



Module 2: What is a Sustainable School?

Introduction

Education is fundamental to sustainable development. People should be aware of the consequences of their actions in order to make informed decisions in their daily lives. This includes everything from making responsible choices when we purchase products, use them and throw them away, to demanding a government that guarantees basic liberties and a promising future for our children.

The United Nations has been an important supporter of this as well. In 2002, they decided to dedicate a Decade of Education for Sustainable Development (2005-2014). This is a global effort that proposes a new kind of education entitled “Quality Education.”

Objectives

The teacher will understand what sustainable development is and will be familiar with what makes a school sustainable.

Themes

1. *An Interrelated Planet*
2. *Sustainable Schools*

3. *Education Initiatives in Favor of Sustainability*
4. *Schools on the Road Towards Sustainable Development*
5. *Experiences of Sustainability in Schools throughout the World*

1. An Interrelated Planet

1.1 Background and Context

Today humanity suffers from the negative effects of ecological imbalance. Degradation of ecosystems, pressure on natural resources, and climate change directly affect agricultural systems, livestock farming, health, and security. Natural resources are being depleted, pollution continues to increase, the human population keeps growing and social inequality persists.

Our entire planet is interrelated. All that we have and consume affects our environment, or, rather, the Earth, and this, in turn, affects us:

Food
Clothing
Transportation
Housing
Electricity
Communication

It is crucial to change certain aspects of our daily lives in order to live in a world that can be self-sustainable. In order to accomplish this, we will have to replenish everything we take from the Earth so the life cycle can reuse it. For example:

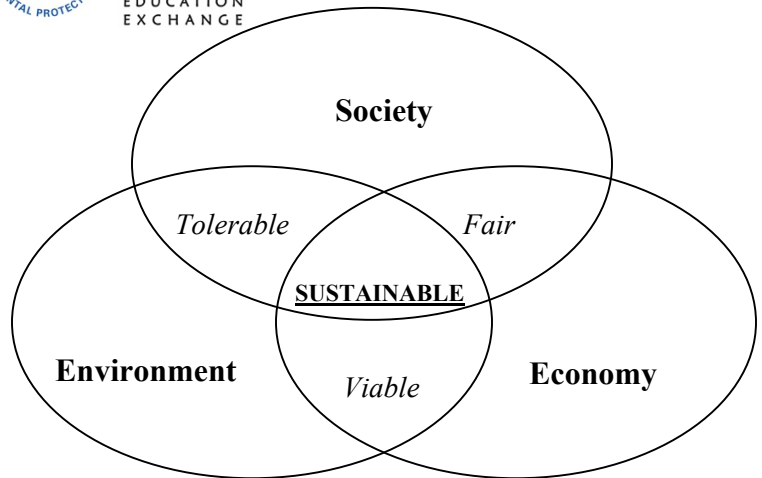
- Reduce our contaminating emissions in order to clean our air, water, and soil.
- Respect others, ourselves, and learn to live together in the world that surrounds us.
- Achieve this without damaging the quality of life for our current and future generations.

These changes can only happen by starting with education, which is the foundation of modern society.

2. Sustainable Schools

2.1 Education for Sustainable Development vs. Environmental Education

It is important to differentiate between sustainable education and purely environmental education: Environmental Education covers only one of the pillars of sustainable development: the environment.



The three pillars of sustainable development are economics, society, and the environment, and all three should be given equal importance. In today's society, however, these pillars do not carry the same weight. Development is out of balance, and therefore, our society is not sustainable.

In order to be effective, the subject of environmental education and development should be concerned with the dynamics of physical and biological, socioeconomic, human development dimensions, and the process of integrating them into all disciplines using academic and non-academic methods and effective communication forms.

2.2 Education for Sustainable Development

As education is the foundation of the system in which we live, we should train people to be conscious of the future:

1. To have a long-term vision of a desired future.



- 2. To develop the capacity to measure the results of our actions (indicators).
- 3. To consider the complete picture, sustainable schools have a focus on integrating all of the existing interrelations.

Today’s young people and children should begin by practicing activities that help them think and look for creative solutions.

There are new challenges for education: we need to realize that human beings depend on the quality of the environment and access to natural resources, now and in the future; and furthermore, that participation, self-sufficiency, equality, and social justice are essential in order to prepare our new generation for a commitment to sustainable development.

So we could conclude that this new teaching method aims to change the current methods by contributing both new values and new challenges for teachers and students, and new experiences to serve as support in this quest towards sustainable consciousness.

Schools and teachers play a very important role in this change, since through education we can teach our new generations to

live in a way that helps protect our environment, respect others, and take care of what is ours (our homes, schools, roads, communities, cities, countries, and planet).

Making our schools sustainable is just one contribution towards the creation of a better world; it is a concrete action that is connected to the rest of the actions being carried out all over the world to safeguard life on Earth.

- Examples of elements that are integrated in Sustainable Schools:
- Energy and water consumption
 - Consumption and waste of materials
 - Construction
 - Security
 - Mobility
 - Travel
 - Health and nutrition
 - Green areas and school playgrounds
 - Holistic vision
 - Social participation in neighboring communities

3. Educational Initiatives in Favor of Sustainability

3.1 Decade of Education for Sustainable Development (DEDS)



To support and help this objective, in 2002, the United Nations decided to dedicate a *Decade of Education for Sustainable Development* (2005-2014).

This initiative is being implemented on a global scale and offers the necessary tools for the educational systems in countries to focus their education on today's problems while raising young people to be prepared for a future in which they will confront enormous challenges towards ecological equilibrium. The United Nations proposes the creation of a new education that has been called *Quality Education*.

Education is a basic human right; consequently, *Quality Education* supports all human rights.

Quality Education is based on four pillars:

1. Learning to know
2. Learning to do
3. Learning to live together
4. Learning to be

(Delors et al., 1996).

In teaching quality education, the student learns to be competent in four roles, which are:

- An individual
- Family member

- Community member
- World citizen

The United Nation's proposal defends and propagates ideals for a sustainable world: an equal, fair, and peaceful world in which people concern themselves with the environment in order to contribute to intergenerational equality, take into consideration the social and economic contexts and the environment of a specific place and configure the curriculum or program to reflect these specific conditions.

3.2 Agenda 21

Agenda 21 is an action plan for implementing ideas about sustainable development at the local and global level. It offers guidelines that can be adjusted to the needs of different communities to reach a more sustainable, fair, and peaceful world.

Chapter 25 of Agenda 21 is dedicated to the importance of youth in a country's development and functions as a call for them to participate in decision-making and the implementation of programs relative to the environment and to development, since it affects their daily lives and has repercussions for the future. However, it does acknowledge that despite their intellectual



contribution and their capacities to motivate others, young people have a particular way of analyzing things and that must also be taken into consideration.

Chapter 36 stresses education, training, and awareness. Combining these three topics into just one chapter informs us that primary education is the fundamental foundation of teaching, but that learning is something to be continued over a lifetime, forming a continual process where human beings and societies can fully develop their latent capacity.

4. Schools on the Road towards Sustainable Development

There is no specific definition for Sustainable School, since it is not concerned with making a new school completely different from before or like others in the area, but rather in modifying, little by little, certain aspects of all schools in the easiest way possible in order to focus the teaching towards sustainable development for their country and our planet.

What we can offer are guidelines you can follow in order to reach this main objective. Therefore, for the purpose of these guidelines, we can say that a Sustainable School is:

- A place that recycles, reuses, and reduces materials used in the school.
- A place where energy and water are conserved.
- A place where things are consumed sensibly and healthfully.
- A place set up by and for its own students, where they will enjoy learning.
- To enjoy learning, students should live and experience for themselves what they are learning.
- A place where students are taught to live together harmoniously respecting the cultural, social, and personal differences that can exist between students, teachers, and organizations.
- A place where teaching is done through example.

The student community will participate in the entire process, which is fundamentally important for the continuity of the project, by:

- Listening to the voices of students, professors, and parents.
- Giving priority to their opinions, respecting them, so that they learn to respect as well.
- We need to teach children to think for themselves, to express their concerns and joys in an environment of respect and enthusiasm.



5. *Experiences of School Sustainability throughout the World*

Different action plans for supporting sustainable development in the school are being applied around the world through networks and programs promoted by the government or by individuals. Next, we describe a series of case studies from different countries:

Spain. Agenda 21 has been applied in Barcelona public schools for the last ten years. The Department of Environment and Teaching implemented a Green Schools plan, and now, more than 200 educational establishments who originally participated in this project are carrying out the following actions:

- Waste separation from school lunches.
- Trash collection from common areas by different student groups.
- Special regulation of batteries
- Re-use of paper and recycling it after it has been used on both sides.
- Encourage respect and care for the plants on the playgrounds and in school gardens.
- Recycling workshops and waste selection.

- Artistic work with recycled materials.

United Kingdom. By the year 2020 the English government hopes that all their schools will comply with a series of basic requirements such as: saving energy and water, recycling of paper, aluminum, and glass, and offering healthy food in the lunchroom and sustainable transportation. Right now there are 3,000 schools forming part of the *Globe* or *EcoSchools* Network of Schools. For example, Alderbrook Primary School in London contacted agriculturalists in Ghana to learn about what things they cultivate in this African country, and to compare them with what's cultivated in the United Kingdom.

Australia. 350 schools participate in the pilot program *Sustainable Schools – The Environmentally Active School*. The “ecological footprint” of each one of these schools has been calculated and students have decided that they want to carry out action plans. For example, the Princess Hill Secondary College organized the clean-up of a nearby river. First they focused on plastic bags, collecting them and carrying out a publicity campaign in the community, informing them about the



effects of plastic bags on the environment. The second step was to organize themselves so that businesses would reduce their use of plastic bags, charging for them and offering reusable cloth bags instead. And lastly, they carried out an aluminum can reduction and recycling project by offering a special container in the school.

United States. The Environmental Protection Agency (EPA) organizes an annual competition called President's Environmental Youth Awards in which 10 prizes are given away to students from each state who excel in their ideas about protecting the environment. This year, the students of Redmond High School in Washington excelled in their initiative to get the teachers from their schools to begin reducing carbon dioxide emissions into the air.

This was achieved by lowering the temperature of the heat, turning on fewer lights in the classroom, carpooling and bringing coffee in reusable mugs. The project was so successful that it has been extended to the rest of the community and in 17 schools, saving 1000 pounds (453 kilograms) of emissions in the

school classrooms and \$7,500 in electricity and recycling costs.

5.1 Conclusions

Everything we do has repercussions on the land and the environment. Climate change, the depletion of natural resources and the rise in population are the principal reasons the United Nations has decided to create a *Decade of Education for Sustainable Development*, since education is the foundation of the system in which we live.

Through this initiative, we hope to prepare our new generation for the changes necessary for making their actions, ideas, and solutions for sustainability into a reality.



Web pages of interest:

http://portal.unesco.org/education/en/ev.php-URL_ID=27234&URL_DO=DO_TOPIC&URL_SECTION=201.html

UNESCO Decade of Education for Sustainable Development

<http://www.unep.org/>

United Nations Environment Programme

<http://www.epa.gov/enviroed/peya/peya2006.html#1>

EPA President's Environmental Youth Awards

<http://www.un.org/esa/sustdev/documents/agenda21/index.htm>

United Nations Division for Sustainable Development

<http://www.un.org/esa/sustdev/documents/agenda21/english/agenda21chapter36.htm>

United Nations Agenda 21, Chapter 36: Promoting Education, Public Awareness, and Training

<http://www.globe.org.uk/>

The Globe Programme

<http://www.sustainableschools.com.au/sustainableschools/overview/>

Sustainable Schools Australia

Recommended readings:

- Chapter 25 of Agenda 21
- Chapter 36 of Agenda 21
- A Decade for the Education of Sustainable Development (United Nations)