



Delivering on the promise of the 2030 agenda through Education for Sustainable Development and for the Future We Want



UNECE Strategy for Education for Sustainable Development (2021-2030)
as an accelerator to address the triple crises of
climate change, biodiversity loss and pollution.

Quality Education | Whole Institution Approach
Digital education | Entrepreneurship

Explanatory Note

This draft document is submitted by the United Nations Environment Programme (UNEP) Europe Office after consultations with the Chair of the United Nations Economic Commission for Europe (UNECE) Steering Committee on Education for Sustainable Development and the secretariats of UNECE and UNESCO.

The document aims to apply the Framework for the implementation of the United Nations Economic Commission for Europe Strategy for Education for Sustainable Development from 2021 to 2030 as an accelerator to address the triple crises of climate change, biodiversity loss, and pollution.

While at the mid-way point towards 2030, the current trends based on regional and global assessments of the progress towards the Sustainable Development Goals (SDGs) are moderately to severely off track.

The Framework for the implementation of the United Nations Economic Commission for Europe Strategy for Education for Sustainable Development from 2021 to 2030 and its four strands in focus can be used as a tool to accelerate transformative action to deliver on the promise of the SDGs, tackle the triple crises, deliver more for young people and succeeding generations, and equip and empower them to be better prepared for the challenges ahead.

This document by no means is intended to duplicate existing work but shared as a **Zero Draft** or a **Thought Starter** for elaboration of a possible **product/tool/tip** that could look like a guidance to address the triple crises by using the four strands of the strategy: **Quality Education, Whole Institution Approach, Digital education, and Entrepreneurship**.

Furthermore, the images used in the document are strictly for illustration and not meant to be a visual representation of the four strands.

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This current generation of young people sees a world in which their future is compromised in multiple ways. We are already feeling the impacts of the triple planetary crisis of climate change, biodiversity loss and pollution, which will only become more devastating and irreversible in the future.



OUR COMMON AGENDA, Report of the Secretary-General

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"... the triple planetary crisis of climate change, biodiversity loss and pollution consist of three self-inflicted planetary crises that are closely interconnected and that put the well-being of current and future generations at unacceptable risk..."

Nicosia Ministerial Statement on Education for Sustainable Development

"We reaffirm the importance of further strengthening and scaling up education for sustainable development to advance environmental governance, strengthen environmental democracy and empower learners of all ages with the knowledge, skills, values and attitudes to address the interconnected global challenges we are facing, including climate change, environmental degradation, loss of biodiversity, pollution, ...".

Ministerial Declaration of the Ninth Environment for Europe Ministerial Conference



TRANSFORMING
PLANET



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TRANSFORMING
PLANET





Education

plays a critical role in addressing and tackling environmental crises, such as climate change and biodiversity loss. Through education, people can gain the knowledge, skills, and perspective required to actively engage in sustainable behaviors and practices. Below are some of the ways education can contribute to tackling environmental crises:

1. **Environmental Literacy:** Environmental literacy provides individuals with the necessary knowledge, competencies, and dispositions aligned with the sustainability guidelines. This literacy engages an innovative mindset with environmental concern around, enabling notable collaborations towards environmental crises initiatives.

2. **Solution-Oriented Thinking:** Education can promote solution-oriented thinking that helps individuals to develop innovative and critical thinking capacities. This approach discovers alternatives, strategies, rather than hindering the problem, and focuses on logically viable advancements through collaboration.



3. **Promoting Sustainable Behaviors:** Through education, individuals can learn how their actions impact the environment and the natural world. It provides them with the necessary tools to adopt and promote sustainable behaviors and lifestyles, to work towards a better future.

4. **Promoting Advocacy:** Environmental education can empower individuals to become advocates for the environment. This advocacy can help

ensure that environmental issues remain a priority in the future.

5. **Collaboration Prowess:** Education enables vibrant and diverse collaborations between stakeholders involved in the design and implementation of environmental policies, leading to effective and sustainable environmental strategies that tackle environmental crises.



Education for Sustainable Development (ESD)

plays a crucial role in tackling the triple planetary crisis, which includes the interconnected environmental, social, and economic crises the world is facing today. Below are some of the ways ESD can contribute to addressing the triple planetary crisis:

1. Raising Awareness: ESD educates and raises awareness about the environmental, social, and economic challenges that we face and provide an understanding of how they are linked. Thus, creating awareness towards developing environmental-friendly and sustainable behavior day to day alongside economic and social concerns.

2. Empowering people: ESD empowers people to take action towards achieving the 17 Sustainable Development Goals (SDGs) and addresses a host of social, ecological, and economic sustainability concerns.

3. Embedding Sustainable Practices: ESD enables the development of sustainable practices at all levels, from individual to organizational levels by emphasizing sustainable economic growth, responsible consumption, and climate action.

4. Encouraging Advocacy: ESD encourages environmental advocacy and promotes civic engagement, especially among young people and future leaders. ESD can inspire individuals to become environmental advocates, fostering active citizenship as a means of social environmental responsibility.

5. Promoting Innovation: ESD promotes innovation in technology, science, and engineering with an intention to create a more sustainable and equitable world. This encourages the development of innovative solutions for sustainable transport, energy, and agriculture systems among others.

6. Moral and Ethical practices: ESD educates individuals and societies about the moral and ethical importance of biodiversity, environmental protection, and sustainability, allowing more in-depth understanding of intercultural and ethical behaviors toward making responsible decisions.

In conclusion, ESD can contribute to solving the triple planetary crisis as education and environmental protection are complementary and interconnected subfields, creating a world of solutions towards a sustainable future.



Quality Education

and Climate Change

Quality education and education for sustainable development (ESD) strategies can be used to **tackle climate change** in various ways, including:

1. **Awareness and Understanding:** Education can help build awareness of the causes, impacts, and consequences of climate change among students, teachers, and the wider public. Education can help increase understanding of the science behind climate change, the effects on the natural world and human society.
2. **Enhancement of Climate Strategies:** Quality education can empower individuals and communities to take informed and responsible action towards mitigating climate change by enhancing strategies such as recycling programs, reducing carbon footprints, promoting green alternatives, and other proactive choices.
3. **Capacity Building:** Education can equip young individuals with relevant knowledge, skills, and attitudes to become activists for climate change action, and contribute towards attracting relevant scientific expertise and financial support towards solutions that combat climate change.
4. **Advocacy:** Education can lead to youth activism and advocacy for climate change. In addition to helping young people to connect and share ideas on climate action, education for sustainable development helps young people to promote critical engagement with the social and ecological issues that underpin climate change.
5. **Advancing Climate Justice:** Quality education can help individuals understand the social justice implications of climate change, particularly for marginalized communities who are often disproportionately affected by environmental degradation.
6. **Policy-making:** Education can stimulate dialogue and deliberation among different groups and stakeholders, facilitating genuine involvement in policy formulation on climate change. By learning informed decision-making and critical analysis, individuals can confidently influence policy development for climate action.
7. **Eco-innovation:** Education can encourage the development of new and innovative practices of climate mitigation and adaptation, like green technologies, renewable energy, and eco-farming practices. Education can foster critical thinking, creativity and innovation, in solving complex issues like sustainability challenges.

In summary, quality education and ESD effectively equip students for the necessary skillset to take action towards tackling climate change. Through innovative and practical learning, young people can be successfully honed and equipped to create a climate-resilient and sustainable future.



Quality Education and Biodiversity

Quality education

can address loss of biodiversity through increasing awareness and understanding of the importance of biodiversity and the threats it faces. By promoting biodiversity education, individuals can be equipped with the necessary knowledge and skills to take actions to protect and conserve the environment. Here are some examples:

1. Incorporating biodiversity education into school curriculums: Schools can teach students about biodiversity, its importance, and how it relates to their surroundings. This can help foster a sense of responsibility towards the environment.
2. Promoting citizen science projects: Citizen science projects such as bird and butterfly counts, and wildlife monitoring can help people understand the importance of biodiversity and encourage them to take action to protect it.

3. Supporting local conservation efforts: Educating communities on the importance of biodiversity can encourage them to take action towards protecting local ecosystems, such as creating community gardens or engaging in recycling programs.



4. Encouraging sustainable living practices: Individuals can learn about sustainable living practices such as composting, using eco-friendly products and reducing waste, which can help to preserve biodiversity by reducing human impact on the environment.

5. Promotion of eco-tourism: Educating people on the repercussions of irresponsible tourism, and how responsible tourism can promote biodiversity conservation.

6. Advancing Policy Change: Education in biodiversity can empower individuals to become advocates for biodiversity conservation and support policies that protect it. By providing individuals with the knowledge and skills needed to engage in policymaking, education can help drive systemic change and support policy measures that protect biodiversity.

These examples illustrate the importance of quality education in creating a sense of responsibility towards the environment and promoting sustainable practices, which can ultimately lead to the preservation of biodiversity. Quality ESD generates a mindset shift towards more well-informed citizens, and a more responsible and sustainable future.





Quality Education

and Pollution Quality education can address pollution by creating awareness about the causes and effects of pollution, encouraging responsible behavior towards the environment, and promoting sustainable practices. Some of the examples are:

1. Environmental Science Education: By teaching environmental science as a subject in schools and colleges, students can learn about the various types of pollution, their causes and effects, and possible solutions.

2. Sustainable Living Practices: Quality education can teach students sustainable living practices that can reduce pollution, such as recycling, reducing energy consumption, and minimizing waste generation.

3. Promoting Remediation: ESD can teach individuals about methods for remediation, such as clean-up techniques and methods to reduce the impact of pollutants on the environment. It can also teach individuals about the importance of restoring ecosystems affected by pollution.

4. Green Technology: Quality education can also promote the development and use of green technology, such as renewable energy sources and eco-friendly products, that can reduce pollution.

5. Community Involvement: Students can be encouraged to take part in community initiatives that aim to reduce pollution, such as organizing clean-up drives in their local areas or participating in tree-planting campaigns.

6. Policy and Advocacy: Quality education can stimulate critical thinking and advocacy skills, leading to the development of policies that can reduce pollution, such as stricter environmental regulations or implementing a carbon tax.

In summary, quality education and ESD are effective ways to educate young people about the causes and effects of pollution and build their capability and motivation to tackle it.





Whole Institution Approach and Biodiversity

A whole institution approach and education for sustainable development can be effective in addressing the loss of biodiversity by implementing the following strategies:

1. **Creating awareness:** Institutions should create awareness about the importance of biodiversity, its loss, and its impact on ecosystems and human lives by advocating for biodiversity conservation through campaigns and public outreach initiatives.
2. **Curriculum Integration:** Integrate biodiversity education into the curriculum at all levels of education. Integrating biodiversity into the curriculum: Biodiversity should be taught in various courses, helping students understand its importance in diverse fields and its role in sustainable development. Institutions can promote research in biodiversity conservation, funding projects and creating opportunities for staff and students to participate.
3. **Encouraging Research and Innovation:** Encourage research and innovation around biodiversity conservation.
4. **Collaborations and Partnerships:** Collaborate with local communities, governments, conservation agencies, NGOs and different stakeholders to engage to develop biodiversity conservation programs and share best practices.
5. **Promoting Green Spaces and Habitats:** Promote the creation of green spaces and habitats within their campuses or surrounding areas.
6. **Sustainable Practices:** Adopt sustainable practices to reduce human impacts on ecosystems. Institutions should reduce water and energy consumption, promote waste reduction, and use eco-friendly products to reduce pressure on natural resources and the carbon footprint.

In summary, enhancing education for sustainable development and adopting a whole institution approach is central to tackling the loss of biodiversity. It requires the integration of strategies that will help develop a positive grassroots movement, which could have a long-term impact in preserving life on earth.

By adopting a whole institution approach, we can address the loss of biodiversity and promote the sustainable use of natural resources for future generations.





Whole Institution Approach and Climate Change

A whole institution approach and education for sustainable development can be used to address climate change through the following strategies and actions:

1. **Develop a comprehensive climate change action plan:** Create a plan that engages both staff and students, detailing strategies to reduce greenhouse gas emissions and mitigate the impacts of climate change based on data and analysis of the institution's environmental impact. Create awareness and change habits through education and training. Empower staff and students to integrate sustainability into their individual operations.
2. **Reduce energy consumption:** Improve the energy efficiency of buildings and operations. This could mean installing solar panels, using energy-efficient light bulbs, optimizing HVAC systems, and using energy-efficient equipment.
3. **Sustainable transportation:** Encourage the use of sustainable transportation alternatives such as cycling, walking, and public transportation. Provide facilities such as bike racks, showers, and changing rooms to support active transportation.
4. **Waste reduction and sustainable procurement:** Adopt sustainable waste management practices such as recycling, composting, and reusing materials. Source products and services from sustainable supply chains to promote sustainability.
5. **Land use management:** Develop and implement sustainable land use practices including green infrastructure, eco-friendly landscaping, and ecological management of natural resources.
6. **Research and development:** Promote research, development, and innovation that focuses on climate change mitigation and adaptation. Develop innovative solutions, technologies, and approaches to address climate change.

By adopting a whole institutional approach to climate change, institutions can effectively contribute to mitigating its impact and promote sustainable development for future generations.





Whole Institution Approach and Pollution

A whole institution approach and education for sustainable development can be used to address pollution through various ways including:

1. Developing a sustainable environmental policy that addresses pollution prevention and reduction, including goals and targets, through effective planning and implementation
2. Encouraging the use of environmentally friendly and renewable energy sources such as wind, solar and hydro power.
3. Adopting best practices in waste management, including the reduction, reuse, and recycling of waste materials to minimize pollution.
4. Promoting sustainable transportation practices such as encouraging the use of public transit, cycling, walking or carpooling.
5. Educating and involving stakeholders such as staff, students, and the community in sustainable practices, including reducing energy consumption, conserving water, and minimizing waste.
6. Partnering with relevant stakeholders such as government agencies and NGOs to collaborate on solutions to manage and mitigate environmental pollution.
7. Conducting regular environmental audits to monitor and evaluate progress towards achieving pollution reduction targets.
8. Setting up and maintaining systems for the provision of safe and clean water supply, and proper treatment and disposal of sewage and other waste products.

In summary, a whole institution approach through education for sustainable development requires an inclusive, integrated, and comprehensive approach towards promoting sustainable development goals that aim at tackling pollution. Through these and other effective measures, institutions can play an important role in addressing pollution and promoting environmental sustainability.





Digital education and biodiversity

Digital education and ICT can play a vital role in addressing the **loss of biodiversity** through the following ways:

1. **Awareness:** ICT can help raise awareness about the importance of biodiversity and practical steps to reduce environmental impact to a larger audience using digital platforms.
2. **Data collection, Analysis and Monitoring:** Digital tech aids biodiversity monitoring through accurate data collection from sensors and drones in real-time; and help inform conservation policies and actions.
3. **Citizen Science:** Digital platforms can provide opportunities for students to participate in citizen science initiatives and contribute to conservation efforts.
4. **Conservation:** Digital tech develops innovative solutions like virtual reality education and satellite tracking for species conservation and allow students to learn about biodiversity from different parts of the world.
5. **Sustainable agriculture:** Digital tech promotes sustainable farming practices like precision farming to reduce pressure on ecosystems.
6. **Innovative Solutions:** ICT can help develop solutions to specific biodiversity problems, such as using AI to identify invasive species.
7. **Collaboration:** Digital tech facilitates collaboration among conservationists, scientists, and policymakers to develop effective policies and strategies for biodiversity conservation. It can enable students to collaborate globally towards biodiversity conservation through online discussion forums, video conferencing, and social networks.

In summary, digital education can provide effective tools to empower students and facilitate their own learning about biodiversity loss. It can also foster collaboration, innovative thinking, and promote sustainable behaviors that are essential for protecting and promoting biodiversity conservation. With adequate support and investment, digital education can create a new era in biodiversity conservation, where innovative thinking and technology can be used to achieve positive environmental impacts.





Digital education and ICT can address **Pollution** in the following ways:

1. Educating people: : Digital education can help in educating people about the causes and consequences of pollution. Interactive online courses, videos, and games can be used to teach people about the different forms of pollution and ways to reduce them.
2. Remote working: Digital education and ICT can promote remote working to reduce pollution caused by commuting and the use of energy and resources in traditional office settings.
3. Data collection and analysis: Digital tools can be used to monitor pollution levels in real-time, enabling authorities to take prompt action in case of any irregularities. Moreover, data collected over time can be analyzed to study patterns and trends, which can help in formulating effective pollution control policies.
4. Virtual meetings: Digital education and ICT promote virtual meetings, which eliminates the need for physical meetings and reduces travel pollution. This is especially relevant in the current pandemic situation, where distance learning and remote meetings have become the new normal.
5. Waste management: Digital education can help in creating awareness about efficient waste management techniques such as recycling and composting. Further, ICT solutions can be used to monitor and optimize waste collection and disposal operations, reducing the environmental impact of waste management.

Thus, digital education and ICT solutions can play a significant role in addressing pollution and promoting sustainable development.





Digital education and ICT can address **Climate Change**

Digital technology education and ICT have the potential to play a significant role in addressing the global challenges posed by climate change in the following ways:

1. Firstly, knowledge on digital tools can enable the monitoring and measurement of carbon emissions, thus facilitating the implementation of effective environmental policies and strategies. Secondly, digital technology can help to improve energy efficiency and sustainability across a range of sectors, including transportation, agriculture, and manufacturing. Thirdly, the use of digital platforms can increase public awareness and engagement with the issue, while also facilitating collaboration and collective action.
2. One specific example of digital technology's potential is that to provide opportunities for innovative solutions, such as the use of artificial intelligence (AI) to optimize energy usage. With the assistance of machine learning algorithms, buildings and factories can be managed more efficiently, ensuring that energy is only used when required. The use of IoT sensors and smart grid technology can also enable more effective distribution and management of renewable energy sources such as wind and solar power.
3. One of the ways that ICT can help tackle climate change is through energy efficiency measures. By using energy-efficient hardware and software, businesses and individuals can significantly reduce their energy consumption and carbon footprint. Additionally, ICT can also be used to track and manage energy usage, providing valuable insights into areas where improvements can be made.
4. Moreover, digital platforms have the potential to facilitate behavioral change, encouraging sustainable consumption patterns and lifestyles. This can be achieved through access to tools such as educational material accessible online, supporting social media campaigns coming from different stakeholders, and other forms of digital engagement that encourage individual action towards reducing carbon footprints.

Overall, the potential of digital technology and ICT in tackling climate change is vast. It can increase transparency, promote collaboration and facilitate more effective decision-making and action. Embracing the potential of technologies can significantly contribute to achieving global decarbonization targets, and support the transition towards sustainable, low-carbon societies.





Youth Entrepreneurship, Employability, Innovation can address loss of Biodiversity in the following ways:

1. **Sustainable Agriculture and Food Production:** Youth entrepreneurs can promote sustainable agriculture practices that result in healthier ecosystems, abundant wildlife, and food security. This includes urban agriculture as a possibility to integrate natural environments into urban spaces, thus promoting wildlife and increasing air quality. They can rethink how food is produced by utilizing regenerative farming methods, as opposed to ones that negatively impact nature.
2. **Reforestation and Restoration:** Youth can launch reforestation and agroforestry initiatives to promote biodiversity. By planting trees and participating in ecosystem restoration, they can enhance forests and natural habitats.
3. **Eco-Tourism:** Entrepreneurs can initiate sustainable tourism options that promote biodiversity conservation. Eco-tourism creates employment opportunities that support conservation efforts whilst promoting enjoyment of natural environments.
4. **Environmental Education:** Youth entrepreneurs can create awareness campaigns to teach people about the importance of biodiversity and its preservation. Also, they can work with schools and community centers to raise awareness and enhance knowledge about the impact of people on biodiversity.
5. **Innovation:** Youth-driven innovation can also contribute to addressing biodiversity loss challenges. This can include promoting alternative protein options, biomimicry-inspired designs that use natural processes and ecosystems to conceive more sustainable products, and innovation in green technologies such as solar-powered irrigation systems. This might furthermore include alternative private investment models, preferring Investments in shares and funds that do not unsustainably exploit natural resources, but contribute to protection and restoration of biodiversity and livelihoods.

Overall, youth entrepreneurship, employability, and innovation can be harnessed to reverse biodiversity losses. Youth have the potential and opportunity to adopt new approaches to biodiversity conservation and contribute to creating transformative and sustainable solutions. Working together with stakeholders and decision-makers such as communities, regulators, and businesses, youth can help promote policies that enhance biodiversity conservation efforts while generating sustainable economic opportunities for young people and the wider community.





Youth Entrepreneurship, Employability, Innovation and Pollution following ways:

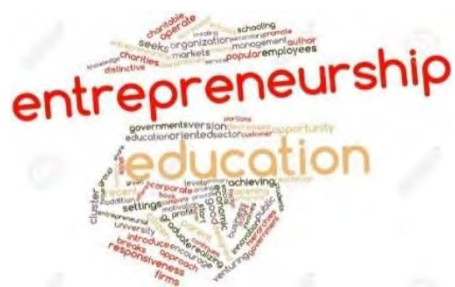
1. Eco-friendly products, recycling and waste management: Young entrepreneurs can identify and develop eco-innovative business opportunities, such as creating biodegradable packaging products for use in food and beverage businesses. Young entrepreneurs can set up businesses that address solid waste management challenges. This includes innovative waste management solutions to reduce pollution costs and encourage recycling activities.

Clean Energy: Young entrepreneurs can introduce businesses that use clean and renewable energy sources such as solar, wind and hydro power. They can promote investment in renewable energy initiatives that reduce greenhouse gases from fossil fuel-based energy sources.

2. Advocacy: Youth can use social media and other platforms to create awareness among peers about the negative impacts of pollution and environmental degradation. Youth-led campaigns and advocacy activities using online tools are emerging as powerful channels for effecting policy change.
3. Sustainable agriculture practices: Young entrepreneurs can employ sustainable agriculture practices, such as regenerative farming techniques that ensure farming returns nutrients to the soil. These practices can reduce air and water pollution even whilst increasing productivity.
4. Innovative Technology: Young entrepreneurs can promote innovative, technological solutions to pollution such as air pollution monitoring devices, smart-water management systems, and renewable energy solutions, which can help reduce pollution and encourage sustainable practices. This can, in turn, create job opportunities for youth in a niche market with a competitive skillset.
5. Innovative Mobility: Youth entrepreneurs can foster alternative mobility models to cars. Being increasingly aware of the advantages of innovative mobility, they can promote the Modal Shift and push people towards a more sustainable transport to benefit people and planet.

Overall, youth entrepreneurship, employability, and innovation can bring positive impact, insights and perspectives that address pollution challenges. Young entrepreneurs have a unique advantage of being able to reimagine the markets and catalyze possibilities that were previously unseen. Collaboration with interest groups, policymakers, and business partners can amplify the impact of these initiatives.





Youth Entrepreneurship, Employability, Innovation and Climate Change following ways:

1. **Developing climate-focused startups:** Young people can develop innovative, sustainable and environmentally friendly start-ups that are focused on developing new technologies, products or services that can help reduce greenhouse gas emissions and mitigate climate change. This includes green job creation through business models that focus on circular economy principles, which involve using resources more efficiently, reducing waste, and recycling materials
2. **Promote sustainable lifestyles:** Young people can promote the adoption of sustainable lifestyle practices that reduce carbon footprints. Youngsters can spread awareness regarding the benefits of sustainable living by endorsing it via social media and other platforms.
3. **Support Climate policies:** They can influence local, state, and national climate policies through social media, advocacy campaigns or voting. They can support climate-focused policies that promote sustainable practices and reduce carbon emissions.
4. **Collaboration and participation:** Young people can collaborate with climate activists, scientists, and policymakers to develop effective solutions to address the climate crisis while promoting social entrepreneurship. The younger generation can encourage awareness campaigns that spread the message of sustainability and reinforce good environmental practices in the society.
5. **Encourage Eco-friendly businesses:** Anticipating the increased importance of environmental, social and governance (ESG) criteria, youth entrepreneurs can promote implementing them in businesses to successfully meet the demands of people and planet. By developing their employability skills, they can encourage Eco-friendly work practices and education across the business communities they engage with, driving change at scale.
6. **Ensure lifelong learning:** Youth entrepreneurs and their businesses can ensure continuing education for themselves and their employees, aiming for a better understanding of current and future challenges, transitions and opportunities.

