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The Sustainable Development Goals (SDGs) and the role of Education for Sustainable Development (ESD)

Seminário Nacional Eco-Escolas 2020

Lisbon, Portugal

Charles Hopkins, UNESCO Chair



Global challenges: future generations



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Exclusion



From Voyager 1 space probe in 1990 and seen from about 6 billion kilometers

Contamination of the “natural”

Alternative facts

Climate change

A-social societies

Security and conflict

Economic injustice

Carrying capacity

Questioning “literacy”



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Credit: NASA



Credit: C Hopkins



Credit: European Space Agency

*Should you be considered literate
if you cannot read the world?*

Former Minister of Education, Newfoundland (Canada)

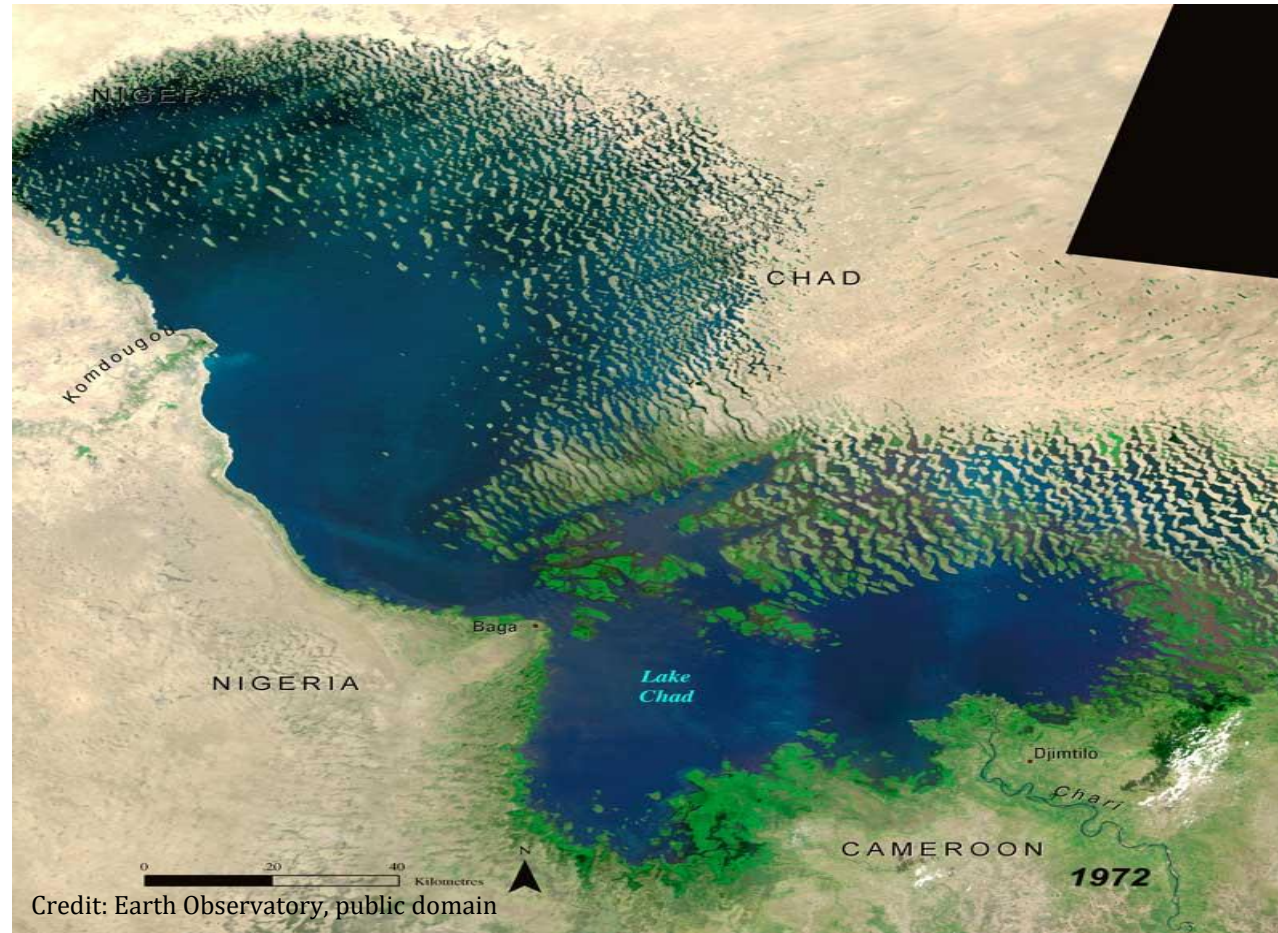
Complex issues



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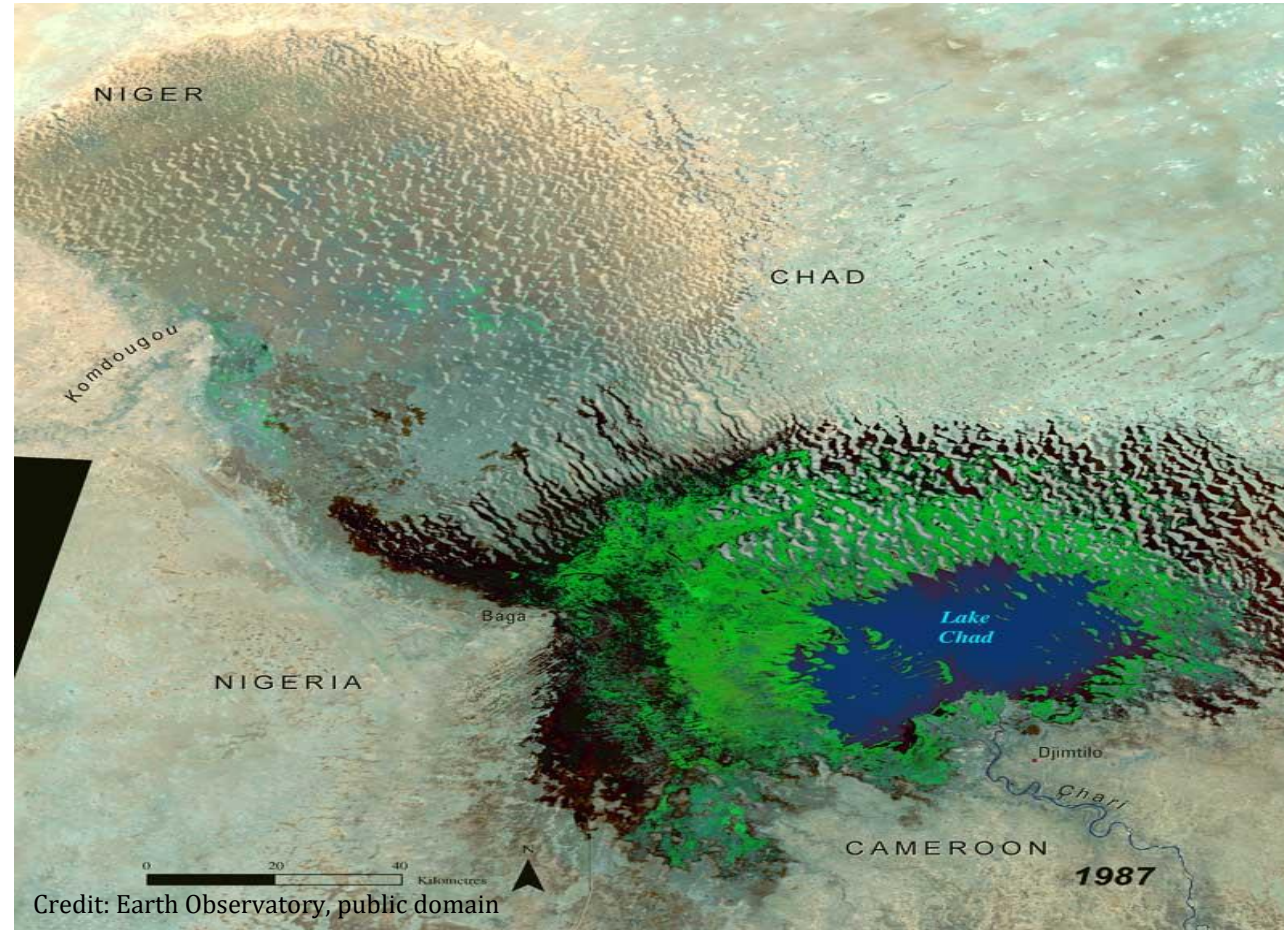
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Credit: Earth Observatory, public domain

Complex outcomes



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Credit: Africa Policy Journal



Credit: AFP Photo

Complex lives



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Credit: C Hopkins

The huge global challenge



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How can we collaboratively create an economic system:

- *that enables individuals and communities to thrive equitably while also,*
- *sustaining the capacity of the environment to support this system for future generations?*

The Sustainable Development Goals (SDGs) in the 2030 Agenda



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The Global Education 2030 Agenda



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Global goal SDG 4

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

SDG 4 is the core



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ESD: more than SDG4



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“Reaffirms education for sustainable development as a vital means of implementation for sustainable development, ... and as an integral element of the Sustainable Development Goal on quality education and a key enabler of all the other Sustainable Development Goals”

UNGA Res 72, 222 2017



Credit: C Hopkins

SDG 4: By 2030 all learners will have...



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- 4.1 Complete free quality primary and secondary school
- 4.2 Access to early childhood education and care
- 4.3 Affordable quality technical, vocational, tertiary, & university
- 4.4 Skills for employment and entrepreneurship
- 4.5 Eliminate gender disparities, indigenous and vulnerable
- 4.6 Ensure youth and “most” adults have numeracy & literacy
- 4.7 Knowledge and skill for sustainable development

The Global Education 2030 Agenda



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Global goal SDG 4

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



SDG target 4.7

by 2030 ensure all learners acquire knowledge and skills needed to promote sustainable development, including ...through **education for sustainable development** ... 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.

4 aspects of ESD:



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1. Access to and retention within quality education
2. Reorienting existing education and training systems to create a sustainable future (*a purpose of education*)
3. Public awareness and understanding of the concept of addressing sustainability
4. Training programs for all sectors

ESD or another adjectival education?



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Environmental Education, Population Education, Development Education, Energy Education, HIV/AIDS Education, Permaculture Education, Citizenship Education, Democracy Education, Consumer Education, Media Education, Outdoor Education, Experiential Education, Workplace Education, Conservation Education, Anti-Racist Education, Religious Education, Equity Education, Gender Education, Holocaust Education, Entrepreneurship Education, Horticulture Education, Water Education, Global Education, Drug Education, Sex Education, International Studies, Family Studies, Human Rights Education, Women's Studies, Native Studies, Values Education, Natural History Education, Vocational Education, Economic Education, Anti-smoking Education, Conflict Resolution Education, Workplace education, Disaster Prevention Education, Computer Studies, Life-Skills Education, Recycling Education, Civics Education, Heritage Education, Community Studies, Multicultural Education, Anti-Violence Education, Systems Thinking Education, Futures Education, Biodiversity Education, Pioneer Studies, Nutrition Education, Resource Management Education, Career Education, Peace Education, Leadership Education, Cooperative Education, Character Education,...

Changing purposes of education



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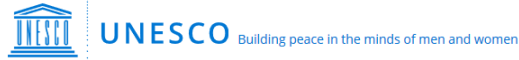
1996 UNESCO “Delors”

- To know
- To do
- To be
- To live together

2015 UNESCO *Rethinking Education*

- To know + **be aware of unknown**
- To do + **be engaged**
- To be + **ensure equity for others**
- To live together + **with “others”
sustainably**

UNESCO's Initiative Futures of Education (2019)



Futures of Education
LEARNING TO BECOME

A global initiative to reimagine how knowledge and learning can shape the future of humanity and the planet.

DISCOVER ▾



To learn more please visit unesco.org/futuresofeducation

Credit: UNESCO



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“When inequalities deepen, when digital, big data and artificial intelligence open new perspectives, when cognitive sciences disrupt traditional approaches to learning, [...] then it is crucial to rethink education.”

Audrey Azoulay, Director-General, UNESCO

Futures of teaching



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We, ministers, representatives and participants from 102 countries, came together as a community of teachers and education stakeholders committed to fresh thinking on how to prepare teachers for education systems of the future and to realizing the ambition of Sustainable Development Goal 4.

2019 Dubai Declaration on The Futures of Teaching at the
12th Policy Forum of the
International Task Force on Teachers for Education 2030

Strengths model



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1. (GCE) and (ESD) do not belong to a single discipline.
2. Every discipline and administrative area can contribute.
3. Should be a focal point of responsibility: identifying existing strands and integrating them into a comprehensive strategy.
4. Those who carry out this integration process must be supported and enabled by institutional decision-makers and embedded in policy ensuring continuity (e.g. ministries of education).

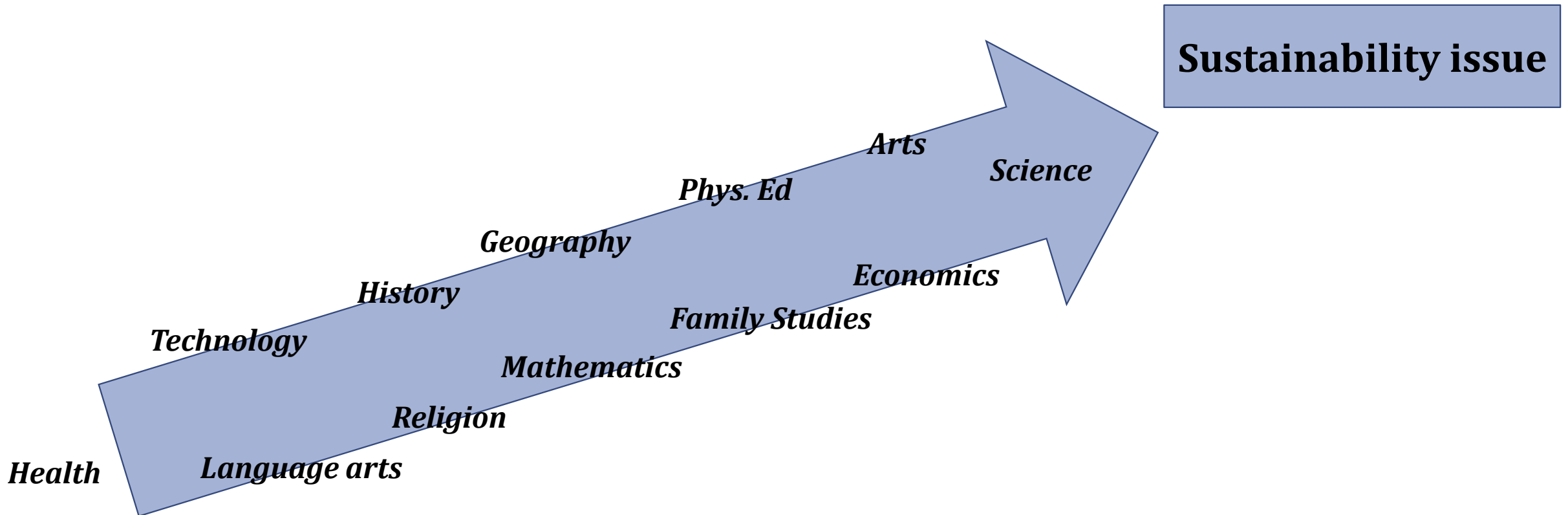
Varying disciplinary leads



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Mathematics



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Credit: C Hopkins

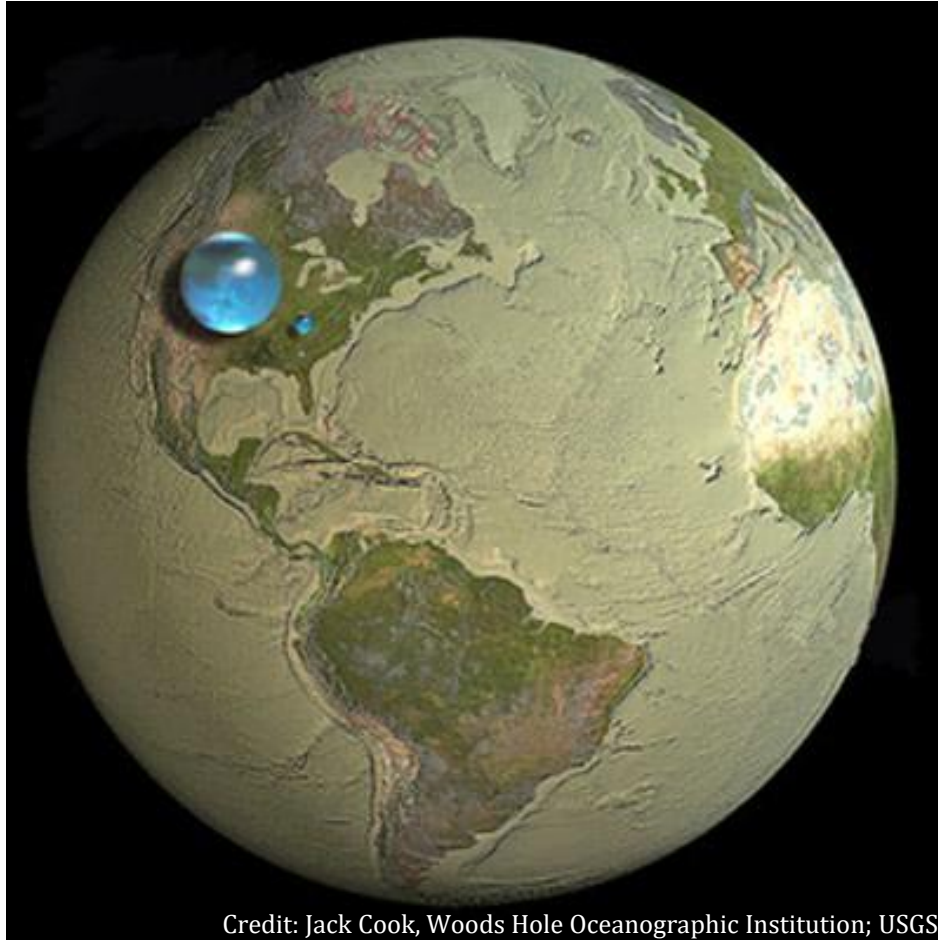
Understanding large perspectives



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Credit: Jack Cook, Woods Hole Oceanographic Institution; USGS

If all Earth's water (liquid, ice, freshwater, saline) was put into a sphere it would be about 860 miles (about 1,385 kilometers) in diameter.

... only the Earth's surface is mainly water

... rivers = $1/10,000^{\text{th}}$ of 1 % of Earth's total water

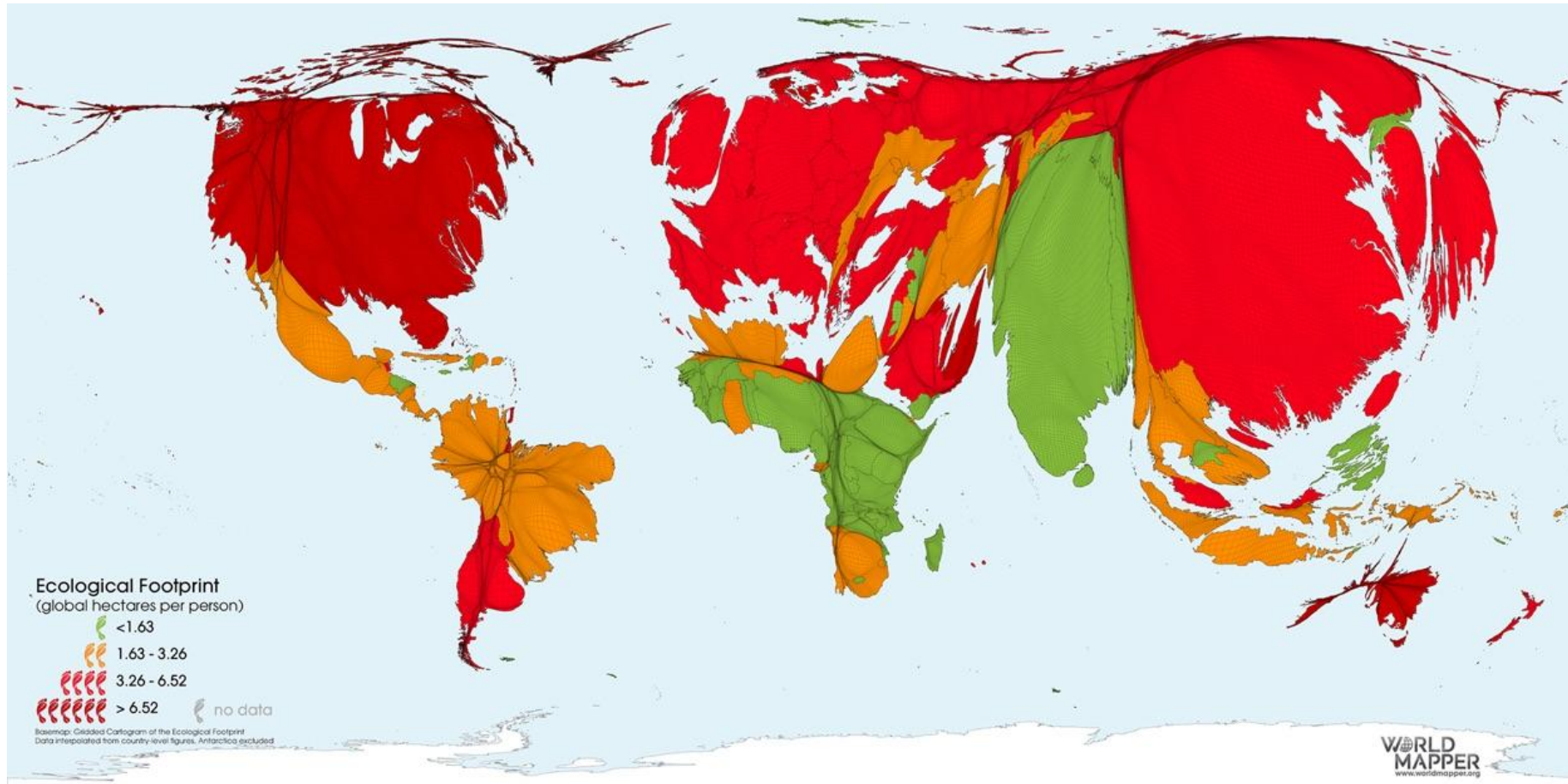
National ecological footprints



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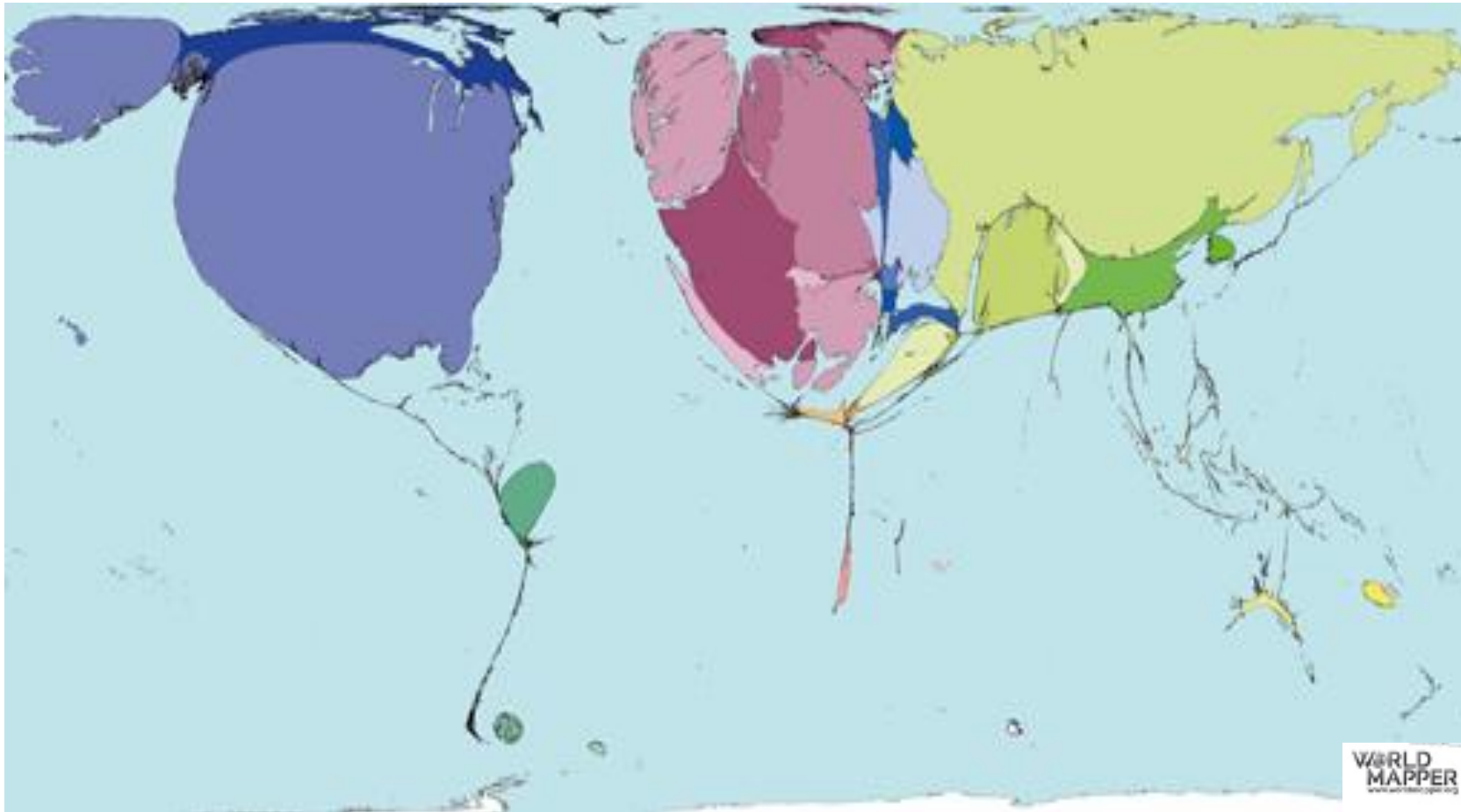
Arms exports



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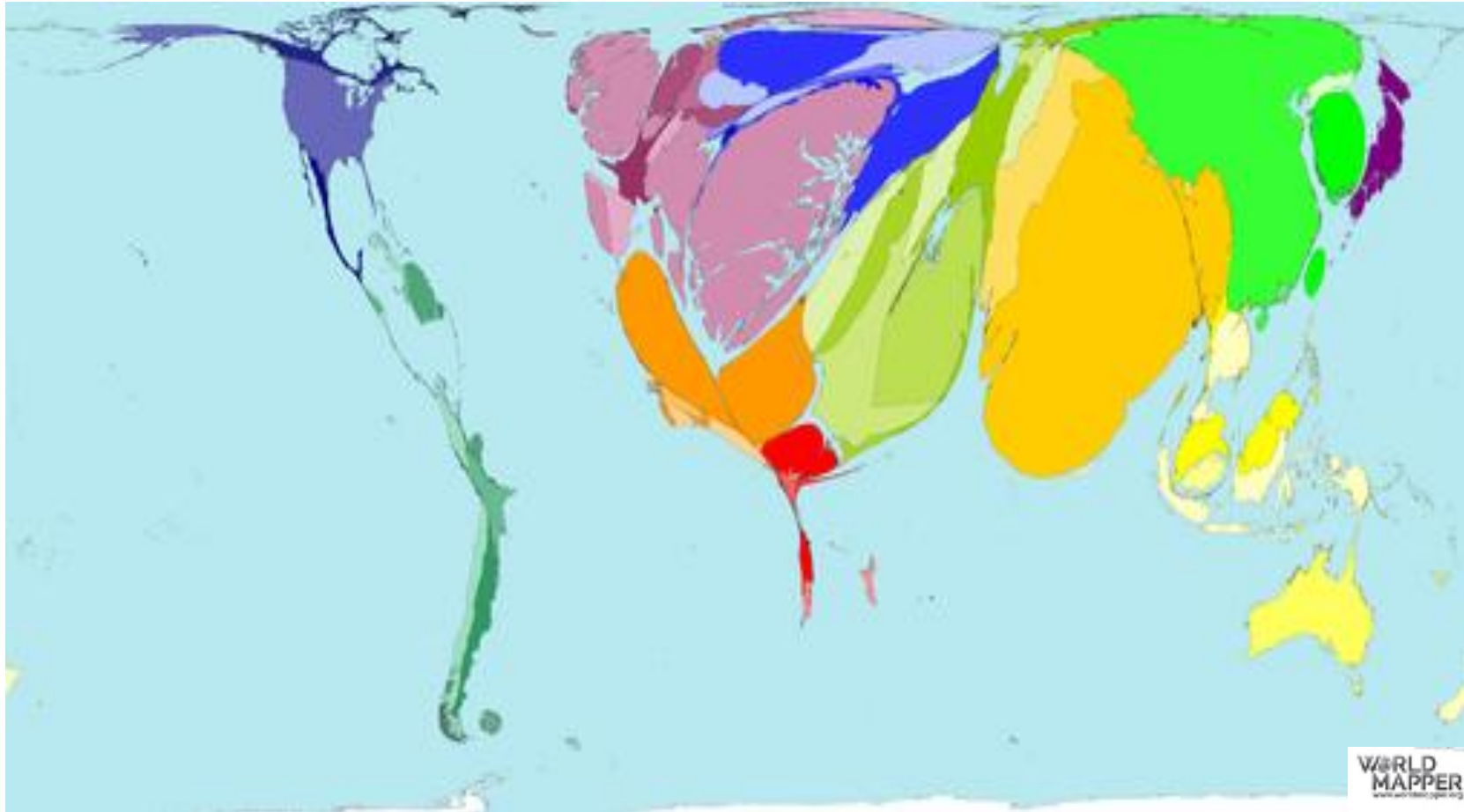
Arms imports



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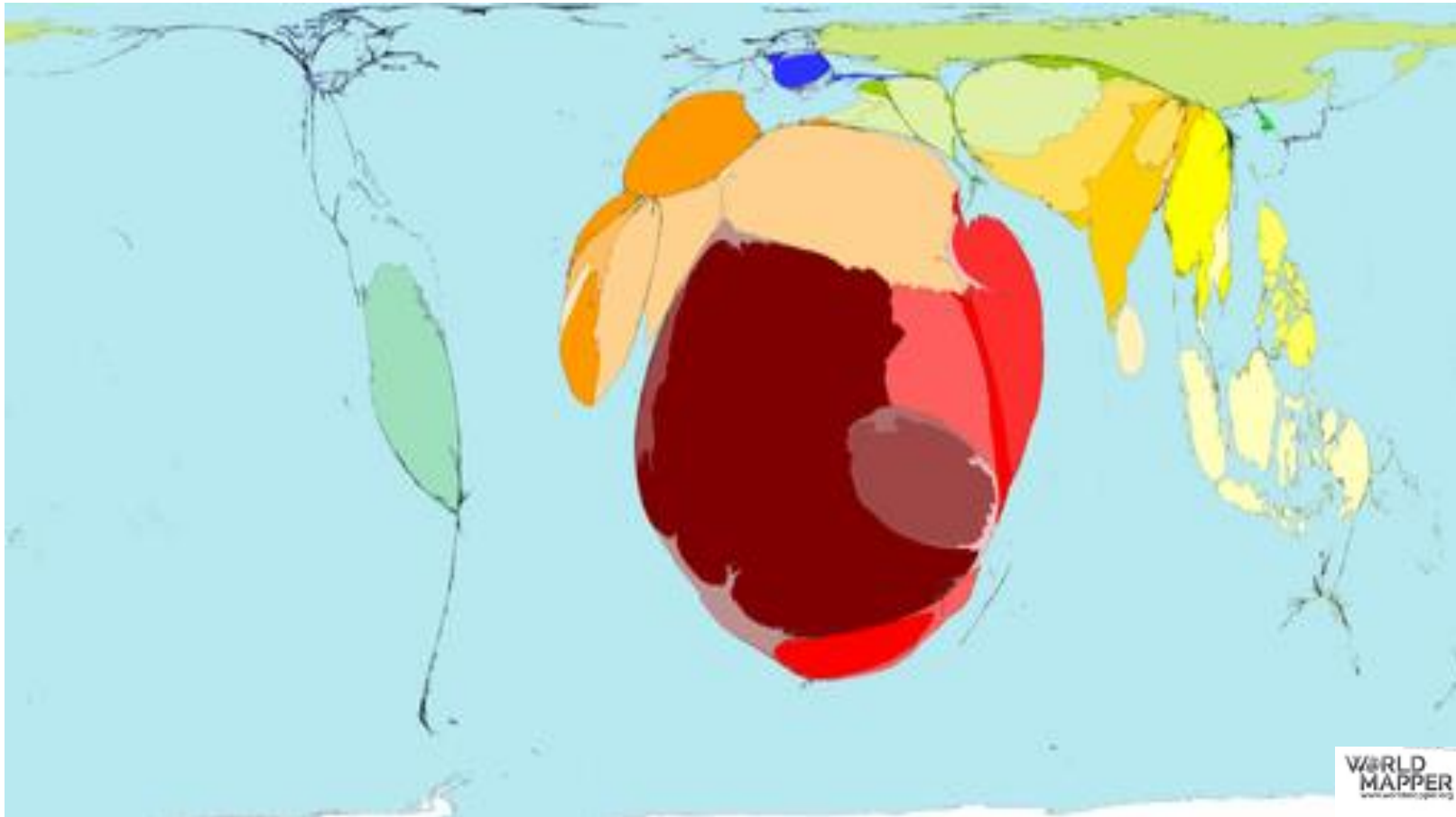
War deaths



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Purposeful STEM: biomimicry provides 4 billion years of free research to build on



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Japan's first bullet train is modeled on the beak of the kingfisher bird.
The second on a duck-billed platypus



STEAM



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Artist: Thomas Hirsz

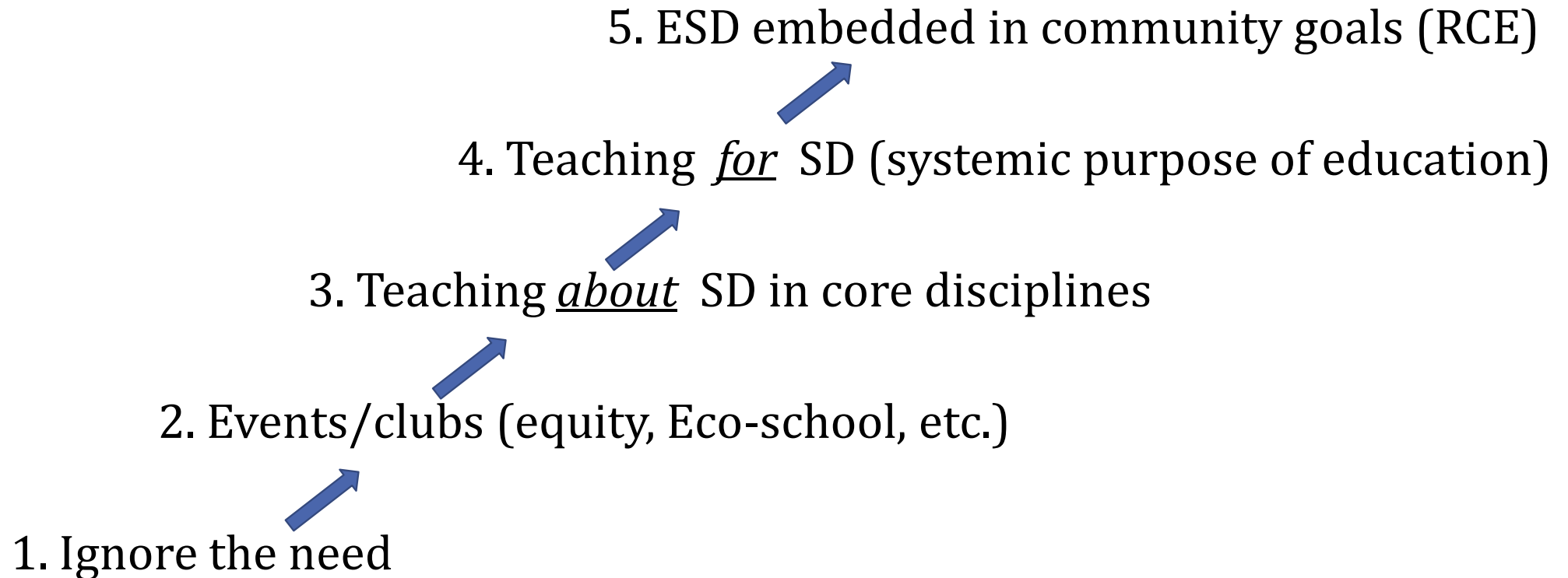
Range of ESD implementation



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Pursuing quality education



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Credit: C Hopkins

Youth engagement



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Credit: Callum Shaw on Unsplash



Photo by Markus Spiske on Unsplash



Photo by Markus Spiske on Unsplash

Mentoring new teachers



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May our handprints continue to grow



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UNESCO Chair in Reorienting Education towards Sustainability
York University Toronto, Canada

Charles A. Hopkins

✉ CHopkins(at)edu.yorku.ca

🌐 unescochair.info.yorku.ca

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Thank you.

