

BEYOND INCLUSION: A SYSTEMS PERSPECTIVE ON EDUCATIONAL EQUITY, CULTURAL DIVERSITY, AND HUMAN AGENCY IN CONTEMPORARY EDUCATION

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Abstract: *Educational inclusion has progressively evolved from a policy objective focused primarily on access to education toward a broader systemic commitment to educational equity, participation, and recognition of diversity. Contemporary educational systems operate within increasingly complex social, cultural, technological, and institutional environments where learners' educational opportunities are shaped by dynamic interactions among individuals, schools, families, communities, and policy structures. Drawing upon systems thinking, this conceptual paper proposes the Inclusive Educational Ecosystem Framework (IEEF) as an integrative model for understanding inclusion as an emergent property of adaptive educational systems rather than the outcome of isolated institutional interventions. The paper synthesizes contemporary literature on inclusive education, cultural diversity, educational participation, teacher professional development, social inclusion, digital transformation, and community engagement to develop a multidimensional framework capable of explaining how educational equity is constructed through reciprocal interactions among educational actors. Within this perspective, inclusion extends beyond physical access to education by emphasizing meaningful participation, recognition, agency, belonging, and collaborative responsibility. The proposed framework highlights the importance of human agency, inclusive governance, family-school-community partnerships, and culturally responsive educational environments in promoting sustainable educational development. By integrating educational, social, and technological perspectives within a*

systems-oriented conceptual model, the paper contributes to the advancement of contemporary inclusion theory while providing a foundation for future empirical research and evidence-informed educational policies designed to foster equitable, resilient, and inclusive learning ecosystems.

Keywords: *educational inclusion; educational equity; systems thinking; cultural diversity; human agency; educational ecosystems; social inclusion; inclusive education; sustainable education; educational policy.*

Introduction

Inclusive education has become one of the defining priorities of contemporary educational systems, reflecting a fundamental shift from ensuring access to education toward guaranteeing meaningful participation, equitable learning opportunities, and recognition of learner diversity. Initially associated primarily with the education of students with disabilities, the concept of inclusion has progressively expanded to encompass broader dimensions of social justice, cultural diversity, linguistic plurality, gender equity, and educational participation. Contemporary educational systems are increasingly expected to create learning environments in which every learner is recognized as an active participant whose individual characteristics are valued as educational resources rather than perceived as barriers to learning (Vienneau, 2002; Thomazet, 2006, 2008; Tremblay, 2015).

This evolution has also clarified the distinction between equality and equity in education. Equality assumes that all learners should receive identical educational opportunities and resources, whereas equity recognizes that students begin their educational journeys from different social, cultural, economic, and personal circumstances. Consequently, equitable education requires differentiated support capable of responding to diverse educational needs while ensuring that every learner has genuine opportunities to achieve academic success and social participation. From this perspective, inclusion represents not merely an educational policy but a continuous process of reducing barriers to participation and promoting educational justice across increasingly diverse educational contexts (Toc, 2019; Serir & Gremion, 2023; Toczek, 2005).

Rather than constituting a challenge to educational systems, diversity should be understood as a strategic resource capable of enriching teaching, learning, and institutional development. Cultural diversity, multilingualism, gender differences, family backgrounds, digital experiences, and varied learning trajectories contribute to educational

environments that foster creativity, collaboration, critical thinking, and mutual understanding. Likewise, inclusive educational practices increasingly recognize that meaningful participation depends upon supportive relationships among teachers, learners, families, and communities, extending learning beyond classroom boundaries toward broader educational ecosystems characterized by cooperation and shared responsibility (Serre, 2012; Si Moussa, 2023; Țurcan, 2023; Soloalijaona, 2010).

These developments reflect the growing complexity of contemporary educational systems. Schools no longer operate as isolated institutions but as components of interconnected social systems influenced by technological transformation, demographic change, educational policies, family dynamics, and community resources. Digital technologies, artificial intelligence, non-formal education, family-school partnerships, and lifelong learning continuously reshape educational experiences, creating new opportunities for participation while simultaneously generating new forms of educational inequality and exclusion. Consequently, understanding inclusion requires theoretical perspectives capable of explaining the reciprocal interactions among individuals, institutions, and social environments rather than focusing exclusively on isolated educational variables (Marin et al., 2026; Rad et al., 2023; Rad et al., 2026a; Rad et al., 2026b; Roman et al., 2026).

Adopting a systems perspective allows educational inclusion to be conceptualized as an emergent property arising from continuous interactions among learners, teachers, families, communities, and educational governance. Within this perspective, inclusion is strengthened not only through pedagogical adaptations but also through communication, collaboration, social participation, mentoring, community engagement, and the development of human agency across multiple educational contexts. Educational ecosystems capable of learning, adapting, and coordinating their resources are therefore more likely to create sustainable conditions that support both academic achievement and social inclusion (Dughi, 2020; Dughi & Bold, 2022; Dughi et al., 2024; Dughi & Coșarbă, 2025; Torkos & Coșarbă, 2026).

Against this background, the present conceptual paper proposes an original Inclusive Educational Ecosystem Framework (IEEF) that integrates systems thinking with contemporary theories of educational inclusion, equity, diversity, and human agency. Rather than viewing inclusion as the responsibility of individual schools or educational policies alone, the proposed framework conceptualizes it as the outcome of dynamic interactions among interconnected educational subsystems. By synthesizing evidence from research on inclusive

education, cultural diversity, educational participation, teacher development, community engagement, digital transformation, and sustainable educational development, this paper seeks to provide a comprehensive theoretical model capable of informing future empirical research and supporting the development of educational policies that foster equitable, resilient, and genuinely inclusive educational ecosystems.

Educational inclusion beyond access

Educational inclusion has undergone a profound conceptual transformation over the past decades, evolving from a relatively narrow concern with school access toward a comprehensive vision of equitable participation, recognition, and social belonging. Early educational policies primarily focused on integrating learners who had previously been excluded from mainstream education, particularly students with disabilities or other identified special educational needs. Within this paradigm, inclusion was frequently understood as a structural issue of placement, emphasizing the physical presence of learners within mainstream educational settings. Although this represented an important step toward expanding educational opportunities, subsequent research demonstrated that physical integration alone was insufficient to ensure meaningful educational participation or equal learning experiences (Vienneau, 2002; Thomazet, 2006; Tremblay, 2015).

As theoretical perspectives on inclusion evolved, educational researchers increasingly emphasized that genuine inclusion requires transforming educational environments rather than expecting learners to adapt to existing institutional structures. This transition from integration to participation reflects a broader understanding of educational systems as dynamic environments that must continuously respond to learner diversity through flexible pedagogical practices, collaborative relationships, and inclusive organizational cultures. Within this perspective, participation extends beyond classroom attendance to encompass active engagement in learning processes, decision-making opportunities, social interaction, and full membership within educational communities. Inclusive education therefore becomes a shared institutional responsibility rather than an intervention directed exclusively toward specific categories of students (Thomazet, 2008; Tremblay, 2015; Serir & Gremion, 2023).

This conceptual evolution is closely connected to the growing importance of educational justice, which extends traditional notions of equality by recognizing that learners experience education under unequal social, cultural, economic, and institutional conditions. Educational justice therefore requires differentiated responses capable

of reducing structural barriers while creating equitable opportunities for participation and achievement. Rather than distributing identical educational resources, equitable educational systems seek to provide the support necessary for every learner to develop according to individual needs and contextual realities. Such an approach acknowledges that educational inequalities frequently originate outside the classroom through broader processes of social stratification, cultural capital, territorial disparities, and institutional practices that shape educational trajectories long before formal schooling begins (Serre, 2012; Toc, 2019; Toczek, 2005).

Contemporary inclusion further recognizes that educational success depends not only upon academic achievement but also upon learners' experiences of recognition and belonging. Educational institutions increasingly function as social environments in which identities are negotiated, relationships are constructed, and opportunities for participation are either expanded or constrained. Learners who perceive themselves as respected, valued, and socially connected are generally more likely to demonstrate engagement, motivation, resilience, and long-term educational persistence. Consequently, recognition should be understood as both an educational and a social process through which diversity becomes an integral component of institutional culture rather than a characteristic requiring accommodation. Inclusive schools therefore cultivate environments in which differences are acknowledged as legitimate expressions of human diversity and opportunities for participation are distributed across all members of the educational community (Serir & Gremion, 2023; Verscheure et al., 2020).

The increasing complexity of contemporary educational environments further reinforces the need to conceptualize inclusion beyond institutional access. Rapid technological change, cultural diversification, migration, evolving family structures, and digital learning environments continuously reshape educational participation, creating new opportunities while simultaneously generating emerging forms of exclusion. Inclusive education must therefore extend beyond classroom practices to encompass family-school partnerships, community engagement, culturally responsive teaching, non-formal educational experiences, and digitally inclusive learning environments that support meaningful participation across multiple educational contexts. Such a perspective positions inclusion as a continuous adaptive process through which educational systems evolve in response to changing learner needs and societal transformations rather than as a fixed educational objective achieved through isolated policy initiatives

(Dughi et al., 2024; Dughi & Coşarbă, 2025; Gavrilă-Ardelean & Gavrilă-Ardelean, 2017; Torkos & Egerau, 2020).

These developments demonstrate that educational inclusion has evolved from a policy primarily concerned with access into a multidimensional systems-based perspective centered on participation, educational justice, recognition, and belonging. This broader understanding provides the conceptual foundation for examining how diversity, human agency, and collaborative educational ecosystems contribute to equitable educational development, an issue explored in the following section.

Diversity, human agency, and educational participation

Contemporary educational inclusion cannot be fully understood without recognizing the central role of diversity as a fundamental characteristic of learning communities rather than as an exception requiring accommodation. Educational systems increasingly bring together learners who differ in cultural backgrounds, languages, identities, experiences, abilities, and digital competencies, creating environments characterized by considerable heterogeneity. Within a systems perspective, diversity represents an essential source of educational innovation because it expands opportunities for dialogue, collaboration, critical reflection, and mutual learning. Consequently, inclusive education seeks not to minimize differences but to create institutional conditions in which diversity contributes positively to both individual development and collective educational outcomes (Vienneau, 2002; Thomazet, 2008; Serir & Gremion, 2023).

Among the multiple dimensions of diversity, cultural diversity occupies a central position because it shapes learners' identities, values, communication styles, and educational expectations. Schools increasingly function as intercultural environments where students encounter multiple systems of meaning, requiring educational practices that promote dialogue, mutual respect, and cultural responsiveness. Inclusive educational environments therefore move beyond simple tolerance by actively recognizing cultural diversity as an educational resource capable of enriching classroom interaction and strengthening social cohesion. Such an approach encourages learners to develop intercultural competencies while fostering respect for different perspectives and life experiences (Si Moussa, 2023; Serre, 2012).

Closely related to cultural diversity is linguistic diversity, which represents both a challenge and an opportunity for inclusive education. Language constitutes far more than a medium of communication; it also shapes identity, cultural continuity, cognitive development, and educational participation. Educational systems that acknowledge

multilingualism and linguistic plurality create more equitable learning environments by recognizing learners' linguistic resources rather than perceiving them as obstacles to academic success. Supporting linguistic diversity contributes not only to improved educational participation but also to the preservation of cultural identity and social inclusion within increasingly multicultural educational contexts (Soloalijaona, 2010; Turcan, 2023).

Educational participation is equally influenced by gender, not only through observable differences in educational outcomes but also through the subtle social processes that shape expectations, classroom interactions, opportunities for participation, and self-perceptions. Educational research has demonstrated that institutional practices, teacher expectations, and implicit stereotypes may contribute to differentiated educational experiences for boys and girls, influencing motivation, performance, and academic aspirations. Consequently, inclusive education requires continuous reflection on how educational environments reproduce or challenge gender-related inequalities while promoting equitable opportunities for all learners regardless of gender identity or social expectations (Toczek, 2005; Verscheure et al., 2020).

Another increasingly important dimension of educational inclusion concerns digital agency, which has become a defining characteristic of contemporary educational participation. The rapid integration of digital technologies and artificial intelligence into educational environments has expanded opportunities for learning, collaboration, creativity, and access to information. At the same time, digital transformation has generated new forms of inequality associated with technological access, digital competencies, ethical decision-making, and learners' capacity to participate critically in digitally mediated educational environments. Digital agency therefore extends beyond technological proficiency to include learners' ability to make informed, autonomous, and responsible decisions while engaging with emerging digital ecosystems. Educational inclusion in the twenty-first century increasingly depends upon developing these competencies alongside traditional academic knowledge (Rad et al., 2026a; Rad et al., 2026b; Roman et al., 2026; Marin et al., 2026).

Ultimately, the convergence of cultural, linguistic, gender, and digital dimensions reinforces the importance of student participation as the defining characteristic of inclusive educational systems. Participation extends beyond academic engagement to include learners' opportunities to express their perspectives, contribute to educational decision-making, collaborate with peers, and actively shape their own learning experiences. Educational participation therefore represents an expression of human agency, understood as learners' capacity to act

intentionally within supportive educational environments that recognize their voices, aspirations, and potential for development. This perspective also emphasizes that agency is not developed in isolation but emerges through interactions among learners, teachers, families, and communities. Educational ecosystems that cultivate communication, mentoring, collaborative learning, and family-school partnerships create the conditions necessary for students to become active participants in both their own educational development and the broader learning community (Dughi, 2020; Dughi & Bold, 2022; Dughi et al., 2024; Dughi & Coşarbă, 2025; Torkos & Coşarbă, 2026). These dimensions demonstrate that educational inclusion is fundamentally shaped by the interaction between diversity and human agency. Rather than treating diversity as a challenge to be managed, contemporary educational systems should recognize it as a source of adaptive capacity capable of strengthening participation, innovation, and social cohesion. This systems-oriented perspective provides the theoretical foundation for understanding how inclusive educational ecosystems emerge through the reciprocal relationships among learners, educators, families, communities, and educational policies, which are explored in the following section.

Educational ecosystems for inclusion

Inclusive education is increasingly understood as the outcome of interactions occurring within broader educational ecosystems rather than as the product of isolated classroom practices. Educational ecosystems comprise interconnected networks of learners, teachers, families, communities, institutions, and policy structures that continuously influence one another through reciprocal relationships. Within this perspective, inclusion emerges from the capacity of these actors to coordinate their efforts, share responsibilities, and adapt collaboratively to learners' diverse educational needs. Consequently, educational success depends not solely on instructional quality but also on the strength of the relationships that sustain learning across formal, non-formal, and community contexts (Vienneau, 2002; Tremblay, 2015; Thomazet, 2008).

At the center of these educational ecosystems stands the teacher, whose professional identity extends far beyond the transmission of knowledge. Contemporary teachers increasingly function as facilitators of participation, mediators of diversity, mentors, and coordinators of collaborative educational processes. Inclusive teaching therefore requires continuous professional learning, reflective practice, emotional competence, and the ability to create learning environments that recognize the unique strengths and needs of every learner. As

educational systems become more complex, teachers are expected not only to respond to diversity but also to contribute actively to building institutional cultures grounded in collaboration, inclusion, and educational equity (Si Moussa, 2023; Dughi, 2020; Dughi et al., 2025). Educational ecosystems are equally dependent upon strong family-school-community partnerships, which create continuity between learners' educational experiences across multiple social environments. Families provide emotional support, values, and learning habits that significantly influence educational participation, while communities contribute social capital, cultural resources, mentoring opportunities, and institutional support. Schools capable of establishing collaborative relationships with families and community organizations benefit from richer educational resources and more coordinated responses to learners' academic and psychosocial needs. Such partnerships strengthen educational resilience by creating networks of shared responsibility in which learning becomes a collective rather than exclusively institutional endeavor (Dughi & Coşarbă, 2025; Dughi et al., 2024; Torkos & Coşarbă, 2026).

An equally important component of inclusive educational ecosystems is represented by non-formal education, which complements formal schooling through experiential learning, creativity, participation, and personal development. Activities developed outside traditional classroom settings provide learners with opportunities to strengthen social competencies, communication skills, emotional regulation, leadership, and collaborative problem-solving. Non-formal educational experiences also create contexts in which learners who may struggle within conventional academic environments can develop confidence, autonomy, and meaningful engagement. Consequently, educational inclusion benefits substantially from integrating formal and non-formal learning experiences within coherent educational pathways that recognize multiple forms of achievement and participation (Dughi et al., 2024; Dughi et al., 2025; Torkos & Egerau, 2020).

Within these interconnected educational environments, socialization represents a fundamental mechanism through which inclusion is achieved. Schools are not merely institutions for academic instruction but also social spaces where learners develop interpersonal relationships, construct identities, negotiate differences, and acquire the competencies necessary for democratic participation. Inclusive educational ecosystems intentionally promote communication, empathy, cooperation, mutual respect, and active participation, thereby creating conditions in which every learner experiences recognition and belonging. Effective socialization processes extend beyond peer interaction by involving teachers, families, and communities in the co-

construction of supportive educational environments that strengthen both individual development and social cohesion (Gavrilă-Ardelean & Gavrilă-Ardelean, 2017; Dughi & Bold, 2022).

The integration of these dimensions ultimately contributes to the development of inclusive learning environments characterized by flexibility, participation, recognition, and adaptability. Such environments acknowledge learner diversity as an educational asset while continuously adjusting pedagogical practices, institutional structures, and collaborative relationships to support equitable participation. Increasingly, digital technologies and artificial intelligence also become integral components of inclusive educational ecosystems, expanding opportunities for personalized learning, collaboration, and accessibility when implemented within ethically responsible and pedagogically meaningful frameworks. Inclusive learning environments therefore emerge from the interaction of professional expertise, collaborative governance, community engagement, technological innovation, and learner agency rather than from isolated instructional practices (Rad et al., 2023; Rad et al., 2026; Roman et al., 2026; Marin et al., 2026).

These elements demonstrate that educational inclusion is fundamentally ecological in nature. Teachers, families, communities, non-formal educational settings, and learning environments function as mutually reinforcing components of adaptive educational ecosystems in which inclusion is continuously constructed through interaction, collaboration, and shared responsibility. This systems perspective provides the conceptual foundation for the Inclusive Educational Ecosystem Framework (IEEF) proposed in the following section, which integrates these interconnected dimensions into a comprehensive theoretical model capable of explaining how inclusive education emerges within contemporary educational systems.

A Systems framework for inclusive educational ecosystems

The literature reviewed throughout this paper consistently demonstrates that educational inclusion cannot be adequately explained through linear models focusing on isolated educational variables. Instead, inclusion emerges from the dynamic interaction of multiple educational, social, cultural, and institutional dimensions that continuously influence one another. While previous studies have examined specific components of inclusive education—such as teacher competencies, family involvement, learner diversity, digital transformation, or educational policy—these dimensions have rarely been integrated into a unified conceptual framework capable of explaining how inclusive educational systems function as complex

adaptive ecosystems. Building upon systems thinking and the preceding theoretical analysis, this paper therefore proposes the Inclusive Educational Ecosystem Framework (IEEF) as an original conceptual model for understanding educational inclusion as an emergent property of interconnected educational subsystems rather than the outcome of isolated institutional interventions.

The IEEF conceptualizes educational inclusion as the product of continuous reciprocal interactions among five interconnected subsystems: the Learner, the Teacher, the Family, the Community, and Educational Policy. Each subsystem contributes unique resources, constraints, and adaptive capacities while simultaneously influencing the functioning of the remaining components. Consequently, inclusive education is not determined by the effectiveness of any single subsystem but by the quality of the relationships established among them. The framework therefore adopts a systems perspective in which educational ecosystems remain in a process of continuous adaptation through communication, feedback, collaboration, and shared responsibility.

The Learner subsystem occupies the center of the framework because inclusion ultimately seeks to promote learners' educational participation, agency, well-being, and personal development. However, learners are not viewed as passive recipients of educational services but as active participants who continuously interact with their educational environments. Their cultural identities, linguistic backgrounds, digital competencies, motivations, prior experiences, and aspirations influence both individual educational trajectories and the functioning of the broader educational ecosystem. Inclusive education therefore depends upon creating conditions that enable learners to exercise agency while actively participating in educational decision-making and collaborative learning processes (Rad et al., 2026a; Roman et al., 2026).

The Teacher subsystem functions as the principal mediator connecting learners with the broader educational ecosystem. Teachers facilitate learning, coordinate classroom interactions, promote inclusive pedagogical practices, support socio-emotional development, and establish communication with families and community partners. Their professional identity increasingly encompasses mentoring, collaboration, reflective practice, and adaptive instructional design rather than solely the transmission of academic knowledge. Consequently, teachers operate as adaptive agents capable of strengthening or constraining inclusion depending upon their ability to coordinate educational relationships across multiple contexts (Dughi, 2020; Dughi & Bold, 2022; Si Moussa, 2023).

The Family subsystem provides the primary developmental environment in which learners acquire values, emotional security, communication patterns, and attitudes toward education. Family engagement extends beyond supporting academic performance by contributing to learner motivation, resilience, identity formation, and educational continuity across formal and informal settings. Families also represent essential partners in collaborative educational decision-making, creating reciprocal communication channels that strengthen learner participation and educational success. Strong family-school relationships therefore increase the adaptive capacity of the entire educational ecosystem (Dughi & Coșarbă, 2025; Torkos & Coșarbă, 2026).

The Community subsystem expands educational opportunities beyond institutional schooling by mobilizing social capital, cultural resources, non-formal education, mentoring initiatives, and collaborative partnerships among public institutions, civil society organizations, and local stakeholders. Communities create authentic contexts in which learners apply knowledge, develop civic engagement, strengthen interpersonal competencies, and experience social inclusion. Educational ecosystems characterized by active community participation demonstrate greater flexibility and resilience because educational responsibility is distributed across multiple interconnected actors rather than concentrated exclusively within schools (Dughi et al., 2024; Gavrilă-Ardelean & Gavrilă-Ardelean, 2017).

The fifth subsystem, Educational Policy, provides the structural conditions that enable or constrain inclusive educational practices across the remaining subsystems. Policies establish legislative frameworks, allocate resources, define institutional responsibilities, promote professional development, and support equitable educational opportunities. However, within the IEEF, educational policy is not conceptualized as a top-down regulatory mechanism but as an adaptive governance process that continuously responds to feedback generated throughout the educational ecosystem. Effective educational policies therefore evolve through reciprocal interaction with learners, teachers, families, and communities, enabling educational systems to remain responsive to changing social, cultural, technological, and demographic conditions (Thomazet, 2008; Tremblay, 2015; Vienneau, 2002).

The defining characteristic of the Inclusive Educational Ecosystem Framework lies in the reciprocal adaptive interactions that connect all five subsystems. Rather than operating through linear cause-and-effect relationships, educational inclusion emerges through continuous multidirectional feedback loops. Changes occurring within one subsystem inevitably influence the functioning of the others. For

example, educational policies shape teachers' professional practices; teachers influence learner agency and family engagement; families strengthen community participation; communities provide additional educational resources; and learners themselves generate feedback that contributes to the continuous adaptation of educational policies and institutional practices. These reciprocal interactions create self-reinforcing processes capable of either strengthening or weakening educational inclusion depending upon the quality of collaboration established across the educational ecosystem.

The proposed framework therefore conceptualizes educational inclusion as an emergent systemic property resulting from coordinated interactions among educational actors rather than from isolated interventions directed toward individual learners or institutions. Inclusive educational ecosystems are characterized by continuous learning, communication, shared responsibility, adaptive governance, and collaborative problem-solving, enabling them to respond effectively to increasingly complex educational realities. By integrating educational inclusion, diversity, human agency, professional collaboration, community engagement, and educational governance within a single conceptual architecture, the Inclusive Educational Ecosystem Framework (IEEF) offers an original theoretical contribution that extends existing inclusion models beyond institutional access toward a dynamic systems-based understanding of equitable and sustainable educational development.

Implications for educational policy and conclusions

The Inclusive Educational Ecosystem Framework (IEEF) proposed in this paper offers several important implications for educational policy by demonstrating that educational inclusion cannot be achieved through isolated institutional reforms or learner-centered interventions alone. Instead, inclusion should be understood as the outcome of coordinated interactions among learners, teachers, families, communities, and educational governance. Educational policies designed from a systems perspective therefore shift attention from individual educational deficits toward strengthening the adaptive relationships that sustain inclusive educational ecosystems. Within this framework, educational equity emerges not from providing identical opportunities to all learners but from creating conditions that enable every learner to participate meaningfully according to individual needs, cultural backgrounds, and contextual realities. Equitable educational systems therefore require differentiated support, collaborative governance, and continuous adaptation capable of responding to the

complexity of contemporary educational environments (Toc, 2019; Vienneau, 2002; Thomazet, 2008).

A second implication concerns the growing importance of inclusive governance. Educational inclusion should no longer be viewed exclusively as the responsibility of schools but as a shared responsibility distributed across multiple institutional and community actors. Effective governance therefore depends upon collaborative leadership, participatory decision-making, interinstitutional cooperation, and continuous communication among educational stakeholders. Policies that strengthen partnerships between schools, families, local authorities, universities, civil society organizations, and community services are more likely to generate sustainable improvements in participation and educational success because they reinforce the adaptive capacity of the educational ecosystem as a whole. Recent evidence further demonstrates that family communication patterns, learners' social well-being, and home educational climates substantially influence motivation, life satisfaction, and educational adjustment, reinforcing the importance of coordinated interventions that extend beyond the school setting (Dughi & Coşarbă, 2025; Dughi et al., 2024; Dughi et al., 2025; Si Moussa, 2023).

The framework also highlights the necessity of developing diversity-responsive educational policies that recognize diversity as an educational resource rather than as a source of institutional difficulty. Such policies should actively promote culturally responsive teaching, multilingual education, gender equity, digital inclusion, and differentiated pedagogical approaches capable of supporting meaningful participation for all learners. Diversity-responsive educational systems continuously adapt their organizational structures, instructional practices, and assessment strategies to accommodate changing learner characteristics while simultaneously strengthening learners' agency, sense of belonging, and opportunities for educational participation. This perspective acknowledges that inclusive education is strengthened when educational policies recognize the dynamic interaction between diversity and educational equity instead of treating diversity as an exception requiring isolated interventions. Contemporary policy discussions should also recognize the educational implications of migration, mobility, educational legislation, school leadership for inclusion, and broader social inequalities that influence learners' educational trajectories (Serir & Gremion, 2023; Serre, 2012; Soloalijaona, 2010; Turcan, 2023; Verscheure et al., 2020; Schmoll, 2020; Sow & Gueye, 2022; Spatari, 2021).

Another important implication concerns the relationship between inclusion and sustainable educational development. Sustainable educational systems are characterized by their capacity to learn, innovate, and adapt continuously to evolving technological, demographic, cultural, and social conditions. Within this perspective, educational sustainability depends not only on institutional effectiveness but also on the quality of relationships established among educational actors and the development of human agency across educational ecosystems. Digital technologies, artificial intelligence, non-formal education, family engagement, and community participation should therefore be integrated within coherent educational strategies that promote both educational quality and social inclusion while ensuring equitable access to emerging learning opportunities. Likewise, evidence from studies addressing cyber-interaction, psychological functioning, and mental health indicates that educational sustainability increasingly depends upon creating safe digital environments while simultaneously supporting learners' psychological resilience and well-being in rapidly changing educational contexts (Marin et al., 2026; Rad et al., 2026a; Rad et al., 2026b; Roman et al., 2026; Rad et al., 2019; Demeter et al., 2026; Fond-Harmant et al., 2023).

Overall, this paper argues that educational inclusion should be conceptualized as an emergent property of complex adaptive educational ecosystems rather than as the result of isolated educational interventions. The proposed Inclusive Educational Ecosystem Framework (IEEF) contributes to the literature by integrating learners, teachers, families, communities, and educational policy into a unified systems model connected through reciprocal adaptive interactions. Within this perspective, educational equity emerges from the quality of interactions established across the educational ecosystem; inclusive governance strengthens collaboration and shared responsibility; diversity becomes a strategic educational resource that enriches learning; and sustainable educational development depends upon the adaptive capacity of educational systems to respond to continuous social transformation. Moreover, educational ecosystems should recognize that learners' social integration, interpersonal communication, emotional development, and positive expectations constitute complementary resources that enhance educational participation across formal and non-formal contexts (Dughi & Cotrău, 2014; Gavrilă-Ardelean & Gavrilă-Ardelean, 2017; Trouilloud & Sarrazin, 2003).

Future research should focus on empirically validating the Inclusive Educational Ecosystem Framework across diverse educational,

cultural, and national contexts. Quantitative studies employing structural equation modeling, network analysis, multilevel modeling, and systems dynamics approaches could examine the reciprocal relationships among the five proposed subsystems, while qualitative and mixed-methods research could further explore the mechanisms through which collaboration, human agency, and adaptive governance contribute to inclusive educational development. Such investigations would strengthen the empirical foundations of the proposed framework and support the design of evidence-informed educational policies capable of fostering equitable, resilient, and sustainable educational ecosystems in increasingly complex societies.

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