

INTRODUCING CHILDREN TO THE ENVIRONMENT AND FORMING THE CONCEPT OF SAVING WATER RESOURCES AND PROTECTING THE ENVIRONMENT IN A PRESCHOOL EDUCATIONAL ORGANIZATION

Orifkhujaeva Mokhirakhon Bakhromho'ja kizi

1st year student of the master's degree program in preschool education at the
Nizami National Pedagogical University of Uzbekistan

Dilnoza Nazarova Eraliyevna

Nizami National Pedagogical University of Uzbekistan
Associate Professor of the Department of History, Doctor of
Philosophy in Historical Sciences (PhD)

Abstract: This article explores the critical pedagogical imperatives for integrating environmental education into preschool educational organizations (PEOs). It focuses on the formative years as the ideal period to cultivate foundational pro-environmental attitudes, specifically targeting the conservation of water resources and broader ecological protection. The discussion synthesizes constructivist and socio-cultural learning theories to advocate for a holistic, play-based, and experiential approach. This model moves beyond simple instruction, emphasizing the PEO's role as a "living curriculum" where daily routines, teacher modeling, and place-based learning transform abstract concepts like water scarcity and conservation into tangible, actionable habits. This early intervention is presented as essential for fostering a generation of ecologically literate and responsible citizens.

Keywords: Early childhood education, environmental education, preschool, education for sustainability (EfS), water conservation, pro-environmental behavior, ecological literacy, play-based pedagogy, teacher modeling, place-based learning.

The preschool years, spanning roughly ages three to six, represent a profound period of cognitive, social, and ethical development. It is during this formative window that children construct their foundational understanding of the world, their relationships with others, and their own sense of agency. In an era defined by pressing ecological crises, from water scarcity to climate change, the role of the preschool educational organization (PEO) must extend beyond traditional literacy and numeracy to include the cultivation of **ecological literacy** and **pro-environmental dispositions**. The challenge, as noted by researchers like Davis (2009), has been that early childhood education for sustainability (ECEfS) has often been a "research 'hole'," overlooked in favor of interventions with older children. Yet, it is in these early settings that the habits of mind and behavior are most pliantly shaped. Introducing young children to the environment is not merely about teaching them to name plants and animals; it is a holistic process of fostering connection, empathy, and a deep-seated understanding of interdependence. This article argues that by integrating concrete practices for water conservation and general environmental protection into the daily fabric of the PEO, educators can effectively instill a lifelong ethic of stewardship.

The pedagogical foundation for this work must be developmentally appropriate, grounding abstract concepts in the tangible, immediate world of the child. Young children are **constructivist learners**; they build knowledge through direct, sensory interaction with their environment. Therefore, abstract warnings about global water shortages are meaningless. The concept of water conservation must be made concrete and experiential. Research supports that

even complex pro-environmental concepts are not "too hard" for preschoolers if presented through direct, hands-on activities rather than as socially desired rules (Kos, Jerman, Anžlovar, & Torkar, 2016). This means embedding conservation into the most routine parts of the day. For example, the simple act of handwashing becomes a pedagogical opportunity. Instead of a generic "don't waste water," the educator can guide the children to turn off the tap *while* they are scrubbing with soap. This can be supported by visual cues, such as a picture of a plant waiting for the water they are saving, or by using a timer to create a playful challenge. This direct, cause-and-effect action links the child's behavior to an immediate, positive outcome, forming a tangible mental model of what "saving" water actually means.

Successfully fostering this specific awareness of water as a precious, finite resource requires a multi-sensory and inquisitive approach. The pedagogy of water conservation in the PEO should focus on making water "visible." Children can engage in activities where they measure the water needed for a classroom plant, comparing it to the water captured in a basin during handwashing. They can experiment with a dripping tap, placing a cup underneath it to visualize how "just a little drip" becomes a lot of water over time. Poursanidou et al. (2024) emphasize the importance of developing valid scales to even measure this water-saving awareness in preschoolers, confirming that it is a distinct and observable competency. This competency is built through play. Water tables, often seen as purely sensory play, can become sites of intentional learning. Educators can introduce challenges, such as moving water from one basin to another using only sponges, forcing children to value every drop they absorb and squeeze. Furthermore, integrating the water cycle through storytelling and art—discussing where rain comes from, where the drain leads, and why the plants in the garden need a drink—connects their personal use of the tap to the wider environmental system they inhabit.

This specific focus on water serves as a powerful gateway to the broader concept of environmental protection. The core principle being taught is not just about water; it is about respect for resources and an understanding of interconnected systems. This philosophy is most effectively implemented through a **place-based educational model**, where the immediate surroundings of the PEO—the garden, a nearby park, or even the weeds growing in a crack in the pavement—become the primary classroom. Boyd (2019) highlights how place-based learning empowers children as "agents of change" within their own local contexts. When children are involved in planting a small garden, they learn firsthand about the resources (soil, sun, and water) that life requires. When they participate in composting food scraps from snack time, they see the "waste" transform into "food" for the garden, closing the loop of consumption. This approach directly counters an abstract, decontextualized environmentalism and instead builds a strong sense of emotional connection and responsibility to a specific, tangible place.

The formation of these pro-environmental attitudes is inextricably linked to the affective domain—a child's sense of wonder, empathy, and connection to the natural world. This is where general environmental protection moves beyond resource management and becomes an ethical stance. Foundational research by Chawla (2007) has shown that significant life experiences in nature, often guided by a trusted adult role model, are the most common predictors of adult environmental activism. The PEO must therefore prioritize frequent, unstructured, and positive interactions with nature. This involves more than a structured "nature walk"; it means allowing children to get muddy, to observe insects without fear, to lie in the grass, and to experience the weather. The educator's role in this process is paramount. They must model curiosity and respect, rather than fear or indifference. An educator who pauses to gently observe a spider, rather than sweeping it away, teaches a more profound lesson about biodiversity than any poster could. This affective connection is the precursor to protective

behaviors; children will not save what they do not love, and they will not love what they have not been allowed to experience.

Ultimately, for any of these pedagogical strategies to be effective, the PEO must function as a **whole-center ecosystem** dedicated to sustainability. It cannot be a single "Earth Day" activity or one teacher's pet project. Research comparing preschools with and without dedicated "eco-programs" demonstrates that a systemic, integrated approach achieves far greater learning outcomes in education for sustainability (Lepičnik Vodopivec & Šindić, 2025). This means the PEO's policies, physical environment, and community culture must all align. The environment itself becomes the "third teacher." Are there recycling and compost bins that are accessible to children? Does the center itself practice water conservation with rainwater collection barrels or dual-flush toilets? Are cleaning supplies eco-friendly? Furthermore, this commitment must be modeled by all staff, from the director to the cook, and must actively involve parents. When children see that the adults in their lives are collaborating and taking these actions seriously, the behaviors are validated and normalized, transforming from "school rules" into "community values."

In conclusion, the preschool educational organization holds a profound responsibility and a unique opportunity to shape the ecological consciousness of the next generation. By strategically moving away from abstract, instruction-based methods and toward an integrated, play-based, and experiential pedagogy, educators can successfully embed the concepts of water conservation and environmental protection. This approach, which relies on constructivist learning, fostering affective connections to nature, and adopting a whole-center commitment to sustainability, is not an add-on to the curriculum but a fundamental component of 21st-century early childhood education. It redefines the purpose of the PEO as a place that cultivates not only a child's mind but also their conscience. By teaching a four-year-old to turn off the tap, we are not just saving water; we are planting the seeds of a resilient, responsible, and hopeful future, ensuring that when they inherit the environmental challenges ahead, they do so with a deeply ingrained disposition of care and a powerful sense of their own agency.

References:

1. Boyd, D. (2019). Utilising place-based learning through local contexts to develop agents of change in Early Childhood Education for Sustainability. *Education 3-13*, 47(8), 983-997. <https://doi.org/10.1080/03004279.2018.1556358>
2. Chawla, L. (2007). Childhood experiences associated with care for the natural world: A theoretical framework for empirical results. *Children, Youth and Environments*, 17(4), 144-170. <https://doi.org/10.7721/chilyoutenvi.17.4.0144>
3. Davis, J. M. (2009). Revealing the research 'hole' of early childhood education for sustainability: A preliminary survey of the literature. *Environmental Education Research*, 15(2), 227-241. <https://doi.org/10.1080/13504620802710607>
4. Edwards, S., & Cutter-Mackenzie, A. (2013). Pedagogical play types: What do they suggest for learning about sustainability in early childhood education? *International Journal of Early Childhood*, 45(3), 327-346. <https://doi.org/10.1007/s13158-013-0082-5>
5. Kos, M., Jerman, J., Anžlovar, U., & Torkar, G. (2016). Preschool children's understanding of pro-environmental behaviours: Is it too hard for them? *International Journal of Environmental and Science Education*, 11(12), 5554-5571.
6. Lepičnik Vodopivec, J., & Šindić, A. (2025). Early childhood education for sustainability in preschools with eco-programs: Implementation and learning outcomes. *Journal of Baltic Science Education*, 24(1), 133-148.