

LEAVING NO ONE BEHIND IN ENVIRONMENTAL EDUCATION

POLICY PAPER

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Leaving no one behind in environmental education



Investing in inclusive environmental education programmes and practices is vital to overcome barriers (physical, systemic and digital) to environmental education and promote climate justice.

This policy report focuses on ensuring inclusion and accessibility in environmental education, aiming to leave no one behind in environmental education. This policy paper targets both policymakers and educators and instructors, with recommendations for both groups provided below. Inclusion is a multidimensional concept that refers to the practice of making spaces, both physical and digital, open to a diverse range of people from different backgrounds, identities and abilities (see United Nations, 2016). Within the context of environmental education, inclusion refers to the ability of students and educators to be able to access and understand information, educational resources and programmes on and about the environment, regardless of format (physical or digital). The key to achieving inclusion lies in ensuring the accessibility and usability of the materials, tools and educational programmes developed.

Accessibility refers to the extent to which a product or service can be used by a diverse range of people to achieve a specified goal in a specific context (ISO 26800, ISO/TR 9241-100, and ISO/TR2241). “Usability” refers to the combination of the effectiveness, efficiency and satisfaction with which specified users achieve specified goals in particular environments (ISO 9241-11 standard, 2018). Tied to the concept of usability is the principle of Universal Design, which refers to the design of products, environments, programmes and services that are usable by everyone, to the greatest extent possible, without the need for adaptation or specialised design. Universal Design does not exclude assistive devices for particular groups or persons with disabilities where necessary.





Why is inclusion and accessibility vital for environmental education?

- Environmental education has come to be recognised as a pragmatic response to the issues posed by the environmental crisis (Padmanabhan et al., 2017, p.722) and has taken shape against the backdrop of increased political initiatives to promote climate resilience with the full participation of all, including those from a diverse range of background, abilities and identities (United Nations Committee for Development Policy, 2018).
- The United Nations (UN) foregrounded the importance of education in combating the adverse effects of the environmental crisis in their Decade of Education for Sustainable Development initiative in which they emphasised the role of education in changing behaviours (see also Buckler & Creech, 2014).
- Tied to this aim is the desire for environmental education to be available to all, irrespective of age, sex, disability, ethnicity, religion, economic or social status (see United Nations' Sustainability Goals 4.5, 2015).
- This emphasis on inclusivity and diversity is particularly crucial because the effects of climate change are not uniformly felt across and within societies.
- Social disparity plays a significant role in amplifying climate vulnerability, particularly for those from lower socioeconomic backgrounds and those with disabilities. Currently, an estimated 15% of the global population has a disability (World Health Organisation), with people with disabilities “disproportionately vulnerable to natural hazards primarily as a consequence of social disadvantage, poverty and structural exclusion” (Hemingway & Priestly 2014: 8).
- Enabling people to make informed decisions about the development and conservation of their environment through inclusive environmental education is key to addressing the challenges of the climate crisis (Boyes & Stanisstreet, 2012, Sunassee et al. 2021)



Recommendations for policymakers to support inclusion in environmental education

- **Funding and resources:** Allocate specific grants for developing educational materials and training programmes that ensure accessible and inclusive environmental education. Funding is often a major barrier to implementing inclusive practices, as specialised materials and programmes can be costly. Research shows that targeted financial support can facilitate significant advancements in educational inclusivity and accessibility (Armstrong et al., 2011).
- **Training programmes:** Invest in training opportunities that equip educators and instructors with the skills to incorporate inclusive and accessible practices in their teaching and educational materials.
- **Curriculum guidelines:** Establish clear guidelines that embed inclusivity into the environmental education curriculum at primary, secondary and third level.
- **Mandatory accessible environmental education:** Introduce compulsory accessible environmental education at primary and secondary level, tailoring it to the needs of students.
- **Community partnerships:** Encourage partnerships between schools, higher educational institutions and local communities to co-create spaces of dialogue and exchange.
- **Partnerships with organisations dedicated to diversity and inclusion:** Encourage partnerships between schools, higher educational institutions and organisations dedicated to improving diversity and inclusion of marginalised groups.
- **Technology and accessibility:** Ensure that digital educational tools are accessible to all students, including those with disabilities, offering them in multiple formats including digital, audio and braille. Learning materials should also be easy to read.

Example:

The European Accessibility Act (2019) is a reference document for accessibility, which can be accessed [here](#).






Recommendations for educators and instructors

Educators design curricula, while instructors deliver the teaching. We recognise that these roles may sometimes overlap. Therefore, the following recommendations are aimed at both educators and instructors.

- **Ensure accessibility in the classroom:** Ensure that all physical and digital learning environments are accessible to students and educators with disabilities. This includes classrooms, educational materials, and online resources that comply with international accessibility standards. Schools should ensure their facilities, including classrooms and outdoor areas, comply with the European Accessibility Act, featuring wheelchair-accessible pathways and accommodating classroom designs to support various mobility and sensory needs. Likewise, digital resources need to conform to the European Standard EN 301 549 on “Accessibility requirements for ICT products and services” and Web Content Accessibility Guidelines (WCAG). This includes optimising online materials with alternative text for images, video captions, and keyboard-navigable websites, ensuring that students with visual, auditory, or motor impairments have equal access to educational content.
- **Include climate justice awareness:** Incorporating climate justice into environmental education involves highlighting how climate change disproportionately affects the world’s most vulnerable groups. It is crucial to raise awareness of the diverse impacts on different communities and to emphasise the importance of avoiding generalisations. Studies by Mohai et al. (2009) and Sultana (2022) illustrate how environmental challenges have historically impacted marginalised communities. Recognising these disparities supports a comprehensive understanding of climate issues.
- **Address climate anxiety:** Research highlights the prevalence of climate anxiety among young people and the need for educational strategies to address it (Hickman et al., 2021; Marks et al., 2021; Kurth & Pihkala, 2022). The curriculum should include elements that help students understand and manage climate-related anxiety. Positive actions and coping strategies can empower students to deal with their concerns constructively.

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- **Monitor and evaluate:** Implement regular assessments of educational programmes to ensure they meet inclusivity goals (Sibanda & Mathwasa, 2020). Feedback mechanisms should be in place to assess the effectiveness of accessibility measures, gathering feedback from students, parents and educators to suggest improvement

Example:

This book chapter presents a case study of integrating emerging technologies to promote accessibility and sustainability in the classroom: McDonagh, Sarah, and Marta Brescia Zapata. 2023. 'Combining XR, Accessibility, and Sustainability in the Classroom: Results of an Exploratory Study'. In Bridging the XR Technology-to-Practice Gap, 67–79. AACE2023.

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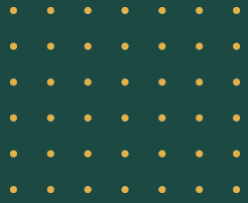
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