

Education Policies and Systemic Reforms for the 21st Century: Leading Schools into the Future

Dr. Layal Abou Mrad¹ and Fatima Itani²

Faculty of Education, Lebanese University, Beirut, Lebanon¹

Doctoral School of Letters, Humanities & Social Sciences, Lebanese University, Beirut, Lebanon²

Abstract: In an age marked by epistemic flux and ontological recalibration, the role of educational leadership stands at an inflection point. This chapter interrogates the paradigmatic limitations of current school leadership policies and reimagines them as dynamic instruments of systemic transformation. By unshackling leadership preparation, selection, and function from technocratic orthodoxy, it proposes a radical reorientation: one where school leaders emerge not as institutional custodians but as architects of ecological, responsive, and ethically situated learning environments. The discourse expands to middle leaders, conceptualized not as transactional conduits but as mitochondria—intracellular engines of intellectual energy—tasked with cultivating distributed leadership and seeding teacher agency at scale. Drawing on global literature, critical policy frameworks, and post humanist sensibilities, the chapter advances a nuanced vision for leadership in an era increasingly shaped by artificial intelligence, planetary interdependence, and deepening educational inequities. In doing so, it calls for policy architectures that transcend managerialism and instead privilege pedagogical imagination, systemic empathy, and the emergence of schools as civic and cognitive commons. The result is an invitation to re-story leadership not as a function, but as an ethos—an ontological commitment to justice, possibility, and collective futurity.

Keywords: educational policy innovation, transformational leadership, middle leadership, teacher leadership, student leadership

INTRODUCTION

Contemporary schooling stands at a critical crossroads. The institutions we entrust with shaping future generations were designed in a vastly different era—one defined by the imperatives of the Industrial Revolution (Teo et al., 2021). Rooted in 19th-century paradigms of uniformity, compliance, and mass production, today's schools were never intended to serve the fluid, complex, and rapidly evolving demands of the 21st century (Ghamrawi et al., 2024a, 2024b). Yet, as we navigate an era shaped by exponential technological advancements, particularly the rise of artificial intelligence, the inadequacy of these legacy systems has become starkly apparent (Fullan et al., 2023; Ramírez-Montoya et al., 2022).

The unprecedented acceleration of change is not merely technological—it is cognitive, social, and moral (Ghamrawi & Shal, 2012). Societies now demand of their schools not only the transmission of knowledge but also the cultivation of critical thinking, ethical reasoning, digital fluency, intercultural competence, and the capacity for continuous learning (Ülker, 2025). Traditional educational models—standardized, rigid, and top-down—are ill-equipped to nurture such multidimensional competencies (Ghamrawi, 2013, 2016; Ghamrawi & Al-Jammal, 2013a). Instead, what is required is a radical reimagining of educational ecosystems: dynamic, inclusive, learner-centered environments that prioritize adaptability, creativity, and leadership at every level (Ojha et al., 2025).

This transformation cannot be achieved through superficial reforms or isolated interventions. It necessitates systemic change—rooted in robust, context-sensitive policy frameworks that acknowledge the realities of a post-industrial, digital world (Ghamrawi et al., 2018). At the heart of this transformation lies leadership: not merely in its hierarchical, administrative form, but as a distributed, developmental force encompassing school leaders, teachers, and students alike (Al-Jammal & Ghamrawi, 2013a, 2015; Harris & Jones, 2023; Ghamrawi & Abu-Tineh, 2023; Shal et al., 2024a, 2024b, 2024c). Leadership must now be envisioned as an engine for innovation, a driver of equity, and a catalyst for cultural and pedagogical renewal (Ghamrawi et al., 2013, 2023a, 2023b, 2024b, 2024c, 2024d; Shal et al., 2018a, 2018b, 2019).

This chapter engages with the pressing imperative to reform education policies in alignment with this vision. Drawing upon contemporary literature, global trends, and critical projections by leading scholars and thought leaders, it examines the policy dimensions necessary to enable educational institutions to lead, rather than follow, societal change. It explores

how policies can be designed to foster leadership that is not reactive but proactive—capable of anticipating future needs and cultivating learning ecosystems that are both resilient and regenerative.

In so doing, this chapter offers a forward-looking analysis of education policy reform, grounded in scholarly evidence and enriched by reflective inquiry. It argues that without intentional, future-oriented policy development, schools risk becoming relics of a bygone era—unable to meet the challenges of a world that demands nothing less than transformation.

RETHINKING SCHOOL LEADERSHIP POLICIES FOR TRANSFORMATIONAL CHANGE

If we are to envision schools as incubators of innovation and responsiveness in an age marked by volatility, uncertainty, complexity, and ambiguity, then we must begin by interrogating the very architecture of school leadership. Contemporary policy frameworks often perpetuate reductive conceptions of school leaders as operational managers—custodians of compliance and procedural guardians of bureaucratic systems (Ghamrawi et al., 2023). Yet, the future demands an ontological shift: from managerialism to metanoia; from control to capacity-building; from stability to dynamic disequilibrium in pursuit of growth (İncirci et al., 2018; Hughson & Wood, 2022). Fullan (2011) emphasizes that leadership in times of systemic change requires a shift from traditional top-down models to collaborative, learning-focused approaches. He argues that ‘leadership in the 21st century is about creating conditions for continual innovation and engagement with the process of learning’ (p. 5). This idea aligns with the vision of school leaders as catalysts for innovation rather than mere administrators.

Pre-service Preparation: Cultivating Visionaries, Not Technocrats

The transformation must begin long before the first day of leadership. Pre-service preparation for school leaders cannot remain tethered to technical-rational models that prioritize budgeting, scheduling, and performance metrics (Ghamrawi & Al-Thani, 2023). Instead, policies must cultivate leadership identities capable of navigating moral complexity, fostering collective intelligence, and thinking systemically about learning ecosystems. Future leaders must be immersed in interdisciplinary learning—drawing not only from education and management, but from philosophy, systems theory, futures studies, and cognitive science.

Innovative policy could mandate immersive residencies in non-traditional settings—start-ups, civic labs, art collectives, or global policy think tanks—spaces where creativity, agility, and strategic foresight are organically practiced. Leadership preparation programs should become crucibles of disruption, where the leader-as-inquirer is privileged over the leader-as-executor. Capstone experiences might include designing speculative educational futures grounded in ethnographic data and ecological awareness. The objective is not mastery of current systems, but the capacity to reimagine and redesign them altogether.

Selection: From Criteria to Calling

Traditional leadership selection processes, often centered on prior experience, degrees, and linear career trajectories, tend to reproduce sameness—rewarding conformity over potential. Forward-oriented policy must instead create conditions for identifying what might be called *leadership disposition*: an amalgam of moral imagination, relational intelligence, and adaptive resilience. Selection should be understood not as a filtering mechanism, but as an act of discerning vocation—a process that seeks those who possess the internal compass to navigate unknown futures.

Policies could institutionalize narrative inquiry, design-based assessments, and collaborative simulation experiences as part of the selection process. These tools would illuminate candidates' capacities to co-construct meaning, make values-based decisions, and sustain communities of practice. The notion of leadership as a fixed role must yield to the understanding of leadership as a form of stewardship—an evolving practice deeply embedded in the relational and moral fabric of the school.

Leadership Functions: Orchestrating Ecologies of Possibility

Perhaps the most radical departure from current policy lies in rearticulating what school leaders are expected to do. The metrics-driven, performativity-laden mandates must give way to a broader conception of the leader as an *ecological designer*—one who cultivates learning environments that are adaptive, inclusive, and future-facing (Lee & Mao, 2023). Policies must allow for fluidity in leadership roles—enabling principals to operate as learning architects, systems thinkers, and narrative weavers. This could include dedicated policy time for leaders to engage in reflective practice, inter-institutional collaboration, and anticipatory governance (Al-Jammal & Ghamrawi, 2013b, 2015). Rather than being inundated with administrative minutiae, school leaders should be empowered to curate pedagogical innovations, broker partnerships with industries and cultural institutions, and co-lead inquiry-based initiatives with students and teachers alike.

Moreover, leadership must be distributed—not in tokenistic terms, but as a deep structure embedded in policy. This entails decentralizing authority, amplifying student and teacher agency, and institutionalizing collaborative leadership councils that include diverse voices, including those historically marginalized (Ghamrawi et al., 2024f). Leadership becomes less a position and more a choreography—a dynamic interplay of roles, relations, and responsibilities aligned with the school’s moral and intellectual purpose (Harris et al., 2023).

The Meta-Leadership Imperative: Beyond Individualism Towards Systemic Stewardship

The contemporary crisis of educational leadership is not merely one of skill gaps or competency deficits; it is a crisis of epistemology—a failure to reconceptualize leadership as an emergent, interdependent phenomenon rather than an individualistic pursuit. Traditional paradigms anchor leadership within hierarchical structures, reinforcing the notion of the solitary principal as the fulcrum of change. However, in an era defined by complexity, such reductionism is no longer tenable.

Policy must facilitate a shift from heroic leadership to meta-leadership, wherein school leaders do not merely operate within their institutions but actively shape the broader educational landscape. This demands an expansive, systemic approach—one that positions leaders as architects of connectivity, adept at navigating transdisciplinary knowledge flows and forging dynamic alliances across sectors (Shal et al., 2018a, 2018b). Policies should incentivize engagement with research hubs, EdTech innovators, and sociocultural thought leaders, embedding school leadership within an ecosystemic fabric of transformation.

A meta-leadership policy framework could introduce leadership fellowships that embed school leaders in cross-sectoral environments, from AI think tanks to urban planning initiatives, exposing them to alternative paradigms of problem-solving. Moreover, policies should mandate inter-school leadership networks that transcend local jurisdictions, fostering regional and global leadership coalitions capable of responding collectively to emergent educational challenges (Shal et al., 2019). Leadership, in this sense, becomes a fluid, adaptive force—a generative network rather than a fixed point of authority.

Chrono-Leadership: Reclaiming Temporal Agency in Educational Transformation

One of the most insidious constraints on contemporary school leadership is the tyranny of reactivity—a state of perpetual crisis management that precludes genuine strategic foresight (Ghamrawi & Al-Jammal, 2013b). Time itself has become an instrument of bureaucratic control, with school leaders operating within compressed, compliance-driven cycles that stifle long-term visionary planning. Educational leadership policy must disrupt this chronopolitics—not by extending workload expectations, but by restructuring the temporal architecture of leadership itself (Dierickx, 2023).

This requires policy innovations that recognize leadership as a temporal practice—one that oscillates between immediate operational demands and long-horizon sense-making. Policies could institutionalize protected leadership inquiry sabbaticals, allowing school leaders to step outside the immediacy of administrative constraints and engage in futures literacy training. Additionally, schools could establish temporal autonomy models, where leadership teams co-design alternative pacing structures for decision-making, ensuring that the rhythms of leadership align with the organic cycles of institutional transformation rather than the artificial constraints of quarterly or annual reporting mandates (Marcus et al., 2006).

Furthermore, policies should redefine leadership evaluation metrics to privilege process over product, trajectory over target. The most profound leadership work unfolds over decades, not data cycles. By embedding a temporal ethics of leadership into policy, we shift the focus from measurable immediacies to transformative possibilities, fostering leadership that is both responsive to the present and radically imaginative about the future (Kensler & Uline, 2017).

Posthuman Leadership: Navigating AI-Human Hybridity in Educational Governance

The rise of artificial intelligence is not merely an operational concern for schools; it is an ontological disruption that demands a reconfiguration of leadership identity itself. The traditional conception of the school leader as a human decision-maker overseeing institutional processes is rapidly becoming obsolete. AI-driven analytics, predictive modeling, and generative algorithms are increasingly mediating educational governance, challenging anthropocentric assumptions about expertise, authority, and intuition (Ghamrawi et al., 2024e).

Policy must embrace a post-humanist turn in educational leadership, moving beyond the simplistic binary of ‘human versus AI’ to envision hybrid models of governance where human leaders operate in dialogue with machine intelligence. This requires policies that do not merely train leaders in AI literacy but redefine their epistemic roles within AI-infused educational ecosystems (Ghamrawi et al., 2024a, 2024e).

For instance, leadership preparation programs could integrate AI-augmented decision-making training, equipping future leaders with the ability to critically interpret and ethically co-govern with intelligent systems. Policies could establish AI-embedded leadership councils, where machine learning models provide real-time scenario simulations, enabling leaders to preemptively assess policy implications before implementation. Furthermore, an ethics of posthuman leadership must be institutionalized—ensuring that AI-driven decisions remain rooted in human values, cultural consciousness, and pedagogical philosophy rather than data-driven determinism (Chen et al., 2020).

Ultimately, school leadership in the AI era is not about human supremacy over technology, but about the symbiotic expansion of human agency through intelligent augmentation. Policies that fail to recognize this shift risk rendering educational leadership obsolete, perpetuating governance models that are neither attuned to the present nor prepared for the exponential transformations of the future

Summing Up

To reform school leadership is not to tweak competencies or adjust frameworks; it is to pose existential questions about the purpose of education in a world that is becoming increasingly algorithmic, fragmented, and uncertain (Harris et al., 2023). Policies, therefore, must serve not merely as instruments of governance, but as provocations—catalysts that summon the next generation of educational leaders to imagine and enact what does not yet exist.

This chapter, in its exploration of school leadership policy, contends that transformative futures are not born of incremental improvements. They require audacious reconfigurations of the very assumptions we hold about who leads, how they are prepared, and what they are called to do. The future beckons not for better leaders, but for a new logic of leadership altogether—one that is as agile as it is ethical, as visionary as it is grounded in the lived realities of the communities it serves.

REPOSITIONING SCHOOL MIDDLE LEADERSHIP: FROM TRANSLATORS TO TRANSFORMERS

In the architecture of educational leadership, the role of middle leaders has too often been relegated to that of intermediaries—mere conduits of information between senior leadership and the teaching corps (Ghamrawi et al., 2024b). Cast in the shadow of top-down directives and confined within narrowly defined departmental or pastoral roles, they have been policy's afterthought, simultaneously overburdened and under-empowered. This positional ambiguity—neither fully strategic nor purely instructional—renders middle leaders a kind of “leadership liminal,” suspended between operational expectations and pedagogical intimacy (Ghamrawi, 2013).

Yet, therein lies untapped potential. It is precisely this liminality, this in-betweenness, that positions middle leaders as the most strategically poised actors to catalyze deep systemic transformation (Ghamrawi et al., 2023). In the complexity of contemporary schooling, middle leadership should no longer be seen as a mailroom for hierarchical messaging. Instead, it must be reconceptualized—as the *mitochondrial engine* of the school: generating pedagogical energy, sustaining professional vitality, and diffusing leadership throughout the institutional body.

Policy as Leverage: Elevating the Middle Space

To unlock this potential, policy must first reframe middle leadership not as a static rung on the leadership ladder, but as a unique and indispensable leadership *domain*—one that operates at the confluence of vision and practice, culture and curriculum, change and continuity (De Nobile, 2018). This requires policies that abandon vertical notions of command in favor of horizontal ecosystems of influence, where middle leaders serve as sense-makers, design thinkers, and leadership incubators.

Policy must inscribe into the organizational DNA of schools a dual recognition: that middle leaders are both close enough to teaching to understand its emotional texture, and positioned enough to interpret and influence broader strategic priorities. As such, they must be provided not just with responsibilities, but with authority—to initiate, to innovate, and to intervene.

Professional Development: From Compliance to Catalysis

Traditional development pathways for middle leaders have been characterized by technical training, procedural alignment, and role-specific upskilling. What is required instead is a policy paradigm that supports the cultivation of *transformational capacity*. This means equipping middle leaders with the tools of organizational learning, design-based research, critical pedagogy, and systems-level reflection (Ghamrawi, 2024b).

Policies should mandate dedicated inquiry time for middle leaders—structured opportunities to engage in practitioner research, action learning sets, and interschool knowledge exchanges. They must be supported not only as managers of teams but as *architects of culture*—those who can mentor teacher-leaders, curate professional dialogue, and steward innovation within and across departments (De Nobile, 2018; Ghamrawi, 2013).

Moreover, leadership preparation must include emotional and relational intelligence development, so that middle leaders become adept at navigating the psychological complexities of leading across rather than leading down. In effect, policy should construct a learning arc for middle leaders that is recursive rather than linear—an ongoing trajectory of identity formation, reflection, and generative action.

Structural Reconfiguration: The Middle as a Site of Regeneration

The structural recalibration of schools must include the elevation of middle leadership from peripheral support to core strategic functionality. This involves policies that institutionalize middle leadership teams as participatory decision-making bodies, with authentic roles in school planning, curriculum redesign, and equity-driven initiatives. Middle leaders should be positioned not as messengers of change, but as *co-authors* of transformation (Ghamrawi et al., 2024b).

Furthermore, policies must formalize their role as *multipliers of leadership*—those who identify, mentor, and nurture teacher leaders. In doing so, middle leaders become the connective tissue in a distributed leadership model, simultaneously responsive to systemic mandates and deeply attuned to classroom realities.

Reframing Identity: From Task Executors to Cultural Catalysts

The narrative surrounding middle leadership must itself be disrupted. Policy must affirm their role not through expanded duties, but through a rearticulated professional identity—one that sees middle leaders as epistemic agents, as intellectual leaders, and as moral stewards of the learning community (Ghamrawi et al., 2024g). This requires sustained investment in their professional narrative, spaces for collaborative reflection, and the dismantling of hierarchies that flatten their contribution to mere execution.

Leadership Interstices: Bridging the Micro-Macro Divide

Middle leaders occupy a unique leadership interstice—a conceptual and operational seam where the micro-practices of pedagogy intersect with macro-structures of institutional governance. This positionality enables them to perform translational labor that transcends mere communication; they become boundary-spanners, capable of mediating tensions between system imperatives and classroom realities. Policy frameworks must begin to see these interstitial roles not as ambiguities to be resolved, but as strategic assets to be amplified.

By formally recognizing these liminal sites as critical zones of innovation and complexity navigation, leadership policy can reposition the school not as a hierarchy but as a meshwork of dynamic interdependencies. Middle leaders then emerge as infrastructural mediators—linking policy intent with pedagogical enactment, ensuring coherence while allowing for contextual responsiveness. This necessitates not just expanded scope but a reimagined infrastructure that embeds their roles into every institutional node of decision-making.

Temporal Leadership: Middle Leaders as Architects of Change Rhythms

While policy discourse often attends to the spatial dimensions of leadership—who leads where and at what level—it rarely addresses the temporal dimension: how leadership configures the rhythms of change. Middle leaders, by virtue of their embeddedness in teaching cultures, are uniquely positioned to regulate the tempo of reform, pacing implementation in ways that are emotionally sustainable and pedagogically sound.

Policy must foreground temporal agility as a leadership competency and legitimize the middle leader's role in managing organizational chronotopes—the qualitative experience of time within school environments. This means involving middle leaders in strategic conversations about reform timelines, feedback loops, and iterative cycles of innovation. By institutionalizing this rhythm-setting function, policies elevate the middle leader not only as an actor in reform, but as a dramaturge—choreographing the movement between stasis and transformation.

Epistemic Infrastructure: Middle Leadership as Knowledge Architecture

At the heart of transformational leadership lies not only the redistribution of power but the redistribution of knowledge. Middle leaders are repositories of tacit institutional knowledge—about pedagogical practices, learner contexts, and cultural nuances—which is often undervalued in policy discourses. Rather than viewing them as implementers of externally produced knowledge, policies should reconfigure them as architects of epistemic infrastructure within schools

(Ghamrawi et al., 2025).

This involves enabling middle leaders to curate, co-produce, and circulate knowledge across the system through policy-mandated innovation labs, practitioner-research fellowships, and collaborative inquiry platforms. They become epistemic nodes—connecting data to meaning, experience to theory, and local insight to systemic strategy. In doing so, the school becomes not merely a site of teaching, but a site of knowledge generation—one where middle leadership is positioned at the epistemological core.

Summing Up

The most profound transformations in schools rarely begin at the summit. They germinate in the middle spaces—quietly, relationally, iteratively—through the work of those who translate vision into culture and strategy into pedagogy. To reform education systems for the 21st century, we must not simply reform middle leadership; we must revere it. Middle leaders are not intermediaries. They are interstitial change agents. When empowered through visionary policy, they become mitochondria in the truest sense: not just fueling the system, but animating its capacity to regenerate, adapt, and thrive.

REIMAGINING TEACHER LEADERSHIP: POLICIES FOR ACTIVATING THE MORAL AND INTELLECTUAL CONSCIENCE OF SCHOOLS

If school leadership charts the direction and middle leadership sets the pace, it is teacher leadership that embodies the *pulse* of transformation. In classrooms across the globe, teachers remain the most immediate architects of student experience. Yet, despite the centrality of their role, leadership policy has long viewed teachers through a narrowly functional lens—positioning them as implementers of reform rather than originators of change (Ghamrawi et al., 2024c). In an era demanding pedagogical agility, epistemic diversity, and democratic responsiveness, such reductive frameworks are no longer tenable.

We must move beyond tokenistic models of teacher leadership—those that conflate it with routine task delegation or nominal committee participation (Ghamrawi et al., 2024b). Instead, visionary education policies must recognize teacher leadership as an ontological stance: a way of being that fuses intellectual agency, moral commitment, and systemic consciousness. To lead as a teacher is not to step away from the classroom, but to transform it into a crucible of collective learning, innovation, and equity. This vision demands policies that do not merely permit teacher leadership but *provoke* it.

Hargreaves and Fullan (2015) assert that professional capital—comprising human, social, and decisional capital—is critical to driving systemic change. They argue that ‘schools cannot improve without strengthening the quality of teaching, and teaching cannot improve without the conditions that support professional learning and leadership’ (p. 17). This insight underscores the argument that both teacher leadership and school leadership must be integrated into a collaborative, forward-thinking policy framework.

From Position to Disposition: Rethinking the Policy Architecture

Traditional education systems have treated teacher leadership as an additive role—an external layer grafted onto the primary function of instruction. This positional model is inherently limited, for it assumes leadership is something teachers do only *beyond* the classroom (Ghamrawi et al., 2024e). In contrast, transformative policy must acknowledge leadership as something that emanates *through* teaching—woven into pedagogical choices, curricular design, classroom culture, and collegial influence.

Thus, policies should not define teacher leadership by titles, but by capacities: the capacity to challenge assumptions, to catalyze inquiry, to mentor peers, to influence school ethos, and to engage in systemic dialogue. What we need is not more roles, but a recalibration of what leadership means within the pedagogical core.

Structures of Emergence: Building Cultures that Surface Leadership

For teacher leadership to flourish, policy must cultivate the *conditions of emergence*. Leadership does not spontaneously erupt—it is nurtured through environments of trust, autonomy, and shared moral purpose. Schools must become ecosystems where every teacher is seen as a potential thought leader, knowledge creator, and agent of democratic renewal. To this end, policies must ensure the institutionalization of inquiry-driven professional learning communities (PLCs)—not the mechanistic, compliance-oriented versions, but generative spaces where teachers co-construct knowledge, interrogate practice, and design innovation (Senge, 1990). Teachers should be supported to engage in collaborative action research, to publish and disseminate their findings, and to shape the discourse within and beyond their institutions.

Moreover, leadership potential must be surfaced early. Pre-service policies should embed leadership development within teacher education programs—not as elective modules, but as foundational frames. Novice teachers must learn to see themselves not merely as facilitators of learning, but as *stewards of transformation*, called upon to continuously interrogate the relationship between schooling and society.

Recognition as Redistribution: Policy as Justice

Central to reimagining teacher leadership is the question of recognition. Too often, leadership in teaching is invisible—uncompensated, uncelebrated, unacknowledged. This invisibility is not benign; it is a form of epistemic injustice that deprives teachers of professional dignity and discourages initiative.

Policy must intervene not only by naming and rewarding teacher leadership, but by redistributing power. Teachers should have formalized roles in policy development, curriculum reform committees, accreditation councils, and national education panels. Their leadership should shape *systems*, not just schools. In doing so, policy affirms teachers not merely as implementers of knowledge but as co-constructors of the educational future.

From Heroism to Ecosystem: Reframing the Leadership Narrative

Importantly, transformative teacher leadership policies must avoid falling into the trap of individual heroism—the myth of the exceptional teacher who single-handedly transforms a school. This narrative, though seductive, is unsustainable and exclusionary. Instead, policy should foster distributed teacher leadership, where leadership is seen not as the province of the few, but the practice of the many.

This involves deconstructing hierarchies and rethinking how authority is enacted within schools. When every teacher feels both empowered to lead and supported to learn, the school becomes an organism of shared responsibility and collective action. The teacher ceases to be a solitary node and becomes part of a living network of influence—diffused, resilient, and generative.

The Epistemology of Practice: Valuing Situated Knowledge in Policy Design

In reimagining teacher leadership, policy must contend with a critical epistemological question: *Whose knowledge counts?* Prevailing policy frameworks often privilege abstract, decontextualized expertise—policy texts authored far from the classroom—over the situated, experiential knowledge embedded in daily teaching practice. This disjuncture marginalizes the nuanced pedagogical judgment that teachers exercise in real time, rendering it invisible in the architecture of decision-making.

Transformative policies must reposition teacher knowledge as epistemically legitimate and systemically generative. Drawing from Schön's (1983) concept of the *reflective practitioner*, teachers' real-world theorizing—built through iterative cycles of action and reflection—should inform curricular reform, school improvement strategies, and educational research agendas. When policy frameworks acknowledge that teachers do not merely implement knowledge but generate it, they begin to dismantle technocratic models and move toward an epistemology of reciprocity—where teacher insight is both data and directive.

Temporal Justice: Recognizing the Rhythms of Teacher Leadership

Teacher leadership is not only a matter of structure and recognition—it is deeply temporal. The current policy discourse rarely considers how time mediates the emergence, enactment, and sustainability of leadership. Teachers are chronically overburdened, and policies often add leadership expectations without recalibrating workload, pacing, or rhythms of reflection. This creates a climate where leadership becomes a cost rather than a capacity.

We propose that future-oriented policy must engage with *temporal justice*—allocating protected time for teachers to lead, learn, and think. This includes time for collaboration, inquiry, and critical dialogue, free from performative accountability pressures. Teacher leadership, as a process of knowledge cultivation and moral discernment, cannot thrive in compressed schedules or crisis-driven routines. Policies must articulate time not as a neutral resource, but as a political tool that either enables or erodes professional agency.

Leadership as Pedagogical Responsibility: Ethical Imperatives Beyond the Role

Rather than framing leadership as an ancillary task or a professional reward, it must be recast as a *pedagogical responsibility*. This reframing draws from moral philosophy and democratic theory, recognizing that leadership is inherent in the relational, formative, and world-making dimensions of teaching. A teacher's influence on the ethos of schooling—its norms, aspirations, and silences—is unavoidable; thus, leadership becomes an ethical imperative, not an optional position.

Such a framing shifts policy discourse from roles to *relational ethics*—how teachers exercise leadership in their interactions with students, colleagues, and the community. Policies should support structures for ethical dialogue, restorative practice, and justice-oriented pedagogies, understanding that leadership is enacted in the daily, often unseen, decisions that shape students' lives and social imaginaries.

Policy Feedback Loops: Designing Reflexive and Iterative Systems

One of the persistent failures of traditional educational policy is its linearity—policies are written, implemented, and evaluated in unidirectional flows. Teacher leadership, however, demands *reflexivity*: the capacity of a system to learn from its own actors. Thus, policy must be designed with embedded feedback loops that channel insights from teacher leaders back into the system in real time.

These loops should be iterative, participatory, and multi-scalar. Schools, districts, and ministries must establish dynamic platforms where teachers' lived experiences can continuously inform and reshape policy decisions. This calls for an infrastructure of trust—where dissent is welcomed, experimentation is protected, and failure is mined for learning. By making policy *reflexive rather than prescriptive*, we ensure its relevance, responsiveness, and resilience.

Transnational Dialogues: Globalizing the Policy Discourse of Teacher Leadership

In an increasingly interconnected world, the challenges and innovations of teacher leadership transcend national boundaries (Ghamrawi, 2024h). Yet, policy often remains parochial—rooted in narrow national imaginaries that overlook the global dynamics of pedagogy, migration, and equity. To reimagine teacher leadership, we must globalize the policy conversation, drawing from transnational case studies, Indigenous knowledge systems, and intercultural pedagogies.

This global orientation resists the export-import model of reform, which imposes decontextualized “best practices.” Instead, it cultivates dialogic spaces where teacher leaders from diverse contexts can co-theorize leadership grounded in shared principles—justice, dignity, relationality—while honoring local specificities. International policy consortia and cross-border teacher networks should be formalized and funded, enabling the co-construction of knowledge that speaks to the global commons of education.

Summing Up

The true value of teacher leadership lies not merely in improving instruction, but in cultivating an ethical imagination—one that interrogates what schooling is, and what it could be. It is teachers who live the paradoxes of policy, who navigate the daily complexities of student lives, and who most intimately know the weight and possibility of education. To lead schools into the future, we must craft policies that honor this wisdom, elevate this agency, and embed this leadership into the very grammar of schooling. Teacher leadership is not a luxury of reform—it is its lifeblood.

STUDENT LEADERSHIP AS CIVIC BECOMING: POLICIES FOR RECLAIMING THE LEARNER AS AGENT AND ARCHITECT

If school leaders chart vision, middle leaders generate momentum, and teachers translate knowledge into transformative pedagogies, then students—too often the passive recipients in this architecture—must be repositioned as co-authors of the educational experience (Ghamrawi et al., 2018). It is here, in the redefinition of student leadership, that policy finds both its ethical imperative and its democratic horizon (Patterson-Stephens et al., 2025).

For too long, leadership within student populations has been confined to ceremonial or representational functions: student councils organizing spirit weeks, elected prefects enforcing discipline codes. These structures, while offering symbolic participation, do little to challenge the adult-centric logic of schooling. What is needed is not the simulation of leadership, but its genuine enactment—rooted in autonomy, voice, critical agency, and moral responsibility. This requires a paradigmatic shift: from preparing students for a world already made, to enabling them to remake the world (Gardner, 2008).

Policy as Liberation: From Management to Mobilization

Policy must move beyond treating student leadership as a mechanism of school management and discipline—where students are enlisted to transmit rules or monitor peers. Instead, student leadership must be reconceptualized as a practice of civic becoming—a form of ethical engagement with the world, grounded in inquiry, critique, and co-construction (Zhang et al., 2025).

To this end, national and institutional policies must explicitly mandate opportunities for students to shape their own learning environments. This may take the form of student parliaments with real decision-making power, participatory

budgeting, peer-led curriculum audits, and co-designed assessment systems. Student leadership must also extend beyond the walls of the school—through community partnerships, intergenerational dialogues, and global citizenship networks that allow students to intervene in the broader social and ecological issues that define their futures (Leal et al., 2022).

Leadership as Lived Praxis: Beyond Talent to Transformation

Policy must dismantle the meritocratic myth that leadership is the province of the ‘gifted’ few. In its place, it must cultivate leadership as a collective, distributive, and developmental phenomenon—one that emerges through struggle, reflection, and praxis. Student leadership should not be conflated with charisma or popularity; it must be reimagined as a disposition toward responsibility, relationality, and critical consciousness.

Thus, educational systems must embed leadership development into the everyday fabric of learning: through inquiry-based curricula, project-based learning, deliberative dialogue, and sustained reflection on self, society, and justice (Mager & Nowak, 2012). Schools must become ethical laboratories where students experiment with action, failure, courage, and consequence—not to win accolades, but to develop a profound sense of stewardship for the common good.

Policies must also ensure that leadership programs reflect epistemic justice—making space for multiple ways of knowing, leading, and being. Indigenous, feminist, postcolonial, and youth-led frameworks of leadership must be recognized and legitimized. Leadership is not always loud or linear; it is sometimes quiet, emergent, and relationally rooted. Policy must resist standardizing who leads and how.

Designing Systems of Trust and Dialogue

Central to any authentic student leadership policy is the cultivation of trust—a cultural and systemic belief in the capacity of young people to act meaningfully. Trust must be codified into structures: students on school boards; youth co-researching with teachers; student-led evaluations of teaching and curriculum; and the right to assemble, petition, and organize within educational spaces.

Schools must be sites of generative dissent, not compliance factories. Policies must affirm that disagreement, critique, and imagination are not signs of rebellion, but the very marks of leadership in formation. It is in the dialectic between voice and system that democratic schools are born.

Rewriting the Purpose of Schooling

The recognition of student leadership is inseparable from the redefinition of schooling itself. If education is to prepare students not for the rote reproduction of knowledge but for the ethical stewardship of society, then leadership must not be a supplement—it must be the grammar of education.

Student leadership is where policy meets its mirror: it reflects whether education systems truly believe in the capacity of young people to shape the world. Policies must therefore go beyond strategy and become acts of faith—faith in the learner’s wisdom, rage, creativity, and care.

Student leadership must be embedded in pedagogical forms that do not merely reflect existing realities but actively prefigure alternative futures. Prefigurative pedagogy insists that students do not wait to inherit leadership roles in some distant adulthood; instead, they live into those roles now—through practices that model the democratic, sustainable, and just societies we claim to envision (Rodríguez-Feria et al., 2024). This includes school environments that function as microcosms of participatory democracy, where deliberation, shared governance, and distributed authority are not curricular topics but lived realities. Policies must therefore support learning architectures that collapse the binary between learning and leading, classroom and commons, curriculum and citizenship.

The Politics of Listening: Valuing Youth Epistemologies

Central to reimagining student leadership is the act of deep listening—not as tokenistic consultation, but as an epistemological commitment to the knowledge that emerges from youth experience. When students speak from the margins, they do not merely voice concerns; they generate insight. Policies must create formal mechanisms for the integration of student-generated knowledge into school improvement processes, national curricular frameworks, and research agendas (Zhang et al., 2025). This requires a politics of listening that honors affect, embodiment, and dissent as legitimate sources of insight. In this reconfiguration, students become not data points to be collected, but theorists of their own lives.

Temporal Justice and Intergenerational Equity

Student leadership is not simply a matter of present-day voice, but of temporal justice—recognizing that students inherit the long-term consequences of decisions made today. Educational policy must be recast as a form of intergenerational

ethics, where the inclusion of students in decision-making is not a gesture of empowerment, but a necessity for equity across time. Climate policy, digital infrastructure, assessment systems—all must be scrutinized through the lens of those who will live their outcomes longest. Student leadership, then, is not limited to school improvement; it is a necessary form of foresight for policy sustainability and social responsibility.

Affective Infrastructures of Belonging

For student leadership to flourish, policies must invest in the affective infrastructures that make belonging possible. Leadership does not emerge in hostile or indifferent environments; it blooms where students feel seen, safe, and significant (Mozhgan et al., 2011). This means attending to school culture as a site of emotional justice—eradicating practices that produce fear, shame, and alienation, and cultivating those that center affirmation, solidarity, and care. Policies should mandate trauma-informed practices, inclusive design, and spaces for collective healing. In such contexts, leadership is not imposed from above but grows from the soil of relational trust.

Technologies of Youth Power: Digital Platforms and Participatory Infrastructure

In the digital age, student leadership increasingly unfolds in hybrid spaces that transcend the school building. Policies must expand their horizons to include the architectures of youth power that reside in social media platforms, online forums, and participatory digital tools (Ghamrawi et al., 2024e, 2024f). Far from distractions, these are emerging publics where students test ideas, mobilize communities, and negotiate identities. Rather than banning or surveilling digital engagement, education systems must scaffold its ethical use—developing students' capacities for digital stewardship, counter-speech, and civic innovation. Policies must fund and legitimize student-led digital initiatives as sites of both political formation and pedagogical experimentation.

Summing Up

To reimagine student leadership is to reclaim the learner as a moral and intellectual subject, capable not only of participating in school life but of transforming it. In a century marked by existential uncertainty—ecological collapse, algorithmic governance, democratic fragility—the stakes are too high to confine students to the margins of their own education.

This chapter argues, therefore, for policies that treat student leadership not as an afterthought of reform, but as its foundation. For it is only when students are trusted to lead—imperfectly, passionately, collectively—that schools become what they were always meant to be: engines of human flourishing and democratic possibility.

SYSTEMIC POLICY FRAMEWORKS FOR THE 21ST CENTURY: ARCHITECTURES OF POSSIBILITY IN THE AGE OF UNCERTAINTY

The challenge of educational reform in the 21st century is not merely one of content or method; it is ontological. It demands that we fundamentally reconsider what schools are for, how learning happens, and who education is meant to serve. No longer can policies operate as incremental adjustments to a legacy system designed for the industrial age. Instead, systemic policy must act as a force of disruption and regeneration—reshaping the contours of schooling to align with the epistemological, technological, and moral complexities of our time.

Biesta (2015) warns against the commodification of education, suggesting that 'education is not about producing predictable results, but about opening up spaces for people to find their own paths and develop their own ways of understanding' (p. 32). This perspective challenges the conventional emphasis on standardized outcomes and calls for policies that prioritize creativity, critical thinking, and student autonomy.

Curriculum as Living Architecture: Policy for Relevance, Reflexivity, and Regeneration

In a world where knowledge is increasingly fluid and distributed, curriculum can no longer be conceived as a static sequence of pre-approved content. Policy must reconceptualize curriculum as a living architecture—a dynamic interplay of core literacies, future competencies, and contextual relevance.

Systemic reform must mandate curriculum frameworks that are:

- *Transdisciplinary*: dissolving artificial boundaries between subjects to allow for complex, real-world inquiry;
- *Ethically grounded*: embedding moral imagination, ecological literacy, and global citizenship as non-negotiables;
- *Student-authored*: enabling co-construction, choice, and adaptive learning pathways that are negotiated rather than imposed.

Such curriculum policies must be radically inclusive of diverse epistemologies, particularly those that have been historically excluded or silenced (Puar, 2017). The canon is not sacred—it is *situated*. Policy must give space for multiple ways of knowing and being, making curriculum a site of epistemic justice and cultural renewal.

Artificial Intelligence and the Policy Imagination: From Automation to Augmentation

Artificial Intelligence is no longer a speculative future—it is a disruptive present. Its presence in the classroom cannot be contained by cautious guidelines or reactive bans. Policy must move from risk aversion to purpose-driven integration. That is, rather than shielding students from AI, we must prepare them to *shape it*.

This involves two urgent imperatives:

1. *AI literacy*: not simply as a technical skill but as a philosophical and ethical domain. Policies must require that all students engage critically with the implications of machine learning, datafication, algorithmic bias, and digital ethics (Selwyn, 2016).
2. *Augmented learning ecosystems*: AI must be harnessed to *extend* human learning, not replace it. Policies should support adaptive technologies that personalize learning, automate administrative burdens, and enable formative assessment—but within a framework that preserves teacher autonomy and human judgment (West, 2018).

This calls for a new kind of AI governance in education—one that is co-designed with educators, ethicists, students, and technologists. Policy cannot afford to be reactive; it must be anticipatory, shaping futures rather than chasing them.

Global Competence and Planetary Consciousness: Education for Interbeing

The age of climate emergency, migration crises, pandemics, and economic precarity demands more than ‘21st-century skills’. It demands planetary consciousness—the understanding that we are entangled in complex global systems, biologically, economically, and ethically (Darling-Hammond, 2017).

Systemic policy, as per Howells (2018), must therefore orient education toward the development of:

- *Global competencies*: including intercultural dialogue, multilingualism, systems thinking, and civic imagination.
- *Ecological citizenship*: a commitment to sustainability, interdependence, and the rights of future generations.
- *Resilience and adaptability*: not as passive coping, but as creative capacity to navigate uncertainty and complexity with grace and responsibility.

These goals cannot be achieved through curriculum alone. They require whole-system alignment: teacher preparation, assessment design, leadership training, funding mechanisms, and accountability systems must all be recalibrated toward this new moral horizon.

Systemic Trust and Professional Agency: Policy as Enablement, Not Enforcement

Perhaps the most radical shift policy must make is to move from control to capacitance—from enforcing compliance to enabling possibility. In the industrial model, systems are built to *predict and manage*. In a complexity-driven world, they must be built to *sense and adapt*.

This means replacing punitive inspection regimes with cultures of professional trust, where school leaders and teachers are regarded as designers, researchers, and stewards of the system. Policy must invest in networks of innovation, communities of practice, and local experimentation. It must allow for contextual variation and emergent solutions, understanding that equity does not mean uniformity.

At the heart of this shift lies a new theory of change: not linear, not top-down, but relational, recursive, and evolving. Systems do not change because policies dictate it; they change because people believe in a new future and are given the space to act.

Toward an Education of Possibility: The Ethics of Policy-Making

Education policy must become a deeply ethical undertaking—one that recognizes the irreducibility of the human, the fragility of the planet, and the potentiality of the learner. It must resist the technocratic temptation to measure what is easy rather than what matters. It must be bold enough to imagine what is not yet visible.

The policies of the future will not be written merely by legislators, but by students, teachers, and communities who see in education the last standing institution with the potential to reclaim justice, hope, and meaning in a fragmented world. This chapter, in addressing systemic policies, does not offer blueprints. It offers provocations—an invitation to redesign education not around the logic of efficiency or accountability, but around the logic of care, creativity, and co-agency.

Beyond Resilience: Designing for Transformative Capacity in Education Systems

While resilience has become a ubiquitous policy goal in the face of disruption, it often operates as a euphemism for adaptation to unjust or unsustainable conditions. A truly future-facing policy framework must move beyond resilience as recovery, toward transformative capacity—the system’s ability to fundamentally reorganize itself in response to crises, not simply bounce back. This involves embedding reflexivity into policy architectures, enabling feedback loops, decentralized leadership, and iterative redesign. Policies must invest in capacity-building ecosystems rather than compliance metrics, and foster adaptive agency at all levels of the system—from classroom micro-practices to transnational governance structures (Folke et al., 2010). Transformation is not a byproduct of crisis—it must be policy-engineered into the system’s very DNA.

The Posthuman School: Rethinking Agency, Materiality, and Entanglement

Conventional policy frameworks continue to operate on a humanist assumption that positions the learner as a discrete, rational subject, mastering a passive world. Yet the challenges of our age—climate collapse, AI ethics, ecological precarity—demand a posthuman turn in educational policy. Drawing on Braidotti’s (2016) concept of the posthuman subject as entangled, affective, and relational, policies must rethink learning environments as intra-active assemblages of human, nonhuman, digital, and material agencies. This means designing schools not only as human-centered institutions, but as ecological nodes embedded in more-than-human worlds. Policies must mandate relational pedagogies, multispecies justice, and ethical attention to the material infrastructures of schooling—from architecture to AI.

Policy as World-Building: Narratives, Symbols, and the Imagination Infrastructure

Systemic reform is not only a matter of technocratic engineering—it is an act of world-building. Policy carries with it imaginaries, metaphors, and affective grammars that shape how we think about education, success, knowledge, and the future. Rather than pretending to neutrality, policy must become aware of its narrative function—actively cultivating visions of flourishing that depart from scarcity, fear, or surveillance. This includes funding artistic, speculative, and design-based approaches to policy research; supporting students and teachers as storytellers of new worlds; and embedding the poetic and the prophetic into systems design. Without imagination infrastructures, reform remains procedural rather than transformational (Appadurai, 2019).

Decolonizing the Policy Paradigm: From Extractive Logics to Pluriversal Futures

Educational policy has long operated within a Eurocentric epistemic frame—exporting models, standards, and evaluation regimes across geographies under the guise of modernization or effectiveness. A truly systemic framework must engage in epistemic disobedience (Mignolo, 2009), disrupting the extractive logic that treats knowledge as a commodity and the Global South as a laboratory. Decolonizing policy means making space for pluriversality—the coexistence of multiple ways of knowing, valuing, and organizing life. This involves resourcing Indigenous knowledge systems, legitimizing non-linear learning models, and acknowledging the colonial histories embedded in schooling practices. Systemic reform, in this view, is not about scaling a universal model, but curating a mosaic of locally rooted, globally conscious ecologies of education.

Temporal Multiplicities: Rethinking Time in Policy Logics

Dominant policy regimes are bound by linear temporalities: fixed-year cycles, benchmarked outcomes, and short-term accountability horizons. Yet educational change unfolds across multiple, overlapping timescales—personal, institutional, generational, and planetary. Systemic policy must thus engage with temporal multiplicities: designing for the long now, honoring slow learning, and recognizing generative delays as essential to deep change. It must reject the tyranny of immediacy and efficiency, making room for what Haraway (2016) calls ‘the practice of staying with the trouble’—the slow, messy, relational labor of transforming systems in ways that last. Policy, therefore, is not a timeline—it is a rhythm, a pulse, a duration of becoming.

CONCLUSION

To engage with the notion of education policy in the contemporary moment is to engage in a profound interrogation of the very epistemological and ontological foundations upon which our educational institutions are built. It is not merely a question of revising administrative structures or tweaking policy instruments; it is a question of confronting and reshaping the very architecture of what is deemed possible in the realm of education. Education policy today must be understood as a critical, dynamic force that defines the spaces in which knowledge is produced, distributed, and lived—spaces that are constructed for specific groups of people, and, more crucially, for particular ends. Within this context, this chapter has endeavored to shed light on the state of educational leadership and systemic reform, with an unwavering conviction: the schools of today—rooted in a deeply outdated, 19th-century model—are epistemologically and morally obsolete.

Designed for an industrial age that no longer exists, these institutions are increasingly incongruent with the needs of a world shaped by hyperconnectivity, ecological instability, and the accelerating forces of algorithmic control.

What is urgently required is not the shallow recalibration of existing structures, but a radical ontological reimagining—a transformation that is nothing short of existential in its scope. This is not a mere operational shift, but a fundamental reconfiguration of the very purpose and function of schools within society. Schools must cease to be sites of rote compliance, where linearity and repetition are the dominant rhythms, and instead evolve into dynamic ecosystems of emergence, characterized by fluidity, adaptability, and a deep engagement with the unknown. They must become places where knowledge is co-authored by students, teachers, and the broader community, where leadership is distributed across levels of the institution, and where innovation is not simply declared in top-down mandates, but lived, experienced, and enacted on the ground.

The role of school leaders in this transformation is of paramount importance. No longer can they function as mere custodians of the status quo, stewards of bureaucratic continuity. Instead, they must evolve into orchestrators of complexity, architects of institutional culture, and curators of the possible—leaders who thrive in ambiguity and who can navigate the manifold interconnections within and beyond their institutions. This new conception of leadership demands a radical rethinking of the processes by which leaders are trained, selected, and empowered. Their formation must prioritize creativity over conformity, vision over maintenance, and adaptability over rigid managerialism. Simultaneously, middle leaders—those often-overlooked linchpins in the organizational machinery of schools—must be liberated from their subordinate roles as mere messengers. They are not passive conduits; they are the very lifeblood of the institution, the mitochondria that sustain and amplify teacher leadership, daily practice, pedagogical innovation, and the reflective inquiry that is the hallmark of educational excellence.

However, policies that focus solely on the development of school leaders are insufficient in isolation. The systemic nature of educational transformation necessitates a broader, more integrated approach to reform. Without systemic coherence, leadership itself risks being reduced to a performative exercise, disconnected from the structural realities that shape the educational experience. In this context, we extend the policy gaze beyond leadership alone, urging a reimagining of the entire educational ecosystem—one that includes a curriculum that is not static and prescriptive, but a living, transdisciplinary structure, constantly evolving in response to both global and local imperatives. We also advocate for the thoughtful integration of artificial intelligence—an integration that augments human capabilities, rather than replacing them, and that serves to enhance, not automate, the human experience of teaching and learning. Furthermore, we call for the embedding of global competence and planetary ethics at the very core of education—principles that move beyond national boundaries and prepare students for the interconnected, interdependent world they will inherit.

In light of the ascendancy of AI and the ever-growing role of technology in educational systems, policy must resist the simplistic binary of utopian promises or dystopian fears. It must foster critical agency among students, who must no longer be regarded merely as digital natives, but as digital philosophers—critical thinkers capable of interrogating the systems they inhabit and the tools they wield. Students must be seen not as passive recipients of education, but as active co-creators, shaping not only their own learning journeys but also the very structures of knowledge and inquiry that underpin their education. To this end, education policy must be deeply intergenerational, reflecting the diverse lived experiences, aspirations, and innovations of the various communities it serves. It must be shaped by the realities of the present, while also being attuned to the hopes and dreams of future generations.

Ultimately, this chapter refrains from offering simplistic prescriptions or standardized templates. The complexities and contradictions of our contemporary world defy such reductive approaches. Instead, we propose a pedagogy of provocation—a call to policy architects, educational leaders, and communities to reimagine education as a collective, imaginative, and profoundly moral undertaking. The transformation of schools must not be seen as a managerial challenge but as a collective moral and intellectual endeavor, wherein schools become sites not just of knowledge transmission, but of the creation of consciousness, community, and hope. In this vision, schools are no longer static institutions to be managed; they are dynamic, possibility-rich spaces where the future is not merely imagined but actively rehearsed in the present. They are the sites where the ethical, intellectual, and aesthetic dimensions of human life converge, producing something far greater than knowledge: they produce an awakening—an evolving consciousness of what it means to be human in a rapidly changing world.

We stand, then, not at the edge of reform, but at the threshold of re-enchantment. The policies we craft today are not simply blueprints for schools; they are inscriptions of our collective beliefs about what is worth knowing, what is worth teaching, and ultimately, what is worth becoming. This is the profound moral and intellectual challenge that lies before

us—a challenge to reimagine the very possibility of education in a world that demands more than we have yet dared to offer.

REFERENCES

- [1]. Al-Jammal, K., & Ghamrawi, N. (2013a). Teacher professional development in Lebanese schools. *Basic Research Journal of Education Research and Review*, 2(7), 104-128.
- [2]. Al-Jammal, K., & Ghamrawi, N. (2013b). Total quality management: Effectiveness in Lebanese schools perceptions of school leaders and teachers. *International Journal of Management*, 1(12), 488-509.
- [3]. Al-Jammal, K., & Ghamrawi, N. (2015). Leading the self: Self-leadership skills of Lebanese private school principals. *International Journal of Social Science and Economics Invention*, 1(2), 1-20.
- [4]. Appadurai, A. (2019). Goodbye Citizenship, Hello 'Statizenship.'. *The Wire*, 4(9), 2019.
- [5]. Biesta, G. J. (2015). *Beautiful risk of education*. Routledge.
- [6]. Braidotti, R. (2016). Posthuman critical theory. *Critical posthumanism and planetary futures*, 13-32.
- [7]. Chen, X., Xie, H., Zou, D., & Hwang, G. J. (2020). Application and theory gaps during the rise of artificial intelligence in education. *Computers and Education: Artificial Intelligence*, 1, 100002.
- [8]. Darling-Hammond, L., & Rothman, R. (2014). *Teaching in the flat world: Learning from high-performing systems*. Teachers College Press.
- [9]. De Nobile, J. (2018). Towards a theoretical model of middle leadership in schools. *School leadership & management*, 38(4), 395-416.
- [10]. Dierickx, P. (2023). *Meta-Leadership: How to See What Others Don't and Make Great Decisions*. Page Two Books.
- [11]. Fullan, M., Azorín, C., Harris, A., & Jones, M. (2023). Artificial intelligence and school leadership: challenges, opportunities and implications. *School Leadership & Management*, 1-8.
- [12]. Gardner, H. (2010). Five minds for the future. *21st century skills: Rethinking how students learn*, 9-31.
- [13]. Ghamrawi, N. (2013). Never underestimate the power of the sandwiched: Middle leaders and school culture. *Basic Research Journal of Educational Research and Review*, 2(2), 29-41.
- [14]. Ghamrawi, N. (2016). Policy review of school leadership in the Arab States. In *Leading better learning: School leadership and quality in the Education 2030 agenda (pp.25-49)*. Regional reviews of policies and practices. UNESCO: Paris.
- [15]. Ghamrawi, N., & Al-Jammal, K. (2013a). Instructional leadership behaviors: The case of Lebanese private school principals. *Global Advanced Research Journal of Educational Research and Review*, 2(9), 181-189.
- [16]. Ghamrawi, N., & Al-Jammal, K. (2013b). Time flies—A statement that best applies to school principals. *British Journal of Education*, 1(1), 52-66.
- [17]. Ghamrawi, N., & Shal, T. (2012). Let us teach them the way they learn: A vision on using social networking and mobiles in teaching and learning. *Educational Research*, 3(12), 921-926.
- [18]. Ghamrawi, N., & Abu-Tineh, A. (2023). A flat profession? Developing an evidence-based career ladder by teachers for teachers—A case study. *Heliyon*, 9(4).
- [19]. Ghamrawi, N., & Al-Thani, H. (2023). Wellbeing leadership: Perceptions of pre-service school leaders. *Heliyon*, 9(11).
- [20]. Ghamrawi, N., Abu-Tineh, A., & Shal, T. (2023). Teaching licensure and education quality: Teachers' perceptions. *Sustainability*, 15(14), 10886.
- [21]. Ghamrawi, N., Shal, T., & Ghamrawi, N. (2013). Leadership performance of emotionally intelligent subject leaders. *Educational Research*, 4(2), 143-152.
- [22]. Ghamrawi, N. A., Ghamrawi, N., & Shal, T. (2018). Student leadership through the lens of Lebanese public school students. *Open Journal of Leadership*, 7(01), 33.
- [23]. Ghamrawi, N., Shal, T., & Ghamrawi, N. A. (2023). Stepping into middle leadership: A hermeneutic phenomenological study. *International Journal of Leadership in Education*, 1-21.
- [24]. Ghamrawi, N., Shal, T., Ghamrawi, N.A.R. (2024a). School Leadership 4.0: Are We Ready?. In: *Papadakis, S. (eds) IoT, AI, and ICT for Educational Applications. EAI/Springer Innovations in Communication and Computing*. Springer, Cham. https://doi.org/10.1007/978-3-031-50139-5_9
- [25]. Ghamrawi, N., Shal, T., & Ghamrawi, N. A. (2024b). Cultivating teacher leadership: evidence form a transformative professional development model. *School Leadership & Management*, 44(4), 413-441.
- [26]. Ghamrawi, N., Abu-Shawish, R. K., Shal, T., & Ghamrawi, N. A. (2024c). Destructive leadership behaviors: The case of academic middle leaders in higher education. *International Journal of Educational Research*, 126, 102382.
- [27]. Ghamrawi, N., Shal, T., & Ghamrawi, N. A. (2024d). Department heads' professional agency: investigating self-perceptions and deans' perspectives through vignette-based analysis. *Studies in Higher Education*, 1-19.

- [28]. Ghamrawi, N., Shal, T., & Ghamrawi, N. A. (2024e). Exploring the impact of AI on teacher leadership: regressing or expanding?. *Education and Information Technologies*, 29(7), 8415-8433.
- [29]. Ghamrawi, N., Shal, T., & Ghamrawi, N. A. (2024f). Leadership development in virtual communities of practice: The case of school principals from the GCC Region. *Education and Information Technologies*, 1-20.
- [30]. Ghamrawi, N., Ghamrawi, N. A., & Alshaer, A. (2024g). Academic middle leadership: An exploration of Arab women's professional identities in higher education. *Management in Education*, 08920206241234769.
- [31]. Ghamrawi, N., Abu-Shawish, R. K., Shal, T., & Ghamrawi, N. A. (2024h). Teacher leadership in higher education: why not?. *Cogent Education*, 11(1), 2366679. Ghamrawi, N., Abu-Tineh, A., Shal, T., Al-Shaboul, Y. M., & Sellami, A. (2025). Illuminating the obscure: Teacher leaders confronting the adverse impact of their subject leaders/coordinators. *The Educational Forum* 89(1), 113-129. Routledge.
- [32]. Hargreaves, A., & Fullan, M. (2015). *Professional capital: Transforming teaching in every school*. Teachers College Press.
- [33]. Harris, A., & Jones, M. S. (Eds.). (2015). *Leading futures: Global perspectives on educational leadership*. SAGE Publications India.
- [34]. Harris, A., Azorín, C., & Jones, M. (2023). Network leadership: a new educational imperative?. *International Journal of Leadership in Education*, 26(5), 919-935.
- [35]. Howells, K. (2018). The future of education and skills: education 2030: the future we want.
- [36]. İncirci, A. Y. H. A. N., & Howells, K. (2018). *The future of education and skills: education 2030: the future we want*.
- [37]. Kensler, L. A. W., & Uline, C. L. (2017). *Leadership for Green Schools: Sustainability for Our Children, Our Communities, and Our Planet*. Routledge.
- [38]. Leal, M. S., Gómez, M. L. O., & Toma, R. B. (2022). Conceptual construction of global competence in education. *Teoría de la Educación*, 34(1), 83-103.
- [39]. Lee, S. W., & Mao, X. (2023). Recruitment and selection of principals: A systematic review. *Educational Management Administration & Leadership*, 51(1), 6-29.
- [40]. Mager, U., & Nowak, P. (2012). Effects of student participation in decision making at school: A systematic review and synthesis of empirical research. *Educational Research Review*, 7(1), 38–61.
- [41]. Marcus, L. J., Dorn, B. C., & Henderson, J. M. (2006). Meta-leadership and national emergency preparedness: A model to build government connectivity. *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science*, 4(2), 128–134. <https://doi.org/10.1089/bsp.2006.4.128>
- [42]. Mignolo, W. D. (2009). Epistemic disobedience, independent thought and decolonial freedom. *Theory, culture & society*, 26(7-8), 159-181.
- [43]. Mozghan, A., Parivash, J., Nadergholi, G., & Jowkar, B. (2011). Student leadership competencies development. *Procedia-Social and Behavioral Sciences*, 15, 1616-1620.
- [44]. Ojha, B., Agrawal, A., & Arya, A. (2025). Artificial Intelligence Integration in Higher Education. In *Adopting Artificial Intelligence Tools in Higher Education* (pp. 1-23). CRC Press.
- [45]. Patterson-Stephens, S., Beatty, C., & Smith, F. (2025). Creating to Transgress: Supporting Student Leadership Development Through Culturally Informed Media Praxis. *New Directions for Student Leadership*.
- [46]. Puar, J. K. (2017). *The right to maim: Debility, capacity, disability*. Duke University Press.
- [47]. Ramírez-Montoya, M. S., Castillo-Martínez, I. M., Sanabria-Z, J., & Miranda, J. (2022). Complex thinking in the framework of Education 4.0 and Open Innovation—A systematic literature review. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(1), 4.
- [48]. Rodríguez-Feria, P., Paric, M., Flórez, L. J. H., Babich, S., & Czabanowska, K. (2024). Critical route for development of medical student leadership competencies in 35 Pan American Health Organization member states: A scoping review and thematic analysis. *The International Journal of Health Planning and Management*, 39(3), 844-859.
- [49]. Schleicher, A. (2020). Developing twenty-first-century skills for future jobs and societies. *Anticipating and Preparing for Emerging Skills and Jobs: Key Issues, Concerns, and Prospects*, 47-55.
- [50]. Schon, D. A. (1983). 1983, The reflective practitioner: How professionals think in action. New York: Basic Books.
- [51]. Selwyn, N. (2021). *Education and technology: Key issues and debates*. Bloomsbury Publishing.
- [52]. Senge, P. M. (1990). The fifth discipline: The art and practice of the learning organization. *Currency Doubleday*, 371.
- [53]. Shal, T., El Kibbi, I., Ghamrawi, N., & Ghamrawi, N. A. R. (2018a). Web 2.0—A Tool for Learning or Socialization Only? Perspectives & Experiences of Lebanese School Principals. *International Journal of Research in Economics and Social Sciences*, 8, 315-347.
- [54]. Shal, T., El Kibbi, I., Ghamrawi, N., & Ghamrawi, N. A. (2018b). Principals' Differentiated Learning through Social Media: Practices and Obstacles. *International Journal of Education and Applied Research*, 8, 19-29.

- [55]. Shal, T., Ghamrawi, N., & Ghamrawi, N. (2019). Mobile learning for differentiated school leadership development. *Journal of Pedagogical Sociology and Psychology*, 1(2), 88-103.
- [56]. Shal, T., Ghamrawi, N., & Ghamrawi, N. A. (2024a). Webinars for teacher professional development: perceptions of members of a virtual professional community of practice. *Open Learning: The Journal of Open, Distance and e-Learning*, 1-17.
- [57]. Shal, T., Ghamrawi, N., & Naccache, H. (2024b). Leadership styles and AI acceptance in academic libraries in higher education. *The Journal of Academic Librarianship*, 50(2), 102849.
- [58]. Shal, T., Ghamrawi, N., Abu-Tineh, A., Al-Shaboul, Y. M., & Sellami, A. (2024c). Teacher leadership and virtual communities: Unpacking teacher agency and distributed leadership. *Education and Information Technologies*, 1-18.
- [59]. Haraway, D. J. (2016). Staying with the trouble: Making kin in the Chthulucene. In *Staying with the Trouble*. Duke University Press. <https://doi.org/10.1515/9780822373780>
- [60]. Teo, T., Unwin, S., Scherer, R., & Gardiner, V. (2021). Initial teacher training for twenty-first century skills in the Fourth Industrial Revolution (IR 4.0): A scoping review. *Computers & Education*, 170, 104223.
- [61]. Ülker, N. (2025, January). Reflecting trends of the contemporary academic landscape in the context of Higher Education 4.0. In *Frontiers in Education* (Vol. 9, p. 1522647). Frontiers Media SA.
- [62]. West, D. M. (2018). *The future of work: Robots, AI, and automation*. Brookings Institution Press.
- [63]. Zhang, M., Thien, L. M., & Ahmi, A. (2025). Profiling the Research Landscape of Student Leadership From 1930 to 2023: A Bibliometric Analysis. *European Journal of Education*, 60(1), e70043.
- [64]. Zhao, Y. (2019). The future of education: 2030. *Shaping future schools with digital technology: An international handbook*, 1-24.
- [65]. Hughson, T. A., & Wood, B. E. (2022). The OECD Learning Compass 2030 and the future of disciplinary learning: a Bernsteinian critique. *Journal of Education Policy*, 37(4), 634-654.