

Education and Pro-Environmental Behaviour: The Role of the Educated Person in Environmental Sustainability

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Abstract

In an era of growing environmental challenges, the responsibility of the educated person has never been more critical. This position paper investigates the vital role education plays in fostering pro-environmental behaviour (PEB) and promoting environmental sustainability, through the lens of Eco-Critical Pedagogy. The global environmental crisis has sparked renewed interest in how educational attainment influences sustainable lifestyle choices. This paper argues that education formal, informal, and non-formal empowers individuals to understand environmental issues, critique unsustainable systems, and engage in transformative actions. Through ecological literacy, ethical reasoning, and active eco-citizenship, educated individuals serve as key agents in challenging dominant exploitative paradigms and shaping a just, sustainable future. Eco-Critical Pedagogy for the educated person, eco-critical pedagogy offers a powerful role: not merely as an informed citizen, but as a critical thinker, ethical actor, and environmental advocate. By confronting dominant ideologies and reimagining sustainable futures, the educated individual becomes instrumental in reshaping public discourse and environmental policy. In essence, eco-critical pedagogy empowers education to function not just as a transmission of environmental knowledge, but as a tool for liberation, restoration, and ecological justice.

The paper outlines the multiple roles the educated person can play as a change agent, advocate, professional influencer, and ethical steward and offers recommendations to strengthen their impact at the personal, community, and policy levels. It concludes by advocating for a radical shift in education systems toward critical, justice-driven, and ecologically grounded learning that empowers learners to participate meaningfully in sustainability and environmental transformation.

Keywords: Eco-Critical Pedagogy, Pro-Environmental Behaviour, Environmental Sustainability, Environmental Education, Educated Person

Introduction

The Earth faces increasing threats from climate change, pollution, deforestation, and biodiversity loss. While global institutions and scientific advancements are vital, sustainable change ultimately depends on human choices and behavior. This paper takes the position that an educated person has a pivotal role in environmental management, as education fosters the critical thinking, values, and knowledge needed to respond effectively to sustainability challenges.

The 21st century has witnessed unprecedented environmental challenges rising global temperatures, biodiversity loss, air and water pollution, and deforestation. These issues are not merely ecological but also social, economic, and political. The global urgency to mitigate these crises has highlighted the indispensable role of education in driving behavioural change and fostering sustainability. While policies and technologies are essential, the real shift lies in human behaviour.

Education is more than a transmission of facts; it is a transformative process that molds attitudes, values, and behaviours. Educated individuals are expected to act not just as passive receivers of information but as proactive, conscious agents capable of making informed and ethical environmental decisions. Osuji, C. U., & Nwuke, T. J. (2024) concluded that the promotion of environmental literacy is more than an educational initiative; it is a catalyst for positive change. It empowers individuals to make informed decisions, nurtures a commitment to sustainable practices, and inspires collective efforts toward global environmental stewardship. By investing in environmental literacy, societies lay the groundwork for a generation capable of navigating complex environmental issues, fostering resilience, and contributing meaningfully to a more sustainable, equitable, and harmonious world.

Education is widely recognized as a foundational pillar of sustainable development, playing a critical role in shaping individual and collective awareness, values, and behaviors towards the environment. In line with global frameworks like the United Nations' Sustainable Development Goals (SDGs), particularly SDG 4.7, education is expected to equip individuals with the knowledge and skills necessary to foster sustainability.

Roles of the Educated Person in Environmental Sustainability

1. Knowledge Disseminator

Educated individuals are often the first point of contact for disseminating accurate environmental information within their communities. Whether through teaching, writing, or informal discussions, they help others understand the causes and consequences of environmental issues. They also challenge misinformation and promote scientific understanding.

2. Critical Thinker and Problem Solver

With access to scientific and analytical tools, educated persons are equipped to interpret environmental data, identify problems, and evaluate solutions. They contribute to research, policy development, and innovation that promote sustainable development. Critical thinking also enables them to recognize greenwashing and advocate for authentic sustainability initiatives.

3. Ethical Role Model

Education cultivates ethical reasoning and empathy for nature. An educated individual internalizes environmental ethics, acting responsibly not just out of compliance but out of conviction. By making sustainable choices in daily life such as reducing consumption, supporting fair-trade products, and conserving resources they model sustainable living.

4. Civic Participant

Educated individuals are more likely to engage in civic actions voting for green policies, participating in environmental campaigns, and holding leaders accountable. Their participation strengthens democratic governance in environmental matters. They also facilitate community mobilization for environmental clean-up and conservation programs.

5. Professional Influencer

In every sector health, engineering, law, business educated professionals shape decisions that impact the environment. A sustainable mindset can influence everything from product design to waste management. In the education sector, teachers act as multipliers of sustainability knowledge.

6. Change Agent

Educated persons often initiate or lead community-based environmental projects such as tree planting, clean-ups, or advocacy campaigns. Their education enables them to mobilize

resources and people effectively. They are also more likely to collaborate across sectors to develop innovative, localized solutions to environmental problems.

Theoretical Framework: Eco-Critical Pedagogy: A Theoretical Lens

Eco-Critical Pedagogy is an educational framework that integrates ecological consciousness with the critical tradition of pedagogy. Emerging from the foundational ideas of Paulo Freire's critical pedagogy and the environmental urgency underscored by ecocriticism, eco-critical pedagogy challenges both environmental degradation and the systems of power that sustain it. It goes beyond simply teaching about the environment it seeks to transform learners into conscious agents who are capable of questioning and changing unsustainable human-nature relationships.

At the heart of eco-critical pedagogy is the belief that environmental crises are not just scientific or technological issues, but also moral, political, and cultural challenges. Therefore, education must not be neutral; it must equip learners with the critical tools to examine the root causes of environmental injustice such as colonialism, capitalism, and industrialism while also nurturing a deep sense of ecological empathy. This approach is particularly effective in cultivating pro-environmental behaviour because it connects the personal with the political, and theory with action.

Eco-critical pedagogy emphasizes dialogue, reflection, and ecological action. It encourages place-based learning, intergenerational knowledge-sharing, and the inclusion of indigenous ecological wisdom. Learners are taught to see themselves as part of nature—not apart from it thus fostering a biocentric or ecocentric worldview. This paradigm shift is crucial for developing educational strategies that influence behaviour not just at the level of individual habits, but within wider community and societal systems.

For the educated person, eco-critical pedagogy offers a powerful role: not merely as an informed citizen, but as a critical thinker, ethical actor, and environmental advocate. By confronting dominant ideologies and reimagining sustainable futures, the educated individual becomes instrumental in reshaping public discourse and environmental policy. In essence, eco-critical pedagogy empowers education to function not just as a transmission of environmental knowledge, but as a tool for liberation, restoration, and ecological justice.

Literature Review

Research consistently shows a strong correlation between educational attainment and environmentally responsible behaviour. For example, Kollmuss and Agyeman (2002) argue that environmental knowledge and awareness are necessary but not sufficient conditions for

pro-environmental action. Instead, they suggest that education must also target values, emotional engagement, and behavioural intent.

A study by OECD (2012) indicates that individuals with higher levels of education are more likely to recycle, reduce water and energy consumption, and support environmental policies. According to Boeve-de Pauw (2015), environmental education contributes significantly to pro-environmental behaviour when integrated into formal curricula and contextualized within students' social realities. Education enhances environmental literacy the ability to understand environmental issues and respond accordingly (UNESCO, 2017). This literacy is crucial for developing critical thinking skills that allow individuals to analyze environmental issues and take appropriate action.

Leicht (2018) opined that educators trained in Education for Sustainable Development (ESD) are more likely to inspire students to adopt sustainable practices and become agents of change in their communities. A UNESCO report (2020) emphasized that education for sustainable development (ESD) helps learners develop the knowledge, skills, values, and attitudes needed for a sustainable future. It highlighted the importance of participatory methods and interdisciplinary learning, which enable students to critically evaluate environmental issues and propose sustainable actions.

Olsson (2021) buttressed that young adults who received environmental education during their formative years are more likely to engage in sustainable lifestyle practices, such as energy conservation, ethical consumerism, and ecological activism. These findings point to a long-term impact of education on environmental consciousness and action.

Furthermore, Sterling (2023) argued that transformative learning approaches that focus on ecological citizenship are essential for addressing climate change and biodiversity loss. They advocate for an education system that moves beyond rote learning to foster critical reflection, systems thinking, and environmental empathy.

The integration of sustainability principles into teacher training programs has also proven effective.

Recent studies between 2015 and 2025 have established stronger links between education and pro-environmental behavior, underscoring the role of cognitive engagement and moral development.

Globally, education has been instrumental in promoting environmental awareness and action. Programs such as UNESCO's Education for Sustainable Development (ESD) framework provide guidelines for integrating sustainability into education systems across all levels. These efforts are grounded in the belief that knowledge empowers individuals to make informed decisions, adopt eco-friendly behaviors, and advocate for systemic change. Numerous studies have shown that higher educational attainment is correlated with increased environmental concern, support for climate policies, and adoption of sustainable practices such as recycling, energy conservation, and reduced consumption.

In countries like Finland, Germany, and Costa Rica, national curricula explicitly incorporate environmental themes, leading to heightened environmental literacy among students. These nations have also implemented sustainability practices within schools, such as eco-certifications, green campuses, and energy-efficient infrastructure. However, disparities in access, quality, and curriculum integration persist across different regions and socio-economic groups. For instance, in many developing countries, limited resources and competing educational priorities often result in environmental topics being marginalized or treated as optional. This affects the uniformity and effectiveness of educational impact on sustainability, highlighting the need for targeted investments and policy reforms.

In Nigeria, the role of education in promoting environmental sustainability is gaining increasing recognition. National policies such as the Universal Basic Education (UBE) Act and the National Policy on Environment emphasize the integration of environmental education into the school system. At the tertiary level, Nigerian universities have introduced courses on climate change, environmental management, and sustainable development. Initiatives like campus recycling programs and environmental awareness clubs are also becoming more common.

At the primary and secondary levels, environmental education serves as the foundation for developing environmental literacy. Early exposure to environmental concepts helps children develop a sense of responsibility and connection to the natural world. Approaches such as project-based learning, outdoor education, and eco-clubs have been shown to significantly enhance students' understanding of environmental issues. In countries like Kenya and South Africa, integrating environmental themes into science and social studies curricula has led to measurable improvements in students' attitudes and behaviors.

In Nigeria, practical initiatives such as school gardens, waste segregation programs, and community clean-up campaigns have demonstrated the potential of hands-on learning to

foster sustainable behaviors. However, these initiatives often depend on the enthusiasm of individual teachers or external funding, making them difficult to scale or sustain.

At the tertiary level, universities play a dual role in knowledge creation and dissemination. Nigerian universities such as the University of Lagos and Obafemi Awolowo University offer degree programs in environmental science, engineering, and policy. These institutions also engage in research, community outreach, and policy advocacy. Higher education fosters specialized knowledge, critical thinking, and leadership skills, enabling students to contribute to environmental problem-solving and innovation.

Informal education, including public awareness campaigns, community workshops, and NGO-led initiatives, complements formal schooling by reaching broader segments of the population. Radio and television programs, social media campaigns, and religious organizations play important roles in shaping environmental attitudes and behaviors. For example, environmental NGOs in Nigeria have conducted campaigns on waste management, tree planting, and climate adaptation that have reached thousands of people in both urban and rural areas.

Conclusion

Environmental sustainability requires not only structural reforms but also human transformation. The educated person stands at the intersection of knowledge, ethics, and action. By fostering ecological literacy, leading by example, and engaging with their communities, educated individuals can help ensure a sustainable future for generations to come. This paper calls on educational institutions, governments, and civil society to empower educated people with the tools, platforms, and responsibilities to manage the environment wisely.

This is fundamentally a human issue, requiring behavioral and attitudinal change. Education serves as the catalyst for this transformation. The educated person, armed with knowledge, skills, and values, becomes a steward of the Earth. For environmental sustainability to become a reality, education systems must be reimagined to inspire, empower, and mobilize individuals for lifelong ecological responsibility.

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