Progress in sustainability in and through education: Global policies and national realities

Aaron Benavot

Professor, University at Albany-SUNY
&
Former Director, UNESCO's Global Education Monitoring Report

Symposium: "Social Progress in and through Education," Institute for Advanced Studies in Vienna, Austria, October 7, 2019

Outline of Presentation

I: The GEM Report: mandated to monitor progress in global education policy commitments

II: Evolving global policies on education and sustainability

III: Efforts to monitor progress in education for sustainable development, primarily through Target 4.7

IV: Concluding reflections

Part I

The GEM Report: mandated to monitor progress in global education policy commitments

# What is the Global Education Monitoring (GEM) Report?

- An editorially independent, authoritative and evidence-based annual report on global state of education published by UNESCO.

- Previously mandated to monitor progress of the 6 Education for All Goals (2000-2015); now monitors education targets in the 2030 Agenda for Sustainable Development, especially those under the global goal on education, SDG 4.

- Draws on latest available data and evidence and commissions research from leading experts around the world, to analyze national, regional and global progress in education.

- Publishes a full report, executive summary, gender review and series of policy papers each year.

- Annually launched in 70-80 countries and at the UN, often attended by high-level ministerial officials, representatives of civil society, academia and int'l organizations

- Focuses on education inequalities, including learning, both among & within countries through World Inequality Database on Education (WIDE). www.education-inequalities.org/

Past UNESCO global monitoring reports in education

2002-2015: 12 Education for All Global Monitoring Reports (GMR)

2016-2019: 3 Global Education Monitoring (GEM) Reports
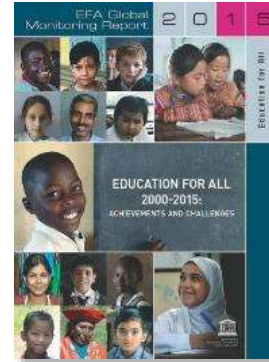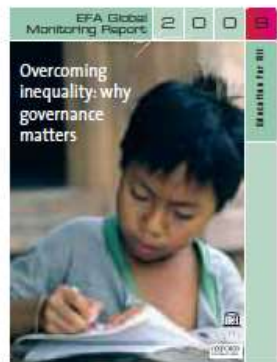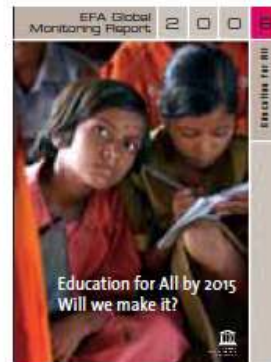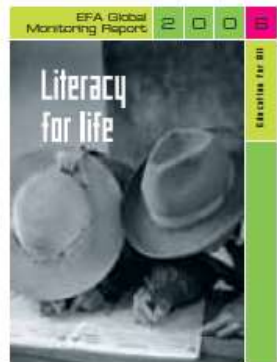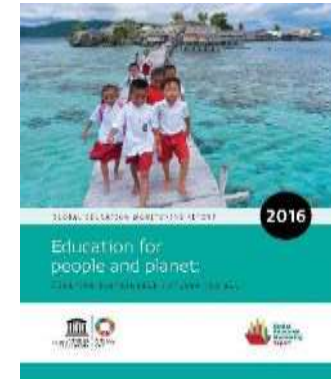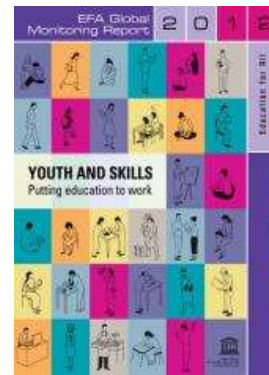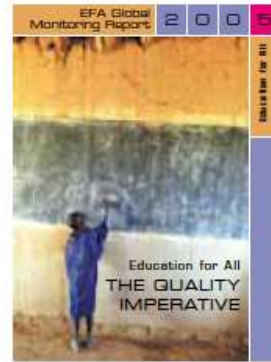
Future reports

2020: Inclusion & education

2021: The role of non-state actors in education

2022: ICT and education

Download the Report: **Bitly.com/sdg4all**

Website: **en.unesco.org/gem-report**

Blogs: **gemreportunesco.wordpress.com**

educacionmundialblog.wordpress.com

Other GEM Report materials: A wealth of knowledge

Full Report and Summary in all UN languages

Summary in other languages:
- Farsi
- German
- Hindi
- Indonesian
- Japanese
- Korean
- Lao
- Nepali
- Portuguese
- Swahili
- Thai
- Urdu
- Vietnamese
- Khmer

Annual **Gender Review and Youth Report**

An **online and mobile-phone version** of the Summary is available

SHARE ON

A **social media pack** is available in all UN languages

en.unesco.org/gem-report/

Hundreds of background papers

Videos with key messages

Powerpoint presentations and posters in English, French and Spanish

A **fold out flyer** with the key messages

Policy briefs containing key recommendations for policy makers

Blog: gemreportunesco.wordpress.com

Part II

Evolving Global Policies on Education and Sustainability:

The lead up to the 2030 Agenda for Sustainable Development and it key features

Global education expansion and role of international policy: Historical perspective

- Historically (late 19th/early 20th centuries) formal schooling expanded in North America, parts of Europe and Latin America, and in Japan. In many countries universal primary education was achieved by 1920s. Minimal impact of international organizations; some transnational forces (eg, colonialism, religious groups) served either as obstacles or carriers of educational models. Key point: primary education expanded in absence of supportive international policies or external financial aid.

- On October 24, 1945 the Charter of the UNITED NATIONS was signed by 50 countries in San Francisco, establishing the UN.

- On November 4, 1946 UNESCO was established, seeks to contribute to peace and security by promoting international collaboration through educational, scientific, and cultural reforms in order to increase universal respect for justice, the rule of law and human rights.

- Key norm-setting instrument: Universal Declaration of Human Rights (adopted by the UN in Dec 1948). The UDHR has 30 Articles; Article 26 directly addresses education.

International education policy based on UN's Universal Declaration of Human Rights 1948

Article 26 in the Universal Declaration of Human Rights states:

(1) **Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit.**

(2) **Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among nations, racial or religious groups, and shall further the activities of the UN for the maintenance of peace.**

(3) **Parents have a prior right to choose the kind of education that shall be given to their children.**

Signatories of UDHR committed themselves to the goal of providing school places for all children; countries expected to implement legislation making primary schooling free and compulsory

Evolution of International Education Policy: Key Milestones

During 1960s-1980s, continued influence of UDHR + spread of modernization, economic development & human capital theories in int'l agencies, justifying expanding access to basic education through norm-setting instruments, technical support and financial aid.

Percent of school-age population enrolled in primary education rose dramatically, out-pacing population growth. And yet **the global goal of Universal Primary Education was missed: in 1980, 2000 & 2015!**

1980s-1990s emerging int'l consensus about **good quality education** and need for (lifelong) **learning policies for children, youth and adults**.

1. **World Conference on Education for All** (EFA) in Jomtien, Thailand (May 1990)

2. **World Education Forum** (WEF) in Dakar, Senegal (May 2000) (**6 EFA goals**)

3. **World Education Forum** (WEF) in Incheon, Republic of Korea (May 2015) **Merging of education and development policies--> SDG4**

EDUCATION FOR ALL

GOAL 1 Expand early childhood care and education, particularly for the most vulnerable children

GOAL 2 Achieve universal primary education, particularly for girls, ethnic minorities and marginalized children

GOAL 3 Ensure equal access to learning and life skills for youth and adults

EFA GOALS

GOAL 4 Improve levels of adult literacy, particularly for women, and ensure access to education for all adults

GOAL 5 Achieve gender parity and equality, with a focus on equal access to education of good quality

GOAL 6 Improve the quality of education and ensure measurable learning outcomes for all

73 million children aged 5 to 11 worked in 2012

EFA Stocktaking: Measurable Progress in Education 2000-2015

There were **84 million** fewer out of school children and adolescents

...**52 million** of these are girls

12 million more teachers were recruited and deployed in primary and secondary education

Two-thirds more children were enrolled in pre-primary education

Some **34 million** more children went to school due to intensive efforts of EFA supporters and organizations

Limits to Progress in Education 2000-2015

Just **one-third of countries** achieved the three measurable EFA goals: UPE, gender parity and adult literacy

Only **just over half of countries** achieved Universal Primary Enrolment
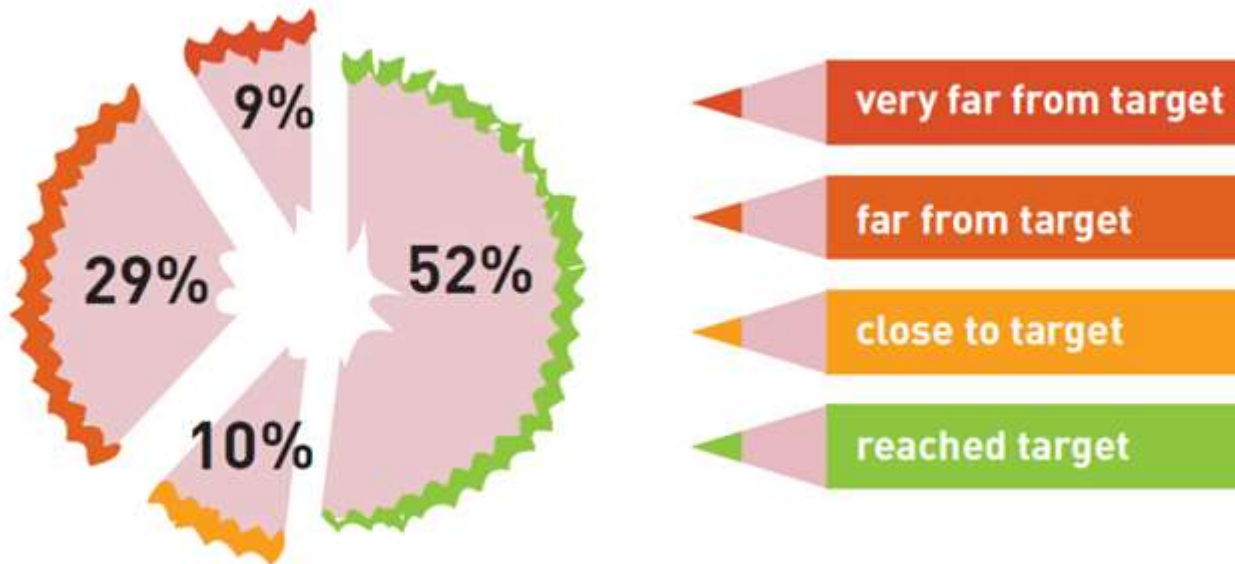
A third of countries did not reach gender parity in primary education; **almost a half of countries** didn't reach gender parity in secondary education

Major Inequalities in Education Persisted

Poorest children are:
- **4x more likely** to be out of school; and
- **5x more likely** not to finish primary school than richest children

The proportion of **out of school children in conflict-affected zones was 36% in 2015,** having increased since 2000

Pronounced **learning gaps remain** between the most and least advantaged students

Nearly **two-thirds** of the 781 million adults who lack basic literacy skills **are women**

Narrow education agenda in the Millennium Development Goals adopted by UN in Sept 2000

MDG 2 focused on **EFA Goal 2: UNIVERSAL PRIMARY EDUCATION COMPLETION; one of MDG 3 Indicators is gender parity in primary education**

Merging the development, sustainability and education agendas into a universal, integrated global policy commitment

- **Merging of development (Millennium Development Goals) and environment agendas: Earth Summit 1992 (Rio), World Summit on SD, 2002 (J-berg), UN Conference of Sustainable Development, 2012 (Rio +20)**

- In 2013 UN establishes country-led Open Working Group (OWG) to negotiate merged post-2015 agenda

- UN conducts *World We Want* survey: almost 10 million people participate

- **Merging post-2015 education and development agendas: Education for All (EFA) process concludes at Global Education Meeting in Muscat Oman, May 2014, when reps of int'l educ community decide to commit to post-2015 sustainability agenda**

- OWG agrees to **separate** Education Goal (SDG 4) together with 7 Targets and 3 Means of Implementation in July 2014. Proposed education goal reflects most, though not all, priorities of international education community

- UN SG synthesis report (Dec 2014) proposes 17 SDGs & 169 targets

- **World Education Forum: Incheon Declaration (May 2015): Ratifies work of OWG**

- UN adopts 2030 Agenda 2030 for Sustainable Development (September 2015) and final formulations of 17 goals and 169 targets

- **UNESCO member states adopt Education 2030 Framework for Action (Nov 2015)**

The 2030 Agenda for Sustainable Development supports Planet, People, Prosperity, Peace and Partnership

UN Member States adopted 17 SDGs and 169 targets in Sept. 2015 and, two years later, 230 global indicators to review country progress on targets
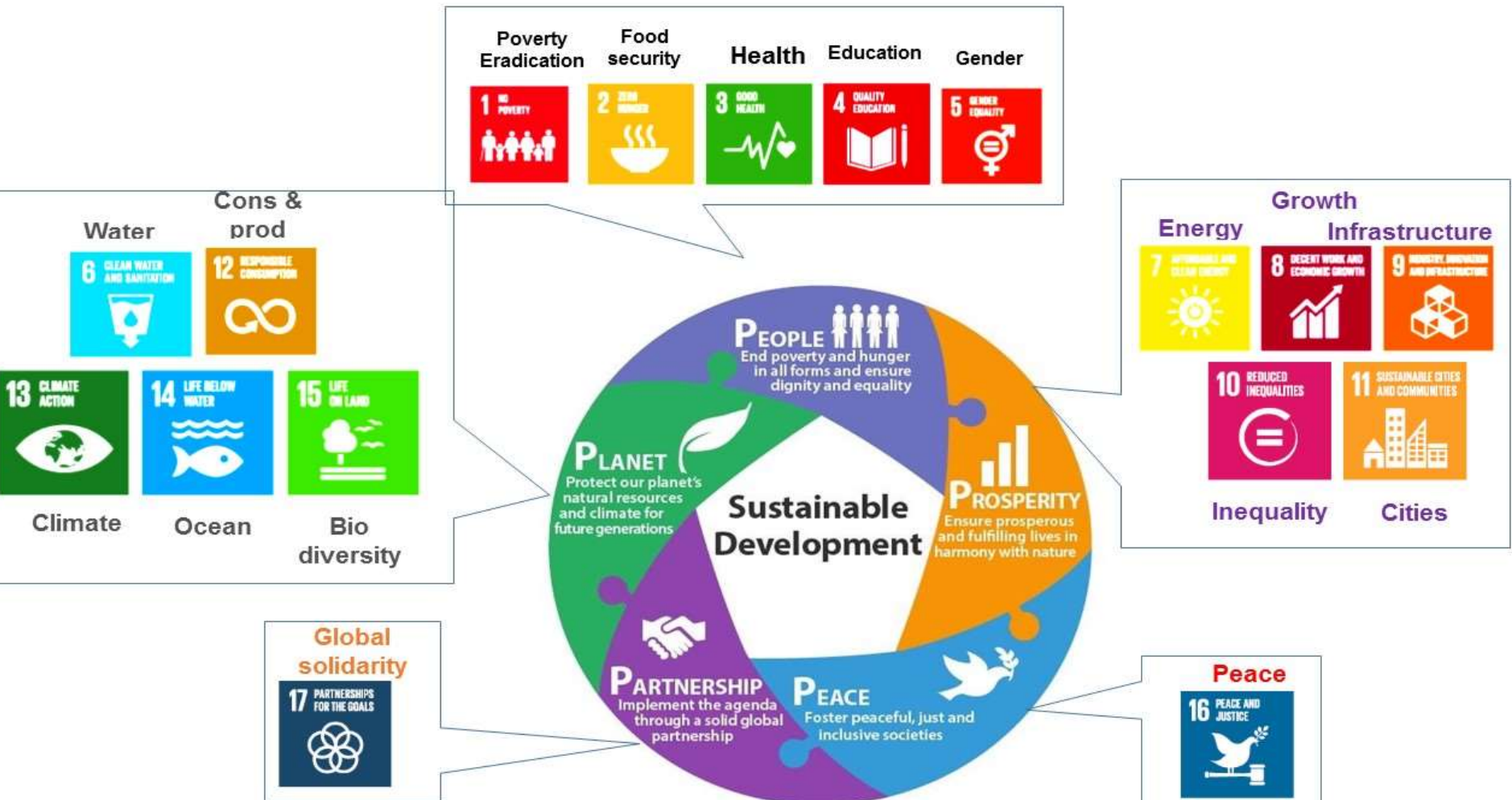
Sustainability understood to include 3 dimensions

The 17 SDGs incorporate three sustainability dimensions into a single universal and transformative agenda

To end poverty and hunger and to ensure that all human beings can fulfil their potential in dignity and equality and in a healthy environment

Social
Leave no one behind

Environment
COP21

Economic
Addis Ababa
Action Agenda

To protect the planet from degradation so that it can support the needs of the present and future generations

To ensure that all human beings can enjoy prosperous and fulfilling lives and that economic, social and technological progress occurs in harmony with nature

For environmental educationalists, the 17 SDGs contained ideas for a holistic approach to transforming societies and economies

The Doughnut of social foundations and planetary boundaries (Raworth 2017)

food

energy

governance

redrawn from "the world we all want project"
(Mark Beam)

community food
culinary center, lotus foods, hot bread kitchen

clean energy
wind, solar, biomass, efficiency, local solutions, smart grid

liquid democracy
state department impact investing, occupy wall street, decline of the west global power shift, the rise of the east, mideast uprinsings

networks

economy

socially responsible investing
corporate social, social impact bonds, responsibility, screw business as usual

smart cities
smartmobs, the rise of the south, the rise of cities

local energy independence

local food

localization of power

local ecosystems

social entrepreneurship
impact investing, b-corp, micro-franchising, social business, formation of social capital, SOCAP

business + impact

Sustainability Movement?

social networks
world cafe, facebook, hubs, youtube, bamyan media, accelerators, {E}nstitute, TedEd, social incubators

peer financing

social networks

crowd funding
indie, gogo, microfinance, kickstarter, time banks, impact investing, crowdfunder.com

social innovation

collaborative problem solving

self-discovery
ted talks, khan academy, institute of play, real-time learning, new culture of learning,

investments

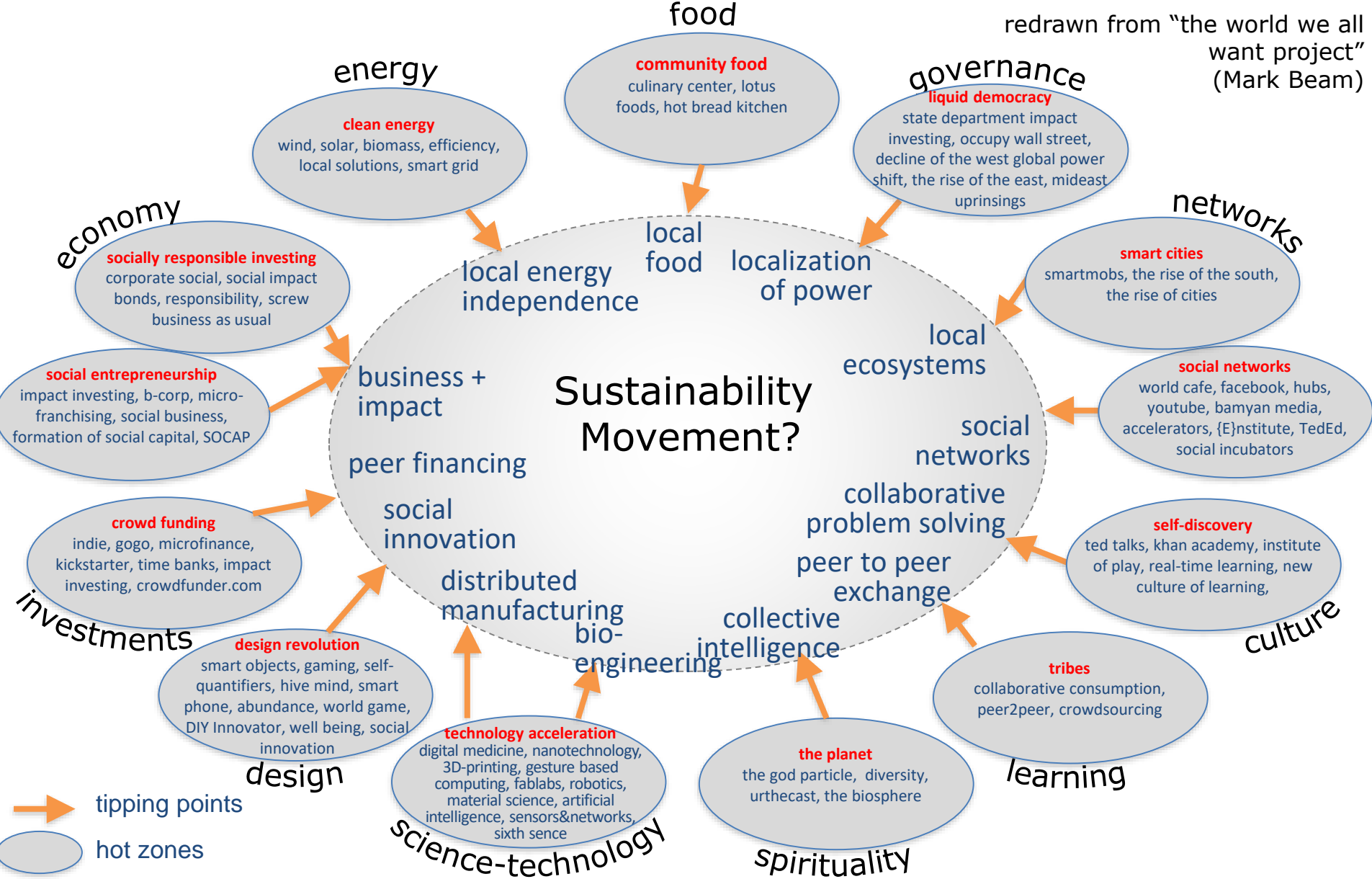distributed manufacturing

peer to peer exchange

culture

design revolution
smart objects, gaming, self-quantifiers, hive mind, smart phone, abundance, world game, DIY Innovator, well being, social innovation

bio-engineering

collective intelligence

tribes
collaborative consumption, peer2peer, crowdsourcing

design

technology acceleration
digital medicine, nanotechnology, 3D-printing, gesture based computing, fablabs, robotics, material science, artificial intelligence, sensors&networks, sixth sence

the planet
the god particle, diversity, urthecast, the biosphere

learning

science-technology

spirituality

→ tipping points

⬭ hot zones

Approaches to environmental education also evolved

	Nature conservation education
Starting period	Late 19th century
Main focus	Connecting with nature, understanding web of life, protecting species, raising awareness, knowledge and understanding
Intended impact	Ecological literacy, societal support base for nature conservation through national parks
Examples	Visitor centres in national parks, public awareness campaigns, nature programmes in schools, school gardening

Source: Wals (2012).

	Environmental education & Communication
Starting period	Late 1960s, early 1970s
Main focus	Raising environmental awareness about pollution of water, soil and air
Intended impact	Changing individual environmental behaviour, developing agency and societal support for environmental legislation
Examples	Environmental education centres in cities, public awareness campaigns, school curricula, teacher training

Source: Wals (2012).

	Sustainability education & Communication
Starting period	Early 1990s
Main focus	Increasing citizen engagement, participation in sustainable development issues and increasing understanding of connections between environment, economy, culture and ecology, and how today's actions affect future generations
Intended impact	A more holistic or integrated approach of dealing with issues around water, food, energy, poverty and biodiversity, in governance, education and business
Examples	Multistakeholder platforms focusing on sustainable development issues, whole school approaches to sustainability, corporate social responsibility

Source: Wals (2012).

Sustainability is not just something to learn, it's something to live!

UNESCO, 2016 /GEM2016 Report

Key aspects of the commitment to education & sustainability are in SDG 4

"Ensure inclusive and equitable quality education & promote lifelong learning opportunities for all"

Vision and Principles

- A single universal agenda: Education 2030 = SDG 4
- Education: Human right and public good
- Comprehensive, holistic, ambitious, aspirational and universal
- Transformative, equity oriented 'leaving no one behind'
- Lifelong learning approach focusing on skills for work and life
- Focus on quality and learning outcomes
- Addresses unfinished EFA/MDG agenda and current and future challenges
- Represents an EFA+ agenda

Targets

4.1 Quality primary & secondary education

4.2 Early childhood & pre-primary education

4.3 Equal access to TVET & higher education

4.4 Relevant skills for work

4.5 Gender equality & equal access for all

4.6 Youth and adult literacy

4.7 Education for Sustainable Development and Global Citizenship Education

4.a Learning environments

4.b Scholarships for higher education

4.c Teachers

What is distinctive about SDG4 and its 10 targets, relative to earlier int'l education policy agendas?

- Part of a **universal** agenda, applicable to all countries and not just those in the Global South

- More **ambitious**: seeks to expand and transform education systems (eg, universal primary **and** secondary education) in ways that are without historical precedent, especially in the time frame allotted (2030)

- More **comprehensive** set of targets: includes formal and non-formal education; early childhood development and pre-primary education, 12 years of basic schooling, TVET, higher education, adult education and lifelong learning opportunities

- More **outcome** oriented: relevant and effective learning outcomes in primary and secondary education; literacy and numeracy among youth and adults; non-cognitive skills for employment & decent work; knowledge and skills for environmental sustainability and global citizenship

- Focuses on the **aims** (sustainability, dignity, inclusion) and **contents** of schooling and not just universal access to, or completion of, primary education

- Focuses on **equity** issues, disparities, and 'leaving no one behind'

28

Education & sustainability also found in other SDG targets

Health and well-being
Target 3.7: By 2030, ensure universal access to sexual and reproductive health -care services, including for family planning, information and **education**, and the integration of reproductive health into national strategies and programmes

Gender equality
Global Indicator: Number of countries with laws and regulations that guarantee women aged 15-49 years access to sexual and reproductive health care, information and **education**

Decent work and economic growth
Target 8.6: By 2020 substantially reduce the proportion of youth not in employment, **education** or training (NEET)

Responsible consumption & production
Target 12.8: By 2030 ensure that people everywhere have the **relevant information and awareness for sustainable development and lifestyles** in harmony with nature

Climate action
Target 13.3: Improve **education**, awareness raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning

Peace, Justice and Strong Institutions
Target 16.7: Ensure responsive, inclusive, participatory and representative decision-making at all levels

The 2030 Agenda elaborated new accountability frameworks defining how countries would 'follow up and review' their progress in relation to the 17 SDGs & 169 targets

1) Through Voluntary National Reviews

2) Through an elaborate indicator framework with different indicators and measures

- **Global** indicators = at least one per target
- **Thematic** indicators = globally comparable indicators
- **Regional** indicators
- **National** indicators

Source: Synthesis Report of UN Secretary General (December 2014)

"The 2030 Agenda is our roadmap and its goals and targets are tools to get there." - Secretary-General António Guterres

Country Follow up and Review of the SDGs: Voluntary National Reviews

"Conduct regular and inclusive reviews of progress at the national and sub-national levels, which are country led and country driven…" (para 79 of 2030 Agenda for SD)

UN provides common reporting guidelines for Voluntary National Reviews

Until now, 158 VNRs have been conducted: 22 in 2016, 43 in 2017, 46 in 2018, 47 in 2019. More than 140 countries have submitted VNRs, some twice.

VNRs are an important source for reviewing country progress on the SDGs, including SDG4.

VIET NAM'S VOLUNTARY NATIONAL REVIEW ON THE IMPLEMENTATION OF THE SUSTAINABLE DEVELOPMENT GOALS
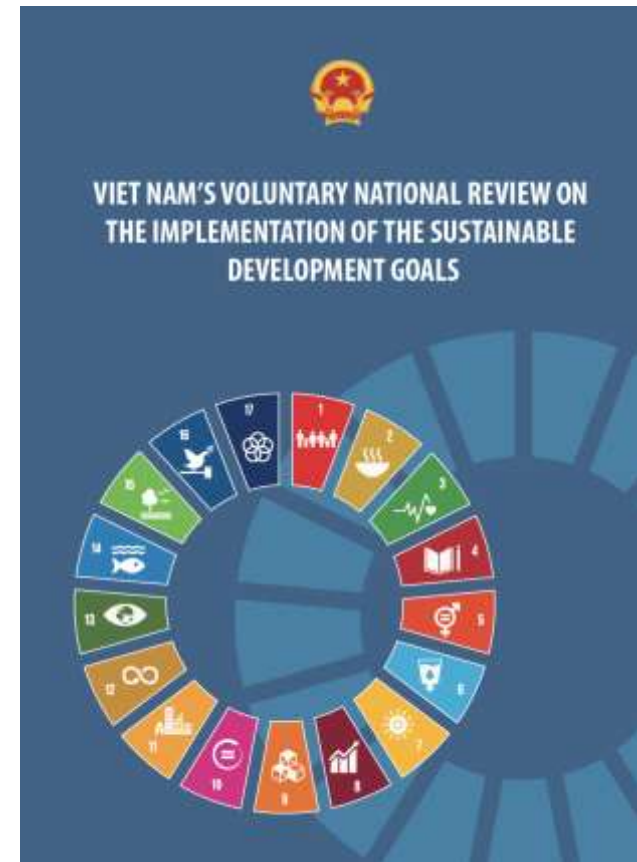
Main accountability framework to review SDG 4 progress

Global Goal on Education:
"Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all"

7 **Targets** and 3 **Means of Implementation**

(10 targets)

11 **Global Indicators** and 32 **Thematic Indicators**

Global indicators are discussed and finalized by InterAgency Expert Group-SDGs, which uses a 3 tier classification system to characterize each indicator

Thematic indicators finalized by Technical Cooperation Group – UIS Secretariat

Different **measures** are proposed and used for the same **global or thematic indicator**

Participation in global SDG indicator framework is country-led and not mandatory, which is surprising given its importance for reviewing SDG progress

When UN member states adopted the global indicator framework in July 2017 (after 2 years of negotiation) the document stated:

The UN "adopts the global indicator framework…as a **voluntary** and **country led** instrument"

"**official [national] statistics constitute the basis**…for the global indicator framework, while recommending that **national systems explore ways to integrate new data sources**…"

"**International organizations shall consult…countries to produce and validate…estimates** before publication…"

Disjuncture between the SDG 4 targets & global indicators

SDG4 Targets	Global indicators

SDG4 Targets

4.1 By 2030, ensure that all girls and boys **complete free, equitable and quality primary and secondary education** leading to **relevant and effective learning outcomes**

4.2 By 2030, ensure that **all** girls and boys have **access to quality early childhood development, care and pre-primary education** so that they are **ready for primary education**

4.3 By 2030, ensure **equal access for all** women and men **to affordable and quality technical, vocational and tertiary education**, including university

4.4 By 2030, substantially increase the number of youth and adults who have **relevant skills**, **including technical and vocational skills**, **for employment, decent jobs and entrepreneurship**

Global indicators

- **Percentage of children/young people at the end of each level of education achieving at least a minimum proficiency level in (a) reading and (b) mathematics**

- **Percentage of children under 5 who are developmentally on track** in health, learning and psychosocial well-being
- **Participation rate in organized learning** (one year before official primary entry age)

- **Participation rate of youth** and adults **in formal and non-formal education** and training in the last 12 months, by sex

- **Proportion of youth** and adults **with information and communications technology (ICT) skills,** by type of skill

Learning is central to SDG 4 targets & global indicators

SDG4 Targets

4.5 By 2030, eliminate **gender disparities in education** and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations

4.6 By 2030, ensure that **all youth and a substantial proportion of adults**, **both men and women**, **achieve literacy and numeracy**

4.7 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 non-violence, **global citizenship** and appreciation of **cultural diversity** and of culture's contribution to sustainable development

Global indicators

● **Parity indices** (female/male, urban/rural, bottom/top wealth quintile and others) **for all indicators** that can be disaggregated

● **Percentage of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills**, **by sex**

● **Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment**

Learning in the SDG 4 targets & global indicators

SDG4 Targets

4.a Build and upgrade education **facilities** that are child, disability and gender sensitive and provide safe, non-violent, **inclusive and effective learning environments** for all

4.b By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programs, in developed countries and other developing countries

4.c By 2030, substantially **increase the supply of qualified teachers**, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States

Global indicators

• **Percentage of schools with access to** (i) **electricity**; (ii) **internet** for pedagogical purposes (iii) basic **drinking water** and (iv) basic **sanitation facilities**; and (v) basic **handwashing facilities**

• Volume of ODA flows for scholarships by sector and type of study / Total net ODA for scholarships and student costs in donor countries (types of aid E01 and E02)

• **Percentage of teachers in (i) pre-primary (ii) primary, (iii) lower secondary and (iv) upper secondary education who have received at least the minimum organized teacher training (i.e. pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country**

Overall framework for measuring and monitoring SDG 4 progress

Policy commitment ➔ 2030 Agenda for Sustainable Development (with its 17 SDGs)

Goal and targets ➔ SDG 4 consisting of 10 targets (other SDGs with other relevant targets)

SDG4 Indicators ➔ 11 Global indicators and 32 thematic indicators

Measures ➔ Specific measures of indicators at country, regional or international level, not all of which need to be comparable

Part III

Efforts to monitor progress in education for sustainable development, primarily through of Target 4.7

TARGET 4.7:
Sustainable development and global citizenship

Target 4.7 "By 2030, ensure **all learners acquire 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 non-violence, **global citizenship**, and appreciation of **cultural diversity** and of culture's contribution to sustainable development.

Why is Target 4.7 important?

- Target 4.7 touches upon **social, humanistic and moral purposes** of education. Refers back to priorities set out in the Universal Declaration of Human Rights and in other international charters and statements

- It explicitly **links the education goal (SDG4) to other SDGs** and captures the transformative aspirations of Agenda 2030

- Target 4.7 refers to **all learners and all education levels**: Strong lifelong learning perspective.

- The knowledge and skills learners are meant to acquire in target 4.7 are **reflected in broad umbrella concepts like education for sustainable development and global citizenship education**.

For further discussion of Target 4.7 hear my FreshEd podcast:
http://www.freshedpodcast.com/

However…..

- **Concepts in Target 4.7 have different ideological/political histories, and understandings**, even in international documents.

- **Difficult to define a consensual analytic framework** of the concepts embedded in Target 4.7, even among experts

- **Few large-scale international surveys of the knowledge and skills** in areas such as sustainability, climate change and global citizenship have been undertaken.

- **Existing surveys** of 4.7 knowledge and skills (eg. Sulitest) **have many limitations**: weak concept construction, limited country coverage and data comparability, focus on higher education students.

- **Some emerging attempts to measure the global indicator 4.7.1**: See below and 2016 GEM Report as well as new report on GCED and ESD learning being launched in Hanoi next week "ESD and GCED Up Close"

Global and thematic indicators for Target 4.7

Global indicator 4.7.1: "Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in: (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment"

- **Thematic indicator 4.7.2** Percentage of schools that provide life skills-based HIV and sexuality education

- **Thematic indicator 4.7.3** Extent to which the framework on the World Programme on Human Rights Education is implemented nationally (as per the UN General Assembly Resolution 59/113)

- **Thematic indicator 4.7.4** Percentage of students by age group (or education level) showing adequate understanding of issues relating to global citizenship and sustainability

- **Thematic indicator 4.7.5** Percentage of 15-year old students showing proficiency in knowledge of environmental science and geoscience

Note. 4.7 not included in 2019 reporting: http://uis.unesco.org/sites/default/files/documents/sdg4-databook-global-ed-indicators-2019-en.pdf

Monitoring Global indicator 4.7.1: 1974 recommendation reporting

Extent to which (i) **global citizenship education** and (ii) **education for sustainable development**, including gender equality and human rights, are mainstreamed in (a) *national education policies* (b) *curricula* (c) *teacher education* and (d) *student assessment*.

- Existing reporting mechanism on the ***UNESCO Recommendation concerning Education for International Understanding, Co-operation and Peace and Education relating to Human Rights and Fundamental Freedoms*** (adopted in **1974** by the 18th UNESCO General Conference).
- Compatible with the concepts contained in Target 4.7.
- Member States have the obligation to report every four years.
- UNESCO Commissioned a review of past country reports on the implementation of the 1974 Recommendation for the reporting cycles for which data are available (cycles 3-5).
- 94 reports were analyzed (35 from 2005-2008 and 57 from 2009-2016)
- The data obtained will also be used for Target 12.8 on sustainable consumption, may inform Target 13.3 on climate change education.

➔ 6th Consultation ended in January 2017. 83 countries have submitted a national report. Report to be submitted to UNESCO's General Conference in November 2017.
- Focal point: UNESCO ESG

Dashboard of five measures of indicator 4.7.1

1) National education policy, 2) Teacher education, 3) Student assessment, and two for Curricula: 4) Curricula content and 5) Curricula resources

National education policies is a combined indicator of 3 items (n=77)
- IV.1 - To what extent are the guiding principles of the 1974 Recommendation reflected in your constitution or domestic legislation?
- IV.2 - To what extent are the principles of the 1974 Recommendation reflected in your country's current education policy/ies and frameworks?
- IV.25 - How would the current overall implementation of the principles 1974 Recommendation be rated?

Teacher Education is a combined indicator of 3 items (n=69)
- IV.12 - Which of the following, or similar, principles and topics are taught in your formal educational system as part of the curriculum?
- IV.13 - Teachers for which level of education received training that reflects the principles and topics mentioned earlier?
- IV.14 - Please indicate the overall percentage of teachers estimated to have been trained on these principles and topics through in-service training and teacher professional development.

Student Assessment is a combined indicator of 3 items: (n=64)
- IV.15(a) - Are the principles and topics mentioned earlier included generally in student assessments/ examinations?
- IV.15(b) - If yes, please indicate which of the following dimensions of learning were included in the last student assessments/examination.
- IV.16 - Which of the following dimensions of learning is your country planning to reinforce in student assessment/examinations in the next five years, in relation to the principles and topics mentioned earlier?

Curricula Content is a combined indicator of two items (n=80)
- IV.7 - Which of the following, or similar, principles and topics are taught in your formal educational system as part of the curriculum?
- IV.23 - What opportunities are provided at school level for students to participate in decision-making processes that concern them?

Curricula Resources is a combined indicator of two items (n=74)
- IV.11 - Overall, are the number of teaching hours for the principles and topics mentioned earlier estimated to be sufficient?
- IV.18 - To what extent are there adequate teaching and resource materials (including ICTs and audio-visual materials) to teach/deliver the principles below and engage learners?

Member State	National Education Policies	Curricula: Content	Curricula: Resources	Teacher Education	Student Assessment
Albania	83.33	61.11	34.72	27.78	44.44
Andorra	50	77.78	65.28	16.67	66.67
Argentina	M	66.67	100	83.33	66.67
Armenia	75	100	76.39	36.11	100
Austria	58.33	83.33	63.89	83.33	M
Bangladesh	33.33	38.89	31.94	22.22	55.56
Belgium	58.33	83.33	52.78	30.56	77.78
Bolivia	M	77.78	83.33	91.67	M
Bosnia	58.33	72.22	73.61	75	M
Bulgaria	91.67	100	44.44	38.89	44.44
Burundi	66.67	50	38.89	M	55.56
Cambodia	91.67	100	79.17	75	100
Cameroon	50	77.78	63.89	75	100
Canada	M	M	76.39	M	100
Central African Republic	83.33	55.56	M	63.89	77.78
Chad	33.33	72.22	41.67	41.67	100
Chile	41.67	44.44	62.5	M	M
Colombia	83.33	16.67	59.72	19.44	33.33
Cook Islands	66.67	50	65.28	M	55.56
Cote D'Ivoire	50	94.44	41.67	75	100
Czechia	100	66.67	100	33.33	M
Democratic Republic of Congo	25	66.67	48.61	41.67	55.56
Denmark	58.33	83.33	73.61	91.67	66.67
Ecuador	91.67	33.33	M	M	88.89
Egypt	33.33	94.44	61.11	M	77.78
El Salvador	25	55.56	25	47.22	33.33

Country					
Cook Islands	66.67	50	65.28	M	55.56
Cote D'Ivoire	50	94.44	41.67	75	100
Czechia	100	66.67	100	33.33	M
Democratic Republic of Congo	25	66.67	48.61	41.67	55.56
Denmark	58.33	83.33	73.61	91.67	66.67
Ecuador	91.67	33.33	M	M	88.89
Egypt	33.33	94.44	61.11	M	77.78
El Salvador	25	55.56	25	47.22	33.33
Estonia	66.67	44.44	62.5	66.67	77.78
Ethiopia	75	100	68.06	72.22	66.67
Finland	75	94.44	87.5	M	M
France	83.33	72.22	100	M	100
Georgia	91.67	100	52.78	58.33	77.78
Germany	100	100	100	100	77.78
Greece	75	66.67	63.89	72.22	44.44
Guatemala	91.67	50	70.83	66.67	M
Haiti	75	83.33	58.33	M	55.56
Honduras	33.33	77.78	65.28	83.33	100
Hungary	58.33	83.33	65.28	44.44	55.56

Many observers have raised questions about the validity, reliability and relevance of this measurement approach to Target 4.7

UNESCO has revised its survey to monitor 4.7.1 in the coming years. Examples of questions

"Please describe the specific current <u>national or sub-national education policies or frameworks</u> in which the principles and topics of global citizenship education (GCED) and education for sustainable development (ESD) have been mainstreamed. Indicate whether the policies apply to the country as a whole or whether different policies apply in different regions or states. Indicate the main principles and topics of GCED and ESD that are covered."

Please indicate which sub-themes of GCED and ESD are covered in national or sub-national education policies or frameworks affecting each level of education by entering the appropriate number in each white cell.

KEY: 0 = not applicable, 1 = no, 2 = yes, 5 = unknown

	Formal education				Non-formal education	Other (please specify)
	Pre-primary	Primary	Secondary	Tertiary		
Global citizenship education						
Cultural diversity and tolerance:						
Peace and non-violence:						
Human rights and gender equality:						
Of which, human rights:						
Equality, inclusion and non-discrimination						
Justice and fairness						
Caring for those in need, treating others with respect and dignity and sharing equitably						
Of which, gender equality:						
Promoting gender equality and justice						
Gender roles, rights and responsibilities						
Education for sustainable development						
Environmental						

The 2016 GEM Report provided some evidence of country efforts and (intended) policies in areas mentioned in global indicator 4.7.1

(a) national education policies
(b) curricula (and textbooks)
(c) teacher education
(d) student assessment

- These data have not been validated by countries and are less internationally comparable, but they have advantages.

- Provide a more nuanced template of information on 4.7, which is relevant to policy-makers and practitioners at different levels: international, regional and especially national.

- Yet, difficult to aggregate information from schools (teachers) and communities in which new models of learning for sustainability are being practised.

- Many gaps and issues in data collection efforts thus far: validity, reliability, international coverage, relevance to target intent, etc.

Analysis of national curriculum documents capture if, how, and to what extent, ESD and GCED content is present in countries, regions and across the globe.The coding scheme searches documents for the presence of key words or terms, associated with GCED and ESD. The GEM Report coding scheme is comprised of nine categories:

1. Human rights
2. Gender equality
3. Peace, non-violence and human security
4. Health and well-being
5. **Sustainable development**
6. Global citizenship and Interconnectedness
7. Cognitive skills, values and attitudes, and behaviours
8. Pedagogical approaches and methods
9. Assessment

The coding process involved searching for key words or related terms within sub-categories in each of the nine main categories

E.g, In the category of Sustainable Development 10 sub-categories were defined:
1. Sustainable, sustainability, sustainable development
2. Economic sustainability, sustainable growth, sustainable production/consumption, green economy
3. Social sustainability, (social cohesion re sustainability)
4. Environmental sustainability/environmentally sustainable
5. Climate change (global warming, carbon emissions/footprint)
6. Renewable energy, alternative energy (solar, tidal, wind, wave, geothermal, biomass)
7. Ecology, ecological sustainability (ecosystems, biodiversity, biosphere, ecology, loss of diversity)
8. Waste management, recycling
9. ESD, sustainability education, education for sustainability
10. Environmental education/studies, Education for the environment

If a key term related to one of the sub-categories above was present in the document being coded, then a '1' was recorded. If not, then a '0' was recorded. Later, each category was characterized by 2 measures:
- a *'total'* count, representing the number of sub-categories found, and
- an *'index'* count coded '1' if one or more sub-category key terms were found present (i.e. if the main category was represented in some way), and '0' if no key terms in the category were found. The total index count was also calculated at the end of coding.

Figure: Percentage of countries (N=78) including each of the key terms -- human rights, gender equality, peace and non-violence, health/well being, sustainable development, and global citizenship -- in their national curriculum frameworks

FIGURE 13:

Human rights is the most prevalent concept in national curricula
Percentage of countries including each of the key terms in their national curriculum frameworks, 2005–2015
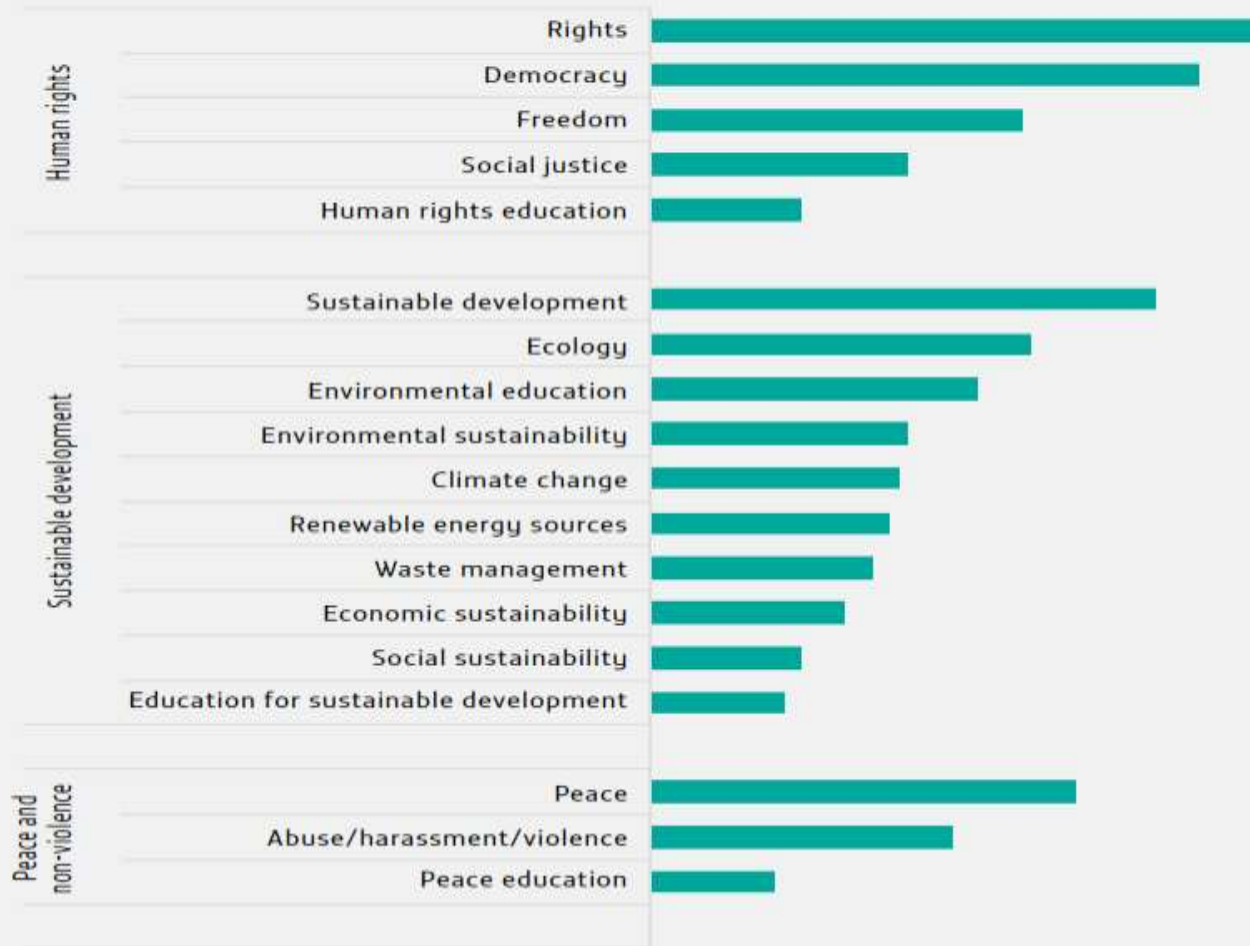
- About **three-quarter of countries** included the terms 'sustainable development' or 'sustainability', but terms like social and economic sustainability were present in **less than one-third of countries**' national curricula.
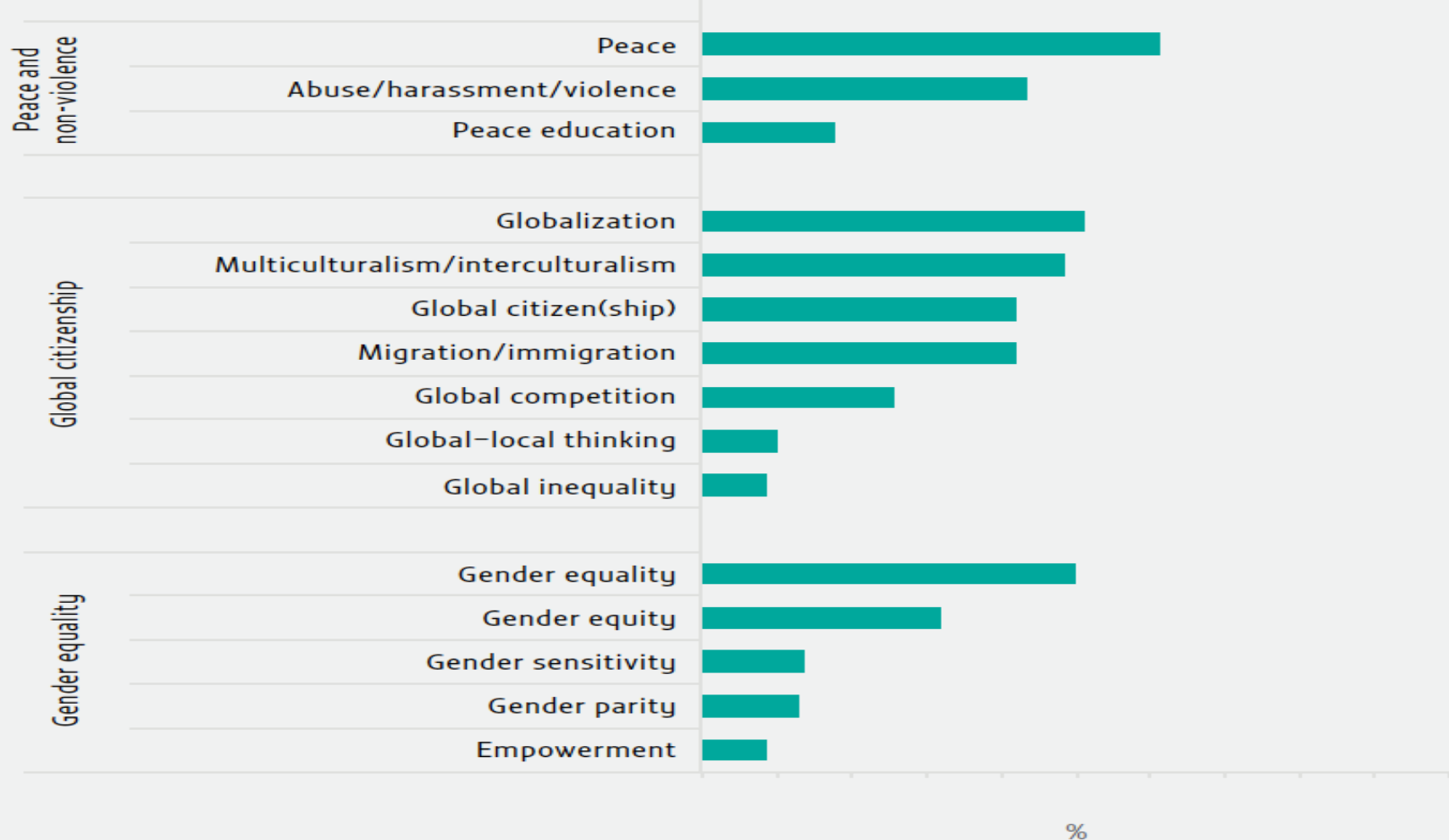
Note: The analysis is based on a sample of 78 countries.
Source: IBE (2016).

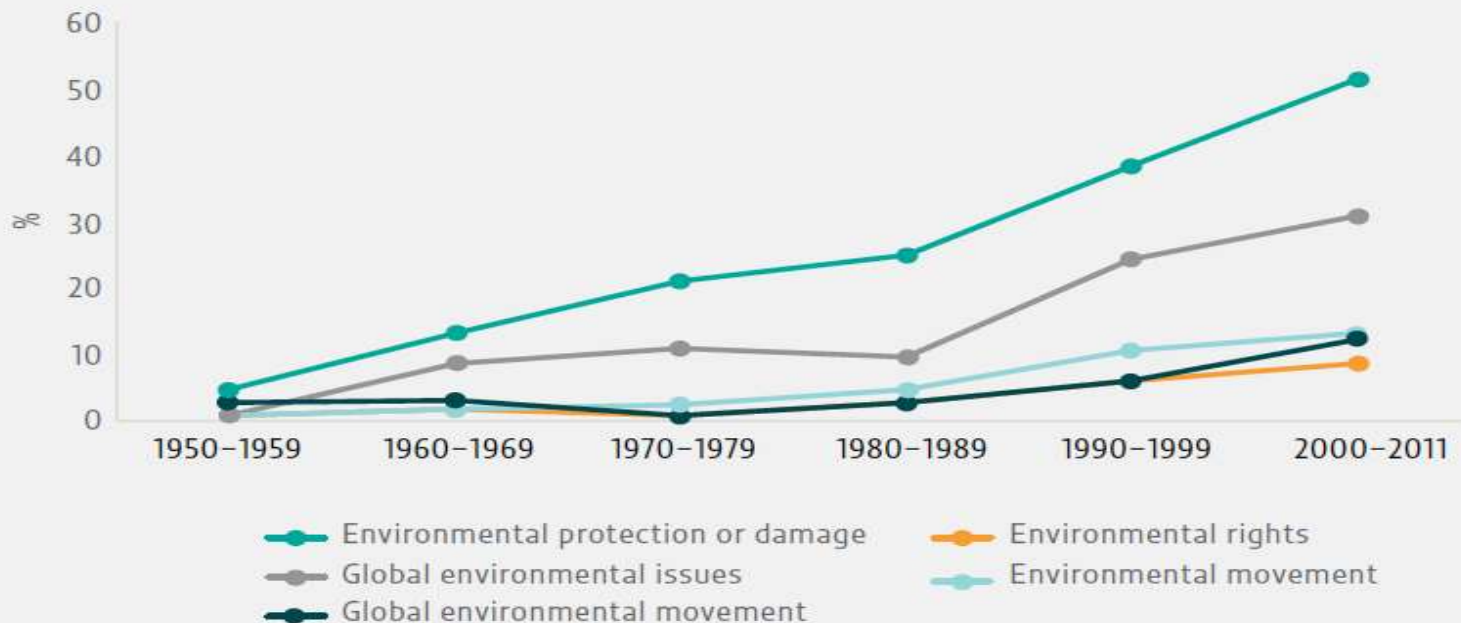- Around **10% of countries** included terms such as 'global inequalities' or 'global thinking' in their curricula, whereas 'globalisation', and 'multi-culturalism' and 'inter-culturalism' were mentioned **in half of the countries'** national curricula.

The GEM Report also reported analyses of secondary school textbooks in history, civics, social studies and geography

FIGURE 16.5:
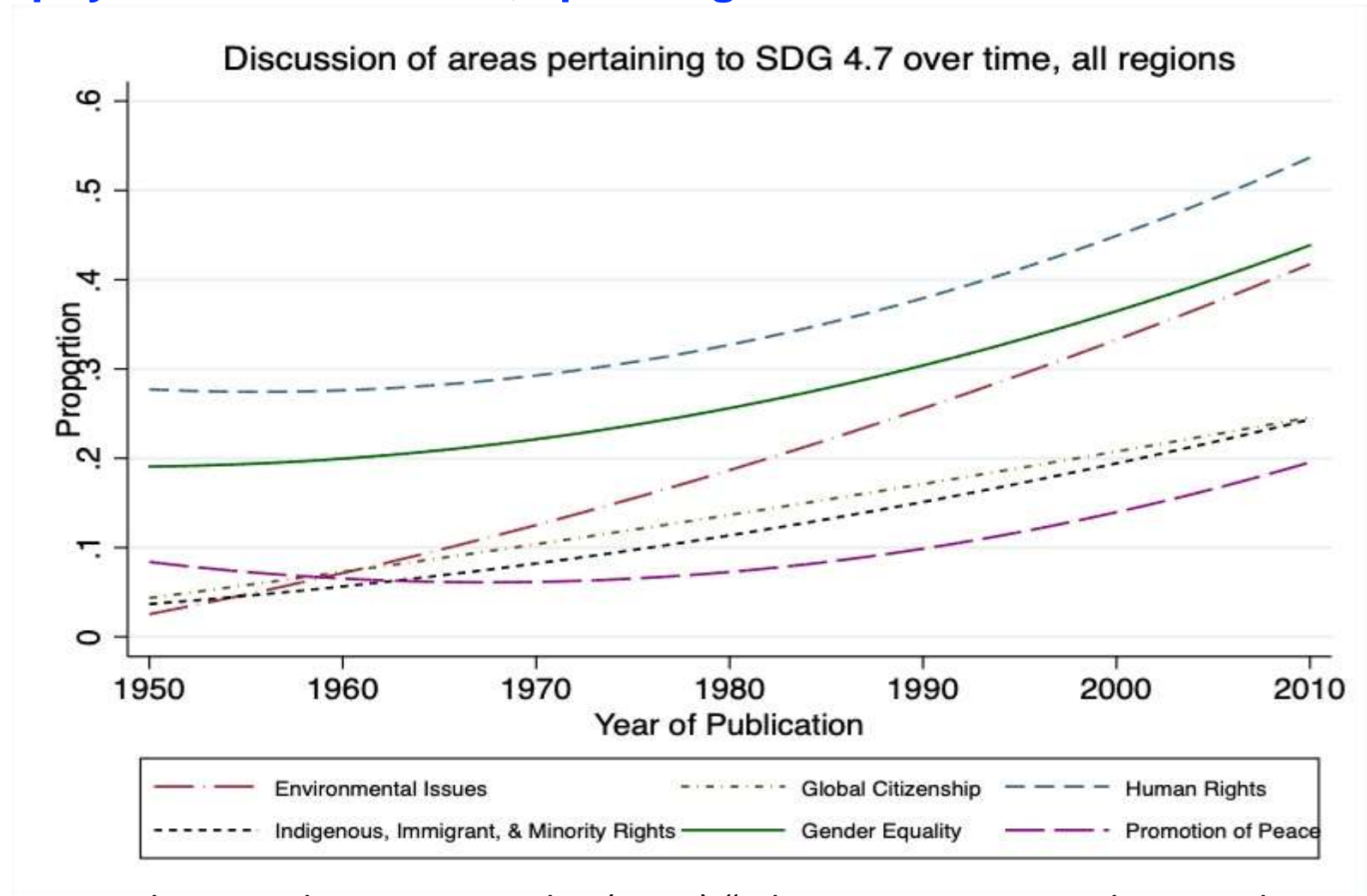Environment is a theme of growing importance in textbooks
Percentage of textbooks that include an explicit statement on environment

Legend:
- Environmental protection or damage
- Global environmental issues
- Global environmental movement
- Environmental rights
- Environmental movement

Coverage of environmental protection and damage has increased: in the 1950s, only five percent of the social sciences textbooks (history, geography, civics, social studies) mention this issue, while by the latest decade, 50% did so.

While few textbooks discussed environmental issues as a global issue in 1950s, close to 30% did so over the 2000-2011 period.
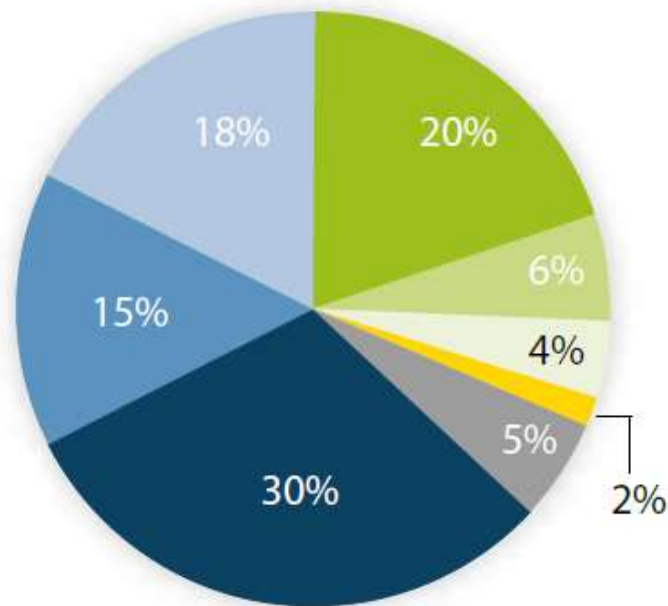
Discussions of SDG 4.7 topics in over 600 secondary school textbooks in history, civics and citizenship education, social studies and geography from 78 countries, spanning 1950 to 2011

Discussion of areas pertaining to SDG 4.7 over time, all regions

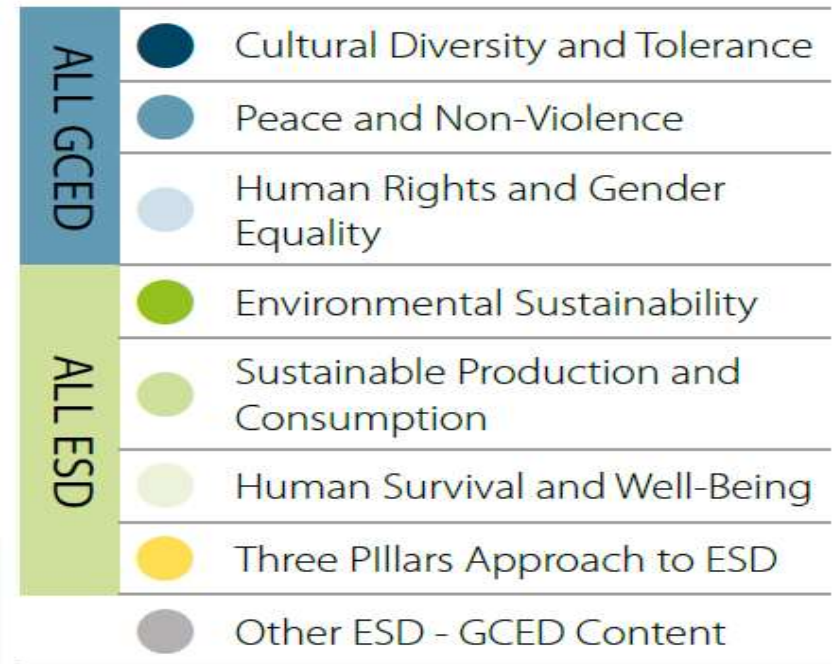|		
—·—·— Environmental Issues	·········· Global Citizenship	——— Human Rights
------ Indigenous, Immigrant, & Minority Rights	—— Gender Equality	—·—·— Promotion of Peace

Source: Seungah Lee and Patricia Bromley (2019) "Educating young people towards sustainable development and a more inclusive, global society? Trends in textbooks" *NISSEM Global Brief: Educating for the social, emotional and sustainable.*

New UNESCO study, *Educational Content Up Close*, reports on content analyses of policy and curricular documents in 10 countries

There is twice as much focus on GCED (64%) than on ESD (32%)

OVERALL
(N=6,317)

ALL GCED	● Cultural Diversity and Tolerance
	● Peace and Non-Violence
	○ Human Rights and Gender Equality
ALL ESD	● Environmental Sustainability
	○ Sustainable Production and Consumption
	○ Human Survival and Well-Being
	● Three Pillars Approach to ESD
	● Other ESD – GCED Content

Source: UNESCO (2019) *Educational Content Up Close*. Paris: UNESCO.
https://unesdoc.unesco.org/ark:/48223/pf0000372327

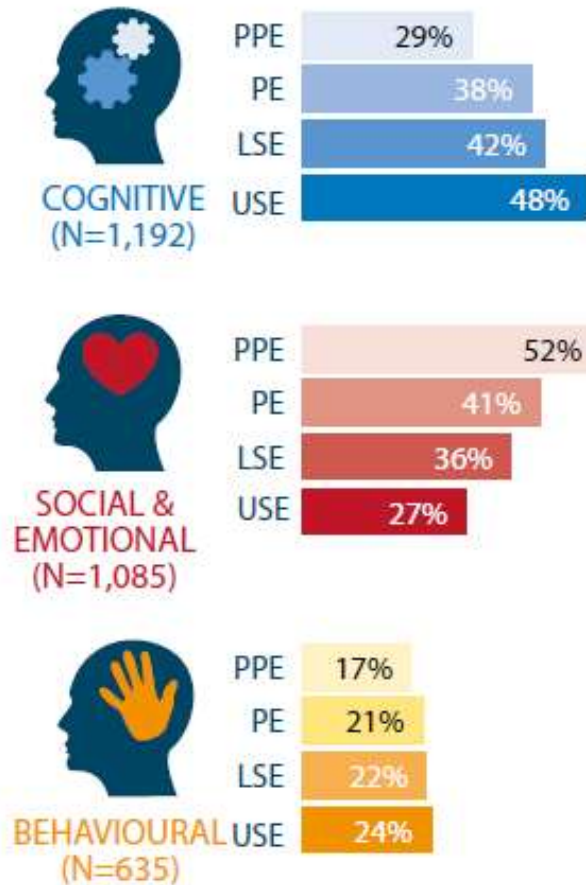# Finding: Greater focus on the social and emotional learning dimension in GCED and on cognitive dimension in ESD

GCED (N=4,015)
- Cognitive: 35%
- Social and Emotional: 42%
- Behavioural: 23%

ESD (N=1,643)
- Cognitive: 48%
- Social and Emotional: 23%
- Behavioural: 27%

- 🔵 Cognitive
- 🔴 Social and Emotional
- 🟠 Behavioural
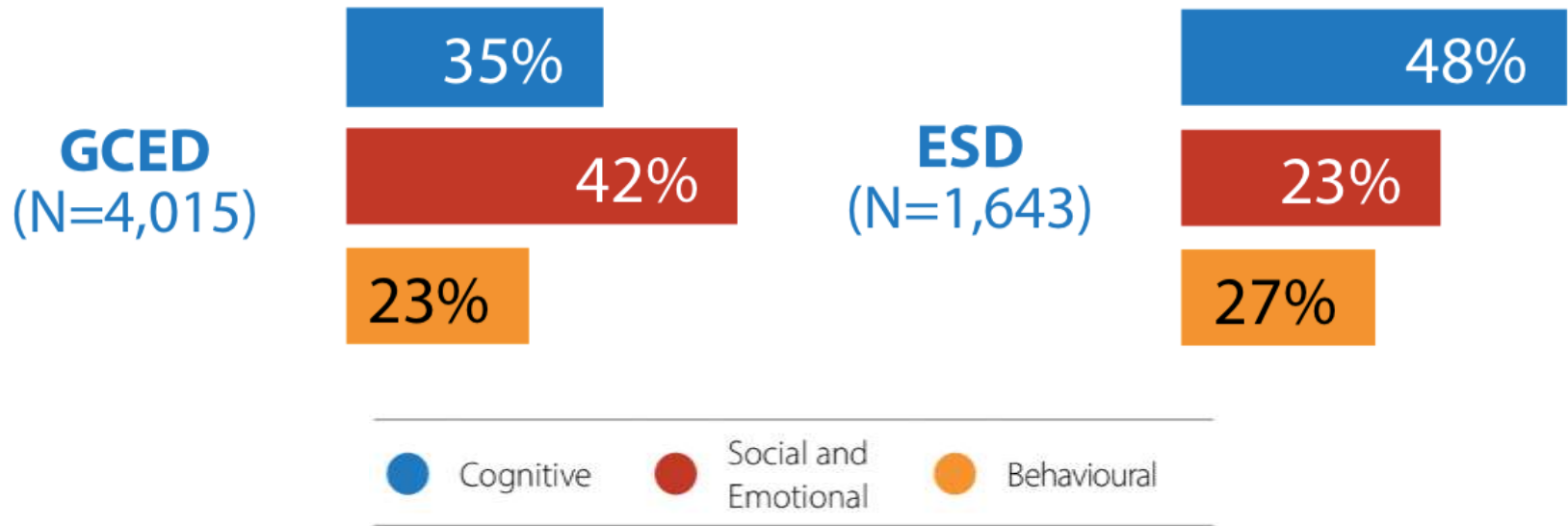
Education 2030

Finding: Focus on cognitive learning increases, while focus on social and emotional decreases in higher education levels

PPE – PRE-PRIMARY EDUCATION
PE – PRIMARY EDUCATION
LSE – LOWER SECONDARY EDUCATION
USE – UPPER SECONDARY EDUCATION

COGNITIVE (N=1,192)
PPE 29%
PE 38%
LSE 42%
USE 48%

SOCIAL & EMOTIONAL (N=1,085)
PPE 52%
PE 41%
LSE 36%
USE 27%

BEHAVIOURAL (N=635)
PPE 17%
PE 21%
LSE 22%
USE 24%

Education 2030

Source: UNESCO (2019) *Educational Content Up Close*. Paris: UNESCO.
https://unesdoc.unesco.org/ark:/48223/pf0000372327

Current initiatives to measure target 4.7 learning outcomes

Among students in basic education
- IEA (2009) study of civic education: knowledge of world history, geography, international institutions and processes
- National learning assessments of civics, citizenship education, world history
- PISA (2006) included questions on knowledge, skill and dispositions on environmental and geoscience
- IEA 2016 ICCS will include global citizenship items
- Southeast Asia Primary Learning Metrics, items on global citizenship
- PISA 2018 will include items on global competence

Among adults and students in higher education
- UN Sustainability Literacy Test (SULITEST) among higher education students to assess sustainability literacy
- World Values Surveys

Other data sources examining sustainability and environmental knowledge and attitudes

Few surveys directly explore adult knowledge and skills on concepts listed in SDG Target 4.7

- **The Sustainability Literacy Test (SULITEST).** Between January and October 2014, almost 20,000 students in higher education took the SULITEST; the average score was 54%.

- **The International Social Survey Programme summary index** on environmental attitudes shows Canada, Denmark and Switzerland leading the ranks in environmental concern, with Bulgaria, the Philippines and South Africa at the lower end.

- In 2015, **the Pew Research Centre** conducted a survey in 40 countries to measure perceptions of global challenges, including climate change, economic instability and ISIS. In Latin America and sub-Saharan Africa, 60% of adults reported high concern about climate change.

Part IV

Concluding Reflections

Concluding reflections (1)

- Drawing on previous global commitments, education and learning for sustainability have been prioritized in the 2030 Agenda for Sustainable Development and in other international agreements and statements.

- The emphasis of education for sustainability not only focuses on all levels of formal education, but also opportunities for adults to be engaged in relevant lifelong and lifewide learning.

- Despite the ambitious agenda in these areas, the accountability frameworks that have been established to monitor progress are relatively weak and often do not reflect the intended content of the targets. Efforts to address these gaps, especially around target 4.7, are limited, despite widespread interest in the target.

Concluding reflections (2)

- Huge efforts are apace to create global scales to measure learning levels across countries, systems and assessment platforms. See www.education-progress.org/en/articles/learning/

- However, emergent global learning metrics (GLMs) reflect a limited set of SDG4 learning outcomes – mainly, cognitive proficiencies in reading and mathematics.

- International assessments in other subject domains or involving complex learning outcomes like sustainability, global citizenship, peace and non-violence, cultural diversity, etc. are unlikely in the foreseeable future. This will likely to diminish and devalue learning in such domains and undermine country commitment to Target 4.7.

- Thus, to achieve all SDG4 targets and other SDGs, it is critical that countries prioritize these domains in policies, curricula, textbooks, and teacher preparation and build capacities to robustly measure and assess learning across a wide array of domains, including but not limited to learning for sustainability in all its dimensions.

Thank you!

For further information contact:
abenavot@albany.edu

Publications at:
albany.academia.edu/AaronBenavot

GEM Report website:

en.unesco.org/gem-report