Scaffolding Sustainability:

Critical Thinking for SDG Achievement

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Abstract. The United Nations Sustainable Development Goals represent humanity's most comprehensive framework for addressing deeply interconnected global challenges, yet progress on more than half of all targets remains insufficient. This chapter argues that the implementation gap is, in part, a cognitive problem that reflects a mismatch between the analytical demands of sustainability challenges and the thinking capacities cultivated by conventional higher education. Based on a narrative review of recent scholarly literature at the intersection of critical thinking and sustainability education, the chapter examines how universities can integrate critical thinking (CrT) pedagogies with SDG-focused curricula and proposes the Critical Thinking Scaffolding for SDG Achievement (CrTS-SDG) model as a conceptual framework for that integration. The analysis identifies five clusters of evidence-based pedagogical strategies, documents a structured asymmetry between which SDGs receive sustained pedagogical attention and which remain underserved, and advances a central argument: the depth of genuine CrT–sustainability co-integration depends less on the choice of pedagogical strategy than on the underlying conceptualization of sustainable development that a given program presupposes. To improve the quality of sustainability education, this conceptualization must itself become an object of critical inquiry.

Keywords: critical thinking; sustainable development goals; higher education; sustainability pedagogy; transformative learning; ESD competencies.

1 Introduction

The United Nations 2030 Agenda for Sustainable Development, adopted in 2015, established seventeen Sustainable Development Goals as the most comprehensive normative framework to date for addressing poverty, inequality, climate change, environmental degradation, and justice (United Nations, 2015). The SDGs are explicitly systemic: progress or regression in any single goal generates cascading effects across the entire framework. Yet the most recent SDG Progress Report reveals that progress on more than 50% of all targets is either weak or actively reversing, and without transformative acceleration the 2030 deadline will not be met (United Nations, 2023). This implementation crisis is not solely attributable to political will or resource deficits; it

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reflects a deeper mismatch between the epistemic complexity of sustainability challenges and the predominantly linear, reductionist analytical frameworks that decision-makers, practitioners, and citizens typically bring to them.

Sustainability challenges are wicked problems in the foundational sense of Rittel and Webber (1973): they resist resolution through conventional problem-solving because they involve incomplete information, contradictory stakeholder values, dynamic interdependencies, and the absence of definitive solutions. These challenges demand a qualitatively different cognitive capacity, one that supports rigorous analysis of evidence, evaluation of competing claims, identification of underlying assumptions, reasoning under uncertainty, and disciplined metacognitive self-regulation. These are the constitutive capacities of critical thinking (CrT), which this chapter argues functions as the cognitive scaffold on which sustainability competencies must be built.

Despite this convergence, systematic analyses of the ESD literature confirm that CrT, though frequently invoked in sustainability curricula, remains underspecified as an enabling foundation and is more often assumed than explicitly cultivated (Redman & Wiek, 2021; Felix, 2023). Three gaps are particularly consequential. First, no widely shared framework links specific CrT dimensions to specific SDG competency demands. Second, existing ESD frameworks implicitly rely on CrT capacities without rendering them pedagogically actionable, which creates a structural vulnerability in sustainability curricula. Third, the literature rarely examines which SDGs benefit most, or least, from CrT-based pedagogical approaches; yet goals with high normative contestation (SDGs 5, 10, 16) and those requiring technical systems analysis (SDGs 13, 14, 15) make qualitatively different demands on CrT capacities that warrant differentiated treatment.

This chapter presents a narrative review of recent scholarly literature at the intersection of CrT and sustainability education in higher education. It draws on peer-reviewed empirical and conceptual sources, mostly indexed in Scopus and Web of Science, and addresses four questions: which pedagogical strategies universities employ to integrate CrT with sustainability education; what roles universities can play in the development of CrT competencies for sustainable development; what evidence exists on the effectiveness of such interventions; and what theoretical framework can coherently link CrT pedagogy to SDG achievement. The chapter proposes the Critical Thinking Scaffolding for SDG Achievement (CrTS-SDG) model and advances a central argument with significant implications for curriculum design: the depth of genuine CrT–sustainability co-integration depends less on the choice of pedagogical strategy than on the underlying conceptualization of sustainable development that a program presupposes.

2 Critical Thinking in Higher Education: Conceptual Grounding

Among the most influential conceptualizations of CrT, Facione's (1990) Delphi Report identified six core cognitive skills (interpretation, analysis, evaluation, inference, explanation, and self-regulation) alongside the affective dispositions essential for their deployment. This bipartite model, which integrates both skills and dispositions, remains

the dominant reference framework in empirical research on CrT assessment and instruction. Ennis (2018) characterizes CrT as reasonable, reflective thinking focused on deciding what to believe or do an action-oriented definition that carries particular importance in sustainability contexts, where thinking well must ultimately serve the goal of acting well.

A persistent tension in the CrT literature concerns the relative weight given to skills versus dispositions. The literature has disproportionately framed CrT as a skill rather than a disposition (Andreucci-Annunziata et al., 2023), a tendency that risks an underestimation of the affective and attitudinal dimensions essential for sustainability-oriented education. Intellectual curiosity, open-mindedness, truth-seeking, systematic reasoning, and cognitive maturity, which Facione and colleagues (Facione et al., 1995) described as the dispositional dimension of CrT, must be cultivated rather than drilled. They emerge, or fail to emerge, in response to the intellectual climate of an institution and to how its faculty model these dispositions.

Barnett (1997) adds a further dimension: the version of CrT promoted in most universities is implicitly conservative, since it teaches students to evaluate arguments within established disciplinary frameworks rather than to question those frameworks themselves. The tension between critical thinking that operates within a tradition and critical being those questions the premises of that tradition carries particular force in sustainability contexts, where some of the most consequential assumptions are embedded in economic and political frameworks that formal education tends to reproduce rather than interrogate. As Mezirow (1991) argued, the genuine perspective transformation requires what he termed premise reflection: a form of inquiry that goes beyond what students know about sustainability and interrogates the underlying assumptions that determine what counts as a sustainability problem in the first place. This distinction between surface-level critical analysis and deeper premise reflection is, as the review below demonstrates, consequential for the depth of CrT - sustainability integration that any given curriculum can achieve.

3 Sustainability Challenges, SDG Complexity, and the Case for CrT

The foundational framework of Wiek et al. (2011) identified five key sustainability competency domains (systems thinking, anticipatory thinking, normative thinking, strategic thinking, and interpersonal competence) as the essential architecture of sustainability problem-solving. Subsequent elaborations, including the OECD Learning Compass 2030 (OECD Future of Education and Skills 2030, 2019) and the European GreenComp framework (Bianchi et al., 2022), have reinforced this competency-based approach. These frameworks share a recognition that sustainability requires not only knowledge but higher-order capacities. They have been slower, however, to specify that CrT functions as the cognitive infrastructure on which those capacities rest: systems thinking requires analysis and interpretation across complex causal structures; anticipatory thinking requires inference under uncertainty; and normative thinking requires

evaluation of competing value frameworks. CrT does not compete with the sustainability competencies identified in these frameworks; it enables them.

The SDGs compound this challenge through interdependence. Progress on SDG 2 (Zero Hunger) affects SDG 15 (Life on Land), SDG 6 (Clean Water), and SDG 1 (No Poverty) in ways that may be reinforcing or conflicting, depending on context and political economy. A graduate educated in, say, agricultural science or environmental management without exposure to these systemic interdependencies, and without the CrT capacities needed to trace and evaluate them, is poorly equipped for consequential professional practice regardless of their technical proficiency. Meadows's (2008) hierarchy of leverage points reinforces this argument: the highest-leverage interventions in complex systems target foundational assumptions and normative frameworks rather than technical parameters. These are precisely the interventions toward which CrT is directed.

A further observation from the literature deserves explicit attention: the SDGs that receive the most sustained pedagogical attention in sustainability curricula are not necessarily those that most demand CrT. Environmental and educational goals (notably SDGs 4 and 13) attract disproportionate scholarly and curricular attention, whereas social justice and governance goals (SDGs 1, 10, and 16) are consistently underserved (Cottafava et al., 2019; Boluk et al., 2019). This asymmetry has structural causes. Students tend to gravitate toward SDGs epistemically proximate to their field of training, and classroom-based pedagogies predominantly activate macro-level environmental goals. The social justice and human-vulnerability dimensions of the 2030 Agenda remain largely inaccessible unless the pedagogy itself relocates students into contexts where those dimensions are lived realities rather than textual representations. By exposing the assumptions that produce this disciplinary filtering, CrT is uniquely positioned to address it.

4 The CrTS-SDG Framework

Building on the theoretical traditions surveyed above, this section proposes the Critical Thinking Scaffolding for SDG Achievement (CrTS-SDG) model, an integrative conceptual framework organized around three interrelated layers.

Layer 1. Critical Thinking as Epistemic Foundation. This layer positions the six core CrT capacities of Facione (1990) as both cognitive skills and affective dispositions. Consistent with Mezirow (1991) and Freire (1970), these capacities are not value-neutral cognitive tools but epistemically and politically situated practices. The revised Bloom's taxonomy (Anderson & Krathwohl, 2001) situates analysis, evaluation, and creation at the apex of cognitive demand, namely the operations most relevant to sustainability problem-solving. The Reflective Judgment Model of King and Kitchener (1994) introduces the developmental dimension: CrT capacities follow a recognizable trajectory from pre-reflective to fully reflective epistemic functioning, with significant implications for how scaffolded instruction should be calibrated.

Layer 2. Scaffolding Mechanisms as Pedagogical Mediators. This layer comprises the instructional support structures through which CrT capacities are developed within

SDG-oriented curricula. Scaffolding theory, rooted in Vygotsky's (1978) Zone of Proximal Development and elaborated by Wood et al. (1976, pp. 89–100) and Van de Pol et al. (2010), provides the organizing logic: effective scaffolding is contingent, progressively faded, and oriented throughout toward the transfer of responsibility to the learner. The two mechanisms identified by Reiser (2004), namely structuring (which decomposes complex tasks) and problematizing (which deliberately exposes epistemological difficulties), are particularly relevant in sustainability contexts, where challenges may appear deceptively tractable to students who have not yet developed the CrT dispositions needed to perceive their underlying complexity.

Layer 3. SDG-Relevant Sustainability Competency Outcomes. This layer draws on the internationally validated frameworks of Wiek et al. (2011), Brundiers et al. (2021), and the GreenComp framework (Bianchi et al., 2022). The model proposes that different SDG domains place differential demands on specific CrT capacities: SDGs with high normative contestation (SDGs 5, 10, 16) place the greatest demands on evaluative and inferential CrT; SDGs with high systemic complexity (SDGs 13, 14, 15) require analytical CrT and systems thinking competency; and SDGs that require coordinated collective action (SDGs 11, 17) place particular demands on dialogic and interpersonal CrT. This differential mapping has direct implications for curriculum design that the existing literature has not yet systematically articulated.

The CrTS-SDG model is recursive and bidirectional rather than linear. CrT and sustainability competencies develop co-constitutively: systems thinking competency, for example, enhances the analytical dimensions of CrT by offering conceptual tools that reveal feedback dynamics which linear analysis would otherwise obscure, and this in turn deepens subsequent systems reasoning. The model also identifies a structural variable that cuts across all three layers and that, as the following section argues, is the primary determinant of how deeply CrT and sustainability education can be integrated.

5 Pedagogical Strategies and the Depth of Integration

5.1 Five Clusters of Evidence-Based Practice

The scholarly literature documents a rich and varied repertoire of pedagogical strategies that integrate CrT with sustainability education. These strategies can be organized into five broad clusters, each with a characteristic CrT profile.

Project-based and problem-based learning (PBL) constitutes the most frequently documented approach, since its structure is compatible with both CrT development and SDG integration. In PBL environments, students encounter ill-structured problems before they receive formal instruction; this sequence compels them to generate hypotheses, seek evidence, and reason evaluatively. In sustainability contexts, the ill-structured character of PBL problems is not a pedagogical artifice but a faithful reflection of the challenges students will encounter professionally. A particularly demanding variant shifts the emphasis from problem-solving to problem identification. Santos et al. (2024) report that a problem-posing protocol for management students, based on Freirean pedagogy, positioned learners to interrogate the premises through which sustainability

problems are constructed rather than simply address them. Such interrogation constitutes a higher-order CrT operation that standard PBL designs frequently overlook. A persistent limitation, however, is the risk that critique remains superficial: without deliberate pedagogical attention, students may engage with sustainability as a technical challenge while leaving their underlying assumptions about development, growth, and justice entirely unchallenged (Carrió Llach & Llerena Bastida, 2023).

Simulation, game-based, and competition-based approaches form a second cluster, well suited to the development of anticipatory and evaluative CrT dimensions. Their scaffolded decision-making structures under uncertainty create natural opportunities for the analysis of consequences and the revision of mental models. Urquidi-Martín et al. (2019) demonstrate that the quality of post-simulation reflection, rather than the simulation itself, is the primary determinant of CrT gains: structured debriefing that links simulation decisions to SDG interdependencies produces meaningfully different outcomes than uncritical task completion. White and Dutta (2025) report significant conceptual change in students' climate action mental models after a specifically designed board game intervention, although they caution that transfer to real-world reasoning requires explicit design rather than incidental exposure.

Reflective practice and transformative learning approaches constitute a third cluster, distinguished by their capacity to address the deepest layers of CrT (normative reasoning, perspective transformation, and epistemic humility) that surface-level pedagogies leave untouched. Theoretically grounded in the transformative learning of Mezirow (1991) and the critical pedagogy of Freire (1970), these approaches use structured encounters with disorienting dilemmas as catalytic starting points. Brunnquell et al. (2015) document professors' experiences with critical reflection in Brazilian business administration courses and identify the emotional and relational challenges that genuinely transformative pedagogies face in institutional contexts not designed for them. El Ouali and Kakar (2025) evaluate the Climate Fresk workshop as a transformative learning experience that moves participants beyond cognitive climate literacy toward affective and behavioral commitment to climate action; this finding extends effectiveness claims well beyond what standardized assessment can capture.

Debate, dialogue, and discourse-based approaches form a fourth cluster that makes a distinctive contribution to the argumentative and normative dimensions of CrT. The dialectical structure of formal debate compels evidence-based position development, anticipation of counterarguments, and revision of claims in light of new evidence; these are core CrT operations that the contested knowledge landscape of sustainability demands. Rodriguez-Dono and Hernández-Fernández (2021) document this in engineering sustainability education; Mejía-Cáceres et al. (2023) extend the argument by drawing on political climate change discourses as CrT resources. They argue that the gap between political rhetoric and scientific consensus provides uniquely rich material for source evaluation and ideological critique. These approaches remain underrepresented relative to PBL in the literature, despite their particular relevance for SDGs with high normative contestation.

Interdisciplinary, transdisciplinary, and service-learning approaches constitute the fifth cluster, which addresses the structural organization of knowledge production. Howlett et al. (2016) make a foundational argument for interdisciplinarity as the most

appropriate epistemic framework for sustainability education, since sustainability challenges do not respect disciplinary boundaries. Service learning adds a dimension of civic engagement and real-world accountability: the evidence consistently suggests that it is the only format through which students develop meaningful critical awareness of the social justice dimensions of the SDGs (goals 1, 2, and 10), because those dimensions require physical co-presence in communities where they are lived realities rather than statistical abstractions (Rathore & Mahesh, 2025).

5.2 The Conceptualization of Sustainable Development as a Structural Variable

The available evidence suggests that the comparative effectiveness question (which strategy best develops CrT in sustainability contexts) is secondary to a prior and largely neglected one: what conception of sustainable development are students being asked to think critically about?

A thin, Brundtland-derived framing (development that "meets the needs of the present without compromising the ability of future generations") tends to generate correspondingly instrumental CrT: students learn to evaluate evidence and propose technically feasible solutions within the parameters of the existing social and economic order. Critical thinking and sustainability education coexist, but their relationship is hierarchical rather than dialectical; sustainability provides the content domain and CrT the analytical method, and neither destabilizes the assumptions of the other. Where programs operate within what sustainability science describes as a weak sustainability orientation, that is, one that accepts market mechanisms and economic growth as the structural context within which sustainability must be pursued, the alignment shifts only marginally. Cotterell et al. (2019) and Slocum et al. (2019) demonstrate that tourism and business education programs governed by this orientation tend to cultivate CrT oriented toward optimization: students think critically about how to green their industry, but the question of whether profit-driven growth is compatible with the SDGs is effectively placed outside the scope of critical inquiry.

The most productive site of genuine co-integration emerges where programs adopt what has been called a strong sustainability conceptualization, one that treats structural critique and value transformation as legitimate targets of education rather than as background assumptions to be managed. In this configuration, CrT is no longer a technique applied to a predefined problem; it is the mechanism through which the problem is constituted as a political, normative, and epistemological question. Brunnquell et al. (2015) exemplify this orientation: sustainability is treated as a deeply contested concept whose critical examination is precisely what education for sustainability must enable. Santos et al. (2024) operationalize the same logic at the level of pedagogical design: their protocol is structured so that students cannot engage with a sustainability problem without simultaneously interrogating the premises through which it has been constructed.

The practical implication is direct: faculty who believe they are integrating CrT into sustainability education while operating within a thin or weak sustainability framework may cultivate a form of critical thinking that is bounded by the very paradigm that their

theoretical references (transformative learning, critical pedagogy, and ESD competency development) are designed to challenge. Genuine CrT–sustainability integration therefore requires that the conceptualization of sustainable development itself become an object of critical inquiry, rather than a settled premise from which teaching proceeds.

6 Assessing CrT in Sustainability Contexts

Assessment of CrT development is notoriously difficult, and the challenge is compounded in sustainability contexts by the absence of consensus on what good CrT performance looks like when applied to genuinely complex, values-laden problems. The literature reveals three unresolved structural tensions.

The first tension is between standardization and contextual sensitivity. Navarro et al. (2023) represent a rigorous effort to develop and apply a validated instrument for CrT assessment in engineering sustainability education; however, the disciplinary specificity of their tool limits its transferability. Portfolio-based approaches, such as the hierarchical e-portfolio designed by Colás-Bravo et al. (2018) to identify progressive levels of "sustainable consciousness" in trainee teachers, preserve the qualitative structure of CrT development but sacrifice replicability and comparability across programs.

The second tension is between cognitive measurability and affective-normative depth. The tripartite framework proposed by Huang et al. (2024), namely "to know, feel, and do," provides a useful diagnostic lens: cognitive dimensions are addressed, with varying degrees of rigor, across virtually all assessment modalities; affective dimensions are sporadically captured through reflective portfolios and transformative learning designs; behavioral dimensions, understood as the translation of critical sustainability thinking into consequential action, remain largely invisible in classroom-based assessment designs. El Ouali and Kakar (2025) represent a methodological exception that extends the assessment horizon beyond cognitive change to encompass sustained motivational and identity-level transformation.

The third tension is between SDG literacy and genuinely transformative competence. Instruments that measure breadth of SDG knowledge, such as the Sulitest deployed by Décamps et al. (2021), are valuable for tracking coverage but offer no purchase on whether students can interrogate the assumptions embedded in the SDG framework itself, evaluate tensions and trade-offs between goals, or translate sustainability knowledge into principled action. Burford et al. (2016) make the deeper point: any instrument that measures sustainability competence already encodes normative commitments about what sustainability requires of learners, and those commitments should themselves be subject to critical scrutiny. The assessment of CrT–sustainability competencies is therefore not simply a technical problem awaiting better instrumentation; it requires prior conceptual agreement about what that co-development is ultimately for.

7 Discussion: Toward Deeper CrT–SDG Integration

The scholarly literature reviewed here confirms that CrT and sustainability education have achieved meaningful conceptual and curricular convergence in higher education, a convergence documented across a diverse repertoire of pedagogical strategies, disciplinary contexts, and theoretical traditions. What this literature does not yet offer is a coherent, evidence-based account of the conditions under which that convergence produces genuine engagement with the transformative ambitions of the SDGs.

The CrTS-SDG model proposed in this chapter reframes the dominant question in the field. Rather than ask which pedagogical strategy most effectively develops both CrT and sustainability competencies, the model asks what conception of sustainable development is operative in the curriculum, because that prior question determines the depth at which any strategy can function. This reframing is consequential: it locates the primary lever of improvement not in pedagogical innovation but in normative definitional work, and it suggests that competency frameworks, as currently constituted, remain insufficient scaffolds for genuine CrT–sustainability integration if the conceptualization of sustainability they presuppose stays unexamined.

The five pedagogical clusters identified in the review are not equally positioned to support the full range of CrT dimensions. Problem-based and project-based learning generate the broadest evidence base, with documented gains in analytical and evaluative CrT across multiple disciplinary contexts; their limitation is that, without deliberate design, they tend to reinforce rather than challenge students' baseline sustainability assumptions. Reflective and transformative approaches are most effective for normative and affective CrT (the dimensions most directly relevant to genuine sustainability transformation), although they remain the most demanding to facilitate and the most resistant to standardized assessment. Debate and discourse-based strategies make a distinctive contribution to argumentation and source evaluation, competencies that are essential for SDGs with high normative contestation, yet they remain underrepresented in the literature. Service-learning and transdisciplinary approaches are uniquely positioned to develop critical engagement with the social-justice dimensions of the SDG framework, but they are institutionally costly and logistically demanding.

Two structural gaps deserve particular attention. The first concerns SDG representation. Social-justice and governance goals (SDGs 1, 10, and 16) are consistently underserved across the literature, not because they are less amenable to CrT-based approaches, but because students' disciplinary socialization and baseline mental models filter them out. This filtering operates independently of pedagogical intention and remains largely invisible to instructors who have not examined it explicitly. The encouraging finding is that effective CrT-oriented interventions can produce measurable shifts in students' SDG mental models: environmental goals cede their default dominance, and previously marginal goals gain salience. These shifts suggest that the asymmetry is a product of design choices rather than a fixed property of student cognition (Cottafava et al., 2019; Décamps et al., 2021).

The second gap concerns assessment. The most distinctively CrT component of sustainability competence (the capacity for normative reasoning, premise reflection, and

ideological critique) is not systematically targeted by any assessment instrument currently documented in the literature. This is not primarily a psychometric problem; it reflects the fundamental difficulty of operationalizing a construct whose value lies in its resistance to predetermined correct answers. The development of assessment approaches adequate to this challenge will require not only better instruments but also prior normative agreement about what CrT–sustainability co-development means at different levels of depth, an agreement that cannot be reached without taking a position on what sustainable development is for.

8 Conclusions and Implications

This chapter has argued that critical thinking is not one competency among many in sustainability education; it is the cognitive infrastructure on which other sustainability competencies depend. The capacity to analyze complex causal claims, evaluate evidence across disciplinary boundaries, draw warranted inferences from incomplete data, and maintain intellectual humility in the face of genuine uncertainty does not develop incidentally through exposure to sustainability content. It must be cultivated deliberately, structured pedagogically, and assessed with instruments that reach beyond surface cognitive performance.

The CrTS-SDG model, organized around three layers that link CrT as epistemic foundation, scaffolding mechanisms as pedagogical mediators, and sustainability competency outcomes, provides a developmental framework for that cultivation. Its central proposition is that CrT and sustainability education are most productively understood not as parallel curricular objectives to be pursued in parallel, but as mutually constitutive practices: each deepens the other when the conceptual conditions are right. The critical condition, as the review demonstrates, is normative: the depth of co-integration achievable in any curriculum is set by how far that curriculum is willing to make the conceptualization of sustainable development itself a target of critical inquiry.

For curriculum design, the most direct implication is that sustainability programs should be explicit about both the CrT dimensions they target and the conception of sustainable development within which they operate. A strategic combination of PBL, reflective practice, debate, and service-learning, rather than reliance on any single approach, is needed to address the full CrT competency space. The social-justice and governance dimensions of the SDG framework (SDGs 1, 10, and 16) require particular curricular attention and pedagogical formats, specifically community-embedded experiential learning, that conventional classroom designs cannot substitute.

For institutional policy, CrT–sustainability co-integration cannot be achieved through a single required course or an individual faculty champion. The intellectual climate of an institution, namely what it models, what it rewards, and what levels of normative ambiguity it tolerates, shapes CrT dispositions in ways that no single course can override. The meta-analytic finding by Abrami et al. (2015) that mixed instructional approaches produce significantly larger CrT effect sizes than any single strategy reinforces the case for institutional rather than merely curricular commitment.

For research, three priorities emerge from this review. A coherent and cumulative research program is needed that combines shared conceptual frameworks for what CrT–sustainability co-development means at different levels of depth, cross-disciplinary assessment instruments validated against those frameworks, and longitudinal multi-institutional designs that can track competency development across full degree programs. The central question that the existing literature raises but cannot yet answer, namely whether CrT instruction scaffolds sustainability competency development in a developmental rather than merely additive relationship, awaits research designs with sufficient methodological rigor to establish sequence and causation.

With less than five years remaining until the 2030 deadline, the generation of students currently in university will be principally responsible for either closing or widening the SDG implementation gap. Whether they are equipped, analytically, dispositionally, and professionally, to engage with that task is not something universities can treat as someone else's responsibility. The primary lever is not the identification of a better pedagogical strategy; it is the resolution of the prior conceptual question of what kind of sustainable development, and therefore what kind of critical thinking, higher education is sincerely committed to fostering.

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