

## Educational Model for the Improvement of Sustainable Development

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### Abstract

This Proposal seeks to empower students to adopt conscious lifestyles and help strengthen the environmental, social and economic dimensions of this aspired level of Sustainable Development Education; Its main objective is to integrate it with the SDGs in the educational organization, using a Bibliographic Review Methodology, resulting in increasing the contribution of education to achieve a more harmonious and balanced world.

It does so through actions in five priority policy action areas; to education and training environments; to the strengthening of the capacities of educators; youth and prioritizing local actions. There are cross-cutting issues interdependent with the theme of the present, referring to: People and subsistence (health, education, urbanization and gender), changes in the environment (climate change, polar zones, mountain ranges and disaster risks, regarding the use of resources and materials: Improper use of natural resources, inadequate management of solid waste and energy, and misuse of chemical substances and food. Consequently, the present will allow a valuable contribution in the diverse geographical levels of the planet. The conclusions were SD2030 will improve the world, making it more sustainable and achieving the 2030 Agenda, likewise, it will allow the insertion of ESD and the SDGs in educational organizations.

**Keywords:** Environment, Environmental education, Global Environment Outlook, Sustainable Development Goals

### 1. Introduction

The period 2006 - 2014 was declared by the UN as established by the United Nations Decade of ESD, from which date UNESCO leads this issue that supports the 2030 Agenda, based on SDG 4 and facilitates the achievement of the other SDGs. The 2030 Agenda is broad and ambitious, and includes the 17 SDGs, Annex 1, which encompass the three dimensions of sustainable development. Source: UN, 2015. GEO 6, published in 2019, concludes that unsustainable activities derived from human activity and climate change undermine the ecological foundations of society. Source: GEO 6. UNEP, 2019. The ESD framework was adopted to monitor World Education and the achievement of the 2030 Agenda. UNESCO, 2020. Mainstreaming investigates issues that are interdependent with other environmental issues, hence their importance in communities, to achieve significant global transformation.

### 2. METHODOLOGY

#### Study Variables

- 1) Dependent variable: Agenda 2030.
- 2) Independent Variables:

- GEO process.
- Education for Sustainable Development ESD.

### **Sampling**

A significant proportion of the city of Chiclayo, with a total population of 552,508 inhabitants as of 2017.

### **Theoretical framework**

#### **1) Epistemological foundation of socio-environmental sustainability**

Pedro Salinas, 2019 studies the relationship between modern self-conscious subjectivity, nature and environment.

A good part of the freedom of our society is oriented towards consuming and exhausting the available resources (UNESCO, 2010), until exhausting them in obtaining products for primary or secondary consumption.

#### **2) Pedagogical Model**

It is a set of courses of action, in which education is based, based on an ideology that explains the work of the world, of society, a profile of man and his foundations.

The proposed model will make it possible to achieve Education for Sustainable Development, based on the environmental diagnoses provided by the GEO Project, which will contribute to the achievement of the SDGs.

#### **3) The 2030 Agenda for Sustainable Development**

The 2030 Agenda for Sustainable Development is a commitment adopted by governments in the United Nations General Assembly and constitutes an "action plan in favor of people, the planet and prosperity". It is also intended to strengthen universal peace within a broader concept of freedom.

We recognize that the eradication of poverty in all its forms and dimensions, including extreme poverty, is the greatest challenge facing the world and is an essential requirement for sustainable development.

The Agenda reflects the dimension and ambition of the new universal Agenda and includes 17 Sustainable Development Goals (SDG) Annex 1, which "are integrated and indivisible in nature and combine the three dimensions of sustainable development: economic, social and environmental".

#### **4) Education for sustainable development by 2030.**

##### **4.1) What is the ESD 2030 framework?**

As UNESCO points out, it is valid to ask ourselves if what we learn is relevant to our lives, and helps our planet survive. In this context, ESD can be vital, by providing us with knowledge, awareness and actions to transform ourselves and do the same with society.

The UN has UNESCO as responsible for the human right to education, which allows peace and development to be achieved,

The COVID-19 pandemic is a crisis that has affected life and health, and has exposed how fragile our interaction with nature is, exposing ourselves to pathogens, as the environment degrades.

ESD emerges from our need for a sustainable world, innovating pedagogy and providing us with guidance to educate ourselves and gain awareness.

The priority areas of action are:

##### **Related to policies.**

To integrate at all geographical levels.

##### **Related to education and training environments.**

Promoting a comprehensive approach that allows us to learn from life and live from what we learn.

**Related the strengthening of the capacities of educators**

Empowering educators, for the transition to sustainability.

**Related to youth**

As agents of change and approach to sustainability and decision-making that is necessary.

**Relative to action at the local level.**

Thinking globally and acting locally.

**5) Mainstreaming**

There are various issues that have an interdependent dynamic with all environmental issues, we detail:

Referring to people and livelihood methods: such as health, education, urbanization and gender.

Referring to changes in the environment: Such as climate change, polar regions, mountains and environmental disasters,

Referring to the use of resources and materials: Such as the use of resources, the elimination of solid waste, energy, chemical products and the food system.

**3. RESULTS**

**1. It is urgent to act.**

**1.1 Current situation.**

**Global and Regional Level (LAC) – GEO 6**

**Priorities:**

- Impacts of climate change and natural hazards
- Biodiversity and ecosystem services
- Natural resources and tourism
- Sustainable economic development, consumption and production
- Health and environment
- Land use and degradation and land use planning
- Environmental governance
- Environmental information
- Communication and public awareness.

The priorities have been grouped into six main focal areas that respond to the central themes covered during this evaluation:

- Climate change
- Management of water resources
- Sustainable management of biological resources
- Environment and health
- Sustainable consumption and production, and
- Good governance

## **National Level – GEO PERU**

### **Main national impacts:**

- High damage to the environment and natural resources
- Water and air pollution and serious damage to watersheds
- Poor solid waste management
- Disorder in the cities
- Loss of agricultural land, forests, fauna and native crops.

## **Local level – GEO CHICLAYO**

### **Main environmental problems:**

- Inefficient management of solid waste, the drinking water and sewerage network, and water resources
- Polluted air and messy vehicle fleet
- Citizen security and disorderly territorial occupation
- Green areas and neglected public spaces.

It is at the Academy in Chiclayo, where the execution of responses begins through educational actions, to reverse this situation, with the support of International Cooperation, especially the United Nations Organization, Multilateral Banking and the main countries of the northern hemisphere. .

### **1.2 What to do**

Plan a sustainable future, proposing new alternative solutions at various levels.

It is recognized that ESD is decisive for the achievement of the SDGs and the transformation of society.

## **2. ESD by 2030**

### **2.1 What is the ESD 2030 framework?**

ESD is based on what has been learned in the GEO Processes and the World Education Programs, for its contribution to the achievement of a more prosperous humanity.

### **2.2 Purpose and objective**

**Purpose.** Contribute to building a fairer and more sustainable world.

**Aim.** Integrate the main processes of diagnosis, education and global action, in favor of development thought of future generations.

### **2.3 Main characteristics of the ESD Educational Model**

#### **Emphasis on Education**

Education is of prime importance in achieving the 17 SDGs, which are interconnected; ESD is an integral element of SDG 4, and enables the achievement and improved implementation of the other SDGs.

### **How does the Educational Model work?**

Emphasis:

- Raising awareness of the SDGs in the educational context.
- The great transformation.

- Emphasis on the leadership of the Member States.

The ESD Educational Model shown in Table 1, and is based on the following reflections:

- Transforming action.
- Exploration of alternatives to the consumer society, in a context of extreme poverty and vulnerability.
- New technological alternatives.

Contribution of ESD to UNESCO's global priorities

- Priority "Africa" and ESD
- Priority "Gender equality" and SDG7
- Small Island Developing States

### Emphasis of the EDS Educational Model in the great transformation

ESD implies individual changes and social reorganization, towards a more just and sustainable direction.

The ESD Educational Model is shown in Table 1.

**Table 1: ESD Educational Model**

N° ODS	EDUCATIONAL OBJECTIVE	DIMENSIONS OF LEARNING
1	Promote new sustainability and distribution of wealth.	<p><b>Cognitive:</b></p> <p><b>Understand the challenges to sustainability and their complex interconnections. Explore disruptive ideas and alternative solutions.</b></p> <p><b>Behavioral:</b></p> <p><b>Bring practical actions for the transformation towards sustainability to the personal, social and political spheres.</b></p> <p><b>Social and emotional: Develop fundamental attitudes and values for sustainability.</b></p>
2	Addressing the causes and consequences of hunger and malnutrition	
3	Ensure resilience and physical and psychological well-being.	
4	Emphasize quality learning content and its contribution to the survival and prosperity of humanity.	
5	Encourage gender equality and sustainability.	
6	Accelerate adequate and equitable access to water as a global common good.	
7	Promote clean and affordable energy, along with sustainable lifestyles.	
8	Promote new models and economic values.	
9	Move towards green technologies and sustainable industries.	

10	Fight inequality in all forms.	
11	Support cities and communities as places of significant and transformative action.	
12	Erect new forms of production and consumption.	
13	Fight against GHGs that cause climate change.	
14	Protect bodies of water and their resources.	
15	Promote the conservation and restoration of biodiversity as the fundamental basis for the survival and prosperity of the human being.	
16	Promote peace and justice.	
17	Provide resources of a diverse nature and promote global cooperation.	

**Source:** UNESCO. Education for Sustainable Development: Roadmap. 2020. Own elaboration

### 3. Priority areas of action

- Promotion of policies.
- Transformation of learning environments.
- Strengthening the capacities of educators.
- Empowerment and mobilization of youth.
- Acceleration of actions at the local level.

### 4. CONCLUSIONS

- It is demonstrated that the model will allow the achievement of the SDGs of the 2030 Agenda.
- On the basis of which it will be possible to achieve the three main dimensions of sustainable development.
- Said articulation will make it possible to achieve a better world, integrating the SDGs into global education.

### 5. RECOMMENDATIONS

Based on what has been stated, we recommend the following Actions for the Implementation of ESD for 2030: Implementation of ESD at all levels, better communication for action and contribution of resources in the coming years.

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