework needs to reflect this complexity and allocate responsibility across three interconnected spheres.

- Sending countries need to invest not only in outbound mobility but also in opportunities for sustained engagement on return.
- Host countries should be assessed not by enrolment numbers but by the quality of inclusion, support, and protection they offer international students.
- Third countries, where graduates settle and work, need to be recognised as legitimate sites of contribution rather than treated as deviations from an assumed return pathway.

When viewed through this triangular lens, scholarships become part of a shared system that strengthens institutions, cultivates capability, and widens civic possibility. Development remains structured by nation states, which can limit but still anchor policy action. Mobility also carries a climate dimension. Cross-border study generates carbon costs, yet it creates the knowledge and networks through which climate responses and scientific collaboration take shape (McCowan, 2023). A future agenda needs to recognise that international education influences people across the places where they are formed, where they act, and where they continue to belong, linking national, transnational, and environmental responsibilities within a single framework.

What a New Agenda Should Ask

Future global goals should include indicators that capture this shared responsibility. For example:

- What policy and funding conditions govern outbound mobility, including who can access opportunities, under what expectations, and with what pathways for re-engagement on return?
- How do host countries ensure inclusion, wellbeing, and opportunities for international students, including fair visa and scholarship conditions?
- To what extent do policies in sending, host, and third countries, together with transnational frameworks, enable internationally educated individuals to contribute across borders?

Only with this fuller picture will international education be understood not as a one-way transaction, but as a shared global commitment.

Mobility alone will not deliver development. But when supported across systems, financially and institutionally, it can expand civic agency, strengthen comparative insight, and help renew public life. The SDGs were right to include scholarships, but the next global agenda must go further: not only by widening access but by ensuring that mobility contributes to the societies where people are formed, where they act, and where they continue to belong. That requires shared responsibility: to fund mobility and, crucially, to create the conditions in which internationally educated individuals can contribute meaningfully, wherever they are.

MOVING THE NEEDLE ON HIGHER EDUCATION EQUITY BEYOND 2030: INSTITUTIONAL EXAMPLES FROM THE AMERICAS

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Key takeaways:

- Higher education equity requires transforming institutions through intentional action to dismantle structural oppression, moving beyond SDG Goal 4's narrow focus on expanding access to higher education.
- Post-2030 pathways for more just and transformative higher education institutions can include designing hiring and retention protocols to support caste-oppressed communities and embedding community-centred governance and curricula rooted in Indigenous spaces.

Introduction

From quotas to legislation, a range of policies have been implemented around the world seeking to make higher education institutions (HEIs) more accessible and equitable. The SDGs – particularly Goal 4 (Quality Education) and Target 4.3, which explicitly calls for equal access to affordable and quality tertiary education for all people – are increasingly used as a rationale for these changes. These policies also address Target 4.5, which promotes the elimination of all discrimination in education. However, policies that focus only on access may reinforce rather than challenge existing power structures, often the result of aiming to 'fix' the student rather than address oppressive institutions and systems. This essay shares two diverse cases from the Americas – anti-caste policies in the USA and intercultural HEIs in Mexico – that are seeking to redress this deficit narrative. These cases highlight the limitations of the narrow focus of Goal 4 on access to higher education and provide pathways for a more equity-oriented international development agenda post-2030.

Introducing Caste into Institutional Policies in the USA

Caste is not merely a cultural or regional issue: it is a deeply entrenched, 3,000-year-old system of social stratification historically formalized in South Asia that now operates transnationally (Danavath et al., 2024), often in tandem with colonial and capitalist power structures. North American higher education has largely failed to acknowledge caste as a structural form of discrimination, leaving caste-oppressed communities such as Dalits and Indigenous communities vulnerable to invisibilization and harm.

However, true equity can only be achieved by engaging with caste-conscious frameworks. In response, policy advocacy work conducted with the University of California (UC), San Diego, focussed on integrating an anti-caste lens into hiring and retention protocols. This included a system-wide convening organized by the UC Caste Equity Collective, where Dalit women-identifying advocates addressed Diversity, Equity & Inclusion staff, faculty, and administrators across all 10 UC campuses. The purpose was to emphasize that anti-caste policies and hiring commitments are just the start: addressing casteism requires sustained, structural change.

UC campuses have subsequently revised their hiring protocols.

This critical move by UC addresses the lived realities of caste-oppressed communities and laid the groundwork for institutional accountability and culturally relevant support systems. Grounded in Indigenous principles of reciprocity and responsibility (Kirkness & Barnhardt, 1991), these efforts signal a shift from performative inclusion to action-oriented policy changes. Future advocacy includes developing research ethics protocols for engaging with caste-oppressed communities.

Mexico's Intercultural Universities: Centring Equity

Mexico's 16 Intercultural Universities (IUs) build equity into their institutional design by placing campuses in Indigenous regions, valuing community knowledge, and creating bilingual curricula that link academic programs to local development and flourishing (Lloyd, 2024). IUs seek to reverse centuries of exclusion by affirming linguistic and cultural diversity and challenging hierarchies between varying knowledge systems .

This systems-level approach rests on three pillars. First, constitutional and legal reforms that recognize Mexico as multicultural, guarantee the right to education relevant in language and content at all levels, and that created national structures to develop intercultural curricula. Second, institutional design: most IUs waive or transform entrance exams into diagnostic tools and charge no registration fees, basing acceptance on interviews that recognize and value students' community experience (Rodríguez 2024). Third, a strengths-based pedagogical model: programs integrate *vinculación comunitaria* (community bonding projects that require students to apply learning in their home communities) and promote intercultural dialogue of knowledge between Western scientific and Indigenous epistemologies.

IUs intentionally centre the people they aim to serve. Practices such as hiring Indigenous professors and locating campuses within communities demonstrate this. While tensions remain (political appointments of some non-local leaders who may not share the same commitments, or epistemic frictions as diverse Indigenous and Western knowledge traditions meet), the model demonstrates how equity can be built into the architecture of higher education.

Next Steps

While reflecting very different contexts, the case studies from the US and Mexico serve to highlight the possibilities of effecting systemic change to enhance equity. While the SDGs were not a specific driver in these cases, the intended outcomes are a good match for the drive towards equal access and the elimination of discrimination in education.

Yet, the cases go beyond the SDGs that simply count who gets access to higher education. This is achieved through **specific policies** to protect students and others who have been oppressed and through **whole-of-institution approaches** to embed and promote interculturality. As such, these examples could shape a post-2030 agenda that places greater emphasis on **equity** and the policies and practices that HEIs can implement to move towards creating truly **just and transformative educational spaces**.

In the USA, this would mean including caste as a protected category in anti-discriminatory policies as an essential first step. However, HEIs must also undertake comprehensive, sustained efforts to change norms and practices. This should include mandatory anti-caste training for faculty and staff to enable them to provide culturally sensitive support for those who are caste-oppressed. In Mexico, the template of intentional co-creation deployed by the IUs can be used to embed intercultural and community-based curricula into all HEIs, valuing students' lived experiences, hiring locally, and mandating participatory governance with the communities served.

ADDRESSING STRUCTURAL RACISM AND WHITENESS IN THE GLOBAL AGENDA BEYOND 2030

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Key takeaways:

- Racial justice and equality must be a key global priority.
- If structural racism, white ignorance and privilege are identified as significant barriers to equality, education has the potential to be a key institution in contributing towards more equality and justice for all.
- As critical teacher educators in South Africa underscore, social justice should be at the core of teacher training for the future.

Introduction

The Sustainable Development Goals (SDGs) aim to 'transform the world' by 2030, with education as a key enabler. Yet, critical gaps remain, particularly in dismantling root causes of structural inequalities, including structural racism and white privilege – issues that are often silenced because the SDGs largely focus on transformation that do not tackle systemic injustices. For example, in UNESCO's (2020) current framework and roadmap for Education for Sustainable Development (*ESD for 2030*), where ESD is considered as a key driver of all the SDGs, structural racism is not mentioned. This silence and ignorance risks reproducing and normalizing racism as an issue that ESD does not need to explicitly address as part of the agenda to transform the world (Phuthi and Griffiths, forthcoming). The absence of race in the development discourse, including in SDG 4, is problematic and contributes to the erasure of racial justice in education (Walker et al., 2023).

To advance the agenda for sustainable futures for all, structural racism must be recognized and its significant barriers to equality identified, including the role of 'white ignorance and privilege' in upholding these structures. If this is acknowledged and addressed, critical education has the potential to work towards dismantling racial inequalities nationally and globally. Here, higher education institutions play a crucial role in preparing future teachers that are educated on the mechanisms of structural racism. However, integrating issues of structural racism into ESD can pose pedagogical challenges. In an ongoing research project on critical sustainability education, I studied which pedagogical approaches teacher educators in South Africa utilize to critically examine structural racism. In what follows, I share insights from interviews with these teacher educators on how they address structural racism and whiteness, followed by implications for higher education and society up to and beyond 2030.

Social Justice-Oriented Teacher Education

South Africa's history is marked by the overt structural racism of apartheid and colonialism, but also by the resilient resistance against oppression and a profound struggle for equality for all, including within education (Vally, 2022, 2023). With this legacy, there are current critical teacher educators at universities in South Africa who are actively working to engage student teachers in challenging conversations about racism/whiteness (Phuthi, 2025). Through a pedagogy of discomfort (Boler, 1999), grounded in care, respect, and love, student teachers are invited to explore root causes to unsustainabilities, such as racism, together with the teacher educators. A key element in their approach is to disrupt established beliefs, such as meritocracy, to raise the students' critical consciousness and awareness of how mechanisms of structural inequalities operate in education and society – nationally as well as globally. This approach often leads to revelatory 'a-ha moments', where the student teachers for example realize that success or lack thereof cannot be attributed to their own or their family's efforts alone, but is directly linked to structural mechanisms of inequality based on socially constructed categories of 'race', gender, class etc.

Through their pedagogical approaches, the teacher educators aim to foster social justice-oriented teachers who do not only become skilled in teaching, but who are also aware of the structural mechanisms of inequalities and are able to identify and work towards transgressing them. South Africa has been 'transforming'

for the past 30 years, but remains one of the world's most unequal countries, showing that 'transformation' is not a quick fix and requires transgressing inequal structures and systems. The critical teacher educators in this study recognize this, and express skepticism toward the SDGs' so-called 'transformative' agenda. They argue that it fails to address the root causes of inequalities, which are systematically sustained by 'racial capitalism' (Alexander, 2023).

Education for Racial Equality and Just Sustainability

In the current global agenda, teacher educators are recognized as pivotal for education's role in transforming the world, which should be continued also beyond 2030. However, as reflected in the current political climate, the global issue of structural racism and whiteness cannot be overlooked if we are to move towards a just and equitable future for all. As highlighted through the study of the critical teacher educators in South Africa, this will stir difficult and sometimes uncomfortable conversations and feelings but is nonetheless necessary.

An important initiative, which highlights the pressing need to explicitly work to dismantle racial inequality, is Brazil's proposal to add another SDG, SDG 18 on Ethnic/Racial Equality. This goal should become a global priority, up to and beyond 2030, and should focus on dismantling the mechanisms of racial privileges as well as deprivations through increased focus on white ignorance and white privilege, including within education.

Figure 13
Addressing Structural Racism Within and Beyond Agenda 2030

Source: Author

UNDERMINING ACADEMIC FREEDOM: A THREAT TO THE 2030 SUSTAINABLE DEVELOPMENT AGENDA

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Key takeaways:

- Policies that recognize academic freedom as a legal position outside of personal free speech are needed to prevent American universities from facing political retribution and maintaining autonomy.
- University messaging on how they work and engage with difference should be presented to the public to counter how they are being described.
- Relationship strengthening between universities and local communities should prioritize civic engagement forums to discuss, teach, and reinforce democratic principles in practice so that discourse on the SDGs leads to action.

Technology is rapidly changing how we live, work, communicate, and learn. Simultaneously, global conflicts and natural disasters are diminishing the quality of life for entire communities while forcing generations of students out of classrooms. These global challenges highlight the urgent need for a strong and responsive higher education system that actively engages with the Sustainable Development Goals (SDGs) to address and improve these conditions.

Yet, the recent attempts to alter who decides what knowledge is at universities in the United States is placing political pressure on some institutions to determine who teaches and what they teach (Jacob, 2018; Walker, 2022; Beidollahkhani, 2025). The determination of "what can be known, studied, or debated within the academy," (Beidollahkhani, 2025, p. 2) by American political actors reduces the nation's knowledge economy and restricts academic freedom (Pringle, 2022, (McCowan, 2025). Through roughshod policy creation, new limits on student access to the university by visa restrictions discourage students and scholars from choosing American institutions . Meanwhile, recent attacks on diversity, equity, and inclusion (DEI) leave some students and faculty wondering about their place in the university (Breen, 2025). With these significant and impactful changes to the American university landscape, political actors have adumbrated their intentions to remake higher education.

The American university system is globally respected for its academic freedom, research opportunities, and innovation, with many institutions recognized in global rankings. This present-day assault on academic freedom in the US increasingly resembles practices associated with authoritarian regimes that wish to "steer academic inquiry to align with broader political objectives," (Beidollahkhani, 2025, p. 4) rather than allow universities to express dissension and provide nuance to complex global challenges. Recent political calls for the removal of entire fields such as gender studies echo Hungary's ban on graduate level gender studies. Similarly, efforts to condition research funding on compliance with prescribed hiring practices and student admission criteria compromises academic freedom, paralleling Orban's installation of government-aligned chancellors at Hungarian universities (Majtényi, 2025).

As such, the re-tooling of what is considered knowledge and validated by political influencers undermines the collective premise of the SDG 17 Agenda on science and technology that acknowledges the interconnectedness and shared responsibilities of nation states and by extension, academics (Helgason, 2016). The university "has a central role in the growth of knowledge" (Cole, 2021), which supersedes political affiliations. When examining the existing environment that American universities are operating in, it is easy to see how SDG-focused discussions are undermined.

The university's positioning as a place for critical engagement with ideas and people helps to expand humanity's thinking and creativity. Politicians making uninformed determinations of which types of students can attend institutions, which fields of study can be offered, and how faculty lean politically as decided by their academic courses and publications reduces academic freedom and thus the quality of education (Romanowski, 2024). The university is a microcosm of the society in which it sits (Gbollie, 2014), thereby intensifying or refracting underlying social tensions. As such, higher education institutions become symbolic

substitutes with perceived meaning for or against certain groups.

For example, Columbia University agreed to pay the Trump Administration $221 million after being accused of allowing antisemitism to fester on its college campus to secure its federal grants, putting its Middle Eastern, South Asian, and African Studies Departments in receivership, and removing its DEI programs. Harvard University has faced similar threats but has thus far resisted the Trump administration resulting in a barrage of attacks that if successful will limit health research funding. Recent (2025) attacks to limit Harvard's ability to enroll international students were rejected in American courts. Other American universities such as Northwestern, Cornell, UCLA, and Princeton have also been singled-out for restriction of federal research funding.

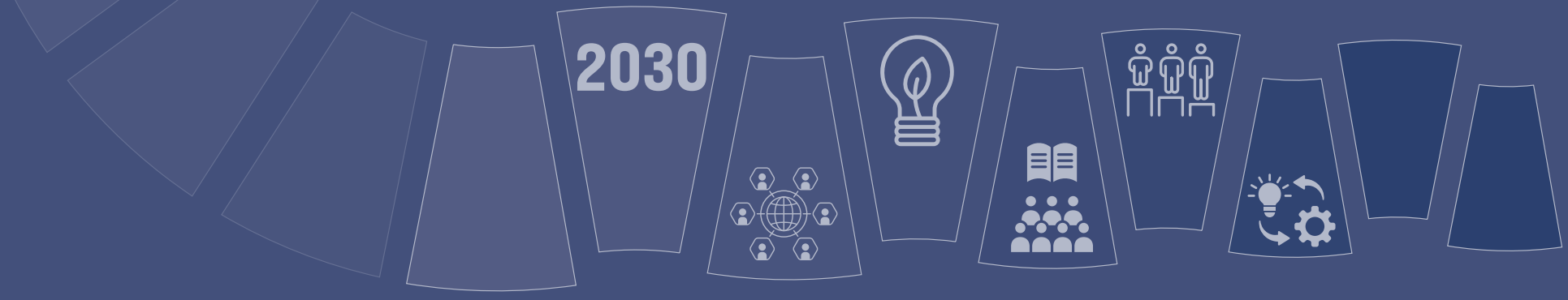
American universities undergoing this intense, targeted political pressure may withstand the attacks. However, their need to defend their institutions reduces their ability to partner in creating solutions that include diverse voices, help marginalized communities, and develop solutions for climate change. This type of political intrusion into the academic space reduces the ability of societies to address the SDGs, as they depend on epistemic capacity for solutions. The SDGs' 2030 end date will be quickly upon us.

The presence of a robust higher education system without undue political pressure allows for creativity and dissent. The quieting of voices and the erasure of dissimilar experiences ignores higher education's position as a conduit between governments, communities, and industries. The university alone has an outsized impact on creativity, expression, and knowledge production streams that make technological advancements, democracies, healthier societies, and sustainable environments possible.

5 RETHINKING PARADIGMS

The final section presents alternatives to the current development agenda, arguing not for greater efforts towards achieving the SDGs, but a fundamental rethinking of higher education and sustainability.

Silova, **Komatsu** and **Rappleye** question dominant assumptions about higher education's role in achieving the SDG agenda, and instead call for the sector to fundamentally question its flawed foundations. **Shahjahan** and **Hou** invite us to rethink the notion of time, through the idea of 'decolonial chronopolitics', questioning linear trajectories of development, and the temporal regimes of mobility and technology that act against Global South academics. **Ibrahim Oanda** argues for a fundamental shift in the knowledge basis of the university, in his analysis of African higher education, proposing a comprehensive change in the region's research agendas towards horizontal partnerships and engagement with African knowledge traditions. Finally, **Andrea Velásquez Butrón** asserts the central importance of epistemic justice in higher education through the case of Peru, and the need for colonial, modernist paradigms to give way to recognition of indigenous and ancestral knowledge traditions.



WHY HIGHER EDUCATION WILL NOT SAVE THE SDGS – AND WHY IT SHOULDN'T

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Key takeaways:

- The SDGs no longer function as a pathway to sustainability; they increasingly serve as a record of planetary failure.
- Higher education is largely mobilized as a delivery system for the SDGs, rather than as a space for questioning their underlying assumptions.
- The proliferation of sustainability knowledge and programs has not unsettled the growth-oriented logics driving ecological collapse.
- Universities should shift from optimizing SDG implementation to interrogating the paradigms that produced the crisis in the first place.

> *"Unless we act now, the 2030 Agenda will become an epitaph for a world that might have been."*
> — António Guterres, UN Secretary-General

The epitaph is already written — not in stone, but in the metrics. Rising CO_2 emissions, biodiversity loss, transgressed planetary boundaries, and unmet SDG targets tell a single story. What was envisioned as a global roadmap toward sustainability has become a record of systemic failure, documenting planetary collapse in real time. That documentation reveals the limits of the development paradigm within which the SDGs operate. Our critique therefore concerns that paradigm, rather than the ambition of global cooperation or the uneven realization of particular goals. Without confronting its underlying assumptions, even well-intentioned frameworks will fall short.

While the SDGs aspire to multilateral cooperation and measurable progress, they remain constrained by the very paradigm they seek to reform. Growth remains central, codified in SDG8, even as it undermines ecological sustainability (Komatsu et al., 2020; Hickel, 2020; Nilsson et al., 2016). Technocratic coordination substitutes for political transformation, especially in education (Smith et al., 2024; Ocampo Cantillo & Lazaro, 2024). Meanwhile, the structural causes of crisis — inequality, extractivism, and epistemic dominance — remain bracketed rather than confronted (Sriprakash et al., 2022; Stein, 2019).

Within this architecture, higher education is positioned primarily as a delivery system — and only rarely as a site of critical inquiry — tasked with supplying skills, solutions, and scalable models to implement a vision it did not author. Universities are celebrated for their alignment with the SDGs and rewarded through global instruments like the *Times Higher Education Impact Rankings*. Yet what such alignment demands — or forecloses — is rarely examined. The result is a university that is not only compliant, but complicit, reproducing the very paradigms it might otherwise be equipped to challenge.

This complicity is not incidental. Despite dramatic growth in university enrollment, sustainability programs, and scientific output, planetary conditions continue to deteriorate (see Figure 1). Yet emissions and other indicators of global climate change continue to rise — not because knowledge is lacking, but because it has failed to disrupt paradigms that define progress as growth, solutions as scale, and impact as institutional performance. As Glavovic et al. (2022) caution, "the tragedy of climate science" lies not in the absence of understanding, but its inability to dominant trajectories.

Higher education faces a parallel dilemma: its contributions are tangible but constrained by systems designed to absorb critique without altering course (McCowan, 2019; 2025). As Crow and Dabars (2023) note, "academic culture is implicated in both social discord and our failed relationship with the natural systems on which we depend" (p. 154). Rather than disrupting dominant logics, universities often reproduce them through disciplinary fragmentation, managerial incentives that reward institutional compliance, and an "impact" culture that equates performance outputs with transformation. Empirical studies likewise show limited effects on students' sense of interdependence with nature and pro-environmental behavior (Komatsu et al., 2022). Under the SDGs, education remains anchored in an anthropocentric, growth-driven, and epistemically enclosed logic (Silova et al., 2025a), symbolically progressive but structurally

constrained, and ill-equipped for the deeper reimagining required beyond 2030.

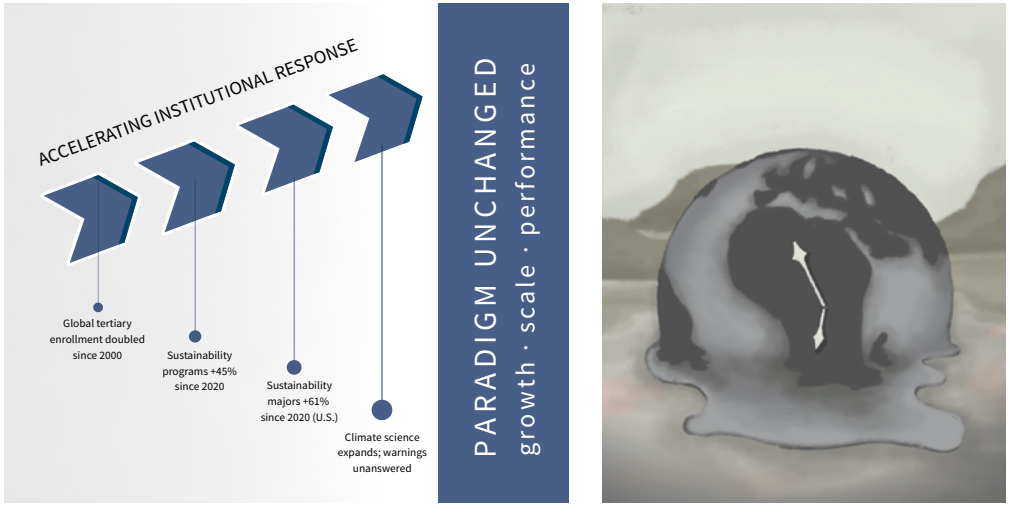
The question is no longer how to optimize higher education for better SDG delivery, but whether the goals themselves — and the paradigms that shape them — can imagine life beyond crisis. As long as universities remain tethered to systems of measurement, delivery, and institutional alignment, their knowledge will circulate within architectures of collapse — precise, prolific, and ultimately inert. This logic is exemplified by the Times Higher Education (THE) Rankings' recent rebranding of its *Impact Rankings* as *Sustainability Impact Rankings*. Despite the new label, THE leadership itself acknowledges continuous reliance on "the tried and trusted" methodology, indicators, and scoring practices (Baty, 2025). Business as usual, indeed.

To remain relevant beyond 2030, higher education must abandon the conceit that it can — or should — save the SDGs. The goals are already slipping beyond reach, constrained by geopolitical inertia and by the short temporal horizons and structural contradictions built into their design. Framed to be universally appealing yet politically neutral, they offer coordination without rupture, ambition without accountability, and sustainability without transformation. To deliver them is to extend the grammar of a paradigm that has already failed.

Universities cannot be expected to fix what the SDGs themselves cannot deliver — nor should they. Rather than doubling down on implementation, their role is to make space for the epistemic, ontological, and political questions the goals sidestep, asking what forms of knowledge, governance, and relationality are needed not just to meet goals, but to imagine entirely different horizons. Such inquiry is already evident in research on cultivating interdependence with more-than-human worlds (Sheffield, Butler, & Richardson, 2022; Wood et al., 2025). Our own scholarship likewise calls for unlearning the growth-oriented and anthropocentric logics embedded in the SDGs (Silova et al., 2025b; Rappleye et al., 2024). The risk is that, amid SDG urgency, universities trade longer horizons for the short-term visibility of metrics.

As McCowan (2025) writes, "*universities give us the tools to both destroy and save ourselves*" (p. 2). That duality — between complicity and possibility — is at the heart of higher education's planetary dilemma. Universities have helped build the paradigms now collapsing, but they may yet help imagine what comes next — if they choose to inhabit that responsibility differently. If the 2030 Agenda becomes an epitaph, let it mark not the failure of ambition, but the failure to think otherwise. Let the university be remembered not for trying to save SDGs, but for helping to imagine what comes after.

Figure 14
Escalating Institutional Response Under an Unchanged Paradigm



Source: Figure design and synthesis by the authors, based on the data from UNESCO (2022); Studyportals (2024); Russell (2024); Glavovic et al. (2022). Artwork within the figure by Aura Azumi (Indonesia), from the Turn It Around! socially engaged art project (www.turnitaroundcards.org).

BEYOND LINEAR PROGRESS: DECOLONIAL CHRONOPOLITICS AND THE "FUTURE" OF HIGHER EDUCATION AFTER 2030

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Key takeaways:

- Embed temporal justice in SDG and higher education policies, valuing diverse, non-linear timeframes beyond 2030 deadlines.
- Address unequal temporal burdens in academic mobility and digital access, prioritizing Global South scholars.
- Support ongoing, collective educational transformation rooted in local, decolonial knowledges.

Introduction

At the 2025 High Level Political Forum on Sustainable Development, global higher education leaders gathered to shape the post-2030 sustainability agenda (MacGregor, 2025). Yet the discourse remained framed by a narrow temporal horizon of "accelerating action" to catch up before the 2030 deadline. But whose 2030 calendar is being used as the norm? This acceleration rhetoric exposes deeper assumptions about time, progress, and engineered futures, with universities positioned as central to this global project. In this piece, we present a decolonial chronopolitics perspective (Shahjahan, 2025) to critique and reimagine the temporal frameworks shaping higher education's role in the SDG agenda, calling for a shift toward temporal justice, epistemic plurality, and decolonial futures beyond 2030.

Higher education's role in advancing the SDGs has been widely emphasized, particularly through embedding sustainability in curricula and graduate learning outcomes (SDSN, 2025), integrating the goals into institutional strategies and partnerships (Hellmann & Ponce-Taylor, 2024), and responding to external pressures such as rankings and stakeholder expectations (Buckner & Zhang, 2025). These discussions demonstrate the breadth of activity across teaching, research, operations, and governance (McCowan, 2023). Yet there is limited reflection on the temporal assumptions that structure the SDG agenda itself. The dominant framing treats time as a neutral or universal resource, rather than a political and cultural construct that privileges certain worldviews, calendars, and paces over others.

A Decolonial Chronopolitics Framing

What is decolonial chronopolitics? It offers a critical framework to interrogate the temporal assumptions embedded in global agendas like the SDGs and institutional contexts like higher education. It rests on three key tenets (Shahjahan, 2025):

1. **Critique of colonial time regimes** – exposing how standardized time (e.g., clock time, Gregorian based calendars, linear development models) enforces colonial logics that discipline learning, labor, and life;
2. **Temporal justice** – reclaiming Indigenous and non-Western temporalities that value cyclical, relational, and place-based understandings of time;
3. **Reimagining transformation** – redefining educational change as an ongoing, collective process rooted in historical, ecological, and intergenerational struggles for justice.

Using this lens, we highlight two areas where decolonial chronopolitics can deepen current discussions in higher education and the post-2030 agenda: how global timelines shape our visions of the future, and how efforts to decarbonize academic work often overlook unequal temporal and mobility burdens.

Futurity and Post-2030 Agenda

A decolonial temporal politics invites us to critically examine how the SDG agenda—especially the 2030 targets—is underpinned by Eurocentric notions of time and progress. Targets like "net-zero by 2050" or "reduce emissions by 45% by 2030" are rooted in the Gregorian calendar and assume a universal, linear trajectory of development. Such framing not only marginalizes non-Western timekeeping systems but also reinforces a future imaginary as something controllable and shared equally by all—despite deep global inequalities. It assumes a singular path forward, obscuring

the fact that many communities, particularly Indigenous ones, already live in the aftermath of environmental devastation shaped by colonial histories (Stein et al., 2023).

Decolonial and Indigenous perspectives challenge these assumptions by foregrounding temporal diversity and historical accountability. Rather than projecting crisis into a hypothetical future, climate crisis must be understood in relation to past and ongoing colonial exploitation (Bandera, 2024; Sultana, 2022). Reimagining climate justice, then, requires decentering Western temporal logics and asking: whose future is being imagined, and at what historical cost?

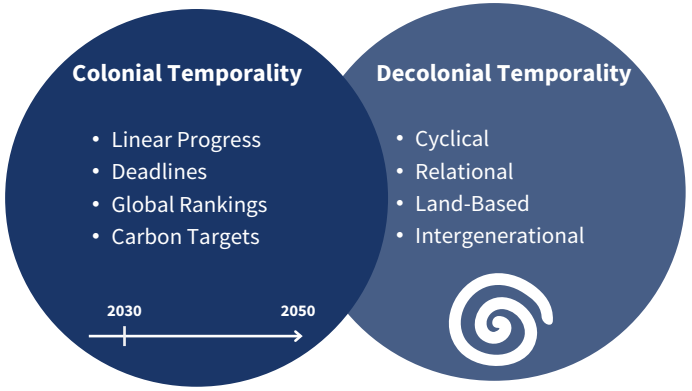
Decarbonizing Academic Work Through a TemporalLens

Decarbonizing academic work often focuses on reducing travel-related emissions (Williams & Love, 2022), yet discussions of academic aeromobility rarely consider its temporal politics. A temporal lens reveals how mobility is unequally distributed across the global academic hierarchy, shaped by colonial geopolitics of knowledge. Scholars from the Global South often bear greater temporal burdens—navigating visa delays, institutional barriers, and long-distance travel—to gain legitimacy in metropolitan academic spaces (Schöpf, 2020; Shahjahan, 2023). In contrast, academics in many privileged contexts enjoy infrastructural and institutional ease, highlighting stark asymmetries in who can afford the time and resources to be mobile. Decarbonization efforts must therefore interrogate the unequal temporal infrastructures that define who moves, when, and at what cost.

Digitization is often promoted as a low-carbon alternative to travel (Pasek, 2023; Reyes-García et al., 2022; Teufel & Sprus, 2020), yet it is also governed by temporal regimes that reproduce global inequalities. The clock time that structures digital technologies—from video conferencing to data storage—is rooted in global infrastructures dominated by the Global North, privileging certain time zones, speeds, and digital access (Moss et al., 2021; Velkova & Plantin, 2023). While virtual collaboration may increase efficiency, many scholars—particularly in the Global South—face digital precarity due to power outages, slow internet, and underdeveloped data infrastructure (CIPESA, 2023). A temporal politics of digitization pushes us to question not just who has access to digital work, but also how time is structured, for whom, and at what cost to human and ecological well-being.

To meaningfully engage in "post-2030" agenda-setting, higher education must not only rethink what we teach, or research, but also center temporal justice and epistemic plurality, by embracing slowness, care, and intergenerational wisdom toward more decolonial futures.

Figure 15
Colonial and Decolonial Temporality



Source: Authors

HARNESSING AFRICAN-CENTRED AND INDIGENOUS KNOWLEDGE TO TRANSFORM AFRICAN UNIVERSITIES IN THE POST-2030 KNOWLEDGE ECOSYSTEM

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Key takeaways:

- Universities in Africa must foster innovation and produce the kind of knowledge required to drive socio-economic transformations across the continent.
- Universities in Africa should incorporate African-centered and indigenous knowledge perspectives rather than rely on Western intellectual traditions in research and knowledge production.
- The post-2030 agenda must embrace knowledge pluralism and present African universities with opportunities to integrate African centered and indigenous knowledge to their academic missions to foster sustainable transformations.

Introduction

The contribution of African universities to transformative knowledge and innovation continue to be low despite efforts by governments and partners to transform the institutions. The persistence of Euro-American perspectives and marginalization of African-centered knowledge (Mbembe,2023) in the institutions has contributed to extractive knowledge practices and deepened knowledge asymmetries (OECD, 2024). Emerging trends however signal a shift to plural knowledges in support of a broader understanding and actualization of sustainability (UNESCO, 2022; Knowledge for Development partnerships, 2025; Fazey, et al, 2020). The emerging trends present opportunities for African universities in search of relevance through Africanization and indigenization of knowledge production and dissemination.

Opportunities

There are emerging opportunities that African universities can exploit to integrate African-centred and indigenous knowledges as part of their overall strategies for transformation and sustainability. There is increasing global acknowledgement that integrating plural knowledges into research and innovation is critical to sustainability in the framework of the SDGs (ISC, 2021; UNESCO, 2021; Fazey, et al,2020). African Universities can exploit the shifts to plural knowledges to mobilizing and resources to support scaling African-centred and indigenous knowledges as central to their research and knowledge production, including embracing bearers of indigenous knowledge as knowledge and innovation co-producers. The enactment of the Indigenous knowledge development and management Act by South Africa (Republic of South Africa, 2019), and the establishment of centres for indigenous knowledge across several African universities (Mbonyinshuti,2021) is building the momentum for universities in the continent to embrace and deepen these knowledge shifts.

The global support for plural knowledge economies as part of the sustainability agenda and the post 2030 knowledge economies open new opportunities for African Universities to mobilise resources to entrench this shift in their academic missions. The UNESCO common education initiative (UNESCO, 2021) suggests that a reimagined future for higher education should include new ways through which education draws from the common knowledge through greater inclusiveness, and a research orientation that embraces plural knowledge as opposed to prevailing homogenization of knowledge. Reimaging a new contract for higher education continue to catalyze efforts, including a 2024 UNESCO/African Union forum to explore needed interventions to accelerate efforts by African universities to contribute to the SDGS (higher-education-africa-cn-en_1.pdf)

The second opportunity for African universities is the campaign for equitable North-South Research partnerships and the coming to force of the African Charter for Transformative research (Africa-Charter-web-new-cover-52e5a047925be9dc.pdf). The Charter, created by African research networks and university associations forges for transformative North-South Research partnerships that give space to research leadership and knowledge perspectives from Southern researchers. To be transformative, it is important that the

implementation of the charter does not end up being a pact between intellectual elites from the South and the North. Rather, indigenous knowledge holders and local communities should be integral partners to defining equitable partnerships at all phases of knowledge production and dissemination. Only then can African-centred knowledge contribute shaping global sustainability debates and policies.

The Pathways

Pathways for African universities to embrace the shift to plural knowledges as part of the knowledge project for transformation require collective efforts. A holistic approach entailing embedding African epistemologies in research and knowledge production, incorporating African-centred, indigenous, and alternative knowledge into transformation interventions, centring African-centred knowledge in curriculum transformation, deepening community engagements, and research methodologies incorporating African-centred knowledge, need to be prioritized. Encouraging developments are emerging to this end. CODESRIA, one of Africa's leading research councils is implementing the African Fellowships for Research in Indigenous and Alternative Knowledge (AFRIAK) project, to train emerging researchers to work alongside indigenous knowledge holders in generating policy relevant insights (AFRIAK – CODESRIA). The project aims to create a critical pool of young researchers skilled in alternative African-centered research methodologies.

Conclusion

The quest by African Universities for transformation will require the institutions to embrace global shifts towards indigenous and local knowledges. By intentionally integrating African-centred and local knowledges, the institutions will enrich research and innovation activities with the knowledge capital residing in local contexts, thus strengthening their capacity to contribute to the global post-2030 knowledge for sustainable development.

RE-FRAMING PERU'S HIGHER EDUCATION: EPISTEMIC JUSTICE BEYOND THE 2030 GLOBAL AGENDA

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Key takeaways:

- Reorient the post-2030 global education agenda to recognize relational, community-based ways of knowing and move beyond standardized benchmarks that conflict with local epistemologies.
- Institutionalize epistemic plurality through sustained policy measures, including contextualized, culturally grounded education and co-created programs between higher education institutions and Indigenous communities.
- Develop contextualized assessment systems that recognize local epistemologies rather than relying exclusively on global or Western standards.
- Increase and strengthen education funding specifically for Indigenous youth, ensuring policies are participatory and responsive to regional and linguistic diversity.

Introduction

Across the globe, higher education has become a central arena in which struggles over knowledge, power, and legitimacy are negotiated. As debates shift toward a post-2030 agenda, focusing on access, quality, and learning outcomes is insufficient. Far less attention has been paid to the epistemic assumptions embedded in higher education, which shape whose knowledge is valued and reproduced. A post-2030 vision requires reimagining post-secondary institutions as spaces of recognition, participation, and reparation, where multiple knowledge systems can coexist and shape collective futures.

In Peru, Indigenous peoples continue to face long-standing inequalities within higher education. Educational institutions, policies, and governance frameworks continue to privilege Western models of knowledge and development, often reinforcing assimilation rather than fostering meaningful recognition. Neoliberal reforms have deepened this tendency by promoting privatization and standardization, narrowing the possibilities for intercultural engagement. Instead of serving as spaces of encounter among diverse epistemologies, higher education institutions frequently reproduce colonial hierarchies that marginalize Indigenous knowledges.

Context

The roots of epistemic injustice in Peruvian higher education are tied to colonial legacies. The imposition of a singular dominant model of thought and learning has resulted in a *coloniality of knowledge and being* (Quijano, 2007, 2000), leaving little room for Indigenous languages, worldviews, or community-based ways of knowing.

Despite a growing presence of Indigenous students in higher education (Olivera et al., 2021), national data remain fragmented, reflecting the absence of policies that can support Indigenous youth participation and success. Most Indigenous students are concentrated in technical institutes rather than universities, where linguistic barriers, cultural alienation, and socioeconomic exclusion remain present (Ibañez, 2014). Although some institutions have introduced compensatory measures, these tend to focus on access, leaving core structures, curriculum, pedagogy, and governance unchanged. As a result, ancestral knowledge systems remain peripheral to academic life.

Global Education Agendas and Inequality Perpetuation

Global education frameworks have played a significant role in reinforcing these inequalities. As Urrieta (2015) argues, global comparisons often create hierarchies of progress that pathologize Indigenous peoples as "behind" and reinforce notions of development based only on Western standards. The politics and economics of comparison promote standardized metrics and global benchmarks, reinforcing a narrow vision of educational quality and sidelining the diversity of knowledge systems across cultural contexts (Steiner-Khamsi, 2010).

In the Peruvian context, these global logics intersect with national policies that emphasize modernization and privatization. The reliance on universal indicators frequently clashes with the relational, community-based, and place-specific nature of Indigenous epistemologies, creating greater complexity and an educative experience that fails to engage with other non-Western perspectives. Indigenous communities claim that authentic

equity requires more than inclusion. This requires a fundamental transformation of hegemonic institutions to acknowledge and integrate diverse forms of knowledge.

National education reforms must therefore actively incorporate Indigenous perspectives into curriculum design, teacher training and quality assurance processes. Without this shift, educational policy will continue to ignore the lived experiences and community knowledge embedded in Indigenous communities.

Moving Through Epistemic Justice in Higher Education

Reframing higher education institutions as pluriversal spaces requires confronting historical struggles and power structures that have determined whose knowledge is recognized as valid. As Ndlovu-Gatsheni (2021) sustains, global justice is tied to cognitive justice: it entails creating higher education systems that value and sustain diverse epistemologies, languages, and worldviews. Such a shift calls for questioning the universalist assumptions embedded in dominant academic models and for acknowledging the knowledge systems of different historical and cultural territories.

In a post-2030 global agenda, this transformation becomes particularly urgent. As international frameworks move beyond this, the challenge is no longer limited to expanding educational access or improving academic quality, but to reimagining the very purposes and foundations of education. The post-20230 agenda calls for education models that pursue justice, institutional acknowledgement, and restorative action, which cannot be achieved without addressing knowledge asymmetries. Integrating epistemic justice into global and national frameworks means ensuring that knowledge can also be conceived as relational, situated and pluriversal.

Across Latin America, initiatives led by Indigenous communities have resisted dominant paradigms and developed intercultural and decolonial approaches to higher education. However, these efforts often face limited political support and institutional recognition. In Peru, advancing knowledge justice requires rethinking the political, cultural, and educational agency of Indigenous youth and confronting the social and colonial hierarchies that have long been normalized.

Transformation requires rethinking academic content, teaching practices, and institutional decision-making through a decolonial lens. Higher education institutions must question and reorient their agendas towards epistemic plurality and commit to institutional models that support land protection and situated ways of knowing that maintain life and community.

Figure 16
Understanding Epistemic Justice

Source: Illustration by Guayaba Ale

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