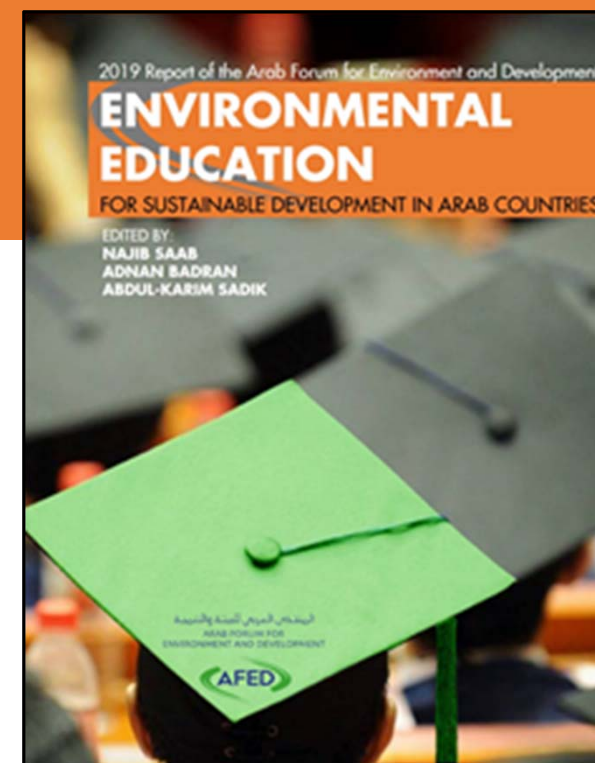# ENVIRONMENTAL EDUCATION
FOR SUSTAINABLE DEVELOPMENT IN ARAB COUNTRIES

Environmental Education and Education for Sustainable Development: Evolution and Global Trends

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Presented by: Ibrahim Abdel Gelil

Outline
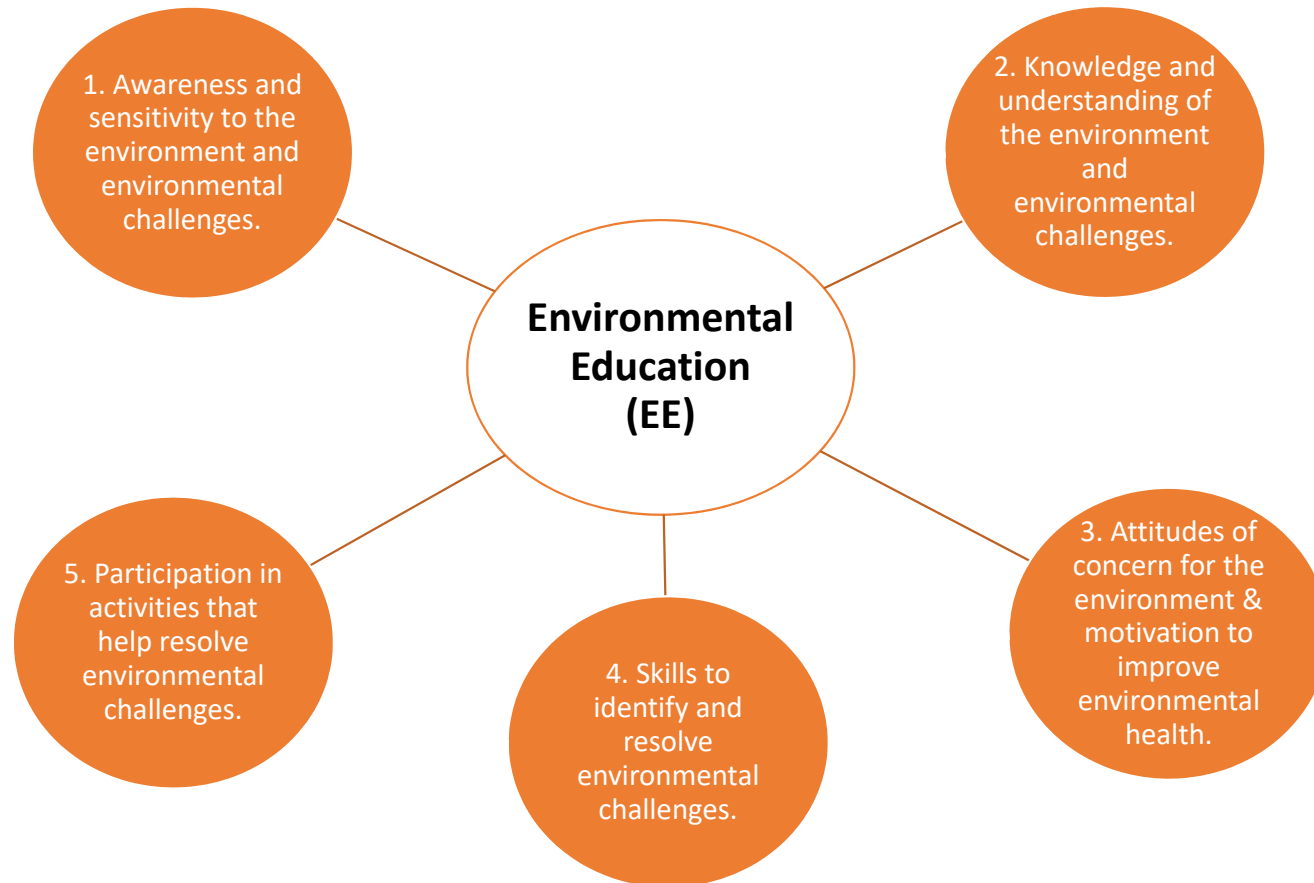
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III.   Education for Sustainable Development and its Evolution

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Introduction

- Many definitions for EE, the most prominent was given by UNESCO:

  "A learning process that increases people's knowledge and awareness about the environment and associated challenges, develops the necessary skills and expertise to address the challenges, and fosters attitudes, motivations, and commitments to make informed decisions and take responsible action."(Borah,2007)

- Today a distinction is rarely made between EE and ESD whereas ESD encompasses socio-cultural and economic issues.

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Components of Environmental Education

1. Awareness and sensitivity to the environment and environmental challenges.

2. Knowledge and understanding of the environment and environmental challenges.

Environmental Education (EE)

3. Attitudes of concern for the environment & motivation to improve environmental health.

4. Skills to identify and resolve environmental challenges.

5. Participation in activities that help resolve environmental challenges.

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EE and its Evolution

Initial Inspiration

- Philosophers and educators wrote on the importance of learning about nature and the environment.
- In the 1920s, the field of Ecology, or the study of nature, became a scientific field of study.

Foundation of Modern EE

- The concept of EE started gaining popularity through policies, conferences held by the UN, and nations' responses to suggested paths.
- Example: In 1969, the National Environmental Policy Act was passed in the US.
- 1987: Brudtland Report and defining SD.

18th Century to 1920s

1930s to 1954

1960s to 1989

1992 to 2002

Conservation Education Era

- After a number of environmental crises, the need for better natural resource management arose and the concept of 'conservation' was emphasized.
- Conservation education in schools and universities started.
- In 1948, the term *'environmental education'* was first used publicly by Thomas Pritchard at the International Union for the Conservation of Nature in Paris.
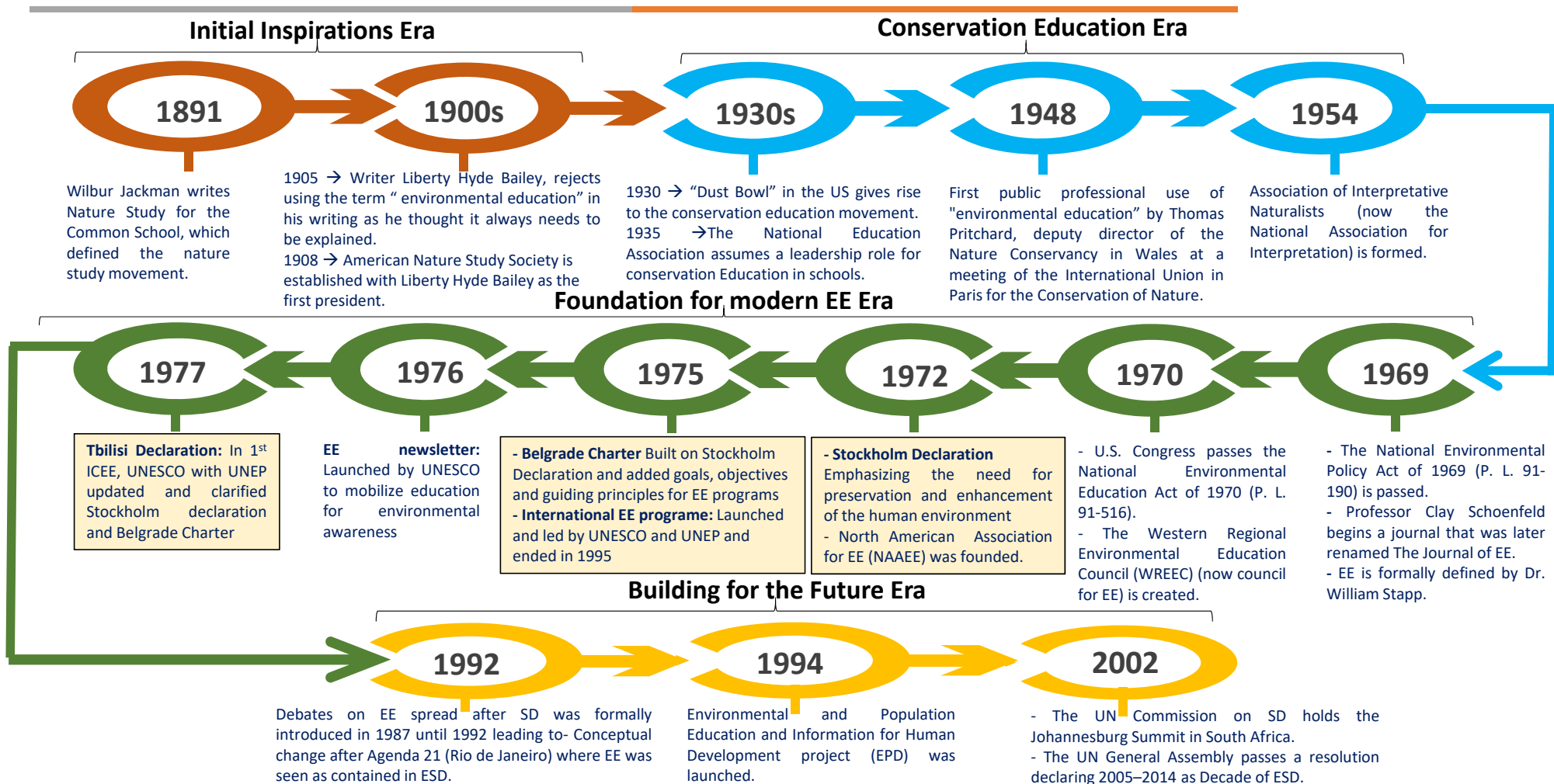
Building for the Future

- Debates on EE started soon after the concept of SD was formally introduced and continued to spread.
- The means of implementing SD was suggested through education in Agenda 21.
- EE first began to be viewed as being contained within ESD (The United Nations Conference on Environment and Development, 1992).

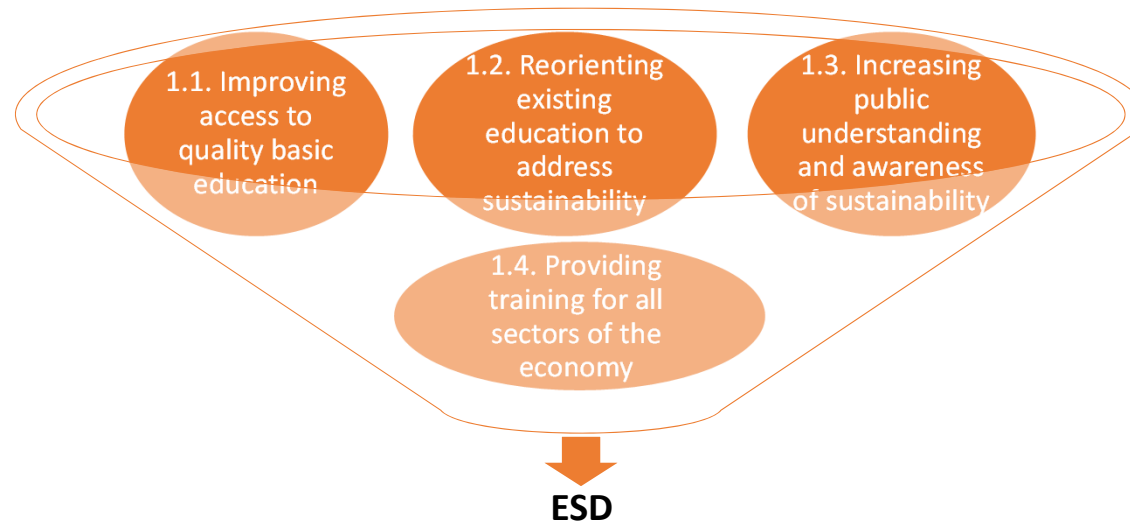*2019 Report of the Arab Forum for Environment and Development*

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EE and its Evolution

Initial Inspirations Era

1891 → **1900s**

Wilbur Jackman writes Nature Study for the Common School, which defined the nature study movement.

1905 → Writer Liberty Hyde Bailey, rejects using the term " environmental education" in his writing as he thought it always needs to be explained.
1908 → American Nature Study Society is established with Liberty Hyde Bailey as the first president.

Conservation Education Era

1930s → **1948** → **1954**

1930 → "Dust Bowl" in the US gives rise to the conservation education movement.
1935 → The National Education Association assumes a leadership role for conservation Education in schools.

First public professional use of "environmental education" by Thomas Pritchard, deputy director of the Nature Conservancy in Wales at a meeting of the International Union in Paris for the Conservation of Nature.

Association of Interpretative Naturalists (now the National Association for Interpretation) is formed.

Foundation for modern EE Era

1977 ← **1976** ← **1975** ← **1972** ← **1970** ← **1969**

Tbilisi Declaration: In 1st ICEE, UNESCO with UNEP updated and clarified Stockholm declaration and Belgrade Charter

EE newsletter: Launched by UNESCO to mobilize education for environmental awareness

- **Belgrade Charter** Built on Stockholm Declaration and added goals, objectives and guiding principles for EE programs
- **International EE programe:** Launched and led by UNESCO and UNEP and ended in 1995

- **Stockholm Declaration** Emphasizing the need for preservation and enhancement of the human environment
- North American Association for EE (NAAEE) was founded.

- U.S. Congress passes the National Environmental Education Act of 1970 (P. L. 91-516).
- The Western Regional Environmental Education Council (WREEC) (now council for EE) is created.

- The National Environmental Policy Act of 1969 (P. L. 91-190) is passed.
- Professor Clay Schoenfeld begins a journal that was later renamed The Journal of EE.
- EE is formally defined by Dr. William Stapp.

Building for the Future Era

1992 → **1994** → **2002**

Debates on EE spread after SD was formally introduced in 1987 until 1992 leading to- Conceptual change after Agenda 21 (Rio de Janeiro) where EE was seen as contained in ESD.

Environmental and Population Education and Information for Human Development project (EPD) was launched.

- The UN Commission on SD holds the Johannesburg Summit in South Africa.
- The UN General Assembly passes a resolution declaring 2005–2014 as Decade of ESD.

ESD and its Evolution

- Education was linked to Sustainable Development (SD) shortly after the introduction of the term.

- This was clear in three out of 27 principles listed in the Rio Declaration on Environment and Development (1992) on sustainability.

- Rio Declaration defined four drives for ESD

1.1. Improving access to quality basic education

1.2. Reorienting existing education to address sustainability

1.3. Increasing public understanding and awareness of sustainability

1.4. Providing training for all sectors of the economy

ESD

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ESD and its Evolution

1987 → **1992 - 1994** → **2000** → **2002** → **2003**

1987
- SD is formally defined in the Brundtland Report ('Our Common Future') report concluding that Education is the path.
- August 1987 → 2nd ICEE was held in Moscow.

1992 - 1994
- June 1992 → Earth Summit in Rio de Janeiro.
- UN clearly addresses education as key for the implementation of sustainability in Chapter 36 of Agenda 21 released following the Rio Declaration.
- In 1994 EPD project was launched.

2000
April 2000 → The Dakar Framework for Action defined the concept of integrating ESD in the Education for All initiative (EFA) by 2015.

2002
August 2002 → World Summit on SD (WSSD) convened in Johannesburg. Nations agreed that more ESD progress was needed and creating a UN Decade of Education for Sustainable Development (UNDESD) was discussed and endorsed by many nations.

2003
- February 2003 → DESD was declared (to start in January 2005) through a UN resolution reaffirming the UNESCO as the lead agency.
- UN Literacy Decade (UNLD) starts with the aim of extending literacy globally and consequently aiding DESD. It ends in 2012.

2014 ← **2012-2013** ← **2009** ← **2007** ← **2006** ← **2005**

2014
World Conference on Education for SD (WCESD) in Aichi-Nagoya, Japan which launched the GAP.

2012-2013
- June 2012 → Earth Summit was held again in Rio de Jeneiro.
- May 2013 → 37th session for the General Conference of UNESCO suggested the initiation of the GAP to follow the DESD.

2009
April 2009: The Bonn Declaration and it was adopted at the World Conference on Education, Bonn, Germany.

2007
November 2007: 4th ICEE on EE's role within ESD towards a Sustainable Future – held in CEE in Ahmedabad, India.

2006
Forty-four (44) countries established national ESD coordinating bodies that included representatives from governments, formal education, NGOs and private sector. This reached seventy-eight (78) by the end of 2008.

2005
September 2005 → Launch of the DESD in which the world was "sought to mobilize the educational resources".

2015 → **2016** → **2030**

2015
World Education Forum (WEF) was held at Incheon, Korea, Ministers of education adopted a global education strategy to implement Sustainable Development Goal (SDG) 4 entitled Education 2030.

2016
Agenda for 2030 was developed with a new overarching vision of ESD and put into effect.

2030
Year set for Incheon Declaration and Framework for Action – an ambitious, aspirational and universal agenda to wipe out poverty through implementation of SDG 4. Deadline for the implementation of 2030 goals.

The Relationship between EE and ESD

The relationship between EE and ESD is interpreted based on whether the historic role of EE in a country is significant, and on the interpretation of EE and its components.

EE = ESD   EE ESD   EE ESD
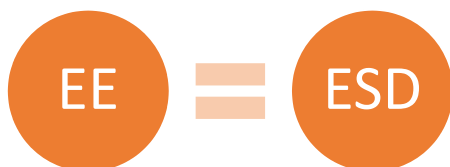
Model 1
- Views EE and ESD as interchangeable.
- Occurs in countries with strong EE traditions.
- There are two responses:
  1) EE continues to evolve since people can identify better with it than with ESD.
  2) EE is integrated in ESD and terms such as EE for SD and EE for sustainable societies emerge.

Model 2
- Views EE as part of ESD.
- Happens when EE is interpreted narrowly with no reference to socio-economic and political aspects.
- In this case, ESD replaces EE and is seen as a more up-to date version.
- This shift allows countries to 'catch-up' to others that started implementing EE at an earlier stage.

Model 3
- Acknowledges that EE and ESD have elements in common but are distinct.
- In this case, the old EE infrastructure will remain and government support for ESD is given, but not at the expense of EE.
- Parallel policy streams and support mechanisms exist.

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Selected Case Studies

Brazil

- In 1981, the Brazilian government issued the 'National Environment Policy', which addresses EE.

- In 1997 and 1998, the Ministry of Education highly recommended that environmental issues be incorporated in basic education.

- In 1999, the National EE Policy, was established.

- Starting 2012, research was implemented to mobilize advancements through education.

- Today, progress in EE and ESD is correlated with policies, strategies, and plans addressing issue of climate change through EE and ESD.

Denmark

- Active commitment of Danish educational policy makers and teachers since the early stages of EE.

- In 1976, the Educational Act addressing curriculum guidelines stated that teaching shall provide a basis for deciding about local and global environmental problems.

- After the launch of the DESD, the Danish government established a national strategy for SD, which outlined the role of the educational sector in achieving SD.

- Today, most Danish schools are recognized as ESD schools .
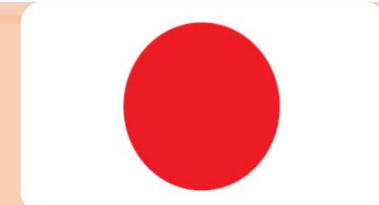
Japan

- In 1947, Japan established the Basic Act on Education.

- EE became gradually functional in the 1980s with the lead of active NGOs, aiming to develop the state through education.

- In 1990, the Society for EE was established .

- In 1993, the Basic Environmental Law was issued addressing collaboration with all citizens for environmental conservation through EE.

- The basic Act on Education was amended with plans to promote education and sustainability becoming a greater goal. Yet, these plans were not oriented directly towards ESD.

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Themes and Trends: Educational Content and Key Competencies

- Current trends focus on relevant education content and not only on access to education and basic skills.
- EE and ESD stakeholders emphasize key competencies to enable individuals to transform their lifestyles towards sustainability, including:

  1. Systems thinking
  2. Anticipatory competency
  3. Normative competency
  4. Strategic competency
  5. Collaboration competency
  6. Critical thinking competency
  7. Self-awareness competency
  8. Integrated problem-solving competency

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Themes, Trends and Topics

- The choice of topic and content in ESD will greatly depend on the competencies that need to be developed.
- Key ESD themes must align with SD processes, such as the 17 fields of action identified by the SDGs.
- The GAP prioritizes four key areas: climate change, biodiversity, disaster risk reduction and sustainable production and consumption (Buckler & Creech, 2014).
- In a report UNESCO (2018) chose six key themes to be discussed in detail: climate change, biodiversity, disaster risk reduction, poverty reduction, sustainable production and consumption and global justice.
- These themes are relevant worldwide, but will need to be tailored to each region and/or country, depending on local needs and requirements.
- Whole-institution approaches are increasing and are helping learners contribute to SD in their schools or institutions, communities and workplaces.

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The Way Forward

- Ensure that both pre-service and in-service teacher education are targeted with the key competencies required for teacher education with ESD as a core element.
- There is much room for improvement of the integration of EE and ESD at the university level as well as for early childhood education, technical and vocational education (UNESCO, 2009).
- The financial aspects of ESD require enhancement since in most countries, there is minimal public budgets and economic incentives for ESD, its research and development and scholarships for ESD innovation and capacity building. Also, multilateral and bilateral donors and the private sector can be significant contributors.
- Assessments should be performed on several levels, including national, individual and largescale assessments to monitor learning outcomes. This feedback will help improve performance and address shortcomings to enhance progress towards ESD goals.
- Furthermore, support should be given to initiatives that enable teachers to become ESD researchers themselves in their own schools and classrooms.

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The Way Forward (cont'd)

- The way forward in all regions depends on the development of inter- and intra-regional networking supported by active ESD focal points, ESD national coordinating bodies, the UNESCO Regional Bureaux for Education, UNESCO National Commissions and UNESCO Chairs, in collaboration with SD-oriented NGOs, the private sector and civil society.
- Capacity-building for ESD policy development within all relevant ministries and at other levels of government is essential for realizing inter-sectoral synergy and improved coordination.

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References

Borah, P. (2007). 4th International conference on environmental education: Environmental education towards a sustainable future partners for the decade of education for sustainable development.

Buckler, C., & Creech, H. (2014). Shaping the future we want: UN Decade of Education for Sustainable Development; final report UNESCO Digital Library. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000230171

Leicht, A., er, H., & Julia, W. J. B. (2018). Issues and trends in education for sustainable development. 271.

Rieckmann, M. (2018). Learning to transform the world: Key competencies in Education for Sustainable Development. In Issues and Trends in education for sustainable development (pp. 39–59).

UNESCO. (1997). Declaration of Thessaloniki (Conference Report No. UNESCO-EPD-97 KONF.40 lKLD.2). Retrieved from UNESCO website: https://www.iau-hesd.net/sites/default/files/documents/thessaloniki.pdf

UNESCO. (2015, August 3). UN Decade of ESD. Retrieved May 9, 2019, from UNESCO website: https://en.unesco.org/themes/education-sustainable-development/what-is-esd/un-decade-of-esd

UNESCO (Ed.). (2016). Education for people and planet: Creating sustainable futures for all (Second edition). Paris: Unesco.

UNESCO General Assembly. (2017). Implementation of Education for Sustainable Development (Seventy-Second Session No. A/72/130). Retrieved from United Nations website: https://undocs.org/A/72/130

UNESCO Member States. (2014). Global Action Programme on Education for Sustainable Development as follow-up to the United Nations Decade of Education for Sustainable Development after 2014 (p. 7). Retrieved from United Nations Educational, Scientific and Cultural Organization website: http://www.mext.go.jp/en/unesco/title04/detail04/sdetail04/__icsFiles/afieldfile/2016/10/11/1375695_01.pdf

WCED. (1987). Our Common Future [Brundtland Report]. Retrieved from World Commission on Environment and Development website: http://www.un-documents.net/our-common-future.pdf

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