



EDUCATION

The biodiversity and climate emergency that our planet is facing, is driven by our inherently unsustainable practices. One of the major root causes of these problems is human behaviour, which is something we need to address in order to transition towards the 2050 vision of “living in harmony with nature.” Education has been identified as an important aspect in this transition¹, and a means of ensuring this behavioural change². While education has always been at the core of most proposed global goals and actions³, the importance of environmental education remains under-emphasised. According to the IPBES Global Assessment, global funds and investment into environmental education from the period of 2010-2020 has been decreasing.⁴

The effects of environmental education are known – it supports people in gaining knowledge, harbouring pro-environmental attitudes and behaviours^{4,5}, as well as equipping communities to deal with the present and future challenges of the biodiversity and climate emergency.^{4,5} It is also essential in forming a society of informed, aware and active citizens who can create awareness, enable discussion and inspire positive change⁶. Alongside education, meaningful childhood experiences in nature are an important step in shaping conscious and empathetic human beings⁴. Positive relationships with nature need not be restricted to childhood learning, and can also be facilitated and enhanced throughout one’s life, showing the importance of lifelong learning^{4,6}. This policy brief highlights the key role of biodiversity and environmental education in our society.

Global and regional calls for environmental education

Sustainable Development Goals (SDGs)

SDG 4, which focuses on Quality Education lacks clear targets which link it with nature or nature’s contributions to people. Such relationships have been identified as complex, and they are not captured in targets and indicators, despite the increasing amount of research and evidence. SDG Target 4.7 states “By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable

development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development.” Under the SDGs, this target is the only one which mentions sustainable development, thus showing that there is an underrepresentation of positive linkages between nature and education. These linkages range from well-known impacts such as shaping of values, skills and knowledge; to the lesser known effects of being able to access (urban) green spaces on cognitive and mental health^{4,5}.

Furthermore, the relationships between the Goals on education and environment fail to be captured in SDG 14 (life under water) and SDG 15 (life on land), with no targets or indicators which report on positive human-nature relationships, or the ways in which education can tackle environmental challenges.

The Post-2020 Global Biodiversity Framework

Although the first draft of the Post-2020 Global Biodiversity Framework mentions the importance of education in Target 20 “*Ensure that relevant knowledge, including the traditional knowledge, innovations and practices of indigenous peoples and local communities with their free, prior, and informed consent, guides decision-making for the effective management of biodiversity, enabling monitoring, and by promoting awareness, education and research.*”, there has been criticism that education is inadequately reflected in this framework¹³.

EU Biodiversity Strategy

The European Union Biodiversity Strategy for 2030⁷, section 3.3.4 acknowledges the importance of environmental education across all learning institutions, and the importance of investing in research, innovation and knowledge exchange. The Action Agenda proposes a Council Recommendation on encouraging cooperation in education for environmental sustainability in 2021. However, we as GYBN Europe believe that this is too broad. Throughout this policy brief, the specific

areas that we believe need more attention and implementation at the EU level are highlighted.

There is an urgent need for action from European policy makers, educational institutions, and the private sector to take responsibility by recognizing the importance of environmental education, and mainstreaming lifelong environmental education in all aspects of our life. This includes encouraging and supporting youth to create or participate in the creation of environmental initiatives for education, as well as concrete measures and targets on transformative education with clear action steps. GYBN Europe therefore highlights the following four priorities which require concrete actions:

Formal education: Through a restructuring of the formal educational system, students at all levels (primary, secondary and tertiary) must be equipped with sufficient knowledge about environmental issues. They should also be able to access resources ensuring they make conscious choices by understanding the benefits of living sustainably, and empower long-lasting lifestyle changes through education. A stronger focus is also required on their educational curricula, which must incorporate environmental and social justice issues across courses, levels and disciplines ⁸⁹.

Non-formal and informal education: The importance of positive experiences and relationships with nature can foster pro-environmental attitudes in people⁴. Thus, engagement with nature through informal and recreational educational activities is essential to inspire people of all ages to lead sustainable lifestyles and value nature for lifelong learning.

Sustainability of educational institutions: Educational institutions should be required to become carbon neutral and follow principles of no-harm towards biodiversity⁸. Retrofitting and making educational institutions environmentally sustainable provides a great opportunity for environmental education⁶. Incorporating this process into the learning curriculum and connecting people with their built surroundings can build engagement and provide case-based experience.

Engagement of educational institutions with local communities: Educational institutions go beyond the roles that they play in the education of students, towards influencing the communities around them. Thus, they need to claim a larger role in engagement with local communities in order to raise awareness, combat misinformation, promote sustainable solutions and empower local citizens to take action.

Through education, we are provided with an opportunity to reform our connection with nature. It is therefore important that we translate this into actions which can be implemented across Europe. Throughout this policy brief, we as GYBN Europe have highlighted the core components of education which we believe require focus, and have provided recommendations on how to tackle these issues. While we understand the challenges of doing so, we also recognise that we must all work together so that we can “live in harmony with nature.”

An action plan for education

At the European level, the recommendations of this brief should be considered in the work and strategies of the EU. This includes the work of the EU Commission's Directorate General for Education and Culture (DG EAC), the European Parliament's Committee on Culture and Education (CULT), and the Education, Youth, Culture and Sport Council (EYCS). It includes EU-funded programmes, such as Erasmus+ and Horizon Europe. Furthermore, these recommendations should be also considered in the work of the Council of Europe (CoE) and the European Higher Education Area (EHEA).

We wish to see comprehensive and ambitious European strategies on environmental education and institutions' responsibilities in the current climate and biodiversity crises. We wish to see these designed and implemented at EU, CoE and EHEA level; and we wish these to be developed with full and equal participation of all relevant stakeholders, including students and pupils.

Cooperation between European countries to support best practices sharing should be strengthened through the creation of a dedicated

online database. At the national level, national and local strategies on education should consider these recommendations. This includes in the work towards implementation of the Post-2020 Global Biodiversity Framework, and the development of concrete targets on transformative education, with clear action steps. At the institutional level, education institutions should actively consider and implement the points put forward by this briefing.

GYBN Europe priorities

Addressing formal education

Educational modules and programmes must be revised and reformulated to integrate environmentally relevant content, across all disciplines and all levels of formal education⁸. This is an important step, which should go beyond science-based subjects to include biological and cultural diversity, social justice, and reflect norms of intersectional environmentalism. Additionally, multidisciplinary approaches and project-based education must also be promoted⁹. This should be done with meaningful involvement of students and teacher representatives.

The staff of educational institutions must also be provided adequate and relevant training on the biodiversity and climate emergency, and must be provided with teaching resources for all levels of education. Along with this, staff must also be trained to identify, help and support students facing eco-anxiety⁶.

The level of support to educational institutions, including funding and investment from states must be made higher, and specifically directed towards environmental research^{4,8}. This is necessary so as to up-scale the level of research and innovation, training, and capacity-building on matters of nature and biodiversity-related areas. This is important especially for higher education institutions, but investments must also be made to support environmental programmes of primary and secondary education.

Lastly, formal education must make it a priority to advocate for accessibility and transparency of research, as well as its effective communication. This includes free flow and

access through active cooperation between governments, educational institutions and civil society, for e.g., enhancing citizen science programmes is one way to bridge the gap between science and civil society.

Addressing non-formal and informal education

The contributions of non-formal and informal educational activities as a means of providing exposure to people and students about environmental challenges has been identified as extremely essential, and hence requires official recognition by governments and decision-makers. Learning about the intrinsic and cultural value of nature that goes beyond nature's contributions to people and ecosystem services must be strengthened^{4,5}. This is possible through promoting value-based learning in informal environments. For example, this can be done by having programmes on nature education outdoors, to encourage students to form deep connections with nature⁹.

Furthermore, support must also be given for participating in youth organizations⁹. This can be done by providing adequate funding and supporting youth organizations at a local, regional, national and global level, as well as empowering youth as equal partners in advocating for sustainability⁸. We can ensure that students and youth engage meaningfully with nature-related topics and learn from those experiences. Such actions will also ensure engagement from parents and teachers in social and environmental action.

Another area which requires mention are international exchange and student mobility programmes. The current and future efforts of programs such as Erasmus+ to become more environmentally friendly and reduce the emissions from transport must be promoted and supported^{11,12}. This is essential in order to inculcate pro-environment and conservation attitudes in students. These programmes could, for example, also financially support students to choose environmentally-friendly means of transportation, and provide more sustainable travelling options^{11,12}.

Lastly, the importance of intergenerational learning programmes such as community

centres and citizen science groups where people advocate for biodiversity and sustainability across generations must also be promoted.

Investing in the sustainability of educational institutions

Education institutions should develop concrete local environmental action plans to function sustainably. These plans should be holistic and include all areas managed by the institutions, from ensuring energy efficient infrastructure, to providing environmentally friendly food. These action plans should be developed including teacher and student representatives. National governments should provide funding to support the institutions' implementation of these plans. These plans must be created in a transparent manner.

Education institutions should not have investments placed in stocks that are not environmentally sustainable. Institutions which do have assets in fossil fuels or other industries harmful towards biodiversity, should immediately divest these and reinvest them in sustainable projects⁸. Therefore, institutions must be provided with references and ethical guidelines for how they should reinvest, and must also have proper control mechanisms in place, paying attention to greenwashing.

Education institutions should also support student-led initiatives for promoting solutions for environmental sustainability. One example of these initiatives is the Green Office Movement¹⁰, where students are supported with office spaces and budgets to lead different awareness-raising campaigns and projects for implementation of environmentally sustainable solutions in education institutions. The Green Office Movement was first started in Maastricht University in the Netherlands, and has now spread all over Europe including Germany, Belgium, Belarus, Italy, UK and Sweden.

Educational institutions also play a key role in engaging with local communities. They must ensure that they promote active citizenship and engagement towards biodiversity conservation, carbon neutrality, and environmental justice⁸. Institutions should also engage parents, promote information campaigns about environmental sustainability, combat disinformation, participate in public projects,

while engaging with their communities to ensure that they have the necessary tools to work for a more sustainable future. Communities must also be equipped with the necessary tools to adapt to the climate crisis and the biodiversity crisis⁶. Since young people today are growing up in a world with increasing environmental challenges and difficulties, we need to be provided with the knowledge to understand how the ecological and climate crisis will affect our futures and impact our lives. Youth and communities must therefore be provided with the skills not only to live sustainably, but also be prepared on how to adapt to and mitigate the current crisis.

Finally, education institutions should support through lifelong learning initiatives the re-education of people working in professions that are unsustainable. Changing our economies to become more sustainable means that jobs in enterprises that are damaging for climate and biodiversity will become obsolete or in less demand. Education institutions need to play an important role to ensure that people that used to work in such activities and cannot do it longer can gain new skills and adapt their experience towards new and more sustainable activities. In order to transition to a sustainable future, more green training must be provided for reskilling the current workforce to aid in the smooth transition to green jobs⁶.

