

Regenerative Learning Environments: Experience in Education for Youth and Adults (EPJA)

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This article analyzes the implementation of regenerative learning environments within the framework of Education for Youth and Adults (EPJA), highlighting their impact on strengthening the community-oriented, participatory, and democratic nature of knowledge. In a global context marked by climate crises and historical inequalities, regenerative education emerges as a paradigm that goes beyond sustainability by seeking to align human activity with the co-evolutionary processes of nature. Objective: To analyze the experiences and impact of regenerative learning environments in the education of young people and adults, in order to identify pedagogical strategies that promote sustainability and holistic well-being throughout their educational processes. Using a sociocritical paradigm with a mixed-methods approach and an exploratory-descriptive scope, the study employed a participatory action research methodology, along with a quasi-experimental and longitudinal design. Data collection instruments included participant observation, in-depth interviews with administrators and teachers, focus groups to explore tensions and collective perspectives, structured surveys, and the administration of psychoeducational tests. The results reveal that the implementation of regenerative learning environments produces a disruptive transformation in EPJA, moving beyond the notion of “incomplete schooling” toward a more holistic educational experience. Furthermore, these environments not only optimize pedagogical practices but also significantly enhance the socio-emotional and cognitive skills of adult learners.

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Introduction And State Of The Art

Education for Youth and Adults (EPJA) in Ecuador has historically represented an unresolved social commitment, often treated as a compensatory and subordinate policy rather than as a fundamental right. However, recent research proposes redefining it as a driver of social change based on lifelong learning and community participation. According to Quevedo, A. (2025), this type of education has been an intermittent policy without a stable institutional structure and represents a historical debt to the most vulnerable sectors of the country.

Escobar, A. et al. (2025) point out that EPJA in Ecuador must adapt to political fluctuations and lacks sufficient public funding to enable its transformation into a state policy. They further state that adult education can become a catalyst for educational and social change when territorial, pedagogical, and community-based approaches are combined.

Along the same lines, Fernández, B. (2021) states:

To guarantee the right of young people and adults to public, free, and quality education, it is necessary to reconstruct and organize the field and institutional framework of EPJA. The State needs to substantially increase the budget allocated to EPJA and promote curricular and organizational transformation within the institutions that provide this service. (p. 25)

Likewise, García, W., and Rojas, O. (2021) note:

Education as a system is required to implement changes in educational policies in order to meet the demands of the new normality that must be faced, regardless of the ideologies and ways of thinking of states. (p. 113)

López, L. (2021, p. 100) states that adult education in Ecuador lies between two paths: on the one hand, disciplinary training that takes into account the characteristics of the population and, on the other, training strongly oriented toward

and shaped by work within a market-oriented logic.

Within this context, there is a need to propose alternatives for the teaching and learning processes of young and adult learners. Considering that, within formal education, these educational processes are identified as incomplete schooling, it is important to note that the Ecuadorian education system does not have a specific curriculum for this type of education.

Since there is no specialized curriculum, the learning environments in which these educational processes take place are given even less consideration. Therefore, the research question is: How can the socio-emotional and cognitive levels of young and adult learners be improved? The researchers believe that by articulating education for young people and adults with regenerative learning environments, it may be possible to reduce the existing gap in this area of education.

Based on the foregoing, the innovative element of this proposal lies in the regenerative dimension and in the creation of the concept of regeneration, a term borrowed from the medical and agricultural sciences which, when applied to education, seeks to strengthen a culture of life within the classroom. Regenerative schools do not merely seek to minimize negative impacts; rather, they aspire to restore environmental, social, and cultural systems, reconciling human beings with Pachamama. The creation of inclusive and innovative environments is strategic to ensuring equitable and accessible education for young people and adults.

Theoretical Foundations Of Regenerative Approaches, Learning Environments, And Epja

For the development of this section, a matrix for determining the categories of analysis was used. It includes the categories of analysis,

subcategories, dimensions, indicators, techniques, and instruments.

Matrix for Determining the Categories of Analysis

Categories of Analysis	Subcategories	Dimensions	Indicators	Techniques	Instruments
Conception of regenerative approaches	Educational regeneration: restoration of the teaching-learning process	Cognitive and practical	Mentions at least two soil/water restoration practices that they have carried out or are familiar with. Describes how a nearby natural area has changed after the intervention.	Interview with photographic support. Photographs of the before and after stages are shown, and the participant narrates the change.	Semi-structured interview guide. Record: audio recorder or field record sheet with notes on non-verbal language.
Social regeneration: community ties and cultural identity		Relational, identity-based, and organizational	Participates in at least one <i>minga</i> or collective activity organized within the learning environment. Identifies two changes in the relationships among group members since the process began.	Focus group: relationship map before and after.	Focus group guide.
Personal regeneration: well-being and meaning in life		Emotional, management, and spiritual	Expresses in their own words a change in their emotional state or motivation since participating. Makes an independent decision regarding the project without waiting for instructions from the facilitator.	In-depth interview: expresses emotional change, using a perceived well-being scale from 1 to 5.	Structured interview.
Characteristics of the regenerative	Physical-spatial: classroom,	Use, symbolic	Uses spaces outside the traditional classroom for at	Structured observation: use of spaces	Observation guide.

learning environment	garden, territory, and use of open/closed spaces	meaning, and access	least 50% of the class sessions. Assigns personal meaning to the space used.	outside the classroom for 50% of the time, using a space-use record for each session.	
Relationship between academic knowledge and community knowledge		Power, recognition, and affective dimension	The teacher asks for and collects participants' contributions before deciding on the activity. Participants correct and support one another without waiting for the teacher.	Participant observation: participation checklist.	Observation record sheet.
Learning rhythms	—	Rhythm, cyclical processes, and permanence	Activities involving the use of the senses are included in at least two observations conducted. Participants express learning through drawings, gestures, or practical demonstrations.	Participant observation: expresses learning nonverbally; photographic records and videos of practical demonstrations.	Notebook.
Pedagogical processes in EPJA	Prior knowledge and life experience as a starting point	Recognition and integration	The session begins with a question about previous experiences related to the topic. The examples used in class come from the participants' work or family experiences.	Structured observation: questions about previous experiences.	Observation guide.
Active methodologies		Participation and product	70% of the sessions involve practical or group work. A tangible product is generated.	Documentary review: tangible products are generated;	Documentary record matrix.

			evaluation record sheet.	
Motivation and retention	Intrinsic and extrinsic	Mentions a personal reason why continuing the process is useful to them. Attends 80% of the sessions scheduled for the month.	Semi-structured interview: personal reason for continuing. Review of attendance records.	Semi-structured interview guide.

Table 1. Authors' own elaboration.

Conception of Regenerative Approaches

The theoretical approach to this category is grounded in the tension that currently emerges from challenges at the planetary level: on the one hand, climate change, and on the other, the rapid transformation of society. Authors such as Lares and Henríquez (2021) propose a regenerative design that offers an alternative perspective in the search for ways to improve quality of life from a regenerative standpoint. Thus, they state: “The interrelationship between innovation, technology, and regenerative design ultimately aims at the health of the integrated system; that is, design is intended for ecosystems and the planet, considering human beings and nature as integrated components of the ecosystem” (p. 26).

From another perspective, “regenerative development from a holistic perspective seeks to create changes that endure over time and are not static, but rather remain in a process of continuous improvement” (Rodríguez, 2021, p. 55). Based on an analysis of the two perspectives presented above, it can be stated that human beings are an integral part of the ecosystem and, therefore, cannot be exempted from the responsibility of caring for the health of the planet through continuous improvement processes that are dynamically sustained over time.

The literature review on the conception of regenerative approaches in the field of education, in general, and in education for young people and adults, in particular, remains limited, since this

concept is more commonly associated with aspects of sustainability, the environment, ecology, and other related areas that address these issues. From a bibliometric study, Granizo and Sarmiento (2025) state:

Regarding the epistemic orientation, studies that approach regeneration from instrumental perspectives focused on sustainable competencies and standards predominate. However, some critical and decolonial approaches are emerging that question the neutrality of knowledge and propose new ways of conceptualizing education from a territorial and ecosystem-based perspective (p. 7).

In this regard, Intriago (2023) points out that:

Regenerative education proposes the rethinking, restoration, and replacement of educational components, elements, models, discourses, and activities, focusing primarily on students’ local realities. It invites us to consider all the heterogeneous contexts in which learning takes place and to connect real-world problems to the classroom by incorporating different factors (p. 5).

This is a concept that responds to the educational needs of young people and adults when the contexts in which learners develop and their correspondence with learning processes are taken into consideration. To strengthen this idea, García et al. (2024) state that “regenerative education proposes rethinking, restoring, and replenishing educational components, elements,

models, conversations, and actions, with a primary focus on local realities” (p. 23).

Local realities and their implications are the result of social heritage and the history that shapes educational processes. From this perspective, it becomes important to define the study subcategory of social regeneration, which is essential when seeking to strengthen the social fabric, the local economy, and people's well-being within a given context, particularly when approached through education for young people and adults.

Maturana and Dávila (2015) state that “the concept of regeneration involves restoring harmony in the ecological and cultural systems that we have lost” (p. 32). Therefore, social regeneration can be understood as the intentional action of recovering, healing, and reconstructing lost harmony within cultural, educational, and social systems, from a perspective of community resilience and the conscious participation of the educational community. It is at this point that education for young people and adults becomes particularly important, because comprehensive interventions can be generated through teaching and learning processes that have an impact on the different realities in which learners develop, thereby strengthening the community-based, participatory, and democratic dimensions of knowledge.

It is important to conceptually clarify the subcategory of personal regeneration. This dimension cannot be treated separately from the subcategory of social regeneration. The elements addressed in this research are drawn from biology and adapted to the field of education.

Therefore, it is important to begin with the proposal put forward by Bustamante (2025).

“Autopoiesis describes the capacity of living systems to self-produce and self-organize, which implies that learning is not merely a transfer of information, but rather a process of internal structural transformation within the learner” (p. 17).

If education transforms the internal structure of the adult learner in a conscious and intentional

manner, the life project is strengthened. Furthermore, Maturana and Varela argue that human beings, as autopoietic systems, are constantly engaged in structural coupling with their environment, indicating that interactions with the environment trigger internal changes that enable adaptation and cognitive growth.

Characteristics of the Regenerative Learning Environment

The theoretical study of this category begins with the tension that arises between the physical spaces used for learning management and the content and processes of learning. Bazantes et al. (2019), as cited by Sarmiento et al. (2024), state that “Learning environments are the combination of the physical setting and the interactions that take place among the actors within a given period, and they themselves promote powerful learning experiences for children” (p. 3).

In the book *Regenerative Schools: Paute Chapter*, García et al. (2024), in their study on regenerative schools, define regenerative learning environments as “...flexible and interactive settings where students can explore, investigate, and construct their knowledge in a meaningful way. Creativity, collaboration, and student autonomy are encouraged, making learners active participants in their own learning process” (pp. 46–47).

In line with the ideas presented above, it is necessary to address the relationship between the category of regenerative learning environments and the way in which curricular integrations influence the educational process of young people and adults. The Curricular Adaptations with an Emphasis on Competencies for the Education of Young People and Adults in Situations of Incomplete Schooling, for General Basic Education, Upper Basic Education Sublevel, and General Baccalaureate Level 2025, proposed by MIDEDEC (2025), states:

“It contains curricular integrations that consider the development of the following competencies: communication, critical thinking, participation,

and problem-solving, which are fully aligned with the graduate profile of the baccalaureate: just, supportive, and innovative. Curricular adaptations allow educational institutions to promote the development of values inherent to their pedagogical approach, mission, and vision, together with the skills, values, and responsibilities that students will acquire throughout their educational process. This will enable each educational institution to strengthen its identity” (p. 13).

Furthermore, it states that “Curricular integrations are new or reinforced competencies or skills that are incorporated into the current curriculum in order to strengthen it” (p. 15). Along the same line of reasoning, it states:

“The skills incorporated through curricular integrations in Socioemotional Education, Financial Education, Education for Sustainable Development, and Road Safety Education seek to strengthen students’ competencies. By addressing issues relevant to their everyday lives, these curricular integrations contribute to their well-being and comprehensive development” (p. 17).

By conducting an analytical exercise on the relationship between the category of regenerative learning environments and the way in which curricular integrations, as a public policy, influence the educational process of young people and adults, it could be argued that regenerative learning environments propose an approach in which the educational process does not merely transmit knowledge, but also seeks to restore, heal, and revitalize socio-ecological systems and ecosystems. In contrast, curricular integrations function as strategic tools that incorporate local issues and practices so that learning has an impact on the community and on the lives of adult learners, thereby achieving comprehensive transformation.

Therefore, it is essential to ask the following question: **Where do these elements converge?** Consequently, it becomes important to analyze the subcategory **Physical-spatial: classroom, garden, territory, use of open/closed spaces,**

among others. For some authors, physical space constitutes the third educator.

Desbrow and Domínguez (2020) note that “the influence of space and the environment on the way we learn and interact, the need to adapt to the underlying paradigm by considering students as diverse and, therefore, responding to all of them as required by attention to diversity” represents a theoretical position that identifies space as a facilitating element for learning. This is particularly relevant when considering curricular integrations in education for young people and adults. In this sense, spaces cease to be merely places occupied by teachers and students and become pretexts for creating and recreating knowledge. The challenge lies in knowing how to design, implement, and manage these spaces so that they become relevant and contextualized environments that respond to the demands of education for young people and adults, particularly when approached from the perspective of regenerative learning environments.

The ideas presented above lead to the understanding that spaces should become regenerative learning environments in which the **relationship between academic knowledge and community knowledge** can emerge. Thus, learning environments from a regenerative perspective become catalysts for academically developed knowledge and community-based knowledge, breaking down the theoretical and practical barriers between educational institutions, where academic knowledge presented through disciplinary approaches continues to follow a predetermined path, while community knowledge is rooted in local contexts and has its own voice, reflecting the cultural, linguistic, and territorial identity with which adult learners have a sense of belonging.

Furthermore, a regenerative learning environment constitutes an ideal space in which relationships between academic and community knowledge can be healed and where knowledge, understanding, skills, values, and emotions can be interwoven between the two.

Osorio et al. (2025), in line with the ideas presented above, state:

“The dialogue of knowledges emerges as a central commitment to an education that opens its doors to the entire community, which engages and projects itself through sharing. The commitment to encounter is the essence of being, projected through its fears, its potentialities, and everything that develops in harmony with its life” (p. 62).

Therefore, it can be argued that regenerative learning environments, as spaces where academic knowledge converges with community knowledge, break down the walls of hegemonic structures and give way to more flexible and dialogical spaces.

Pedagogical Processes in Education for Young People and Adults: The starting point for this category is the tension between formal and non-formal environments in which teaching and learning processes take place. Unlike the traditional school system, EPJA should be understood as an autonomous field that takes into account adult learners’ autonomy and life experience, as well as their established interests and life projects.

Ibarra et al. (2020) argue that the socio-educational reality has been affected because, in addition to the problems already identified in education in general, its target population presents particular conditions, such as predominantly coming from rural areas and having a socioeconomic composition corresponding to the most disadvantaged sectors of society. Hence, the need arises to understand the pedagogical processes of education for young people and adults from both formal and non-formal environments, in correspondence with regenerative learning environments.

Thus, Castillo et al. (2014) provide a characterization of the EPJA learner:

“Those who have not completed their schooling are generally in a situation of greater vulnerability, associated with precarious, low-skilled, and lower-paid employment, in addition to experiencing stigmatization as a result of this circumstance, with all its consequences from the

standpoint of self-perception and self-esteem” (p. 166).

Rensoli and Piña (2022) state:

“From the perspective of EPJA, education throughout life as a mechanism for social mobility, and training for employment should constitute an essential dimension to be developed and defined based on the analysis of specific socio-historical situations; that is, from the context in which not only educational institutions are located, but also the various settings where students live. This entails participation in their culture and in contextual activities, thereby making it possible to consolidate a participatory and productive life. To this end, EPJA educational institutions must achieve not only an approach to the world of production and services, but also to the learning acquired by young people and adults through their own life experiences” (p. 352).

After analyzing the ideas presented above, it can be stated that the world of production and services, which represents the expression of prior knowledge and life experience, should become the starting point for managing the teaching-learning process. It is precisely here that regenerative learning environments become particularly important.

Prior knowledge and life experiences as a subcategory of study: adult learners have already established their life projects, and their interests and motivations for completing their schooling differ from those of young people who attend educational institutions at the age traditionally associated with formal schooling.

Ramírez and Reyes (2026) emphasize that learning does not occur in isolation; rather, it is constructed and reconstructed based on what the learner already knows, enabling them to organize and make sense of and assign meaning to new information. This contribution becomes even more relevant when considering the adult learner as a construct of accumulated learning acquired throughout life.

In line with the ideas presented in the previous paragraph, it can be stated that teaching

strategies, as a subcategory, complement, organize, construct, and reconstruct learning in a logical and systematic manner.

López and Cardernasso (2022) define teaching strategies as those “procedures or activity structures that are used in a grounded and systematic manner in classroom situations” (p. 132), in this case, by EPJA teachers in basic education under the regular modality.

Education for young people and adults in Ecuador can be provided through the regular modality, that is, within formal education; however, there are also alternative forms, such as non-formal education. In both cases, it is essential to establish harmony between where teaching takes place and how it is carried out. In this sense, regenerative learning environments become a guiding framework for fostering flexible, inclusive, and contextualized teaching strategies for the teaching and learning process of young people and adults.

Materials And Methods

The methodology proposed for this study moves away from traditional positivist models and is situated within a sociocritical paradigm, using a mixed-methods approach and an exploratory-descriptive level. This choice is based on the need not only to observe the reality in which young people and adults are educated, but also to transform it through the active participation of the participants.

1. Participatory Action Research (PAR)

Method: The study uses PAR as its driving framework, allowing the EPJA educational community to be not merely an object of study, but a leading actor in the construction of its own knowledge through the implementation and use of regenerative learning environments. This method facilitates reflection-action processes and horizontal relationships between researchers and the participating community.

2. Quasi-Experimental and

Longitudinal Design: To scientifically validate the impact of regenerative environments, a design involving control and experimental groups is employed, with pre-tests and post-tests

administered. The longitudinal analysis makes it possible to observe the evolution of socioemotional and cognitive variables over time.

3. Techniques and Instruments:

Qualitative: Participant observation, in-depth interviews with administrators and teachers, and focus groups to explore tensions and collective perspectives.

Quantitative: Structured surveys and administration of psychopedagogical tests.

4. Statistical Analysis: Scientific rigor is ensured through the application of the Shapiro-Wilk normality test, Welch's t-test for equivalence, and the paired-samples t-test, ensuring that the observed changes are statistically significant.

5. Intervention Phases: The methodology is organized into four logical phases: Socialization and Diagnosis (identification of needs), Design (participatory development of guidelines), Implementation and Evaluation (measurement of impact), and Improvement and Transfer (community engagement and sustainability).

The intervention methodology used in this research study was an adaptation of the proposal developed by Sarmiento, García, and Collado (2024, p. 26) in Chapter 1 of the book *Regenerative Schools: Paute Chapter*. The intervention was organized into four logical and systematic phases:

1. Socialization and Diagnosis: Meetings with transformation leaders and identification of socio-educational needs related to education for young people and adults.

2. Design: A tour of the facilities of the educational institutions where education for young people and adults is provided. This process is carried out through focus groups, with the aim of defining spaces and collaboratively developing the design proposal for regenerative learning environments and pedagogical guidelines. Regenerative learning environments can be implemented inside or outside the classroom and may even be identified beyond the educational

institution, that is, within the context in which the institution is located.

3. **Implementation and Evaluation:**

Based on microcurricular planning, teachers and students in education for young people and adults design classes from an interdisciplinary perspective. Evaluation is systematic, involving planned visits and the application of observation forms to measure the impact of the designed environments on the learning of students who have not completed their schooling.

4. **Improvement and Transfer:**

The results are analyzed every two months, and an improvement plan is developed. Through

continuing education courses, teachers share their experiences with teachers from other educational institutions that provide education for students with incomplete schooling, thereby ensuring the sustainability of knowledge and transformation.

The projection and complete implementation cycle of regenerative learning environments is based on the integration and articulation of regenerative learning environments, the pedagogical pathway, and transdisciplinary educational laboratories. The process can be visually represented as follows:

Articulation of Regenerative Learning Environments

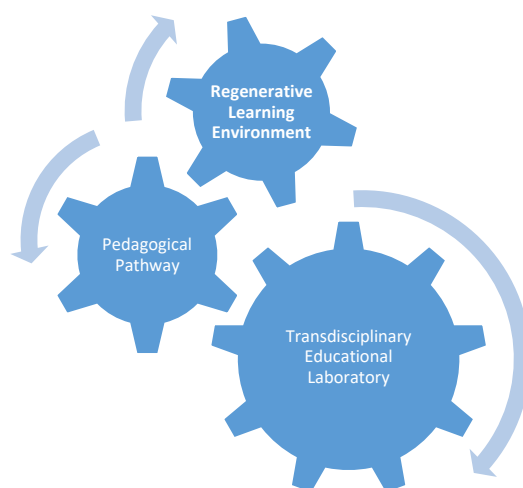


Table 2. Authors' own elaboration.

Regenerative Learning Environments: These are dynamic settings, whether physical or virtual, that may be located inside or outside the classroom, and even beyond the educational institution. They are spaces where knowledge is deconstructed and constructed through the dialogue of knowledges, the resilience of knowledge, and educational healing. They become safe and flexible spaces that promote student autonomy and co-learning within the framework of education for young people and adults.

Pedagogical Pathways: These are defined as the sequence of routes through regenerative learning environments according to the microcurricular planning. Furthermore, from the

perspective of the pedagogical pathway, regenerative learning environments become nodes for learning development. There can be as many pedagogical pathways as there are possible educational combinations of the available environments.

Transdisciplinary Educational Laboratories:

These constitute intentionally created settings designed to break down disciplinary boundaries and develop innovative theoretical and practical proposals. These laboratories are not tangible spaces; rather, they emerge through discussions, dialogue, debates, and other forms of interaction that may arise after using regenerative learning environments and pedagogical pathways. In these

spaces, practical and critical thinking takes precedence.

Analysis And Results

The results reveal that the implementation of regenerative learning environments produces a disruptive change in EPJA, moving beyond the notion of “incomplete schooling” toward comprehensive education.

- **Socioemotional and Cognitive Enhancement:** A significant improvement is evident in the skills of adult learners, who move from being passive recipients to becoming active participants in the construction of knowledge. Flexible environments foster autonomy and creativity, allowing learning to be constructed upon prior knowledge and life experiences. In addition, learners are able to connect the knowledge acquired in their everyday lives with scientific knowledge. Some of the work settings of adult students became regenerative learning environments, contributing to positive community coexistence.

- **Emergence of the Transdisciplinary Educational Laboratory:** The results show that the sequential organization evidenced through the progression along the pedagogical pathways breaks down disciplinary boundaries, integrating all actors involved in the teaching-learning processes into debates, reflections, and knowledge-sharing discussions from a dialogical perspective.

- **Recognition of and Connection with the Environment:** From their design and construction to their implementation, regenerative learning environments demonstrate a connection with the local environmental reality, identifying real-world problems that are addressed through declarative, procedural, and attitudinal knowledge that were previously unfamiliar or invisible.

- **Effectiveness of Active Methodologies:** Regenerative learning environments facilitate the application of active methodological strategies such as Project-Based Learning (PBL), Flipped Classroom, Inquiry-

Based Learning, Gamification, STEAM, Simulations, among others. Their application has proven to be more effective than traditional lecture-based classes in promoting critical thinking and writing skills.

In addition, the following findings were obtained:

1. **Direct Correlation:** The data show that the control group achieved the highest percentage of teacher and student attendance (49.09%) and recorded the largest and most significant increase in student performance (+93 points).
2. **Model Effectiveness:** The high student retention rate (97%) and the perception of personal improvement (91.49%) validate that regenerative learning environments and andragogical training affect not only cognitive development but also foster a sense of belonging and well-being among adult learners.
3. **Knowledge Gap:** The diagnosis conducted in Manabí reveals that, although there is a high prevalence of project-based learning practices (97.3%), there is a concerning lack of knowledge of emerging pedagogies for education for young people and adults. Up to 45.9% of participants do not practice other didactic, pedagogical, or methodological alternatives. This finding underscores the urgent need for transdisciplinary educational laboratories to restore environmental awareness and promote educational healing.

Statistical Validation

The integration of these three tools ensures what is referred to in scientific research as **cognitive justice**. By applying these tests, the study demonstrates, with a confidence level above 95%, that:

1. The groups were comparable at baseline (Welch's *t*-test).
2. The data were reliable and coherently distributed (Shapiro-Wilk).
3. The growth in cognitive and socioemotional skills is a direct and measurable consequence of the regenerative paradigm (paired-samples *t*-test).

The discussion focuses on how regenerative education transcends conventional sustainability by seeking to align the learning processes of young people and adults with the processes of nature.

1. Autopoiesis Theory Applied to Learning:

The discussion emphasizes that learning is not a transfer of information, but rather a process of internal structural transformation in the adult learner, who self-produces through interaction with their environment.

2. Academic Knowledge vs. Community Knowledge:

A productive tension exists within regenerative learning environments that acts as a catalyst for healing the relationship between scientific knowledge and ancestral knowledge, such as the Chacana and the agro-festive calendar, thereby breaking down hegemonic institutional barriers.

3. Space as the Third Educator:

The importance of transforming the physical environment from a static place into a “pre-text” for learning is discussed, where infrastructure, such as gardens and pathways, influences the quality of education.

4. Structural Barriers:

Critical challenges are discussed, including curricular infantilization, that is, the use of content designed for children with adult learners, as well as precarious teaching conditions and the digital divide in rural areas, all of which limit the scope of educational regeneration.

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Conclusions

- The study concludes that regenerative learning environments represent a necessary paradigm shift for the twenty-first century.
- Education as a Right and Cognitive Justice: EPJA must be consolidated as a fundamental human right, rather than as a compensatory measure, oriented toward cognitive justice and environmental sustainability.
- Emancipatory Potential: The co-creation of knowledge between academia and the community possesses liberating power that can restore equity for historically marginalized sectors in Ecuador.
- Formation of the New Citizen: It is imperative that teachers be reconceptualized as professional andragogues capable of guiding holistic learning processes that prepare citizens not only for the labor market but also to rebuild a world in crisis.
- Sustainability and Future: The regenerative school model, by integrating transdisciplinary educational laboratories and pedagogical pathways, ensures that knowledge is situated, territorial, and socially conscious, thereby securing its continuity and relevance in a new era for the education of young people and adults.

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