

Publication status: This preprint has not been published elsewhere.

Environment and education in theoretical dialogue with the Environmental Psychology Working Group

Dayse da Silva Albuquerque, Larissa Medeiros Marinho dos Santos, Raquel Perez-Lopez,
Nikolas Olekszechen, Ada Raquel Teixeira Mourão, Gustavo Martineli Massola, Maria Inês
Gasparetto Higuchi, Karla Patrícia Martins Ferreira, Gleice Azambuja Elali, Hellen Chrystianne
Lúcio Barros, Ana Paula Soares da Silva

<https://doi.org/10.1590/1982-4327e3635>

Submitted on: 2026-10-20

Posted on: 2026-10-20 (version 1)

(YYYY-MM-DD)

Paidéia

2026, Vol. 36, e3635. <https://doi.org/10.1590/1982-4327e3635>

ISSN 1982-4327 (online version)

Thematic Dossier

Environment and education in theoretical dialogue with the Environmental Psychology

Working Group

Dayse da Silva Albuquerque¹ -  <https://orcid.org/0000-0003-1745-8336>

Hellen Chrystianne Lúcio Barros² -  <https://orcid.org/0000-0001-5586-463X>

Gleice Azambuja Elali³ -  <https://orcid.org/0000-0001-5270-4868>

Karla Patrícia Martins Ferreira⁴ -  <https://orcid.org/0000-0001-9374-4890>

Maria Inês Gasparetto Higuchi⁵ -  <https://orcid.org/0000-0001-6525-4018>

Gustavo Martineli Massola⁶ -  <https://orcid.org/0000-0002-1601-9211>

Ada Raquel Teixeira Mourão⁷ -  <https://orcid.org/0000-0001-6022-7045>

Nikolas Olekszechen⁸ -  <https://orcid.org/0000-0003-2443-7592>

Raquel Perez-Lopez⁹ -  <https://orcid.org/0000-0002-6019-5984>

Larissa Medeiros Marinho dos Santos¹⁰ -  <https://orcid.org/0000-0003-4906-4163>

Ana Paula Soares Silva¹¹ -  <https://orcid.org/0000-0002-0212-2402>

¹*Instituto Nacional de Pesquisas da Amazônia (INPA), Manaus-AM, Brazil.*

²*Universidade de Pernambuco (UPE), Petrolina-PE, Brazil.*

³*Universidade Federal do Rio Grande do Norte (UFRN), Natal-RN, Brazil.*

⁴*Universidade de Fortaleza (UNIFOR), Fortaleza-CE, Brazil.*

⁵*Instituto Nacional de Pesquisas da Amazônia (INPA), Manaus-AM, Brazil.*

⁶*Universidade de São Paulo (USP), São Paulo-SP, Brazil.*

⁷*Universidade Federal do Piauí (UFPI), Teresina-PI, Brazil.*

⁸*Centro Universitário Cesumar (UniCesumar), Maringá-PR, Brazil.*

⁹*Universidad Complutense de Madrid (UCM), Madrid, Spain.*

¹⁰*Universidade de Brasília (UnB), Brasília-DF, Brazil.*

¹¹*Universidade de São Paulo (USP), Ribeirão Preto-SP, Brazil.*

Correspondence address: Dayse da Silva Albuquerque. Av. André Araújo, 2936 - CEP: 69060-001, Aleixo, Manaus-Amazonas, Brazil. dayse.albuquerque@inpa.gov.br

Abstract: This theoretical essay examines the interface between Environmental Psychology (EP) and Education, addressing the limited recognition of physical, social, and natural environments as active dimensions of educational processes. The objective was to identify contributions of Brazilian EP to qualifying school, urban, and community environments, based on the production of the Environmental Psychology Working Group between 2000 and 2023. The method consisted of a theoretical review and a documentary survey of the Lattes Platform. Results highlight four axes: indoor school environments, inclusion and accessibility, connectedness to nature, and educating territories. EP provides solid foundations for understanding spatiality as a constitutive component of education, contributing to territorialized pedagogical practices and public policies that recognize the environment as an educational agent. Possible implications include expanding research on person–environment relations, strengthening intersectoral actions, and integrating EP principles into teacher education.

Keywords: environmental psychology, schools, education, psychological processes

Ambiente e educação em diálogo teórico com o GT de Psicologia Ambiental

Resumo: Este ensaio teórico analisa a interface entre a Psicologia Ambiental (PA) e a Educação, partindo do pouco reconhecimento do ambiente físico, social e natural como dimensão ativa dos processos educativos. O objetivo foi identificar contribuições da PA brasileira para qualificar ambientes escolares, urbanos e comunitários, com base na produção do Grupo de Trabalho de Psicologia Ambiental entre 2000 e 2023. O método consistiu em revisão teórica e levantamento documental na Plataforma Lattes. Os resultados evidenciam quatro eixos: ambientes internos da escola, inclusão e acessibilidade, conexão com a natureza e territórios educativos. Conclui-se que a PA oferece fundamentos sólidos para compreender a espacialidade como componente constitutivo da educação, contribuindo para práticas

Albuquerque, D. da S. et al. (2026). Environmental Psychology and Education in dialogue.

pedagógicas territorializadas e políticas públicas que reconheçam o ambiente como agente educativo. Possíveis desdobramentos envolvem a ampliação de pesquisas voltadas para as relações pessoa-ambiente, o fortalecimento de ações intersetoriais e a integração de princípios da PA na formação docente.

Palavras-Chave: psicologia ambiental, escolas, educação, processos psicológicos

Ambiente y educación en diálogo teórico con el Grupo de Psicología Ambiental

Environmental Psychology and Education in dialogue

Resumen: Este ensayo teórico analiza la interfaz entre la Psicología Ambiental (PA) y la Educación, partiendo del escaso reconocimiento del entorno físico, social y natural como dimensión activa de los procesos educativos. El objetivo fue identificar contribuciones de la PA brasileña para cualificar ambientes escolares, urbanos y comunitarios, basándose en la producción del Grupo de Trabalho de Psicología Ambiental entre 2000 y 2023. El método consistió en una revisión teórica y un levantamiento documental en la Plataforma Lattes. Los resultados evidencian cuatro ejes: ambientes internos de la escuela, inclusión y accesibilidad, conexión con la naturaleza y territorios educativos. Se concluye que la PA ofrece fundamentos sólidos para comprender la espacialidad como componente constitutivo de la educación, contribuyendo a prácticas pedagógicas territorializadas y a políticas públicas que reconocen el ambiente como agente educativo. Posibles desdoblamientos incluyen ampliar investigaciones sobre las relaciones persona-entorno, fortalecer acciones intersectoriales e integrar principios de la PA en la formación docente.

Palabras clave: psicología ambiental, escuelas, educación, procesos psicológicos

Education involves interests, public policies, and practices that require constant improvement to ensure formative processes capable of promoting people's integral

development. However, the environment in which such practices occur—physical, social, and natural—has historically been treated as a secondary or passive element of the educational process. This marginalization can be explained by factors such as the historical separation between humans and nature, reinforced by scientific and religious traditions, and by the late incorporation, within Education, of perspectives that recognize the interdependence between people and environments.

Given contemporary socio-environmental impacts and the urgency of ethical changes in person–environment relations, there is a growing need to understand the environment as an active dimension of learning, social interaction, and citizenship formation. In this context, Environmental Psychology (EP) offers theoretical and methodological contributions that allow analyzing how spatialities—inside and outside schools, urban and community-based—shape educational practices, social interactions, and developmental processes.

Based on this context, this theoretical essay is guided by the following question: How does Brazilian Environmental Psychology, particularly the production of the Environmental Psychology Working Group, contribute to understanding the environment as an active dimension of educational processes at different scales—from the school to the city?

From this perspective, the study discusses contributions of Brazilian EP, focusing on the production of the Environmental Psychology Working Group between 2000 and 2023, articulating four thematic axes identified in the documentary survey: indoor school environments, inclusion and accessibility, connectedness to nature, and educating territories. These axes help explain how spatiality operates as a constitutive component of education, guiding territorialized pedagogical practices and public policies sensitive to person–environment relations.

Studies in Brazilian Environmental Psychology

Albuquerque, D. da S. et al. (2026). Environmental Psychology and Education in dialogue.

Environmental psychology (EP) is a field of knowledge investigating the reciprocal relationship between the environment and people, avoiding a unidirectional focus—whether from the person to the environment or from the environment to the person (Günther, 2003). This reciprocity requires considering the complexity of person-environment relationships (PER) in various dimensions.

Brazilian EP gained greater visibility in the 1990s, driven by researchers who, after training abroad, began to advance the field in universities. Prof. Dr. José Q. Pinheiro (UFRN) and Prof. Dr. Hartmut Günther (UnB) played key roles in this effort. Over time, other professionals embraced this perspective, establishing the Environmental Psychology Working Group (EP-WG) in 2000. This occurred in a context of challenges that shaped its trajectory as a crucial initiative to connect researchers scattered across Brazil and within the broader national psychological science domain.

The Working Group (WG) has been a beacon of collaboration in the field of Brazilian Environmental Psychology. The first meeting, which brought together ten researchers, was a testament to this spirit of cooperation. It provided a platform to discuss shared interests and strategies, and most importantly, to address the lack of educational materials in Portuguese. Since then, the WG has continued to foster collaboration, organizing meetings that resulted in various important publications. These efforts have significantly boosted academic production and created national and international collaboration networks, inspiring a new wave of collective effort in the field.

These efforts have been essential for consolidating EP as an interdisciplinary and relevant field. It has increased its visibility and attracted new researchers and graduate students, becoming a national milestone in promoting debates about Person-Environment Relationships (PER) in different contexts. This progress includes a growing body of academic literature (Diniz et al., 2025).

This study is characterized as a theoretical essay, grounded in classical and contemporary literature in Environmental Psychology (EP) and in a documentary survey of the production of the Environmental Psychology Working Group (EP-WG). The choice of a theoretical essay is justified by the reflective and integrative nature of the proposal, which seeks to articulate concepts, evidence, and practices related to the interface between environment and education, without relying on empirical data-collection procedures.

The documentary survey was conducted using the Lattes Platform, covering the period from 2000 to 2023, with the aim of mapping the EP-WG's production related to Education. The curricula of the 25 most active members were analyzed, defined by their continuous participation in WG meetings and the regularity of their production recorded on the platform. The search included terms such as education, school environment, early childhood education, educating territories, nature, accessibility, and inclusion.

A total of 87 publications related to the interface between Environmental Psychology and Education were identified, distributed as follows: 42 articles, 18 book chapters, 5 edited books, 12 completed graduate advisories (master's and doctoral), and 10 research projects registered on the platform. The thematic analysis of this material allowed organizing the production into four central axes: internal school environments (spatial arrangements, interactions, and pedagogical practices), inclusion and accessibility (environmental conditions for participation, autonomy, and diversity), connection with nature (benefits for integral health, socioemotional development, and ecological citizenship), and educating territories (articulating school, neighborhood, and city as formative spaces). These axes structure the discussion developed in this essay and respond to the guiding question of the study, demonstrating how spatiality operates as a constitutive component of education and informs territorialized pedagogical practices and public policies sensitive to person–environment relations.

Albuquerque, D. da S. et al. (2026). Environmental Psychology and Education in dialogue.

These axes emerge both from the production of the Environmental Psychology Working Group and from consolidated discussions in the field's literature, articulating different scales of analysis - from the classroom to the city. Each axis highlights how spatiality, in its multiple configurations, operates as a constitutive component of education, influencing pedagogical practices, social interactions, and developmental processes. Together, they guide the theoretical discussion and reflect recurring themes in the WG's production, evidencing the relevance of spatiality in educational processes.

Environmental Psychology and educational environments

The connection between Environmental Psychology (EP) and Education occurs through investigations focused on analyzing school environments, improving the teaching/learning process, and Environmental Education (EE). In these studies, the environment is treated as an active agent in shaping people, drawing on classical texts written between the 1960s and 1990s by scholars such as Roger Barker, Allan Wicker, Irwin Altman, Paul Bell, Jeffrey Fisher, William Ittelson, Harold Proshansky, Leanne Rivlin, Robert Sommer, Andrew Baum, Thomas Greene, James Gibson, Robert Bechtel, David Canter, Daniel Stokols, Robert Gifford, David Uzzell, Azra Churchman, Juan Ignacio Aragonés, Maria Amérigo, Luís Soczka, Enric Pol, among many others who explore phenomena studied by EP and their relationship with school environments.

Initially, studies in this field focused on the microscale (within the walls), varying their emphasis between the role of the environment in individuals' performance on specific tasks, the classroom, and the space occupied by the institution's lot or grounds. The emphasis on the classroom, as demonstrated by Mara Campos-de-Carvalho's (2005) pioneering work on the influence of spatial arrangement on interactions among children in early childhood education, showcases the practical applications of this field.

From the perspective of the lot or grounds, it is important to highlight its connection to early concerns about the quality of life for students and teachers, particularly regarding the school's open areas and the natural elements present there. In this context, Gump (1974) emphasized the influence of the physical dimensions of schools (large and small) on student performance, highlighting the interplay among three domains: the function of the environment, the existing stimuli, and developmental changes. In Brazilian schools, green spaces and natural elements have gradually disappeared, giving way to new constructions that confine students indoors for longer periods. This shift limits opportunities for development through direct interaction with outdoor environments.

Regarding the relationship between school, community, and city, there is a clear interest in shaping the perception of the school and its integration into the community, emphasizing social and cultural issues. From this perspective, Azevedo et al., (2017) highlighted the importance of schools extending beyond their walls to engage with the neighborhood and foster networks of reciprocity between the two, thereby underlining the social impact of this field. Achieving this requires recognizing the social experiences of both students and the local community.

Significant efforts have been made in environmental education to integrate themes, knowledge, and practices between the two areas, highlighting the interdisciplinary nature of this field. This is particularly evident in addressing issues related to sustainability, environmental responsibility, and care and promoting practices that strengthen ecological values and encourage pro-ecological behaviors (Peruzzo et al., 2026).

Some recent research is presented here to build on this general framework and provide a contemporary overview of the field's content. This body of work is organized into the following topics: environments within the school, connection with nature, inclusion and special education, and educating territories.

Albuquerque, D. da S. et al. (2026). Environmental Psychology and Education in dialogue.

Internal school environments: The EP-WG's production shows that internal school environments—classrooms, hallways, covered patios, and shared spaces—directly influence pedagogical practices, social interactions, and learning experiences. Studies examine how spatial arrangements, furniture, lighting, ventilation, colors, and noise levels affect attention, well-being, participation, and socio-affective bonds. EP contributes by offering theoretical models that articulate environmental perception, spatial behavior, and environmental appropriation, allowing schools to be understood as ecological systems in which the quality of spaces shapes educational processes.

Understanding the relationship between environment and education requires a rethinking of what we consider education. This necessitates an approach that emphasizes reflection on the connection between persons and their environment, informed by educational practice, critical thinking, and a perspective of mutual transformation. This transformative viewpoint aligns with the idea of the educational process as a crucial dialogue between educator and learner, influenced by the surrounding world.

In EP, the concept of the environment is multidimensional, encompassing both the physical characteristics of one's surroundings and the socio-historical and cultural context in which the person-environment relationship unfolds. Mutual transformation between persons and their environment is guided by praxis—action coupled with (critical) reflection both in and on the world—shaped by tangible experiences and relationships across various socio-environmental dimensions.

Thus, the school environment is understood as both a geographically and architecturally defined space, and a space for development and learning, knowledge exchange, social interaction, and diverse relationships. All these configurations are significant, as each can either facilitate or hinder other processes, contributing to a stronger person-school connection, as well as the experiences that occur there.

In this context, notable studies have been conducted on various aspects, such as the impact of spatial arrangements on the behavior and interactions of infants and children in daycare centers (Campos-de-Carvalho, 2005); the significance of school courtyards (Modler et al., 2024); environmental perceptions toward schools (Vieira et al., 2022); accessibility issues (Dourado et al., 2024); and the planning of school spaces that restrict connections with nature, contradicting an ecological vision of cities and society (Albuquerque et al., 2024).

These studies highlight that the environmental characteristics of educational institutions often result in confinement, exclusion, and limited opportunities for diverse interactions. This undermines their potential to function as educational environments, which emphasizes liberating practices, fostering inclusion, and supporting the holistic development of learners. The findings call for collaboration between environmental psychologists and professionals involved in the planning, construction, and utilization of school spaces.

Inclusion and Accessibility

The WG's researches addresses inclusion and accessibility as essential environmental dimensions for ensuring participation, autonomy, and equity in educational processes. Research analyzes physical, communicational, and social barriers that affect students with disabilities, reduced mobility, or specific needs. EP contributes by integrating concepts such as spatial behavior, environmental legibility, and support for action, demonstrating that inclusive environments expand learning opportunities, strengthen community bonds, and promote social justice.

Debates on special and inclusive education have intensified in Brazil over the past decades. Alongside these discussions, efforts to understand and implement the concept of accessibility have also grown. Accessibility is the condition that enables safe and autonomous use, whether full or assisted, of spaces, furniture, urban equipment, buildings, transportation systems, and communication systems.

Albuquerque, D. da S. et al. (2026). Environmental Psychology and Education in dialogue.

The arrangement of spatial layout and other physical contexts—present in general and inclusive education—are key elements in promoting accessibility and mobility. These elements make the school environment accessible, create interactive opportunities, enhance development and diverse learning experiences, and positively impact the quality of students' experiences, social connections, and needs.

The environment is not a neutral backdrop for human activity; it is imbued with characteristics, functionalities, and meanings that support development. Engaging with and acting within the environment are understood as interconnected elements of the learning process. This concept is reinforced by Gibson's (1986) theory of affordance, which posits that perceptions emerge from the intrinsic characteristics of the environment and the subjective meanings attributed to them through direct experience. In this context, perceptions are not merely mental representations of reality but are built upon what the properties of the external environment enable.

Castro and Ferreira (2022) discuss how sensory overload, and an excess of visual and auditory stimuli contribute to many of the behaviors considered challenging in school environments for children with Autism Spectrum Disorder (ASD). In a study conducted with children with ASD during the COVID-19 pandemic, Fernandes and Elali (2022) highlighted aspects of their socio-spatial behavior, emphasizing affordances and behavior settings that can help minimize communication and sensory barriers, fostering accessibility, safety, and autonomy.

From an inclusive environmental perspective, studies in the field reaffirm that the usability of objects, devices, and spaces only makes sense when considering their interaction with diversity. Classroom arrangements, accessible technological resources, and materials impact the learning of students with different needs. Additionally, they either promote or

hinder feelings of belonging, ownership, and use of school spaces by individuals with various disabilities.

Connection with nature

The analyzed production highlights the importance of human–nature relations for integral development, well-being, and citizenship formation. Studies explore the benefits of green areas, school gardens, trails, urban parks, and environmental education practices. EP offers models explaining attentional restoration, stress reduction, pro-environmental engagement, and affective bonds with natural environments. These findings reinforce that the presence of nature in schools and cities constitutes an active dimension of learning and social interaction.

The environment of a school significantly influences the behavior of its occupants (Rind et al., 2023). Both built and natural spaces are shaped by physical characteristics that can directly impact the promotion of holistic health and environmental stewardship, depending on how educators' structure and manage these spaces. Schools that focus primarily on walls, sidewalks, and fences restrict students and limit opportunities for autonomy, mobility, and emotional well-being. Furthermore, many school curricula fail to recognize the importance of spatial arrangement in social interactions as a component of learning. This oversight reflects the physical design of schools, which often downplays or excludes outdoor areas that incorporate elements of nature (Albuquerque et al., 2024).

When viewing the environment as an educational space, it is important to emphasize the natural environment's role in providing essential benefits for human health, particularly during early childhood. Research in EP has shown that interaction with nature contributes to human survival, restores physical and mental health, and promotes overall well-being (Karisman & Supriadi, 2020; Kida, 2019). Regular contact with and engagement in nature fosters an affinity for the outdoors, which enhances its restorative potential. This

Albuquerque, D. da S. et al. (2026). *Environmental Psychology and Education in dialogue*.

phenomenon is partly explained by the concept of connectedness to nature (Rosa et al., 2018).

Connectedness to nature (CN) is defined as a subjective state that fosters a positive bond with natural environments through cognitive, affective, and experiential aspects (Barrable & Booth, 2020). This connection develops from experiences in natural settings throughout life, whether independently or facilitated by family, friends, teachers, and social groups. Some theories suggest that this biophilia arises from a biological need to connect with nature at all stages of life (Chang et al., 2022). Encouraging interactions with nature during childhood is particularly beneficial, as it significantly strengthens levels of CN (Rosa et al., 2018). In turn, this enhanced connection promotes psychological development (both cognition and affectivity), nurtures creative imagination (Rolim et al., 2022) and facilitates socialization through the exploration of the world and its inhabitants (Tiriba & Profice, 2023).

Despite various warnings, the presence of nature in Brazilian school environments and their surroundings remains limited. This issue is worsened by contemporary lifestyles, which have diminished the importance of engaging with nature and have neglected the responsibility of caring for the environment. People are increasingly replacing outdoor activities with indoor ones mediated by technology. Additionally, there has been a rise in violence in public spaces, and the time available for social and family interactions has decreased. These factors have severely impacted the quality of life for individuals and communities. As a result, the benefits of nature—both for physical and mental health—are lost, along with the development of environmental citizenship. The growing distance from nature also leads to reduced connectivity to it (Louv, 2016).

The disconnection from nature has serious consequences, such as a decline in holistic health and a reduced affinity for nature among children. Soga and his colleagues (2018)

describe the phenomenon as the "extinction of experience", which refers to the diminishing connection people have with natural environments. As a result, individuals may feel alienated from nature and become less motivated to care for it and preserve it for future generations.

This loss of connection to natural spaces is not only a public health concern, but also a pressing issue for sustainability. The ongoing separation of children and adolescents from nature contributes to a generation of citizens who adopt anthropocentric viewpoints. This leads to a lack of awareness about the broader impacts of our everyday actions (Rambo & Roesler, 2019).

In this context, schools play a crucial role in fostering and valuing connections to nature, beginning with early childhood education and continuing through basic education. To expand and make this connection more inclusive, it is essential to prioritize it through the training and awareness of educators, enhancing the institution's internal spaces, and providing access to various areas within the school's surrounding environment.

From the standpoint of educational legislation, the National Curriculum Guidelines for Early Childhood Education (DCNEI) (Resolution - Basic Education Board of the National Education Council 05/2009 [CEB/CNE]) have introduced the integration of environmental principles, practices, and values into the experiences of infants and young children with natural elements both inside and outside educational institutions. However, despite these efforts and some progress in other initiatives, legal regulations and opportunities for meaningful pedagogical experiences remain limited. These measures are insufficient to address the current levels of nature deficit and to strengthen our connection to nature while fostering a deeper understanding of the interdependence in person-environment relationships.

Albuquerque, D. da S. et al. (2026). Environmental Psychology and Education in dialogue.

EP emphasizes the importance of interaction with nature as a fundamental right in human development, rather than just as a personal choice made by schools or teachers. There is a strong need for guidelines that prioritize this aspect within basic education. Such guidelines can facilitate intentional practices and create pedagogical environments in formal, non-formal, and informal educational settings, fostering holistic development in individuals. Cultivating an awareness of these issues—viewing the environment as an educational element—is essential for creating alternative territorialities and nurturing environmentally conscious individuals.

Educating Territories

The WG's studies broaden the understanding of education beyond school boundaries, examining neighborhoods, squares, cultural centers, rivers, markets, and other community spaces as educating territories. EP contributes by providing tools to understand spatial appropriation, place identity, community bonds, and social participation. These studies show that the city is a formative environment in which everyday experiences, movements, and interactions expand cultural, cognitive, and socio-emotional repertoires.

The concept of educating territory is a relatively recent area of study that has been developed over more than fifty years by researchers from various fields (Lima & Tetzlaff, 2024). The term "territory" reflects the essential connection between social relations and the physical contexts in which they occur, highlighting the spatial nature of these relationships. An educating territory, therefore, is one where social relations are linked to education (Demuth et al., 2021).

Authors such as Henri Lefebvre (1968), David Harvey (2012), and Milton Santos (1982) have contributed significantly to the debate on the relationship between society and space, emphasizing that meanings and power relations are shaped within specific geographical contexts. Education has the potential to transform these spaces and foster the

development of democratic environments. Given these perspectives on the role of space in modern contexts, it is essential for education to actively engage with these issues. Any initiative undertaken within a territory must prioritize and value the experiences of all involved groups.

Azevedo et al., (2017) specifically explore the relationship between education and the environment by introducing the concept of the "educating territory," which includes the school space, the neighborhood, and the city as a whole. This notion aligns with the idea of the "educating city" found in influential documents such as the Edgar Faure Report (United Nations Educational, Scientific and Cultural Organization [UNESCO]/International Commission on the Development of Education [CIDE], 1972) and the Barcelona Charter in 1990. These texts stress the importance of recognizing that everyone plays an active role in mutual and reciprocal education. The city serves not just as a backdrop for education but as a transformative agent. Through proper management, actions within the territory can be organized, and public and private institutions, neighborhood associations, and resident collectives can be empowered.

From this perspective, a city becomes educational when it takes on the responsibility of fostering the development of its citizens. This effort must be undertaken collectively. While it cannot and should not rest solely on the shoulders of schools, education must be shaped by their involvement. It is important to recognize that whether viewed as an educating territory—an environment for educational activities—or as an educating city—an entity that promotes participatory actions through its various stakeholders—the city serves as a public space for daily life. It imparts lessons about laws, differences, inequalities, values, and many other aspects of collective life that shape its identity.

The field of EP has significantly contributed to the discussions about educating territories and cities by examining the qualities that humanize and improve the built

Albuquerque, D. da S. et al. (2026). Environmental Psychology and Education in dialogue.

environment. This research reflects the main trends in the field over the past 20 years (Sousa et al., 2021). At both the neighborhood and city levels, various researchers have focused on understanding how physical and social environments can strengthen community connections. Their work encompasses non-formal learning spaces, the holistic development of individuals, and the pursuit of quality of life, well-being, a sense of belonging, and rootedness (Federal Council of Psychology [CFP], 2022). This includes recognizing the emotional connections the children and adolescents have, the prevailing values, and the culture surrounding them.

The connection between the community and schools should be a priority for public policies. These policies should encourage the use of school facilities by groups not formally associated with the institution, such as local associations and nearby residents. Conversely, they should promote the use of open spaces in the neighborhood for school activities like games, play, gardening, and field trips. By extending their presence into the community, schools can establish and strengthen ties with local residents. This approach not only complements the limited spaces available within schools but also helps to reduce the number of abandoned areas and discourages undesirable activities in urban voids.

In schools situated in marginalized neighborhoods, students can perceive central areas and zones of segregation, as well as the school's positive and negative interactions with the community. Educational practices should take these specific characteristics into account and leverage the potential of the local environment in which they operate.

In a study conducted by Martins et al. (2022) on the relationship between a medium-sized city in northeastern Brazil and its residents, the researchers explored perceptions and discovered a strong sense of belonging among the residents. However, this sense of belonging was accompanied by negative feelings, highlighting a mixture of emotions. The findings indicate that the city has emotional and affective significance for its

residents, who feel welcomed and develop emotional bonds and a sense of identification with the place.

Despite this positive attachment, residents also pointed out negative aspects, particularly concerning inadequate public services and environmental preservation. Many participants attributed these issues to a lack of educational initiatives that address ethical and political concerns, as well as a need for greater public participation in decision-making and active citizenship. Notably, this challenge is not confined to urban areas but also extends to rural contexts.

The connections between EP and Education highlight the importance of interdisciplinarity and the idea that personal development takes place within a complex system of interactions involving oneself, others, and the surrounding environment. However, educational processes often overlook the crucial role that the environment plays in this journey. In response, EP aims to encourage a reevaluation and reconstruction of perspectives within pedagogical practices.

This theoretical essay sought to demonstrate how Environmental Psychology contributes to understanding the environment as an active dimension of educational processes, articulating concepts, evidence, and practices emerging from the production of the Environmental Psychology Working Group between 2000 and 2023. The documentary analysis allowed identifying four central axes that express different scales of person–environment relations and reveal the relevance of spatiality in shaping educational experience.

The results show that the environment is not a neutral backdrop but a constitutive component of learning, social interaction, and citizenship formation. The WG's production demonstrates that environmental qualities, spatial arrangements, accessibility, bonds with nature, and territorial appropriations influence pedagogical practices, social interactions, and

Albuquerque, D. da S. et al. (2026). Environmental Psychology and Education in dialogue.

developmental processes. By integrating these dimensions, Environmental Psychology expands the understanding of education as an ecological, situated, and relational phenomenon.

Although the reflections presented here do not aim to exhaust the discussion, they offer an articulated synthesis that contributes to advancing the field, highlighting the need for public policies and pedagogical practices sensitive to person–environment relations. It is suggested that future research deepen empirical analyses of the identified axes, broaden investigations across different educational contexts, and explore participatory methodologies that engage students, teachers, and communities in building more inclusive, healthy, and formative environments.

Although this article has discussed key aspects of the relationship between Education and Environmental Psychology, it is crucial to recognize that this field offers countless opportunities for support and contribution. The intricate interdependence between people and their environment, thoroughly examined by EP, establishes it as an essential reference for Education that values the holistic development of individuals within their context.

EP's contributions to Education are broad and diverse, offering numerous ways to rethink person-environment relationships. These contributions become especially significant in the current context, where issues such as climate change, sustainability, and quality of life require an educational approach that intentionally and transformative integrates the environmental dimension. Therefore, EP emerges not only as a field that researches but also as one that empowers Education to cultivate citizens who understand and care for their environment.

References

Paidéia, 36, e3635

Albuquerque, D. S., Luniere, G. S., & Higuchi, M. I. G. (2024). Natureza em ambientes escolares no contexto amazônico [Nature in school environments in the amazon context]. *Revista @mbienteeducação*, 17(00), e023062.

<https://doi.org/10.26843/ae.v17i00.1334>

Associação Internacional de Cidades Educadoras [International Association of Educating Cities]. (1990). *Carta de Barcelona*. AICE.

<https://www.edcities.org/rede-portuguesa/wp-content/uploads/sites/12/2018/09/Carta-das-cidades-educadoras.pdf>

Azevedo, G. A. N., Rheingantz, P. A., & Tângari, V. R. (Orgs.) (2017). *O lugar do pátio escolar no sistema de espaços livres: uso, forma e apropriação* [The place of the schoolyard in the system of open spaces: use, form and appropriation]. RioBooks.

Barrable, A., & Booth, D. (2020). Increasing nature connection in children: a mini review of interventions. *Frontiers in Psychology*, 11, 492. <https://doi.org/10.3389/fpsyg.2020.00492>

Campos-de-Carvalho, M. I. (2005). Contribuições da organização espacial em creches para a educação infantil [Contributions of spatial organization in daycare centers for early childhood education]. In A. M. Bock, H. Vargas & J. A. Romero (Eds.), *Psicología, educación y sociedad* (pp. 187-205). Universidad Autónoma; Facultad de Estudios Superiores Zaragoza.

Castro, M. R. de, & Ferreira, K. P. M. (2022). Ambientes físicos inclusivos a crianças com transtorno do espectro autista: uma revisão de literatura [Inclusive physical environments for children with autism spectrum disorder: a literature review]. *Revista Educação Especial*, 35, e15/1–19. <https://doi.org/10.5902/1984686X68331>

Chang, C. C., Cox, D. T. C., Fan, Q., Nghiem, T. P. L., Tan, C. L. Y., Oh, R. R. Y., Lin, B. B., Shanahan, D. F., Fuller, R. A., Gaston, K. J., & Carrasco, L. R. (2022). People's desire

Albuquerque, D. da S. et al. (2026). Environmental Psychology and Education in dialogue.

to be in nature and how they experience it are partially heritable. *PLoS Biology*, 20(2), e3001500. <https://doi.org/10.1371/journal.pbio.3001500>

Conselho Federal de Psicologia (2022). *Catálogo de práticas em Psicologia Ambiental* [Catalog of practices in Environmental Psychology] (1ª ed.). Brasília: CFP. https://site.cfp.org.br/wp-content/uploads/2022/11/catalogo_praticas_psi_ambiental_w eb-2.pdf

Conselho Nacional de Educação. (2009). *Resolução CNE/CEB nº 5, de 17 de dezembro de 2009: Fixa as diretrizes operacionais para a educação infantil*. Ministério da Educação. <https://www.gov.br/mec/pt-br/cne/resolucoes/resolucoes-ceb-2009>

Demuth, M. C., Faria, A. B. G. D., Pompeia, A. A. I., Clasen, C. M., Laub, D., Viola, G. G., & Ribeiro, H. B. (2021). Escolas saudáveis: O papel do território educativo no contexto da pandemia de covid-19 [Healthy schools: the role of educational territory in the context of the covid-19 pandemic]. *Cadernos do Aplicação*, 34(2), 603-614. <https://doi.org/10.22456/2595-4377.111182>

Diniz, R. F., Pinheiro, J. de Q., Moisés, J. B., Gomes, V. C. O., & Mendes, T. M. A. S. (2025). Psicologia ambiental no Brasil: estudo bibliométrico da produção científica em acesso aberto [Environmental psychology in Brazil: bibliometric study of scientific production in open access]. *Estudos de Psicologia (Campinas)*, 42. <https://periodicos.puc-campinas.edu.br/estpsi/article/view/16500>

Dourado, J. L. G., Barbosa, A. dos S., & Gomes, E. R. A. de S. (2024). Psicologia ambiental na promoção da autonomia: praticando a inclusão de pessoas com deficiência visual [Environmental psychology in promoting autonomy: practicing the inclusion of people with visual impairments]. *Extensão em Foco*, 12, 71–82. <https://doi.org/10.33362/ext.v12i00.3458>

- Fernandes, L. V. S., & Elali, G. A. (2022). O comportamento socioespacial de pessoas com transtorno do espectro do autismo (TEA) na pandemia: reflexões com base na psicologia ambiental [The Socio-Spatial Behavior of People with Autism Spectrum Disorder (ASD) During the Pandemic: Reflections Based on Environmental Psychology]. *Nova Revista Amazônica*, 10, 23-41. <https://periodicos.ufpa.br/index.php/nra/article/view/13591/0>
- Gibson, J. J. (1986). *The ecological approach to visual perception* (Original work published 1979). Erlbaum.
- Gump, P. V. (1974). Big school – small school. In R. H. Moss & P. Insel (Eds.), *Issues in social ecology* (pp. 276-285). National Press.
- Günther, H. (2003). Mobilidade e affordance como cerne dos estudos pessoa-ambiente [Mobility and affordance as the core of person-environment Studies]. *Estudos de Psicologia (Natal)*, 8, 273-280. <https://doi.org/10.1590/S1413-294X2003000200009>
- Harvey, D. (2012). O direito à cidade [The right to the city]. *Lutas Sociais*, (29), 73-89. <https://revistas.pucsp.br/l/article/view/18497>
- Karisman, V. A., & Supriadi, D. (2020). The effect of short term adventure based outdoor program on decreasing the stress level of college students. *Journal Pendidikan Jasmani dan Olahraga*, 5(1), 76-80. <https://doi.org/10.17509/jpjo.v5i1.22584>
- Kida, P. (2019). Competences and qualifications in outdoor education. *Journal of Education Culture and Society*, 10(1), 79- 92. <https://doi.org/10.15503/jecs20191.79.92>
- Lefebvre, H. (1968). *Le droit à la ville [The right to the city]*. Anthropos.
- Lima, A. P. C. T. D., & Tetzlaff, Í.M.B. (2024). Território educativo: Ações integradoras e intersetoriais de um projeto em instituições de educação infantil [Educational territory: integrative and intersectoral actions of a project in early childhood education

Albuquerque, D. da S. et al. (2026). Environmental Psychology and Education in dialogue.

institutions]. *Caderno Pedagógico*, 21(13), e11679.

<https://doi.org/10.54033/cadpedv21n13-121>

Louv, R. (2016). *A última criança na natureza: resgatando nossas crianças do transtorno do déficit de natureza* [The last child in the woods: saving our children from nature-deficit disorder]. Aquariana.

Martins, F. M., Mourão, A. R. T., & Lapa Junior, L. G. (2022). O potencial educativo dos afetos: relação entre a cidade e seus moradores [The educational potential of affects: relationship between the city and its residents]. *Educação em Foco*, 27(1), 27021. <https://doi.org/10.34019/2447-5246.2022.v27.36541>

Modler, N. L., Carvalho, R. S. de, & Rheingantz, P. A. (2024). Crianças e pátios escolares: significados, valores e afetividades [Children and schoolyards: meanings, values, and emotions]. *Revista Projetar*, 9(2), 77-92. <https://doi.org/10.21680/2448-296X.2024v9n2ID34370>

Peruzzo, M. P., Lapa Junior, L. G., & Pato, C. M. L. (2026). Psychosocial dimensions of ecological behavior: nature connectedness among university students in the Federal District. *Remunon*, 13(14), 1-20. <https://doi.org/10.66104/jh3dr211>

Rambo, G. C., & Roesler, M. R. B. (2019). Vivência com a natureza no ambiente escolar na primeira infância e sua relevância para construção do respeito e cuidados com o meio ambiente [Experiences with nature in the school environment during early childhood and their relevance to building respect and care for the environment]. *Revista Brasileira de Educação Ambiental* (RevBEA), 14(1), 111–131. <http://dx.doi.org/10.34024/revbea.2019.v14.2698>

Rind, Z. ul abdin, Khaskhali, S., & Mubeen, A. (2023). Impact of school environment on students' behaviour: a case of public and private schools. *Annals of Human and Social Sciences*, 4(4), 357–364. [https://doi.org/10.35484/ahss.2023\(4-IV\)35](https://doi.org/10.35484/ahss.2023(4-IV)35)

Paidéia, 36, e3635

- Rolim, A. C. A., Frezza, M., & Cavalcante, R. E. (2022). Ambientes físicos verdes como espaços promotores de interações potencializadoras do desenvolvimento infantil [Green physical environments as spaces that promote interactions enhancing child development]. In M. I. G. Higuchi & D. da S. Albuquerque (Eds.), *Cronologias na relação pessoa-ambiente* (pp. 33-46). CRV.
- Rosa, C. D., Profice, C. C., & Collado, S. (2018). Nature experiences and adults' self-reported pro-environmental behaviors: the role of connectedness to nature and childhood nature experiences. *Frontiers in Psychology*, 9, 1055. <https://doi.org/10.3389/fpsyg.2018.01055>
- Santos, M. (1982). *Pensando o espaço do homem* [Thinking about human space]. Hucitec.
- Soga, M., Yamanoi, T., Tsuchiya, K., Koyanagi, T. F., & Kanai, T. (2018). What are the drivers of and barriers to children's direct experiences of nature? *Landscape and Urban Planning*, 180, 114-120. <https://doi.org/10.1016/j.landurbplan.2018.08.015>
- Sousa, A. L., Zeni, L. A., & Schneider, D. R. (2021). Territorialidades e contexto urbano nos estudos sobre a relação pessoa-ambiente: revisão integrativa de literatura [Territorialities and urban context in studies on the person-environment relationship: an integrative literature review]. *Estudos e Pesquisas em Psicologia*, 21(2), 494-512. <https://doi.org/10.12957/epp.2021.61053>
- Tiriba, L., & Profice, C. C. (2023). Desemparedar infâncias: contracolonialidades para reencontrar a vida [Unwalling childhoods: counter-colonialisms to rediscover life]. *O Social em questão*, 26(56), 89-112. <https://www.redalyc.org/articulo.oa?id=552274743005>
- United Nations Educational, Scientific and Cultural Organization/International Commission on the Development of Education. (1972). *Aprender a ser (Relatório Edgar Faure)*

Albuquerque, D. da S. et al. (2026). Environmental Psychology and Education in dialogue.

[Learning to be (Edgar Faure Report)]. UNESCO/CIDE.

<https://archive.org/details/UNESCOAprenderASer1972/mode/2up>

Vieira, J. de S. F., Ferreira, K. P. M., & Castro, M. R. de. (2022). Afetos, significados e sentidos relacionados com o ambiente escolar para estudantes do Ensino Médio [Affects, Meanings, and Senses Related to the School Environment for High School Students]. *Educação: Teoria E Prática*, 32(65), e28[2022].
<https://doi.org/10.18675/1981-8106.v32.n.65.s16039>

Dayse da Silva Albuquerque is a Researcher of the Instituto Nacional de Pesquisas da Amazônia (INPA), Manaus-AM, Brazil.

Hellen Chrystianne Lúcio Barros is a Professor of the Universidade de Pernambuco (UPE), Petrolina-PE, Brazil.

Gleice Azambuja Elali is a Professor of the Universidade Federal do Rio Grande do Norte (UFRN), Natal-RN, Brazil.

Karla Patrícia Martins Ferreira is a Professor of the Universidade de Fortaleza (UNIFOR), Fortaleza-CE, Brazil.

Maria Inês Gasparetto Higuchi is a Researcher of the Instituto Nacional de Pesquisas da Amazônia (INPA), Manaus-AM, Brazil.

Gustavo Martineli Massola is a Professor of the Universidade de São Paulo (USP), São Paulo-SP, Brazil.

Ada Raquel Teixeira Mourão is a Professor of the Universidade Federal do Piauí (UFPI), Teresina-PI, Brazil.

Nikolas Olekszechen is a Professor of the Universidade Estadual do Maringá (UEM), Maringá-PR, Brazil.

Raquel Perez-Lopez is a Professor of the Universidad Complutense de Madrid (UCM), Madrid, Spain.

Larissa Medeiros Marinho dos Santos is a Professor of the Universidade de Brasília (UnB), Brasília-DF, Brazil.

Ana Paula Soares Silva is a Professor of the Universidade de São Paulo (USP), Ribeirão Preto-SP, Brazil.

Paidéia, 36, e3635

Authors' Contribution:

All authors made substantial contributions to the conception and design of this study, to data analysis and interpretation, and to the manuscript revision and approval of the final version. All the authors assume public responsibility for the content of the manuscript.

Research Data Availability

The datasets generated and/or analyzed during the current study are available from the corresponding author on reasonable request.

Conflict of interest

The authors have no conflicts of interest to declare.

Declaration of Use of Artificial Intelligence

The authors declare that no artificial intelligence tools were used in the writing or editing of this manuscript.

Associate editor:

Viviane Sanchez

Received: Mar. 25, 2026

1st Revision: Aug. 24, 2026

Approved: Aug. 27, 2026

How to cite this article:

Albuquerque, D. da S., Barros, H. C. L., Elali, G. A., Ferreira, K. P. M., Higuchi, M. I. G., Massola, G. M., Mourão, A. R. T., Olekszechen, N., Perez-Lopez, R., Santos, L. M. M., & Silva, A. P. S. (2026). Environment and education in theoretical dialogue with

Albuquerque, D. da S. et al. (2026). Environmental Psychology and Education in dialogue.

the Environmental Psychology Working Group. *Paidéia (Ribeirão Preto)*, 36, e3635.

<https://doi.org/10.1590/1982-4327e3635>

This preprint was submitted under the following conditions:

- The authors declare that the necessary Terms of Free and Informed Consent of participants or patients in the research were obtained and are described in the manuscript, when applicable.
- The authors declare that the preparation of the manuscript followed the ethical norms of scientific communication.
- The authors declare that they are aware that they are solely responsible for the content of the preprint and that the deposit in SciELO Preprints does not mean any commitment on the part of SciELO, except its preservation and dissemination.
- The authors declare that the data, applications, and other content underlying the manuscript are referenced.
- The deposited manuscript is in PDF format.
- The authors declare that the research that originated the manuscript followed good ethical practices and that the necessary approvals from research ethics committees, when applicable, are described in the manuscript.
- The authors declare that once a manuscript is posted on the SciELO Preprints server, it can only be taken down on request to the SciELO Preprints server Editorial Secretariat, who will post a retraction notice in its place.
- The authors agree that the approved manuscript will be made available under a [Creative Commons CC-BY](#) license.
- The submitting author declares that the contributions of all authors and conflict of interest statement are included explicitly and in specific sections of the manuscript.
- The authors declare that the manuscript was not deposited and/or previously made available on another preprint server or published by a journal.
- If the manuscript is being reviewed or being prepared for publishing but not yet published by a journal, the authors declare that they have received authorization from the journal to make this deposit.
- The submitting author declares that all authors of the manuscript agree with the submission to SciELO Preprints.