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***Stepping-up and promoting Education & Innovation toward
Sustainable Development Goals (SDGs) through Educational Laboratory for
Accelerating civic Skills and sustainable Businesses - EduLab4Future -***

1st Multiplier Event

**"Strengthening Education through Innovation & Sustainable Development
Goals (SDGs)"**

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**Module: Inventory of emerging knowledge on
innovation & SDGs – (O1/A1)**

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Inventory of emerging knowledge on innovation & SDGs

1. Key initiative for innovation and SDGs at European and international level
2. Standard approaches for sustainability in doing business
3. Topical educational approaches for teaching and learning on SDGs
4. Key initiatives on entrepreneurship and social innovation

Inventory of emerging knowledge on innovation & SDGs

Key initiative for innovation and SDGs at European and International Level

- The 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs)
- The role of innovation to achieve Sustainable Development Goals
- Innovation approaches for Sustainable Development Goals

Standard approaches for sustainability in doing business

- Existing normative frameworks, principles and guidelines

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Topical educational approaches for teaching and learning on SDGs

- What is Education for Sustainable Development?
- Integrating education into sustainable development
- Contribution of Sustainable Development to Education
- Learning objectives for achieving the SDGs
- Strategies to implement EDS

Key initiatives on entrepreneurship and social innovation

- Social economy, social enterprise, social entrepreneurship and social innovation in EU
- Successful social economy policies (SEP) in Europe
- Good practice examples for social enterprise development in Romania
- Examples of social business initiatives in Romania

Key initiative for innovation and SDGs at European and International Level

The 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs)

Sustainable development - 'Development which meets the needs of the current generations without compromising the ability of future generations to meet their own needs'. (WCED, 1987)

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The 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs)

The 2030 Agenda integrates the three dimensions of sustainable development:

- economic
- social
- environmental

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The 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs)



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The role of innovation to achieve Sustainable Development Goals

The ambition of the Sustainable Development Goals require *“innovation in development and innovation for development”*.

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The role of innovation to achieve Sustainable Development Goals

Goals and targets that explicitly mention the role of science, technology and innovation include the following: (UN General Assembly, 2015)

Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture (2.a)

Goal 3. Ensure healthy lives and promote wellbeing for all at all ages (3.b)

Goal 6. Ensure availability and sustainable management of water and sanitation for all (6.a)

Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all (7.a) Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all (8.2)

Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation (9.5); (9.b)

Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development (14.4 (14.a)

Goal 17. Strengthen the means of implementation and revitalise the Global Partnership for Sustainable Development (17.6); (17.7); (17.8)

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The role of innovation to achieve Sustainable Development Goals

The Addis Ababa Action Agenda (AAAA) - recognises that *“The creation, development and diffusion of new innovations and technologies and associated know-how, including the transfer of technology on mutually agreed terms, are powerful drivers of economic growth and sustainable development”*. (UN General Assembly, 2015b)

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The role of innovation to achieve Sustainable Development Goals

Paris Climate Agreement (COP21) explicitly refers to innovation in its Article 10, paragraph 5:

“Accelerating, encouraging and enabling innovation is critical for an effective, long-term global response to climate change and promoting economic growth and sustainable development. Such effort shall be, as appropriate, supported, including by the Technology Mechanism and, through financial means, by the Financial Mechanism of the Convention, for collaborative approaches to research and development, and facilitating access to technology, in particular for early stages of the technology cycle, to developing country Parties.”

(United Nations, 2015)

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Innovation approaches for Sustainable Development Goals

- Directing innovative activities: Mission-oriented innovation
- Extending beneficiaries: Pro-poor and inclusive innovation
- Broadening the range of actors in the innovation process - Grass-roots innovation
- Shifting beyond technological to social innovation - Social innovation
- Fostering open, digital collaborations - Digitally enabled open and collaborative innovation

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Innovation approaches for Sustainable Development Goals

Directing innovative activities: Mission-oriented innovation

Example: “Fighting Ebola: A Grand Challenge for Development (relevant to Goals 3, 9 and 17)

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Innovation approaches for Sustainable Development Goals

Innovation approaches for Sustainable Development Goals

Extending beneficiaries: Pro-poor and inclusive innovation

- The World Bank defines inclusive innovation as any innovation that helps expand affordable access to quality products and services that create and increase livelihood opportunities for excluded populations (World Bank, 2013).
- Another definition of inclusive innovation refers to the inclusion in some aspect of innovation of groups that are currently marginalized.
- The private sector can help improve the lives of the poor in three ways:
 - by creating jobs and increasing the productivity of the poor,
 - by addressing some of their needs through corporate social responsibility initiatives and
 - by developing affordable products and services tailored to the needs of low-income consumers

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Innovation approaches for Sustainable Development Goals

Innovation approaches for Sustainable Development Goals

Extending beneficiaries: Pro-poor and inclusive innovation

Example of innovations for and by marginalized people:

- General Electric low-cost ultrasound scanner (relevant to Goal 3)
- Promoting locally developed technological solutions in India (relevant to Goal 3)
- Mobile ICT for rural women in India

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Innovation approaches for Sustainable Development Goals

Broadening the range of actors in the innovation process - Grass-roots innovation

Grassroots innovations are community-led solutions for sustainability.

Example: The One Million Cisterns Project (relevant for Goals 2 and 6)

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Innovation approaches for Sustainable Development Goals

**Shifting beyond technological to social innovation -
Social innovation**

Example: Car clubs (relevant for Goals 11, 12 and 13)

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Innovation approaches for Sustainable Development Goals

Fostering open, digital collaborations - Digitally enabled open and collaborative innovation

This innovation approaches draw on and recombine multiple sources and forms of knowledge, especially through digitally enabled open collaboration.

There are two key requirements for enabling collaborative innovation:

- (1) open access to knowledge and
- (2) (2) wide participation in the process of developing ideas, products and technologies.

Examples:

- Hackathons
- Civic innovation labs
- The Global Village Construction Set

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Standard approaches for sustainability in doing business

Sustainability is most often defined as meeting the needs of the present without compromising the ability of future generations to meet theirs.

The concept of sustainability is composed of three pillars:

- economic,
- environmental, and
- Social

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Standard approaches for sustainability in doing business

Generally, sustainability in business addresses two main categories:

- the effect business has on the environment and
- the effect business has on society

“Private business activity, investment and innovation are major drivers of productivity, inclusive economic growth and job creation. We acknowledge the diversity of the private sector, ranging from micro enterprises to cooperatives to multinationals. We call on all businesses to apply their creativity and innovation to solving sustainable development challenges.”

The 2030 agenda for sustainable development Article 67 agreed to by all 193 UN Member States (UN General Assembly, 2015)

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Standard approaches for sustainability in doing business

Existing normative frameworks, principles and guidelines

Frameworks analyzed:

- UN Global Compact Principles;
- UN Guiding Principles on Business and Human Rights
- ILO Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy
- SDG Compass. The Guide for Business Action on the SDGs (UN, GRI, WBCSD)
- ISO 26000 Guidance on Social Responsibility and more regional guidelines such as the
- OECD Guidelines for Multinational Enterprises
- Social Accountability 8000:2014

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Standard approaches for sustainability in doing business

UN Global Compact Principles - “ Business as a force for good”

THE TEN PRINCIPLES OF THE UNITED NATIONS GLOBAL COMPACT

Human Rights

- 1 Businesses should support and respect the protection of internationally proclaimed human rights and;
- 2 Make sure that they are not complicit in human rights abuses.

Labour

- 3 Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
- 4 The elimination of all forms of forced and compulsory labour;
- 5 The effective abolition of child labour; and
- 6 The elimination of discrimination in respect of employment and occupation.

Environment

- 7 Businesses should support a precautionary approach to environmental challenges;
- 8 Undertake initiatives to promote greater environmental responsibility and;
- 9 Encourage the development and diffusion of environmentally friendly technologies.

Anti-Corruption

- 10 Businesses should work against corruption in all its forms, including extortion and bribery.

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Standard approaches for sustainability in doing business

UN Guiding Principles on Business and Human Rights

The Guiding Principles are founded on three pillars:

- The State duty to protect human rights;
- The corporate responsibility to respect human rights;
- The need for greater access to effective remedy, both judicial and non-judicial, for victims of business-related human rights abuse.

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Standard approaches for sustainability in doing business

ILO Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy

These principles reflect good practice for all and are addressed to multinational and national enterprises, governments of home and host countries, and employers' and workers' organizations and cover areas such as:

- employment;
- training;
- conditions of work and life;
- industrial relations;
- general policies.

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Standard approaches for sustainability in doing business

SDG Compass. The Guide for Business Action on the SDGs

(GRI, UN Global Compact ,World Business Council for Sustainable Development (WBCSD)

The guide presents five steps that assist companies in maximizing their contribution to the SDGs. (SDG Compass, 2015)

The SDG Compass guide is organized into sections that address each of the five steps of the guide:

- **Understanding the SDGs**
- **Defining priorities**
- **Setting goals**
- **Integrating**
- **Reporting and communicating**

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Standard approaches for sustainability in doing business

ISO 26000 Guidance on Social Responsibility

ISO 26000 provides guidance on how businesses and organizations can operate in an ethical and transparent way that contributes to sustainable development while taking into account the expectations of stakeholders, applicable laws and international norms of behaviour. (ISO, 2018)

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Standard approaches for sustainability in doing business

The OECD Guidelines for Multinational Enterprises are a set of recommendations addressed by governments to multinational enterprises operating in or from adhering countries.

The OECD Guidelines are structured in two parts:

- Part I defines standards for responsible business conduct in a global context
- Part II sets out Procedural Guidance to implement the recommendations in Part I

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Standard approaches for sustainability in doing business

Social Accountability 8000:2014 (Social Accountability International)

Social Accountability 8000 - is the leading social certification standard for factories and organizations across the globe.

SA8000 measures the performance of companies in eight areas important to social accountability in the workplace: child labour, forced labour, health and safety, free association and collective bargaining, discrimination, disciplinary practices, working hours and compensation.

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Topical educational approaches for teaching and learning on SDGs

“Education can, and must, contribute to a new vision of sustainable global development.” (UNESCO, 2015)

What is Education for Sustainable Development?

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Topical educational approaches for teaching and learning on SDGs

Integrating education into sustainable development

Within 2030 Agenda for Sustainable Development, education is essentially articulated as a stand-alone goal - **SDG4 Quality Education**.

Under Goal 4, one of the most challenging targets is Target 4.7, which aims to: *„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 nonviolence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development.”*

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Topical educational approaches for teaching and learning on SDGs

Contribution of Sustainable Development to Education

Not only education contributes to sustainable development and the transformation of society but also sustainability improves education and has the potential to transform education:

- *Sustainability adds purpose to education*
- *Sustainability gives a common vision*
- *Sustainability in the curriculum raises economic potential*
- *Sustainability gives concrete examples of abstract concepts*
- *Sustainability can save pupils' lives*

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Topical educational approaches for teaching and learning on SDGs

Learning objectives for achieving the SDGs

Cross-cutting key competencies for achieving all SDGs

Specific learning objectives for the SDGs

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Topical educational approaches for teaching and learning on SDGs

Learning objectives for achieving the SDGs

Cross-cutting key competencies for achieving all SDGs

- **Systems thinking competency**
- **Anticipatory competency**
- **Normative competency**
- **Strategic competency**
- **Collaboration competency**
- **Critical thinking competency**
- **Self-awareness competency**
- **Integrated problem-solving competency**

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Topical educational approaches for teaching and learning on SDGs

Learning objectives for achieving the SDGs

Specific learning objectives for the SDGs

For each SDG, learning objectives are described in the cognitive, socio-emotional and behavioural domains.

- The **cognitive domain** comprises knowledge and thinking skills necessary to better understand the SDG and the challenges in achieving it.
- The **socio-emotional domain** includes social skills that enable learners to collaborate, negotiate and communicate to promote the SDGs as well as self-reflection skills, values, attitudes and motivations that enable learners to develop themselves.
- The **behavioural domain** describes action competencies.

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Topical educational approaches for teaching and learning on SDGs

Recommendations for implementation

- Integrating ESD in **policies, strategies and programmes**
- Integrating ESD in **curricula & textbooks**
- Integrating ESD in **teacher education**
- Promoting a **whole-institution approach**
- Applying **action-oriented transformative pedagogy**
 - **A learner-centred approach**
 - **Action-oriented learning**
 - **Transformative learning**

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Topical educational approaches for teaching and learning on SDGs

Pedagogical approaches in ESD

ESD favours methods that foster sustainability competencies through active learning:

- **Critical reflection**
- **Systemic thinking and analysis**
- **Participatory learning**
- **Thinking creatively for future scenarios**
- **Collaborative learning**

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Topical educational approaches for teaching and learning on SDGs

Assessing ESD learning outcomes and the quality of ESD programmes

ESD programmes and initiatives should be assessed at multiple levels.

Assessment and evaluation in ESD can serve different purposes.

There are many ways of assessing learning outcomes. The approach taken will depend on the characteristics of the education system and on how ESD is delivered.

Methods of assessment will need to be aligned with the learning objectives and with teaching and learning practices

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Key initiatives on entrepreneurship and social innovation

Social economy, social enterprise, social entrepreneurship and social innovation in EU

Social economy

Social enterprises - The European Commission identifies the social enterprises' main fields of activity:

- Work integration
- Personal social services
- Local development of disadvantaged areas

Social innovations

Social entrepreneurship

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Key initiatives on entrepreneurship and social innovation

Successful social economy policies (SEP) in Europe

Typology of social economy policies:

- Soft policies aim at creating a favourable environment for the creation and development of social economy enterprises. They may be divided into two groups, institutional policies and cognitive policies.
- Hard policies aim at intervening in the economic process of social economy enterprises with incentives both from the supply side, promoting its economic competitiveness in the different business roles in the value chain.

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Key initiatives on entrepreneurship and social innovation

Social innovation in Eastern Europe

- Social innovations in the region of Eastern Europe are mainly connected with the activities of civil society organisations.
- They mainly occur in the field of education and environment and rarely in the field of energy or healthcare.

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Key initiatives on entrepreneurship and social innovation

Good practice examples for social enterprise development in Romania

- Junior Achievement Romania
- NESsT
- Impact Hub
- “Tara lui Andrei”

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Key initiatives on entrepreneurship and social innovation

Examples of social business initiatives in Romania

- VIITOR PLUS
- CONCORDIA
- FUNDATIA ALATURI DE VOI
- PROIECT MOZAIC