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Environmental Education *in places*: the cases of Azerbaijan and the Galápagos Islands, Ecuador

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ABSTRACT

Environmental education is increasingly seen as an important tool for addressing multiple intersecting crises. The climate and ecological crises are global crises, but multiple scales – local, regional, national, and global – connect and blur, and there are important senses in which these global crises are always produced and experienced in local places. Education similarly cuts across scales: schooling is embodied, local and highly place-specific, yet it is also bound up with global discourses, assessment exercises, geopolitics and governance regimes. This paper explores these themes and tensions by thinking across the cases of Azerbaijan and the Galápagos Islands, Ecuador. Analysis of the environmental education in these quite different environments offers insights into the place-specific nature of environmental education, discussed through the themes of pedagogy, attachment and action. Across each theme we argue that place is deeply connected to environmental education, but this strong relationship manifests in some quite different ways, including at times enabling, and at other times restricting. The findings prompt questions about justice, equity and the role of environmental education in producing – rather than only reproducing – young people’s engagements with and constructions of their local places.

KEYWORDS

Azerbaijan; Ecuador;
Galápagos;
environmental education;
place

Introduction

Environmental education is receiving increasing attention globally in response to intersecting climate and nature crises. Longstanding calls for education to fulfil a transformative role enabling individuals and societies to address existential threats, meet the challenges of survival, and to support human flourishing place considerable weight on the field. These calls are often framed in strongly urgent and normative terms. For example, arguing that: “sustainability education is *crucial* in addressing climate change” (Kidman & Chang, 2024, p. 2, italics added); “education is a *critical agent* in addressing the issue of climate change” (UN, 2023), and “to protect the health of our planet and our public health, it is *crucial* to integrate sustainability into our education and training systems” (Bianchi et al. (2022, p. 1, italics added).

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Education, and the climate and nature crises, are all issues with complex relationships to place, raising multiple questions about scale. In many ways these crises are archetypal global issues: “global temperature change is determined by cumulative emissions, that is, the total of all emissions over time, and not isolated emissions at a particular point in time” (Fankhauser et al., 2022, p. 17). Global temperature averages are, by definition, not isolated to a particular place. Yet this every- and any- where framing also sits alongside, and is produced through, multiple local places. The production of the issues - such as emissions released, or sewage being discharged into particular streams at particular times and in specific locations; the production of knowledge about the issues, such as the particular computers in particular rooms in particular buildings, set on particular streets in particular cities in which we are writing these words; and our responses to these issues are all embedded in a deep sense of particularity (Borie et al., 2021; Forbes & Stammler, 2023; Mulugetta et al., 2022). “As a multiscale phenomenon that is global in its causes but local in its impacts, climate change presents several challenges to the concept of place” (Praskievicz, 2022, p. 137). Yet the dichotomy between local and global breaks down as the relationships between our local digital code-spaces (Ash et al., 2019) explode globally through cloud-based services, fibre optic cables, networks and epistemic communities. Questions about *where* events happen are not simple, and we want to begin this discussion acknowledging the multiple interconnections across scale and place that complicate analyses of environmental education *in places*.

This paper offers the opportunity to think across two different research projects, drawing together some of the major themes of these studies and opening questions about the relationships between environmental education and places. These studies are quite different—including the locational difference being separated by thousands of miles, and with one focusing on teachers and the other on students—but both share a central concern with environmental education in quite distinctive places. Our intention is not to offer a strictly comparative study, but to think with and across the provocations that both offer, and to open up questions about environmental education *in places*. In part, this exploration is prompted by research in multiple locations suggesting that teachers and students are more likely to be aware of environmental issues at a global level than local place-specific understandings, which Feldbacher et al. (2024, p. 115) argue is due to the absence of local characteristics on many curricula. Their Austrian context is supported by findings from research in Hong Kong (Jackson & Pang, 2017) and India (Puttick et al., 2024), with teachers highlighting the Anglo-American dominance of knowledge about climate change education, and calling for place-specific information and teaching resources. There are tensions “between generalised concepts related to an abstract global pattern or a symbol of climate change, such as glaciers melting in distant regions, and the experiences of teachers and students, particularly in terms of weather events they personally see, hear and feel” (p. 804), opening questions about the distances between sites of knowledge production, media representation, and school classrooms. Prompted by these critiques and calls, we ask what two contrasting cases—Azerbaijan and the Galápagos—might tell us about the relationships between place and environmental education.

Azerbaijan

Situated in the Southern Caucasus, Azerbaijan has a population of 10 million and covers an area of 86.6 km². Azerbaijan's Climate Risk Country Profile estimates temperatures from July to September to increase by nearly 6°C by the 2090s, exceeding global average forecasts (World Bank, 2021). Moreover, oil production has exacerbated other environmental issues, notably the pollution of vital water resources and lakes, as evidenced by the widespread contamination caused by the unregulated discharge of crude oil, petroleum products, and untreated wastewater into both natural and artificial reservoirs (Aliyev & Khalilova, 2014). Increasing attention has been given to environmental education in Azerbaijan, including the Law of the Republic of Azerbaijan on Environmental Education and Enlightenment of the Population (2002) which requires environmental education as a compulsory component of general education, updated through the 2010 curriculum's emphasis on global environmental issues (Cabinet of Ministers of the Republic of Azerbaijan, 2020). In 2020, a supplementary textbook titled "Plastic" focused on fostering environmental awareness and global responsibility (Mutallimov et al., 2020), and in 2024 these efforts were expanded through the national initiative "Year of Solidarity for a Green World" prior to Azerbaijan's hosting of COP29. However, existing evidence suggests a disconnect between the higher-level policy commitments and the curriculum. For example, the Monitoring and Evaluating Climate Communication and Education Project (MECCE, 2023) highlights several areas of tension, particularly the tensions between high level policy commitments to climate change and the limited funding allocations, research attention, or integration in the curriculum.

Galápagos, Ecuador

The Galápagos Islands, a province of and archipelago off the coast of Ecuador, are home to around 25,000 residents, across four inhabited islands (the other 97% of the archipelago is strictly National Park land). The entire island system covers 8,000 km² and hosts some of the highest levels of endemism (species found only in one area) on the planet (Biodiversity, 2023n.d.). The ecosystems have received attention and conservation work for decades, but the human population of the islands is relatively recent. The islands were first discovered by Spanish crews in the 1500s (Durham, 2021) and there is no human population indigenous to the islands. Contemporary residents appeared in the early 1800s and continuous permanent habitation then was established in the early 1900s (Oxford & Watkins, 2009). The islands became a National Park of Ecuador in 1959, the Galápagos Marine Reserve was established in 1986, and the islands became one of the first UNESCO Natural World Heritage Sites in 1978. Conflict, often violent, between local economies dependent on exploitation of natural resources, and National Park staff, continued late into the 1990s. Significant attention has been given to environmental education on the islands (Wray, 2020), calling for the creation of Galápagos "citizens with a deep understanding of, value for, and appreciation of the special place where they live" (p. 1). There is a Galápagos-specific curriculum (Farber, 2025; Wray, 2020), teacher training for education for sustainability (Knab et al., 2021), and further

attention to climate change across multiple national strategies (Correa Delgado & Aguiñaga Vallejo, 2012).

Place and environmental education

This literature review focuses on conceptualisations of place and environmental education and a critical examination of the relationships between them, understanding place as something multifaceted: dynamic environments shaped by interconnected relationships in locations. These relationships might be social, biological, emotional, experiential and more (Häggström & Schmidt, 2020). This conceptualisation of place entails a reciprocal relationship: we shape and are shaped by it, even to the extent that places are argued to “define who we are” (p. 14). We all see place(s) differently, constantly negotiating ways of coexisting (Schmidt, 2019). We are intertwined with the places we are born and live in, whose cultural, historical and geographical characteristics interact with our beliefs, values, behaviours and understandings. Our interpretations of words and concepts happen through the places we interpret them from (Eisenhart et al., 2019). A wide body of evidence offers strong support for claims about the importance of local places and experiences in the shaping of people’s beliefs and actions towards the environment. Local experiences have been found to reduce “distance” from climate change across multiple dimensions including; hypothetical, temporal, spatial and social distances (Hoffmann et al., 2022), and there are strong correlations between economic inequality and biodiversity, associating higher levels of economic inequality with lower biodiversity, and wealthier areas with higher levels of biodiversity (Kubiszewski et al., 2024). The production of knowledge about the environment is strongly shaped by Global Environmental Assessments (GEAs)—such as the Intergovernmental Panel on Climate Change (IPCC). GEAs have received attention, including from Science and Technology Studies’ (STS) perspectives, focusing on questions of place and knowledge production. The interdisciplinary collaboration forged through the IPCC happens on a vast scale and represents an incredible achievement of the scientific community. However, the global “view from nowhere” these reports aim to produce is critiqued by Borie et al. (2021) to be a “view from somewhere”: knowledge production that is “marked by politico-epistemic struggles and shaped by the interests, priorities and voices of certain powerful actors” (p.1). Highlighting the power relations embedded in this knowledge construction has revealed the ways in which Indigenous knowledges have been used. Ford et al. (2016) analysis of the fifth IPCC assessment report suggests a “victim-hero” framing that describes Indigenous peoples’ vulnerability alongside a role as holders of essential knowledge for solving the problems. Depoliticising and homogenising representations of Indigenous cultures, knowledges, and ways of knowing in these accounts are critiqued as problematic because of the highly place-specific nature of environmental challenges. These arguments draw on a longer history of STS analyses tracing the close connection between knowledge production and place in which “formalised education in information handling practices was necessarily place-bound and concentrated in specific places” (Graham & Dittus, 2022, p. 19).

Across multiple contexts there is support for claims about the importance of where research evidence is produced, and also where it is received. For example, Livingstone (2003) argues that:

Place is essential to the generation of knowledge. It is no less significant in its consumption. Ideas and images travel from place to place as they move from person to person, from culture to culture. But migration is not the same as replication. As ideas circulate, they undergo translation and transformation because people encounter representations differently in different circumstances. (p.12)

Applying these arguments to his own account of *The Geographical Tradition* (Livingstone 1992), Livingstone (2019) critiques the book's "failure to take geography seriously enough—and by that I mean the geography of geographical knowledge and practice" (p. 458). A wide range of research has emphasised the importance of education responding to the place-specific nature of environmental challenges with place-specific education, with multiple calls for taking the geography of knowledge and curriculum more seriously. In Myers et al. (2013) research on local, place-based climate change education, based on data about personal experience and beliefs collected at two time points with 20 months between, they pose a "chicken and egg" question. That is, which came first; participants' beliefs (about the importance of environmental issues) or their experiences (of environmental events)? There are complex relationships between pre-existing beliefs (or disbeliefs) and the interpretation of experience, and the socio-economic context in which people live is an important factor in their environmental beliefs and actions (Bez et al., 2023). Examples from Pacific Islands illustrate some different ways in which place-based particularities are responded to by climate change education (Fair, 2018). In Vanuatu, Pierce (2019) focuses on a technical and vocational course, arguing that the place (a highly vulnerable Pacific Island) has a strong relationship with the teaching and learning approaches. Pierce argues for focusing "on vulnerability assessment and ways of becoming more resilient to the negative impacts of climate change and disasters, adopting a hands-on, student-centred, experiential approach to learning" (p. 319). Education is given a specific role driven by place: "in view of Vanuatu's exposure to a plethora of hazards, education provides a positive way for people to engage with climate change and disasters and take measures to mitigate and adapt to their effects" (p. 320). The argument also makes spill-over or knock-on impacts of education explicit in the expectation that young people become "agents of transformation" in their home communities.

Translation across different languages offers a further example of the connection between place and knowledge. The term *topoglossia* used by Hammond and Cook (2023) to refer to place-languages, which in the example of urban studies prompts them to ask whether Lefebvre's theories are "analytically separable from their linguistic and geographical contexts? How do we read its 'original' French? Or is there something 'universal' about Lefebvre's work that transcends linguistic difference?" (p. 11). With relevance for curricular and pedagogical questions, they argue that "we are always translating; not simply between languages but *within* them...Who do we produce knowledge for? And how does our production of knowledge enable multiple forms of community?" (p. 13). Their argument highlights the materialities

and spatialities through which knowledge moves, framing knowledge production as “learning *via* translation” which necessarily involves multiple people and puts “greater emphasis on the role of other people in the writing process beyond the single author” (p. 14). Similar connections are made through Mannion’s Mannion (2020) place-responsive heritage education project—*Stories in the Land*—and the assemblage pedagogy they develop to participate in journeys along “drove roads”; a historically and culturally significant practice used to move livestock, for example, taking cattle into the hills for summer pastures. Taking inspiration from decolonial feminist methodological approaches, Zaragocin and Caretta (2021) push this further through the Latin American method of *cuero-territorio* to explore relationships between embodiment and land.

Methodology

We now introduce the methodological approaches of the two projects that we are thinking across and with in the current paper. Both studies draw on in-depth case studies of multiple areas across both regions, and both have a shared interest in formal education and are situated within schools. The primary researchers for each study (Mehdiyeva for Azerbaijan, Farber for the Galápagos) also share deep and long-term engagement with the environments, including fluency in the local languages.

Azerbaijan study

This study employed an in-depth qualitative-case study approach to explore the perceptions and experiences of teachers in public schools situated within the highly polluted area of Black City, Azerbaijan. Five geography teachers were purposively recruited from three schools within Black City. Data collection spanned over a period of 20 wk, using semi-structured interviews and observational methods to gather rich, in-depth and insights into teachers’ beliefs and practices about the environment. Interview questions were developed by drawing on the New Ecological Paradigm (NEP) framework by Dunlap et al. (2000), and throughout fieldwork all interviews and observed classroom sessions were audio recorded with the explicit consent of the participating teachers. Each case was analysed individually to generate depth of insight into the nuances of teachers’ beliefs and practices. The data analysis was conducted in two phases: within-case analysis and cross-case thematic analysis. The within-case phase followed an inductive approach to qualitative coding, allowing for the emergence of key patterns and themes from the collected data. Interview and observation transcripts and field notes were carefully reviewed, and emerging codes were clustered into broader categories. These categories were subsequently synthesised (Stake, 2010) and reassembled (Yin, 2016) to support deeper interpretation and respond to the study’s core research questions. Following the within-case analysis, a cross-case thematic analysis was conducted to examine both commonalities and differences across the five participating teachers. This phase drew on Stake’s (2010) concept of categorical aggregation and Braun and Clarke’s (2012) thematic analysis framework, enabling a structured comparison of how environmental education beliefs were enacted in practice. One ethical challenge and interesting dynamic

arose around the voluntary involvement of teachers in the study. Prior to this research initiative, none of the schools in Black City had been visited by researchers within living memory, nor had any teachers participated in research projects. As a result, the introduction of a researcher into these school settings, facilitated initially through meetings with school principals could have been perceived as an implicit expectation of compulsory participation.

Galápagos study

This study used a mixed methods design to learn from local children (fifth grade; 9–10 years old) living on the two most populous Galápagos Islands, exploring how they constructed their own local ecological knowledge, and what perceptions they had of the local Galápagos environment. Data collection spanned a period of nine weeks and usually involved 3–4 visits to each of the 18 classrooms at the 12 participating schools, and all data was collected in Spanish, the local language. Methods included a survey, semi-structured outdoor walking interviews, and semi-structured outdoor focus groups, which each method informing the next, h. Questions within the survey and in the interviews and focus groups were influenced by the Middle School Environmental Literacy Survey (McBeth & Volk, 2009) and further localized to be place-specific to the Galápagos socioecological system. Interviews and focus groups were audio recorded, with permission from parents and assent from children, and subsequently transcribed in Spanish, checked by a local Galapagueña and native Spanish speaker, and then analysed.

Access to working with children was approved and allowed through a partnership with the local non-profit, *Fundación un Cambio por la Vida* (FUNCAVID), and through direct discussion and meetings with the education district director, who approved entrance into all schools, and the head teacher of each school. Further permission was gained from parents, and final assent was gained from children directly prior to each of the three data collection methods and class visits. Working with children, it was deeply important to both work with children as equal partners in knowledge creation, and to mitigate any harm to child participants, which meant taking time to introduce and meet each class of children prior to starting the survey, being on hand throughout the survey administration to carefully and thoughtfully answer questions from individual children, and to clearly assure children that participation was not required, non-participation was not to be condemned, and completion of the survey was not for any grade. Further care was taken to ensure that children participating in the interview or focus group did so voluntarily, mitigating peer pressure to add their name to the volunteer selection pile (from which volunteers were selected randomly). Care was also taken during walking interviews to ensure children were safe and comfortable leading the outdoor walk with the researcher, that teachers could always see the researcher and child, and that the interview did not push the child to participate longer than they felt up to it. Focus groups were highly child-led in the discussion, though managed by the researcher, by ensuring all children were safe and comfortable with other child behaviour and researcher interaction during focus groups. In addition to safety, it was important to centre children through the employment of childism as a theory (Wall, 2022)

which seeks to actively decentre adult-centric lenses. This required active reflection by the researcher to ensure that adult bias and misunderstanding was not driving data interpretation and analysis, and a constant inclusion of children and their contributions.

Transcriptions of interviews and focus groups were analysed using thematic analysis (Braun & Clarke, 2012). Transcriptions were analysed individually and then themes were progressively combined and honed across each group. Survey data was cleaned and selected questions were analysed using descriptive statistics and, for long-answer questions, additional qualitative coding.

Thinking across and with projects

The projects were both doctoral research studies, and both were supervised by Puttick and Childs who also led the integrative approach of the current paper. Working across both projects for over three years played an important role in stimulating insights into the shared thematic areas. Our approach of “thinking across and with” offers a flexible and reflexive account, rather than a direct comparison or strictly comparative study. Through a dialogic and iterative process of thinking with and across these projects, we examine the ways in which these studies shed light on the relationships between places and environmental education. Over a three-year period through the inception, development, refinement, fieldwork, analysis, writing up and examination of both studies, Puttick and Childs engaged deeply with the ways in which the research was generating new understandings of environmental education in these particular places. Towards the completion of both studies the work of more explicitly thinking across the projects began. This involved reanalysing aspects of the data, refining the shared research question around environmental education in places, and engaging in a critical and collaborative dialogue between the studies. In this process, Mehdiyeva and Farber explored different aspects of each others study, conducting additional thematic analysis of the combined studies’ written findings, while looking at both studies through the theoretical perspectives of decoloniality, feminism, and childism to foreground context-specific, participant-led understandings. Puttick and Childs expanded the conceptualisation of the current paper, and all collaborators developed the thematic focus on pedagogy, attachment and action through an iterative process of contributing findings from each study, looking for counter-examples and testing the potential of the concepts to offer insights into the ways these studies shed light on the distinctiveness of different places for environmental education. We sought to draw from the whole of the rich range of data generated through both studies, which was aided by the engagement that Puttick and Childs had as supervisors of these projects over several years.

Pedagogy, attachment, and action

We now present our reflections in response to the overarching question *In what ways does the environmental education in Galápagos/Azerbaijan relate to these places?*

through three main themes that emerged through analysis; pedagogy, attachment, and action.

Pedagogy

The pedagogical dimensions of environmental education in Azerbaijan and the Galápagos suggest strong—but very different—connections between teaching practices and local conditions, belief systems, and broader curricular and political frameworks.

Pedagogical approaches to environmental education in Azerbaijan, as described by teachers, were shaped by intersecting pressures of curriculum design, teacher beliefs, and legacies of post-Soviet educational paradigms. Although Azerbaijan's national curriculum includes environmental education across different subjects, including; geography, biology, and life skills, environmental topics are framed through strongly anthropocentric lenses that emphasise the instrumental value of nature for human benefit: nature more as an object of utility than a site of relational meaning or ethical concern. Teachers in Black City, Baku described pedagogical practices as grounding environmental education in students' local surroundings. A recurring approach involved using local environmental features as foundational content in geography, progressing gradually to broader regional and global contexts. Emphasis was also placed on experiential learning, where theoretical concepts were tied to everyday experiences that reflects a broader pedagogical orientation that values relevance and context in curriculum delivery, suggesting a deliberate move away from abstract teaching toward place-based, practical learning. Their practices were dominated by indirect, vicarious learning: textbook readings, debate formats, and state-directed exercises. While all teachers articulated strong beliefs in the value of direct or experiential learning, their pedagogy largely relied on symbolic or indirect encounters with nature. These tensions between pedagogical aspiration and practice reflects a broader set of constraints; limited institutional support, safety concerns in toxic outdoor environments, and an educational system influenced by centralised, top-down control structures. The potential pedagogical resource of local place—reflected here in the visibility of oil refineries and built industrial landscapes in view outside classroom windows—stood in tension with the focus on topics further afield with students more likely to encounter lessons on the Amazon rainforest or the melting Arctic.

Pedagogical practices, perceived and described by students, through informal and formal education channels in the Galápagos showed a more obviously positive relationship with local place. Students frequently engaged in place-responsive learning that was informal and often student-initiated, through visiting National Park sites and research stations where lived experience directly with local flora, fauna, and geographical elements, or interactive displays and walk-through exhibits present place-dependent education. Students described their own child-led pedagogies as experience-based, ecocentric, and supported by local community members, often adults, including family members, organizational leaders, and teachers who could facilitate frequent visits to local nature-centric sites, and answer questions around conservation and local ecology. Students also frequently noted that teachers in science classes, but occasionally in other subjects, included local environmental education through species names and the importance of protecting local environments,

or fieldtrips to local sites, or that schools partnered with local organisations such as the National Park to deliver interactive material around Galapagos invasive species and ways of mitigating negative impacts on the local environment. School based pedagogies are currently supported both by a recent teacher training program focused on education for sustainability, and by a locally consulted curriculum that intends to include Galapagos-specific themes through all subjects, and community organizations that emphasized the uniqueness of the islands and the importance of conservation. Yet even here, external pressures—such as conservation tourism agendas, other local economies not directly supportive of or based around conservation, and national standards—sometimes introduced tensions between pedagogical autonomy in classrooms and globally framed imperatives. Across both contexts, the pedagogical approaches seem to have strong connections with local place, but in quite different ways.

Attachment

Attachment to place surfaced in both contexts as a crucial dimension of environmental learning—rooted in lived experience, emotional connection, and the affective geographies of everyday life.

In the Galápagos, children demonstrated a high degree of emotional and sensory attachment to their environment. During walking interviews and focus groups, they described specific places—beaches, tunnels, highland spaces, local sites such as Lago el Junco on San Cristobal Island or Las Grietas on Santa Cruz, and other National Park sites and even tortoise breeding centres—not just as scenic spaces, but as personal and communal landmarks: place as an interwoven mesh of relational, emotional, and experiential connections that shape our understandings of the world (Häggström & Schmidt, 2020). Children's ecological knowledge was often deeply place-anchored, informed predominantly through informal experiential learning through frequent and easy access to hyper-local National Park sites on home islands and other nature-centric and human-centric spaces, because endemic flora is present in human-inhabited zones and endemic fauna have not evolved a fear of humans and thus are highly present in daily human lives (Durham, 2021). Children also constructed knowledge through received stories and information from both adult and child family and community members, including teachers. This frequent transmission of shared knowledge seemed to emulate the practiced and culturally-structured passing along of knowledge within and through Indigenous communities, despite the recency of Galapagos human populations and the lack of Indigeneity to the islands. Contact with natural spaces and species was a prominent and emotive reference that came up frequently in conversations with children and through the survey, highlighting that experiences in protected places and around or with protected species were cherished and deeply impactful on the development of place attachment for children in Galápagos. Children seem to exhibit exceptional attachment to their Galápagos home, specifically to the non-human environment and species within it. Emotive attachment to Galápagos was strongly supported in the survey, when 90% of the 337 children participants noted that they agreed, either somewhat or completely, with the statement “I love the Galapagos environment,” and 89% wanted to

continue learning more about the Galápagos environment. The appetite for environmental education and the emotional attachment to the natural environment were echoed in interviews and focus groups. However, this attachment was not purely local. Many children internalized global narratives about the Galápagos as a world heritage site and “ecological treasure.” Their articulation of attachment often blended familial affection with global responsibility—what Ford et al. (2016) identify in the IPCC’s framings as a “victim-hero” narrative. Children thus positioned themselves as stewards of a fragile paradise, echoing but also resisting externally imposed roles.

In Azerbaijan, there was a similarly strong sense of attachment to place, and this attachment was experienced and described in quite different ways. Attachment was manifested in the teachers’ beliefs as a deeply embedded emotional, aesthetic, and ethical relationship with the environment, shaping their pedagogical choices, values, and environmental narratives. The environment was not merely a subject to teach but a source of identity, comfort, and emotional stability. Attachment emerged through deeply felt associations with natural elements—trees, mountains, rivers where natural beauty was not only observed but experienced as calming, healing, and essential to well-being. This aligns with Rautio’s (2010) assertion that beauty functions as a moral compass, prompting individuals to evaluate environmental value through the lens of memory and to assume responsibility for its preservation for future generations. This was particularly evident in how natural sounds, sights, and textures were described. The environment was framed as a therapeutic space, one that soothed stress and connected individuals to something larger than themselves. Attachment in this sense was not static; it extended through memory, senses, and a longing for harmony, suggesting a romantic, almost spiritual connection to the environment. Teachers’ attachment was not only passive or nostalgic, but was in contrast with the emotional burden of responsibility, guilt, feelings of regret about environmental degradation reflected in emotional exhaustion in relation to the physical degradation surrounding them. As Esmene et al. (2024) argue in their study of UK policy-practice gaps, the detachment felt in the face of national-level abstraction and local-level hardship is a key barrier to meaningful environmental response. Despite the depth of attachment expressed, there were underlying tensions in how teachers framed human-nature relationships. While a few teachers adopted ecocentric positions, the dominant orientation was utilitarian. These views were not always consciously reconciled, instead, they existed in parallel, creating a dualistic attachment: both a romanticised ideal of untouched nature and a utilitarian approach to environmental enhancement through human intervention. These beliefs influenced not only their curriculum choices, but also the emotional tenor of their teaching—whether oriented toward hope, resignation, or cautious optimism. In each case, these beliefs are strongly shaped by the particular place in which they live and work, and are connected to the kinds of action pursued.

Action

Environmental action—whether conceived as classroom behaviour, civic responsibility, or ecological stewardship—emerged as both a possibility and a constraint, shaped by local governance, curricular scope, and socio-political structures.

In the Galápagos, frequent child-initiated environmental action was often embedded in quite overt ways with students' daily lives. Children practiced quotidian care for local flora and fauna through direct and indirect protection by avoiding negative environmental behaviours such as not touching, bothering or hurting local wildlife, not damaging native or endemic plants, or not littering on land or in the ocean. Pro-environmental action was also taken through peer encouragement and often insistence to recycle and care for the local environment or notice use of renewable energy sources on the islands. Students also engaged actively with environmental empathy and proudly shared their participation in informal conservation work through engagement with local sites, encouragement from schools, and extracurricular programs. These actions echo what Pierce (2019) describes as an experiential pedagogy of resilience—where students are positioned not just as learners but as actors within vulnerable ecosystems. Yet students' accounts also revealed more adult-based tensions; especially indirectly highlighting a clear difference between an ecocentric ethos of most child participants, and the often, but not always, more anthropocentric ethos of some local adults who children cited as contributors to local responses to pollution and littering, and who helped to design the Galapagos-centric curriculum which adopts a more anthropocentric tone around sustainability. Children rarely validated trade-offs between ecological protection and local economic needs. They exhibited pride and passion around local practices that upheld environmental protection, such as admiring the authority of National Park staff, invasive species controllers, and environmentally-conscious family members (all adults who shared, with children, a more ecocentric ethos).

In contrast, environmental action in Black City, Azerbaijan, was largely conceptual. Teachers drew on moral narratives and emotional framing to encourage action using stories and cartoons to reshape students' perceptions of humans as protectors (rather than destroyers) of nature, highlighting the moral responsibility to safeguard the Earth as our "shared home", appealing accountability, even in small acts like not littering or separating waste. While hands-on engagement with nature through activities like planting trees, collecting recyclable materials, making environmental models, creative reusing and repurposing of waste items offered some opportunities for involvement, these were framed as extracurricular and symbolic rather than transformative. A point of divergence lay in how teachers conceptualised responsibility for environmental action. Some promoted a bottom-up approach, emphasising the importance of individual and collective student action, even if symbolic or small in scale. Others adopted a top-down perspective, arguing that real environmental change lies primarily in the hands of governments, policymakers, or international actors rather than a domain for student agency. The marginalisation of place-specific action in Azerbaijani classrooms adds to Feldbacher et al. (2024), findings documenting how environmental curricula in other contexts prioritise global abstraction over local relevance. By contrast, Galápagos students often articulated their actions through specific animals, places, and community roles—action that was both place-embedded and affectively charged.

Across both of these places, the theme of action illuminates the extent to which place seems to mediate possibilities for environmental engagement. In both contexts there is a sense of place being strongly felt, but with quite different—almost

contradictory—outworkings: in the Galápagos, place provided a scaffold for participation. In Azerbaijan, situated aspects of place seem to create a barrier against school-based action.

Conclusions

This paper has explored how environmental education is shaped by, and in turn shapes, particular relationships with place. Drawing on two contrasting case studies—Black City, Azerbaijan, and the Galápagos Islands, Ecuador—we have examined the pedagogical, behavioural, and affective dimensions of environmental education in these distinct settings. While the two contexts differ markedly in terms of environments, educational governance, and socio-political histories, our analysis has illuminated common themes and critical divergences that speak to broader questions about environmental education in the Anthropocene.

In both cases, local place emerged not merely as a backdrop to education, but as a key force that informs what is taught, how it is taught, and how it is engaged with. In Azerbaijan, environmental education was often delivered through indirect and decontextualised pedagogies, shaped by curriculum structures and legacies of centralised educational systems. Despite being situated in one of the most environmentally degraded areas of the country, local ecological realities were described as being integrated into classroom learning by teachers. By contrast, in the Galápagos, place was a central feature of environmental education. Children articulated strong emotional and ecological attachments to their environment, with teaching practices, both informal and formal, often being explicitly grounded in local knowledge and experience. However, even here, tensions arose as adult agendas sometimes shaped education in ways that did not fully reflect the ecocentrism and environmental perspectives of local youth communities or the stated local and national goals for conservation and environmental awareness.

Across both settings we identified three key themes—pedagogy, action, and attachment—that illustrate the complex interplay between environmental education and place. Pedagogy was shaped by structural conditions and teachers' personal beliefs; opportunities for action were unequally distributed, ranging from community-embedded practices in the Galápagos to symbolic initiatives in Azerbaijan; and attachment to place, while strong in both contexts, was expressed through very different emotional registers—from pride and care to nostalgia and exhaustion. Each study presented perceptions and observations with and from two distinct groups of participants: adults (teachers) and children (students). While there are differences between this combination of participants and the design of a more strictly comparative methodology, bringing findings from two distinct groups into conversation has generated important insights into environmental education *in places*.

These findings reinforce calls for more place-responsive approaches to environmental education—ones that attend not only to local ecological specifics, but also to cultural, political, and affective geographies (Ford et al., 2016; Häggström & Schmidt, 2020; Livingstone, 2003). They also highlight the importance of supporting teachers in developing curriculum and pedagogy in ways that relate to the environments in which they live and work, engaging more deeply with the emotional,

ethical, and political entanglements that shape lived experiences of place—and which also contribute to the production of these places. The act of thinking across these two places has offered insights into how environmental education can both reflect and reproduce spatial inequalities, prompting questions about justice, equity and the role of environmental education in producing—rather than only reproducing—imaginative geographies of place.

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