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Unleashing the potential of teacher leadership for ESD

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This article reconceptualizes teacher leadership as a foundational pillar for advancing Education for Sustainable Development (ESD) within contemporary schooling systems. Disrupting dominant discourses that frame sustainability leadership through top-down or managerialist paradigms, the article articulates a nuanced theoretical and empirical case for recognizing teachers as ethical agents, pedagogical innovators, and transformative leaders situated at the heart of sustainability praxis. Through a critical engagement with educational leadership literature, sustainability theory, and post-structural perspectives, it interrogates the epistemic exclusions that have historically marginalized teachers in global ESD agendas. The article argues that teacher leadership, when rooted in professional agency, critical reflexivity, and contextual responsiveness, offers a powerful counter-narrative to technocratic educational reforms and opens up imaginative possibilities for cultivating just, resilient, and ecologically attuned learning communities. By reweaving the conceptual threads of sustainability, equity, and pedagogical activism, this work repositions teachers not only as implementers of policy, but as co-constructors of educational futures in an age of systemic uncertainty.

KEYWORDS

teacher leadership, Education for Sustainable Development (ESD), sustainability and schooling, critical pedagogy, educational reform

1 Introduction

The intensifying complexity and interdependence of global crises—from climate change and ecological degradation to widening social inequities and economic instability—have magnified the imperative for educational systems to act not as passive transmitters of knowledge, but as active agents of transformation (Koçulu and Topçu, 2024; United Nations, 2023). Within this context, Education for Sustainable Development (ESD) has emerged as both a normative aspiration and a pragmatic necessity, challenging educators to cultivate in learners the capabilities to imagine, engage with, and shape sustainable futures (UNESCO, 2020). The 2030 Agenda for Sustainable Development situates education as a catalyst across all 17 Sustainable Development Goals (SDGs), underscoring its transversal influence in fostering critical consciousness, participatory citizenship, and ethical responsibility (Ghamrawi, 2016). Yet, despite widespread rhetorical endorsement of ESD, the prevailing discourse on educational leadership remains anchored in hierarchical, managerial models that fail to adequately harness the distributed, situated, and often underrecognized capacities of

teachers as leaders of sustainability-oriented change (Lu and Chen, 2025; OECD, 2019, 2021; Printy and Liu, 2021).

In educational leadership literature, the conventional spotlight has remained disproportionately fixed on principals and senior administrators, relegating teacher leadership to the peripheries of theoretical engagement and policy implementation (Ghamrawi, 2013). This oversight is not merely conceptual; it reflects a deeper epistemic bias that privileges positional authority over pedagogical influence, and formal hierarchies over grassroots initiatives (Abu-Shawish and Ghamrawi, 2025; Hargreaves and Fullan, 2012). However, as schools grapple with the pressing need to reorient practices toward sustainable development, the role of teachers must be radically reimagined—not solely as deliverers of curriculum, but as strategic actors capable of mobilizing collective agency, initiating eco-social innovation, and embedding sustainability principles into the lifeblood of school culture (Ghamrawi et al., 2024a, 2024b). Indeed, the localized and relational nature of teacher leadership renders it uniquely positioned to drive context-sensitive transformations, especially in areas where institutional mandates fall short of lived pedagogical realities (Ghamrawi and Abu-Tineh, 2023; Lieberman and Friedrich, 2010).

Moreover, the discursive turn toward transformational and distributed leadership paradigms opens conceptual space to legitimize the leadership of teachers not only in instructional domains but also in shaping the moral and civic trajectories of educational institutions (Ghamrawi and Al-Jammal, 2014). These emergent models foreground leadership as a shared, interactive, and dynamic process that transcends organizational hierarchies and enables a multiplicity of actors to co-construct meaning and practice (Al-Jammal and Ghamrawi, 2013a,b; Shal et al., 2024a, 2025). Within this framing, teacher leadership becomes a vital conduit for Education for Sustainable Development, as it invites collaborative inquiry, critical reflection, and the co-design of pedagogical practices that resonate with sustainability's ethos of intergenerational equity, ecological stewardship, and social justice. The emphasis on participatory leadership aligns seamlessly with ESD's own pedagogical commitments—rooted in interdisciplinarity, values-based learning, and action competence—thus reinforcing the need to center teachers in the leadership equation (Bedford, 2022).

Critically, the potential of teacher leadership in advancing ESD is not merely theoretical. Empirical studies demonstrate that when empowered, teachers can galvanize school-wide sustainability efforts by integrating environmental consciousness into curricula, fostering student engagement in community projects, and cultivating a school ethos grounded in ethical responsibility (Laessøe, 2010; Mogren et al., 2019). However, such efforts are often contingent upon the degree to which institutional structures recognize, support, and sustain teacher-led initiatives. The lack of systemic frameworks to nurture teacher leadership—through professional development, policy support, and collaborative cultures—remains a persistent barrier to realizing the transformative potential of ESD at scale (Harris and Muijs, 2005). Without intentional efforts to scaffold teachers' leadership capacities, ESD risks being reduced to fragmented, project-based interventions rather than a coherent, enduring shift in educational values and practice.

Thus, this article argues for a paradigmatic shift: from viewing teachers as implementers of externally designed sustainability

agendas to recognizing them as critical leaders of educational transformation. By interrogating the intersections between teacher leadership and sustainable development, and grounding the discussion in empirical case studies, this work advances the proposition that empowering teachers to lead is not ancillary, but foundational to actualizing the aspirations of ESD. It is within the dialogic, relational spaces of classrooms, staffrooms, and communities that sustainability must be enacted—and it is there that teacher leadership finds its most fertile ground.

2 Conceptual foundations: teacher leadership through the lens of sustainability

Building on the imperative articulated in the introduction—that transformative educational change hinges not solely on institutional policy but on the quotidian leadership practices of teachers—it becomes necessary to explore the conceptual scaffolding that legitimizes teacher leadership as integral to the realization of sustainable development. This section elucidates the intersections between teacher leadership and ESD through three interrelated theoretical strands: (1) ecological paradigms of leadership, (2) the moral architecture of sustainable education, and (3) distributed agency within complex systems. These lenses offer a deeper analytical terrain for understanding why teacher leadership is not an ancillary phenomenon, but rather a linchpin in the cultivation of sustainable educational ecologies.

2.1 Ecological paradigms of leadership

Traditional conceptions of leadership—often predicated on control, linearity, and top-down authority—are increasingly misaligned with the complex, interdependent challenges that characterize the Anthropocene. Emerging ecological paradigms of leadership disrupt these reductive frames, advancing instead a relational ontology wherein leadership is not a fixed role, but a dynamic and distributed capacity embedded in interactions, contexts, and systems (Al-Jammal and Ghamrawi, 2015). In these paradigms, the school is conceptualized not as a mechanistic organization to be managed, but as a living system to be nurtured—an ecosystem in which all actors, including teachers, are both interdependent and co-evolving (Ghamrawi and Al-Jammal, 2013; Al-Jammal and Ghamrawi, 2013a).

Within this ecological framing, teacher leadership acquires new significance. Teachers are not merely responders to policy, but *ecological connectors*—anchoring the flow of pedagogical, ethical, and cultural knowledge between the micro-realities of the classroom and the macro-agendas of sustainable development (Daly et al., 2022; Shal et al., 2024b). Their proximity to students, curricular decisions, and community dynamics positions them as crucial actors capable of sensing emergent needs, iterating practices, and instigating context-responsive interventions (Fidan and Balci, 2017). Leadership in this view is rhizomatic rather than hierarchical, distributed through relational networks and informed by a sensitivity to place, plurality, and participation.

2.2 The moral architecture of sustainable education

Sustainable development is not merely a technical project, but a deeply ethical one—requiring educators to confront normative questions about justice, equity, interdependence, and responsibility. As such, teacher leadership for ESD must be understood not only in instrumental terms (i.e., implementing sustainability curricula), but as a form of *moral praxis*—a conscious and reflective engagement with the values that underpin sustainable futures (Noguchi, 2017). This repositions teachers as *moral leaders* whose work entails cultivating the dispositions of care, criticality, and civic agency within their students and within the broader educational milieu.

This moral dimension distinguishes ESD from other educational reforms by demanding a fundamental reorientation of purpose. It is not sufficient for teachers to adopt isolated sustainability practices; rather, they must engage in ethical deliberation and collective meaning-making about the kind of futures education should promote (Jickling and Wals, 2008). Herein lies a powerful, yet underleveraged, form of teacher leadership: the facilitation of value-driven dialogues within school communities that challenge dominant paradigms of competition, consumerism, and individualism, replacing them with solidaristic visions grounded in relational responsibility and ecological integrity.

2.3 Distributed agency and the architecture of change

A final conceptual strand is rooted in complexity theory, which holds that systemic change emerges not from centralized command, but from the interaction of diverse agents across multiple levels of a system (Davis and Sumara, 2006). From this vantage point, teacher leadership is indispensable because it activates the latent *distributed agency* necessary for systemic adaptation and innovation (Ghamrawi and Al-Thani, 2023). Schools as complex adaptive systems cannot evolve toward sustainability through policy mandates alone; they require a proliferation of leadership from below—incremental, dialogic, and networked efforts that cumulatively shift institutional cultures (Ghamrawi, 2023).

Indeed, the success of ESD depends less on the structural placement of leadership and more on the *density and quality of leadership interactions* across the school ecosystem. Teachers, when afforded autonomy and trust, generate micro-movements of transformation that ripple through classrooms, influence peers, and catalyze broader pedagogical reform (Ghamrawi et al., 2024c). These movements are often experimental, situated, and iterative—precisely the qualities that align with the adaptive demands of ESD (Fullan and Quinn, 2016). Thus, teacher leadership is not simply desirable—it is structurally essential to the emergence of sustainable school systems.

In sum, conceptualizing teacher leadership through ecological, moral, and complexity-informed lenses reveals its profound relevance to the architecture of sustainable development. This reconceptualization challenges entrenched leadership orthodoxies

and invites a more expansive, ethically grounded, and systemically aware understanding of how change occurs in education. In the sections that follow, we delve into empirical illustrations of teacher-led sustainability initiatives, drawing on case studies that illuminate the possibilities—and constraints—of teacher leadership in action.

3 Problematizing the silences: structural and epistemic barriers

The preceding discussion established the intersectional and transformative potential of teacher leadership within the framework of ESD, anchoring its theoretical legitimacy in critical, ecological, and participatory paradigms. Yet, this promise is systematically stifled by enduring structural and epistemic forces that obscure, delimit, and frequently delegitimize teacher-led sustainability work. The silencing of teacher leadership in sustainability discourse is neither neutral nor accidental; it is a manifestation of deeper educational orthodoxies that prioritize hierarchical governance, technocratic rationality, and policy homogeneity over contextualized, relational, and morally driven educational praxis.

3.1 Hierarchical architectures and the erosion of professional voice

At the heart of the marginalization of teacher leadership lies the entrenched architecture of schooling as a bureaucratic, top-down apparatus. As stated earlier, schools continue to be governed by managerial rationalities that situate leadership within formal positions of authority, privileging the role of the principal or senior leadership teams as the exclusive agents of change (Ghamrawi et al., 2024d). In this schema, teachers are cast as implementers rather than initiators, their agency reduced to fidelity in execution rather than originality in thought. Such structural configurations are particularly inimical to ESD, which demands adaptive, distributed, and ethical leadership attuned to the moral imperative of sustainability (Allen, 2018). The valorization of positional leadership reproduces a logic of compliance, systematically eclipsing the potential of teachers to serve as intellectual and moral leaders within their communities.

3.2 The deficit logic of professional development: a misalignment with sustainability ethos

Conventional models of professional learning are complicit in this suppression of teacher leadership by perpetuating a deficit-oriented, competency-driven paradigm. Professional development continues to be framed as episodic, externally imposed, and narrowly focused on technical efficiency, often divorced from the ontological and epistemological commitments that underpin ESD (Waltner et al., 2018). This misalignment results in a professional learning culture that privileges content mastery and performance metrics over critical reflection, values clarification,

and pedagogical activism (Albareda-Tiana et al., 2019). The cultivation of sustainability-oriented teacher leadership requires a radical reimagining of professional development—not as training but as transformation—where teachers are engaged as co-constructors of knowledge, capable of interrogating dominant paradigms and imagining alternative futures (Ghamrawi, 2013; Ghamrawi et al., 2024a). Without such paradigmatic shifts, teachers remain epistemically disempowered and institutionally disincentivized to lead sustainability change.

3.3 Epistemic injustice and the marginalization of teacher-led innovation

Embedded within these structural barriers is a more insidious form of marginalization—epistemic injustice—that denies the legitimacy of teacher knowledge in sustainability discourse (Fricker, 2007). Policy narratives and academic scholarship alike have tended to valorize large-scale, top-down interventions while rendering teacher-led, locally grounded initiatives as anecdotal or peripheral. This epistemic bias sustains a monoculture of knowledge production that privileges detached objectivity over relational knowing, and standardized solutions over context-sensitive experimentation (Kotzee, 2017). In the realm of ESD, where sustainability is inherently local and deeply relational, this erasure of teacher-generated knowledge represents a profound disservice. Teachers possess intimate insights into the lived realities, aspirations, and challenges of their communities—knowledge that is not ancillary but essential to meaningful sustainability praxis. Recognizing teacher leadership thus requires a reconfiguration of epistemic authority in education, one that affirms plurality, resists homogenization, and embraces the legitimacy of practitioner inquiry (Omodan, 2023).

3.4 Policy-implementation disjunctures: misalignment between macro vision and micro practice

A further impediment to teacher leadership in ESD is the persistent chasm between policy intent and classroom enactment. While global policy frameworks such as UNESCO's Education for Sustainable Development Agenda 2030 have articulated ambitious goals, these often remain abstract and aspirational when translated into national curricula and school-level strategies (UNESCO, 2020). Teachers are frequently burdened with the implementation of ill-defined mandates without the requisite resources, professional autonomy, or institutional support to actualize them meaningfully. This misalignment exacerbates the alienation of teachers from the reform process, reducing ESD to a set of performative add-ons rather than an integrated educational ethos. More critically, it obscures the role of teachers as co-authors of policy, reinforcing a technocratic logic that positions them as passive recipients rather than critical interlocutors in shaping the sustainability agenda (Biesta, 2010). Bridging this gap requires a rethinking of policy as a dialogic, iterative, and participatory process—one that legitimizes

and harnesses the insights, innovations, and aspirations of teachers in co-constructing sustainable educational futures.

Thus, the marginalization of teacher leadership within ESD cannot be disentangled from the structural and epistemic logics that govern contemporary schooling. The perpetuation of hierarchical control, the impoverishment of professional learning, the erasure of practitioner knowledge, and the disconnect between policy and practice collectively conspire to silence teacher agency in sustainability leadership. Unveiling these silences is not a matter of critique alone; it is a necessary precondition for transformation. Interrogating and dismantling these barriers allows the educational community to imagine more equitable, inclusive, and dialogic forms of leadership—where teachers are not merely participants in change but its co-creators and custodians.

3.5 Cultural, contextual, and personal constraints: a broader lens on leadership barriers

Teachers' capacity to lead Education for Sustainable Development (ESD) is shaped not only by institutional frameworks but also by deeply embedded personal, cultural, and contextual factors. Personal beliefs and attitudes play a pivotal role in shaping educators' engagement with sustainability leadership. When teachers adhere to values that deprioritize environmental or social responsibility, or exhibit resistance to continual professional growth, they are less likely to adapt or innovate their pedagogical methods, thereby weakening their potential to lead transformative ESD practices (Zhukova et al., 2020). These internal constraints are often compounded by external limitations, such as a lack of social or institutional recognition for ESD-related work. When sustainability efforts are not visibly supported or celebrated within the school community or broader society, teachers may perceive their leadership in this area as undervalued, further diminishing their motivation to step into such roles. Therefore, enhancing teacher agency and promoting a culture that elevates the professional status of educators are essential conditions for nurturing sustainability leaders (UNESCO, and Education International, 2021).

In parallel, contextual barriers significantly undermine teachers' leadership capacity. Systemic issues such as chronic time shortages, scarcity of material and human resources, and entrenched school cultures resistant to change pose formidable obstacles to the advancement of ESD initiatives (Parry and Metzger, 2023). Hierarchical school structures, where decision-making is centralized and teacher voices are marginalized, often suppress innovation and render sustainability efforts peripheral (Hamwy et al., 2023). These conditions are exacerbated by professional development offerings that are either insufficient or misaligned with evolving global best practices in ESD. Without access to relevant, high-quality training, teachers remain ill-equipped to assume leadership roles in sustainability education. Overcoming these multi-layered constraints requires comprehensive, system-wide approaches—strategies that promote inclusive and democratic school environments, invest in sustained and contextually relevant ESD professional learning opportunities, and implement policy frameworks that recognize and institutionalize teachers' roles

as agents of sustainable transformation (Hamwy et al., 2023; UNESCO, and Education International, 2021).

4 Methodological considerations: mapping praxis through theoretical inquiry

In light of the structural and epistemic marginalization detailed in the previous section, any scholarly inquiry into teacher leadership within ESD must itself resist the reproduction of those same logics. A conceptual investigation into the leadership capacities of teachers vis-à-vis sustainability education necessitates a methodological stance that is both critical and generative—one that engages not only in theorizing the world but in reimagining its possibilities. As this study is located within the tradition of desktop research, it adopts a methodological posture that foregrounds theoretical synthesis, normative critique, and conceptual reconstruction as valid and rigorous modes of educational inquiry (Matias, 2021).

4.1 Reframing the ‘method’ in non-empirical educational research

In contrast to empirical research grounded in data collection, a conceptual study privileges the analysis, juxtaposition, and critique of existing knowledge formations. Far from being ancillary to empirical work, this tradition occupies a central role in advancing educational thought by making visible the assumptions that shape discourse and practice (Smith, 2005; Le Grange, 2008). Through a systematic engagement with multidisciplinary scholarship—ranging from critical pedagogy and sustainability theory to leadership studies—this study constructs a layered and contextually attuned understanding of teacher leadership in ESD. This theoretical inquiry does not aim to describe the world as it is, but to render visible the world as it could be. In doing so, it aligns with the Freirean imperative that ‘to speak a true word is to transform the world’ (Freire, 2018, p. 87).

4.2 Conceptual synthesis as methodological praxis

The method adopted herein can be understood as conceptual synthesis, wherein diverse but intersecting theoretical traditions are woven together to produce new analytical categories and interpretive lenses (Maxwell, 2012). Drawing from critical leadership theory, post-structuralist notions of power, and sustainability-oriented pedagogical frameworks, this synthesis illuminates the multi-dimensional potentialities of teacher leadership in shaping sustainable futures. Rather than seeking generalizable claims, the purpose is to construct a generative conceptual terrain upon which future empirical work and policy dialogue may be grounded. In this way, the methodological orientation is simultaneously analytical and normative: it interrogates what is while proposing what ought to be.

4.3 Problematization as a methodological imperative

Following Foucault (1980) notion of problematization, the study treats teacher leadership in ESD not as a self-evident good, but as a contested and under-theorized construct requiring critical unpacking. What forms of knowledge are legitimized or excluded in defining leadership? Whose interests are served by current sustainability agendas in education? How do power and discourse shape the conditions under which teachers are positioned—or not positioned—as leaders? These are not merely philosophical questions but methodological provocations that determine the trajectory of inquiry. Problematization allows the study to remain alert to contradictions, exclusions, and silences in both policy and scholarship, resisting the closure of debate through premature consensus (Ball, 2012; Jones and Ball, 2023).

4.4 The role of theory as praxis

Crucially, this study adopts a view of theory not as abstraction but as praxis—a mode of engaging with the world that is inherently political and transformative (Giroux, 1983). This aligns with the ethos of ESD itself, which demands that education cultivate dispositions for critical thinking, moral reasoning, and collective action. The use of theory in this inquiry is thus not merely diagnostic but emancipatory. It seeks to unearth buried possibilities, to unsettle taken-for-granted assumptions, and to offer new vocabularies through which teacher leadership can be reimagined as a force for sustainable educational transformation. In this sense, the study becomes a form of intellectual activism—a call to reclaim the educative value of leadership and the leadership value of teaching.

4.5 Validity, trustworthiness, and the ethics of conceptual research

Though not empirical, conceptual research carries its own criteria for rigor and credibility. Internal coherence, theoretical plausibility, moral clarity, and relevance to practice are the benchmarks against which the trustworthiness of this work is assessed (Maxwell, 2012). Reflexivity is central to this process, as the researcher continuously interrogates their positionality, assumptions, and ethical commitments. This is particularly salient in the context of ESD, where normative judgments are intrinsic to the educational project. The study’s commitment to equity, voice, and sustainability informs not only its conclusions but also the ethical integrity of its conceptual framework.

In sum, the methodological stance adopted in this study does more than scaffold its analytic architecture; it is itself a form of epistemic resistance. By embracing theoretical inquiry as a legitimate, rigorous, and ethically engaged mode of research, this study affirms the transformative potential of ideas to reconfigure educational practice. As such, the conceptual methodology becomes a powerful vehicle for both understanding and imagining teacher leadership within the broader quest for sustainability and justice in education.

5 Toward a transformative vision: reclaiming teacher leadership for ESD

If sustainability demands systemic transformation, and transformation requires leadership across all levels of the educational ecosystem, then any conceptualization of ESD must take seriously the question of who leads, how, and toward what ends (UNESCO, 2021). While traditional leadership paradigms remain tethered to hierarchical, managerialist logics, a transformative vision of ESD calls for a radically different distribution of agency—one that foregrounds the intellectual, moral, and pedagogical labor of teachers as pivotal to enacting sustainability within and beyond the school (Mogaji and Newton, 2020). This section advances a normative claim: teacher leadership must be reimagined as a form of critical sustainability praxis, capable of unsettling entrenched power relations and enabling new ecologies of educational possibility.

5.1 From compliance to contestation: teachers as agents of transformation

Within dominant policy frameworks, teachers are often cast as implementers of pre-defined sustainability curricula, their work circumscribed by externally imposed metrics and competencies (UNESCO, 2020). This technocratic framing obscures the inherently political nature of sustainability education and erases the intellectual autonomy required to navigate its complexities. Yet, as Wals (2019) argues, sustainability cannot be taught through prescription; it must be lived, enacted, and continually negotiated in context. Teachers, situated at the intersection of policy, community, and classroom, possess the situated knowledge and relational capital necessary to contest unsustainable practices and cultivate new imaginaries. Reclaiming teacher leadership thus requires a shift from performative compliance to critical contestation—again, a move that aligns with Freire (2018) conception of education as a practice of freedom.

5.2 Cultivating ecologies of practice: beyond the individual leader

A transformative vision of teacher leadership for ESD also necessitates a departure from individualistic, heroic conceptions of leadership. Instead, it demands an ecological view in which leadership is distributed, relational, and embedded within broader communities of practice (Wenger-Trayner and Wenger-Trayner, 2020). Teachers lead not in isolation but through dialogic engagement with students, peers, local actors, and the natural world. This ecological framing echoes the principles of systems thinking central to sustainability science, where change is understood as emergent from the interaction of interdependent elements (Sterling, 2011). Here, leadership becomes a collective endeavor—an evolving ecology of praxis marked by mutual accountability, reflexivity, and shared moral purpose.

Moreover, these ecologies are inherently place-based. As Gruenewald (2003) emphasizes in his critical pedagogy of place, sustainable education must be rooted in the cultural, ecological, and historical specificities of local contexts. Teachers, through their embeddedness in community life, are uniquely positioned to integrate global sustainability imperatives with locally meaningful pedagogies. They function not simply as conveyors of knowledge but as weavers of relational webs—catalyzing student agency, community engagement, and environmental stewardship from the ground up.

5.3 Leading through curriculum: pedagogical imagination as leadership

Leadership in ESD does not always take overt institutional forms; often, it manifests most powerfully through the curriculum—through what is taught, how it is taught, and what remains unsaid (Peters and Biesta, 2009). Teachers exercise leadership when they create spaces for critical inquiry, model ethical reasoning, and disrupt anthropocentric narratives that sustain ecological degradation (Jickling and Sterling, 2017). Such pedagogical leadership entails reimagining the curriculum not as a neutral repository of content but as a site of ideological struggle and possibility. In this light, curriculum-making becomes an act of resistance—a means of unsettling dominant logics of growth, extraction, and competition and nurturing more sustainable ontologies of interdependence and care.

The pedagogical leadership of teachers in ESD also lies in their ability to translate abstract sustainability goals into lived experiences. Through interdisciplinary projects, inquiry-based learning, and civic engagement, teachers animate otherwise distant concepts like climate justice or biodiversity loss, making them tangible and ethically compelling for learners. In doing so, they become what Sipos et al. (2008) describe as facilitators of transformative sustainability learning: educators who link heads (cognitive understanding), hands (practical action), and hearts (affective connection).

5.4 Reclaiming the political: leadership as ethical-political praxis

Any robust account of teacher leadership for sustainable development must reclaim its political dimensions. Sustainability is not a technical problem to be solved but a deeply moral and political challenge entangled with questions of power, equity, and justice (O'Brien and Selboe, 2015). As such, leadership in this context requires what Connell (2009) terms a 'moral stance'—a willingness to disrupt normative assumptions, challenge policy incoherence, and act in solidarity with marginalized communities most affected by ecological and social crises. Teachers who advocate for equitable access to resources, who resist deficit discourses surrounding disadvantaged students, and who embed critical global citizenship into their pedagogy are enacting forms of leadership that are profoundly political—even when not institutionally recognized as such.

This re-politicization of teacher leadership resonates with the work of [Ghamrawi \(2023\)](#) who contend that teachers must be seen as intellectuals actively shaping the moral direction of schooling. By positioning teachers as ethical agents capable of transforming both practice and policy, we begin to undo the epistemic erasure that has long rendered their leadership invisible. In the context of ESD, this means recognizing that sustainable futures are not merely delivered through schools—they are co-constructed through acts of everyday leadership in which teachers play a central, if often unacknowledged, role.

5.5 Whole-school-approach: cultivating teacher leadership for transformative ESD

The Whole-School Approach (WSA) can be viewed as a paradigm shift in how educational institutions conceptualize leadership, moving away from hierarchical models to embrace a more integrated, collaborative framework. As [Mathie and Wals \(2022\)](#) argue, the WSA calls for embedding sustainability not just within the curriculum but across all dimensions of school life, including governance, community engagement, pedagogy, and campus operations. This holistic integration positions teachers as pivotal leaders, not merely as curriculum deliverers but as change agents who actively shape the school's vision and practice.

In this sense, unleashing teacher leadership within the WSA entails recognizing and harnessing their unique positionality at the intersection of policy, community, and practice. [Mathie \(2024\)](#) underscores that it takes a whole school to cultivate sustainable change, where teachers, through collective agency and reflexive practice, lead the way in embedding ecological literacy and sustainability values across the educational experience. Additionally, [Wals and Mathir \(2024\)](#) highlight that when schools adopt a whole-system redesign—rooted in participatory decision-making and community involvement—teachers naturally assume leadership roles that transcend classroom boundaries. This reconceptualization of leadership aligns with the transformative vision of Education for Sustainable Development (ESD), where teachers are not just enacting policies but critically shaping them through grassroots innovation and contextual adaptation. Hence, the WSA is not merely an operational strategy but a political and ethical commitment to fostering teacher leadership as the driving force behind educational transformation.

6 Implications for policy and practice: catalyzing structural realignments

If teacher leadership is to play a central role in advancing ESD, then it cannot remain conceptually marginal or structurally unsupported. The arguments articulated thus far point not only to the urgent need for reimagining teacher leadership, but also to the necessity of aligning educational policies, institutional cultures, and governance structures in ways that valorize and sustain the agency of teachers as transformative leaders. This final section identifies

the implications of such a vision for education systems, arguing for a deliberate realignment of policy frameworks, professional development practices, and institutional logics to create the enabling conditions for teacher-led sustainability transformation.

6.1 Reconceptualizing policy frameworks: from delivery to co-construction

Most national and international ESD policy documents retain a top-down logic, envisioning teachers as implementers of externally designed agendas ([UNESCO, 2020](#); [OECD, 2021](#)). This approach fails to leverage the intellectual capital and contextual insight that teachers bring to the sustainability challenge. A shift is needed—from policies of ‘delivery’ to policies of ‘co-construction’—where teachers are not only consulted but are positioned as co-authors of curriculum, co-designers of pedagogy, and co-shapers of institutional priorities. As [Ghamrawi \(2023\)](#) argues, policy enactment is never linear; it is mediated by professional judgment, cultural norms, and institutional dynamics. Recognizing this complexity, ESD policies must be reimagined as dynamic frameworks that empower teacher leadership rather than constrain it.

This requires abandoning the managerialist vocabulary of fidelity, outcomes, and accountability in favor of a lexicon rooted in trust, professionalism, and situated agency ([Douglass et al., 2018](#)). Such a shift is not merely rhetorical—it entails systemic recalibrations in how educational systems conceptualize authority, responsibility, and change. Ministries and education departments must foreground collaborative policymaking processes that actively include teachers' unions, professional associations, and school-based networks as epistemic partners in sustainability education.

6.2 Professional learning as sustainability praxis

If teacher leadership for ESD is to flourish, professional learning must move beyond skills training toward deeper forms of critical and ethical inquiry. Dominant models of professional development often operate within depoliticized and technocratic paradigms, emphasizing the mastery of predetermined content and generic pedagogical strategies ([Kennedy, 2014](#)). However, sustainability education resists such standardization. It demands pedagogical improvisation, epistemological pluralism, and moral courage—capacities that can only be nurtured through sustained, dialogic, and reflexive learning communities.

This calls for an infrastructure of professional learning that is place-based, inquiry-oriented, and explicitly geared toward sustainability praxis. Networks such as eco-pedagogical learning circles, teacher inquiry groups, and inter-school sustainability hubs can serve as incubators of teacher leadership, enabling educators to collectively grapple with local-global tensions, ecological ethics, and pedagogical innovation ([Kagawa and Selby, 2010](#)). Moreover, these spaces should be institutionally supported—not as peripheral initiatives, but as core components of school improvement strategies grounded in ESD.

6.3 Reconfiguring school governance and culture

The realization of teacher leadership in ESD also requires a structural reconfiguration of school governance. In many educational systems, leadership is still associated with formal titles and hierarchical authority, while teachers are excluded from decision-making processes that shape the ethos and direction of their institutions (Ghamrawi et al., 2024a,b,c,d, 2025). Yet, as argued in previous sections, leadership in sustainability contexts must be dialogical, distributed, and ethically grounded.

This implies the need to democratize school leadership structures—opening up spaces for teachers to lead from their pedagogical expertise, to participate in institutional planning, and to shape whole-school approaches to sustainability. Models of shared leadership, participatory budgeting, and cross-role committees offer promising avenues for institutionalizing teacher agency in ways that transcend tokenism (Ghamrawi, 2023; Spillane, 2006). More fundamentally, schools must cultivate cultures of collegiality, critical dialogue, and ecological consciousness—cultures in which teacher leadership is not merely permitted, but expected and celebrated.

6.4 Bridging the gap between grassroots practice and systemic reform

Policy efforts must recognize the disjuncture that often exists between grassroots innovation and systemic reform. Teachers around the world are already leading bold experiments in sustainability pedagogy—redesigning curricula, transforming school gardens into outdoor classrooms, organizing student climate action groups, and building community partnerships. Yet these efforts frequently remain disconnected from formal policy narratives, which continue to valorize test scores and standardized indicators as the primary measures of educational success (UNESCO, 2020).

To address this, systems must develop mechanisms for recognizing and scaling grassroots teacher leadership without erasing its contextual specificity. This might include sustainability-focused teacher leadership awards, national registries of innovative practice, and research-practice partnerships that document and theorize local innovations. Crucially, such mechanisms must avoid instrumentalizing teachers' work. Instead, they should center educator voice, honor local knowledge, and foster a culture of horizontal learning across schools and regions.

7 Discussion and conclusion

At the confluence of ecological precarity and educational transformation lies a profound imperative to reimagine the architecture of leadership in schools—not as a managerial function confined to hierarchical authority, but as a generative, relational, and moral endeavor anchored in the practice of teachers. This article has advanced a central thesis: that teacher leadership is not simply compatible with ESD, but constitutive of its very possibility.

In the face of planetary urgency, sustainability must be re-understood as a pedagogical ethic, a civic orientation, and a cultural disposition that is lived, embodied, and cultivated through the everyday decisions of those who teach. Teachers, long positioned at the margins of leadership discourse, must be recentered as intellectual agents and critical interlocutors in shaping the futures of education and society alike.

The argument unfolded across this article has disrupted reductive binaries that separate leadership from teaching, policy from practice, and sustainability from schooling. It has instead advanced a complex ecology of thought wherein teacher leadership emerges as both a locus of resistance to the technocratic rationalities that dominate current systems, and as a seedbed for alternative futures grounded in justice, interdependence, and planetary wellbeing. By examining the conceptual fault lines that have traditionally sidelined teachers in sustainability discourses—epistemic, institutional, and ideological—the article has revealed how the marginalization of teacher agency is not accidental, but symptomatic of broader regimes of knowledge and power that continue to decouple the educational from the ethical, the professional from the political.

In repositioning teacher leadership as a cornerstone of ESD, the article has illuminated its capacity to disrupt inertia and enliven transformative praxis within schools. Far from being incidental actors, teachers occupy the epistemic ground where policy intentions translate into lived realities—where the abstractions of sustainability are rendered meaningful, actionable, and affectively resonant for students and communities. To ignore their leadership is not only a strategic miscalculation but an ethical failure. Their proximity to learners, their fluency in contextual nuance, and their capacity to mobilize relational trust render them indispensable actors in reweaving the social fabric of schools around values of care, equity, and ecological responsibility.

Yet for this potential to be realized, a radical reframing of educational leadership itself is required. It is no longer sufficient to conceive of leadership in terms of formal roles or institutional status. Rather, leadership must be reimagined as a distributed, dialogic, and insurgent force—emerging from within rather than imposed from above, cultivated through collective sense-making rather than individual authority. Teacher leadership for sustainability, then, is not merely an operational strategy; it is a democratic praxis that calls into question existing power relations and reorients schooling toward long-term ethical commitments rather than short-term performative metrics.

This article thus concludes not with a set of prescriptions, but with an invitation to rethink—deeply, collectively, and courageously—the foundations upon which we build educational futures. In placing teacher leadership at the heart of the sustainability project, we do not simply amplify teacher voice; we recalibrate the moral compass of educational leadership itself. It is here, in the everyday acts of pedagogical imagination and ethical discernment, that the seeds of a more sustainable world are already being sown. What remains is to recognize, support, and systemically embed these acts—not as exceptions to be celebrated, but as the new norm for a world in urgent need of transformation.

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that could be construed as a potential conflict of interest.

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