Transformative Education
toward a Life in Harmony with Nature
Executive Summary

Education is a key enabler for change toward sustainability, and a powerful solution to address the environmental and social crises that society is currently facing. Young people all over the world recognize the transformative potential of education in achieving a better future. However, we also believe that current systems of education do not yet meet the needs for eliciting whole-of-society transformative change needed to live in harmony with nature.

We are therefore calling for a transformative education that fosters an active citizenry aware of their place in the web of life and their role in society, fully capable of stewarding society towards a sustainable, peaceful and equitable future in harmony with nature. Such a transformative education must be:

- An education that holistically nurtures connectedness, reciprocity, and kinship to nature
- An accessible rights-based education that is respectful, inclusive, and celebrates diversity
- A lifelong education that fosters sustainable, respectful, responsible, proactive, and critical societies
- An education that is of high quality, actively supported, and holistic in its approaches

In order to turn this vision into reality we recommend that:

- Biodiversity is integrated in formal education curricula at all levels and across all relevant subjects, not only in natural sciences.
- Teaching staff are provided holistic training on biodiversity-related matters.
- Non-formal and informal education relevant to biodiversity and sustainability is supported and its value is recognized.
- Lifelong learning and adult education take a central role, especially through re-skilling workers to redirect them to sustainable professions.
- Education institutions play a central role in their local communities through offering support, promoting engagement, and facilitating access to information on biodiversity-related matters.
- Education be culture-rooted, recognize the value of indigenous and local knowledge, and support its respectful and self-determined transmission.

We call for transformative education to be integrated and reflected in local and national education policies as well as international instruments. As GYBN, we particularly call for its inclusion in the post-2020 global biodiversity framework under negotiation through processes of the UN Convention on Biological Diversity (CBD).
We believe the Post-2020 Global Biodiversity Framework should, among other things, include more concrete and ambitious language on transformative education in its targets. In particular, we call for a standalone target on education to match the key role education can play in transformative change toward living in harmony with nature. It should also include stronger monitoring systems and ensure resource mobilisation for transformative education. We also believe that the CBD should develop a holistic strategy for transformative education, put mechanisms in place for sharing best practices on education, strengthen synergies on education with other relevant international institutions and institutions (such as UNESCO or the UNFCCC ACE), as well as meaningfully engage the education sector and strengthen collaboration with education-related government institutions.

This document elaborates our community’s perspectives on transformative education and how we can make it a reality on the ground and through policy.

About the Global Youth Biodiversity Network (GYBN)

Created in 2010, the Global Youth Biodiversity Network (GYBN) is a network of individuals and youth organizations from around the world whose common goal is to prevent and halt the loss of biodiversity. The network encompasses 558 member organizations from 172 countries and 43 national and regional chapters, representing a total of 1.2 million members.

GYBN is the international coordination platform for youth participation under the United Nations Convention on Biological Diversity (CBD) and is committed to bring young people’s perspectives and positions into the negotiations so that they are heard and taken into consideration. GYBN promotes and facilitates collaboration between youth from diverse backgrounds in order to build a stronger and unified voice to advocate for the rights of future generations within the biodiversity policy arena. GYBN seeks to inspire global youth and future leaders to lead society towards the sustainable use and conservation of biodiversity.
Introduction

In our capacity as the international coordination platform for youth participation in the UN Convention on Biological Diversity (CBD), the Global Youth Biodiversity Network (GYBN) has organized several rounds of youth consultations both at the national, regional and international levels, involving young people active on biodiversity issues from over 130 countries.

Transformative Education has emerged as a core priority for young people in their vision for the future. This document aims to provide some perspectives of young people on Transformative education and its role in fostering the transformative change needed for a future in harmony with nature. This policy brief was prepared and consolidated by members of GYBN’s Transformative Education Task Force, and is the product of the aforementioned youth consultations conducted by our community on biodiversity and the post-2020 global biodiversity framework, as well as a Global Youth Consultation on Transformative Education conducted online on January 31, 2021.

What is transformative education?

Transformative Education refers to diverse education and learning approaches that foster an active citizenry aware of their place in the web of life and their role in society, fully capable of stewarding society towards a sustainable, peaceful and equitable future in harmony with nature.
Why do we need transformative education?

- Societal values, principles and beliefs, influenced by historical and systemic inequalities, are driving our behaviors and shaping our economies, policies, institutions and practices in an unsustainable and unequal manner. This is resulting in an unprecedented global social-ecological crisis of our own making—manifesting in, among others, widespread pollution, climate change, global pandemics, and loss of the biodiversity and cultural diversity underpinning our survival and well-being.

- The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), as well as other experts worldwide are calling for Transformative Change—a fundamental, system-wide, strategic reorganization across technological, economic and social factors towards sustainability—in order to revert this social-ecological crisis and pursue a sustainable and just future in harmony with nature.

- Education has been identified by IPBES as a key leverage point to enable this much needed transformative change. Education is in fact a key enabler toward sustainability, playing a fundamental role in shaping values, behaviors and transmitting knowledge and capabilities. Youth worldwide through our consultations have lamented, however, that current systems of education and learning do not yet meet the needs for the meaningful structural changes our societies need. We are hence calling for education that is truly transformative.

Our vision for transformative education

We envision a transformative education that has the following characteristics, all of which are necessary and interconnected with each other.

1. An education that holistically nurtures connectedness, reciprocity, and kinship to nature
   - Enhances connectedness, care and, kinship to nature, embracing all—including non-materialistic—values of nature
   - Shapes values, behaviors, skills, and attitudes away from an exploitative relationship with nature, to systems that are consistent with a way of life in harmony with nature; promotes values of responsibility and stewardship
   - Integrates biodiversity, cultural diversity, sustainability, heritage and social justice content at the core of its learning goals.
   - Contributes to addressing interconnected drivers of biodiversity and cultural diversity loss
   - Draws lessons from indigenous wisdom, and integrates these lessons in the education system and other learning structures respectfully and appropriately
2. **An accessible rights-based education that is respectful, inclusive, and celebrates diversity**
   - Accessible for everyone independently of age, socio-economic background, gender, religion, ethnicity, nationality or geographic area.
   - Supports the intergenerational transmission of Indigenous and local knowledge and promotes the use of local and indigenous languages as a medium of instruction.
   - Ensures gender responsiveness, and acts to eliminate gender inequalities, biases and discrimination.

3. **A lifelong education that fosters sustainable, respectful, responsible, proactive, and critical societies**
   - Fosters respectful, thoughtful, and informed decisions and actions toward a sustainable and just future and creates the ability to critique and transcend social norms, patterns of behavior, and lifestyles.
   - Promotes interpersonal skills, emotional intelligence, critical thinking, systems thinking and behaviors that embrace equity, empathy, solidarity, empowerment, participation, inclusion, cooperation, creativity, and responsibility.
   - Engages with communities and people of all ages through lifelong learning, as well as promotes intergenerational dialogue and solutions.

4. **An education that is of high quality, actively supported, and holistic in its approaches**
   - Encompasses all education, learning and knowledge transmission activities at all levels, in formal, informal and non-formal learning spaces.
   - Takes point of departure on the current state of the world and deals with real life matters, as well as complements theory with practice and knowledge that can be applied in learners’ present and future lives.
   - Fosters experiential learning and learners’ contact with nature and includes so in their programmes.
   - Is developed to be relevant and appropriate for local social-ecological context of the learners.
   - Is enjoyable, student-centred and prioritizes student well-being.
   - Is innovative and interdisciplinary, and breaks “silo mentality”.
   - Is sufficiently funded.
How can we make transformative education a reality?

Below we outline some recommendations which we deem necessary to the realization of our vision for a transformative education:

• **Biodiversity needs to be integrated in formal education curricula.** Education curricula need to integrate biodiversity, cultural diversity and identity, sustainability, heritage, and social & environmental justice content at all levels of the education system, as well as across all relevant subjects—not only in natural sciences. Students and pupils should not only learn about the science behind biodiversity loss, but also about the social, economic and cultural causes and impacts of this. Students and pupils should also be able to learn what their current and future role is in the transition towards societies that live in harmony with nature. This should not be limited to how to live more sustainable lifestyles, but it should also include how to understand, shape and engage meaningfully in decision-making processes at all levels, as well as developing their agency and potential to promote more long-term and transformative change. Furthermore, formal education systems must foster direct contact with nature and provide students opportunities to learn and be within nature.

Integration of biodiversity in formal education curricula must always be done with meaningful involvement of teachers and students, as they are everyday experts of the education system.

• **Teaching staff should be provided training on biodiversity-related matters.** Relevant training and teaching resources on biodiversity and transformative education need to be given to teaching staff, in order to not leave them alone with the task of implementing the inclusion of this content in curricula.
• Non-formal and informal education must be recognized and supported. There are learning gaps that cannot be fulfilled by formal education. Examples of these gaps could be community-based learning, intergenerational transmission of traditional knowledge, or simply the skills gained by young people through being part of projects taking place outside school hours. These gaps are filled by non-formal and informal forms of education, which play important roles in students’ and pupils’ understanding of biodiversity and their relationship with it, but are insufficiently recognized and supported.

A way to support the fundamental roles of non-formal and informal education is by promoting and supporting local, national and international youth-led organizations, including through resources and infrastructure. Youth-led organizations provide spaces for young people to engage on biodiversity-related topics, experience biodiversity, lead on-the-ground biodiversity initiatives, or get together to discuss their visions for future and more sustainable societies, among other things.

• Lifelong learning should play an important role in the sustainable transition. Changing our economies to become more sustainable means that some people will have to transition towards new, more sustainable areas of work. States and education institutions need to engage in reskilling workers, who need to transition towards new industries, as their old employment areas become obsolete by not being sustainable and not meeting the needs of societies that live in harmony with nature.

• Education institutions need to support, and engage, and facilitate access to information for their local communities. Education institutions play a fundamental role in their local communities as gathering points, places of discussion & debate, settings for social learning, and sources of information. These roles need to be used for the benefit of the transitions towards sustainable societies.

This can be done through educational institutions engaging and informing parents, leading projects to combat disinformation, participating in public projects relevant for biodiversity, and engaging with their communities to ensure that they have the necessary tools to work for a more sustainable future. Furthermore, in communities heavily affected by the impacts of the biodiversity crisis, education institutions could play a central role in supporting local people on how to adapt to the environmental changes underway.

• Education must be culture-rooted, recognize the value of indigenous and local knowledge, and support its respectful and self-determined transmission. It is important to recognize that Indigenous and local knowledge (also referred to as traditional knowledge) is a key contributor to the governance, conservation, and sustainable use of biodiversity from local to global levels. Current systems of education must also take steps to avoid contributing to cultural diversity loss, replacement of indigenous and local knowledge, or hindering the traditional transmission of knowledge based on direct learning from practice guided by local adults and elders. Furthermore, there is a need to support the revitalization and intergenerational transmission of Indigenous and local knowledge, and for the wider society to draw lessons from this knowledge, respecting the rights to free, prior, and informed consent and to self-determination.
Transformative education and the post-2020 global biodiversity framework

The post-2020 global biodiversity framework (GBF) currently being developed under the UN Convention on Biological Diversity (CBD) is set to lay down global goals and targets needed to achieve the long-term vision of living in harmony with nature.

**Context**

The CBD defines obligations for Parties regarding public education and awareness in Article 13 of the Convention Text, stating, among other things, the need to include biodiversity in educational programmes. Elements on awareness of the values of biodiversity, traditional knowledge, and knowledge sharing have also been integrated into the previous Strategic Plan for Biodiversity 2011-2020, particularly in Aichi Targets 1, 18, and 19, respectively. Education is also among the 10 priority actions of the CBD’s Communication, Education and Public Awareness (CEPA) Programme.

A number of international policy frameworks and agencies integrate education into their programmes as a key strategy to address the planetary crisis and achieve sustainable development. These include, among others:

- **Action for Climate Empowerment** under the United Nations Framework Convention on Climate Change (UNFCCC)
- **Education for Sustainable Development (ESD)** under UNESCO
- **SDG4: Quality education**

As of April 2021 education is reflected in the updated draft of the post-2020 global biodiversity framework in proposed Target 19 as a means to ensure that quality information, including traditional knowledge, is available to decision makers and the public for the effective management of biodiversity. However, we deem this level of inclusion to not be sufficient to reflect its potential as a key leverage point and strategy to effect transformative change toward sustainability; therefore, we propose a set of recommendations on how to do so.

**Recommendations**

The post-2020 GBF can be much further strengthened to lead to the needed transformative change by:

- Including more concrete and ambitious language on transformative education in the targets. In particular, we believe the framework needs a standalone target on education to match the critical roles education can play in shaping values and behaviors and address continued disconnection from nature.
• Including monitoring elements on the extent of integrating biological and cultural diversity, sustainability, and heritage in school curricula at all levels and subjects where relevant, and promoting biodiversity values in non-formal education

• Including monitoring elements on mechanisms to support intergenerational transmission of knowledge among Indigenous peoples & local communities

• Including monitoring elements promoting educational and learning practices that seek reconnection with nature

• Ensuring resource mobilization for transformative education

Implementation of these policies can also be enriched through:

• Creating fora for sharing of best practices, where Parties can support each other and stakeholders from the education community, including students

• Developing a strategy on transformative education for formal, informal and non-formal education

• Building strong synergies with other international institutions and instruments such as the UNFCCC ACE and UNESCO

• Engaging the education sector and strengthening collaboration with other government institutions

Intergenerational Equity & Education

Intergenerational equity is a principle that states that all generations hold the natural environment of our planet in common with other species, people, and with past, present and future generations. The principle articulates a concept of fairness among generations in the conservation and sustainable use of biodiversity, and the fair and equitable sharing of benefits arising from genetic and biological resources.

Despite intergenerational equity being generally recognized in law and policy, being the foundation behind the concept of sustainable development, and having deep roots in the religious, cultural and legal tradition of the world, there has been insufficient enforcement of existing commitments. Intergenerational equity is a strong pillar towards achieving a sustainable future, and therefore must be mainstreamed into policy & implementation.

Ensuring a transformative education is a strong tool in ensuring intergenerational equity. Education is key in shaping the behavioral and social changes necessary to ensure the sustainable use of natural resources and meaningful engagement in decision-making needed to secure intergenerational equity.
Education, human rights & the environment

- **Education is a fundamental human right** and indispensable for the access of other human rights, as affirmed by the Universal Declaration of Human Rights.

- **The right to a safe, clean, healthy and sustainable environment** is legally protected by more than 80 per cent of UN Member States through constitutions, legislation, court decisions and regional treaties.

- The IPBES global assessment points to important positive synergies between biodiversity and **Sustainable Development Goal 4 (Quality Education)**.

- The need for education that promotes the respect of the natural environment has also been agreed in Article 29 of the **Convention on the Rights of the Child**.

- In order to protect human rights, healthy ecosystems and biodiversity, States have the procedural obligation to provide the public with accessible, affordable and understandable information regarding the causes and consequences of the global nature emergency, including incorporating the importance of a healthy biosphere as a required element of the educational curriculum at all levels.

**Education And The Persistence & Erosion Of Indigenous And Local Knowledge**

Indigenous peoples and local communities possess detailed knowledge on biodiversity and environmental management, formed through their interdependence with their lands and resources. This knowledge, which takes the form of language, arts, natural resource use and management practices, socio-political structures, rituals and spirituality, is a result of their close interrelationship with their territories and resources, and a product of thousands of years of collective innovation and adaptation to the local environment.

These knowledge systems, referred to as **indigenous and local knowledge (ILK)** or **traditional knowledge**, are important contributors to the governance, conservation, and sustainable use of biodiversity from local to global levels. As such, ILK is a priceless heritage to be safeguarded, developed and passed on from one generation to the next, and is valuable not only to Indigenous peoples and local communities, but to society at large.

Communities worldwide are facing the erosion of Indigenous and local knowledge, decreasing knowledge transmission, along with changes in values and lifestyles. **Education and learning play key roles in the transmission of ILK** and with it the maintenance and enhancement of local capacities for stewardship, well-functioning participatory & political processes, values of care and kinship, and cultural integrity and identity.
Ensuring that education is culture-rooted, culturally appropriate, and available in indigenous and local languages is crucial to ensuring that it does not contribute to the erosion of indigenous and local knowledge. According to the IPBES global assessment, changes in both values and knowledge can be driven by contemporary education, which might consciously or unconsciously incentivize the replacement of traditional knowledge. Additionally, if the process of direct learning from practice guided by local adults and elders is not recognized and supported as fundamental to the learning process of indigenous and local values and practices, schooling could potentially hinder the traditional transmission of knowledge. For instance, formal education can remove children from the everyday lives of families during the periods crucial for learning ILK, as ILK is often best transmitted through observation, participation, and imitation in families and wider local communities rather than formal education.

Where relevant, education strategies must therefore take measures to not hinder traditional knowledge transmission through practice, as well as recognize the importance and enhance the respectful, appropriate, and self-determined transmission of Indigenous and local knowledge, both intergenerationally and among different societal groups, including to maintain crucial relationships with nature and values of responsibility and stewardship associated with those.

Some helpful indicators relevant to ensuring transformative education in this context can be found in the Indigenous Navigator, UNESCO’s Culture for Development Indicators, and the Arctic Social Indicators. Some examples are:

- Diversification of primary and secondary education curricula in accordance with indigenous peoples’ cultural and linguistic characteristics within the national education framework (Indigenous Navigator)
- The right to mother-tongue and culturally appropriate education is recognized in national legislation (Indigenous Navigator)
- Trends in availability of multilingual education (indicator under UNESCO’s Culture for Development Indicators)
- Cultural Vitality Index (Arctic Social Indicators)

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