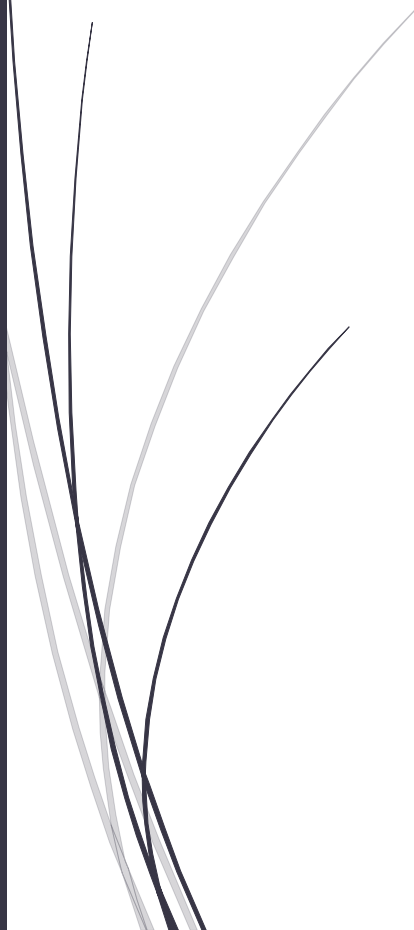


15-11-2022

# Guidelines for Developing 'Education for Sustainable Development' (ESD) indicators at Higher Education Institutions

*How to develop relevant and internationally  
comparable indicators?*



## PREFACE

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Between 2020 and 2022, the U-Multirank team held discussions with a diverse group of higher education stakeholders to identify promising indicators on Education for Sustainable Development (ESD) at the institutional level. As a result of these discussions, a clear need emerged to develop guidelines for ESD indicators. Such guidelines would not aim to propose specific indicators but rather find common ground across a diverse group of stakeholders and bring challenges associated with indicator development and operationalisation to the forefront. The experts and stakeholders consulted included policymakers, practitioners and student representatives. Their qualitative feedback was complemented by insights from a survey sent to U-Multirank participants to assess the feasibility of the most promising indicators. These insights are used to develop the guidelines presented in this document. The insights were collected and integrated by Frans Kaiser and Anete Veidemane.

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# 1. INTRODUCTION

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## Rationale

Higher education institutions (HEIs) have a substantial role in “building more sustainable, resilient and peaceful societies” (p.3).<sup>1</sup> Nowadays, many HEIs are actively contributing towards attaining the United Nations Sustainable Development Goals (SDGs) by 2030 and beyond. To have a significant impact, sustainability at HEIs should become a core practice, reflected in structures, programs and activities (p. 14).<sup>2</sup> Internationally comparable yet locally relevant indicators on Education for Sustainable Development (ESD) can support this progress by helping Higher Education Institutions (HEIs) to

- (i) establish a baseline and measure progress over time
- (ii) provide a comparison with other institutions in a contextualised manner.
- (iii) identify effective institutional policies to address sustainability and SDGs
- (iv) capture the blind spots in SDG and sustainability monitoring mechanisms

We<sup>3</sup> see indicator development as an aspect of the formulation, implementation, and evaluation of evidence-based policies promoting ESD in the Higher Education sector. Hence, the rationale for developing indicators should focus on (i) improvement and institutional learning while (ii) enabling a fair and contextualised comparison. Moreover, while indicators can be (mis)used to rank institutions against each other without proper consideration for their local context, some level of competition amongst HEIs can also help to build momentum amongst HEIs for progressing towards SDGs and creating stronger institutional commitment. Therefore, indicators should be transparent, relevant for diverse HE systems, valid, and not easy to manipulate. Building on stakeholder consultations, we have provided suggestions for developing such indicators at the institutional level. To create synergies, efforts at the institutional level should be harmonised with national reporting mechanisms.

In this document, we follow the definition of ESD as proposed by United Nations Educational, Scientific, and Cultural Organisation (UNESCO). ESD promotes holistic and transformational learning that addresses learning content and outcomes, pedagogy and learning environment. ESD “empowers learners to take informed decisions and responsible actions for environmental integrity, economic viability and a just society, for present and future generations, while respecting cultural diversity”<sup>4</sup> (p. 4). First institutionalised by UNESCO in 1992, it is now recognised in the key global agreements such as the Paris Agreement and the 2030 Agenda for Sustainable Development (SDG 4.7).<sup>5</sup>

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<sup>1</sup> UNESCO. (2022). *Beyond Limits. New Ways to Reinvent Higher Education*. Working document for the World Higher Education Conference. 18-20 May 2022.

<sup>2</sup> UNESCO. (2022). *Knowledge-driven actions: Transforming higher education for global sustainability: Independent Expert Group on the Universities and the 2030 Agenda*. UNESCO Publishing.

<sup>3</sup> The U-Multirank project in collaboration with experts (see Table 1)

<sup>4</sup> UNESCO. (2018). *Issues and trends in education for sustainable development (Vol. 5)*. UNESCO Publishing.

<sup>5</sup> UNESCO. (2017). *Education for sustainable development goals: Learning objectives*. UNESCO Publishing.

## 2. GUIDELINES

### Promote a flexible ESD scope & a holistic approach

- I. **The ESD scope is multi-dimensional and transdisciplinary. ESD indicators should be sufficiently flexible to align with the ESD's multi-dimensional approach and recognise diverse institutional efforts.**
  - Diverse efforts to educate students for the SDGs and sustainable development should be recognised. These approaches may be content-oriented (interdisciplinary or discipline-specific) or combine content with transformational teaching methods/approaches (e.g., action inquiry/research, deep democracy, challenge/problem-based learning) and ESD competencies (e.g., systems thinking, integrated problem solving). While the focus on ESD content is essential, more transformational approaches that include content, teaching methods and assessment tools should be encouraged and rewarded.
  - The ESD definition should address all four dimensions stated in the UNESCO definition – learning content, learning outcomes (including assessment), pedagogy<sup>6</sup> and learning environment.<sup>7</sup> The figure below indicates potential definitions and how they align with the four ESD dimensions.

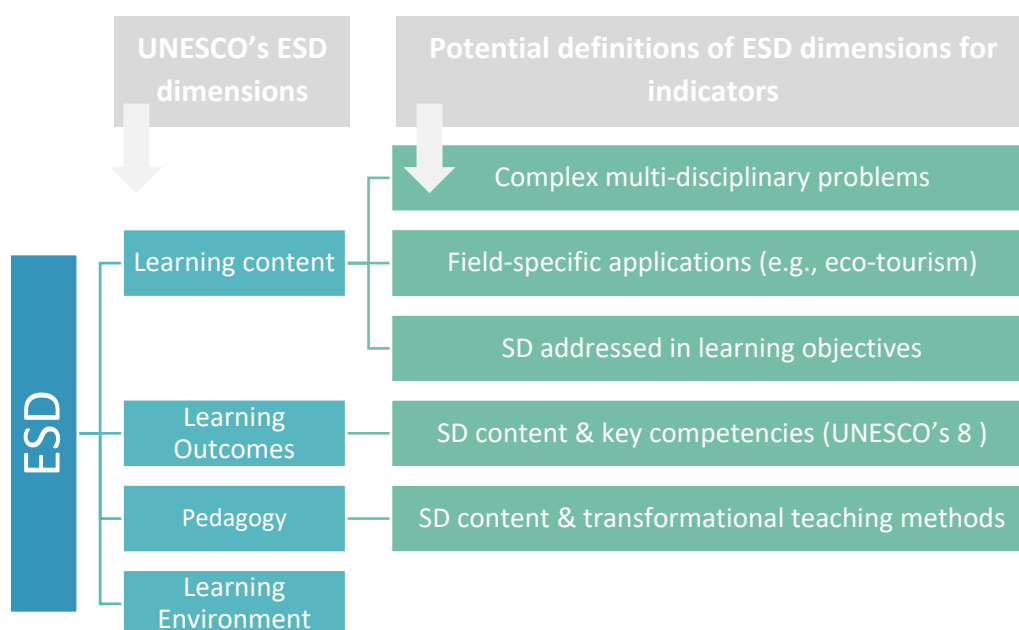


Figure 1: ESD dimensions and potential definitions

<sup>6</sup> ESD-aligned pedagogy may include problem-based learning, project-based learning, challenge-based learning, learning by developing, experiential learning, real-world experiments.

<sup>7</sup> ESD learning environment may include learning in real-life setting with external stakeholders or community members, formal and informal learning taking place in classrooms/campus environment that can role model sustainable solutions (e.g., recycling, use of renewable energy, plastic reduction in cafes).

**II. A holistic, systems-view, whole-institution approach to indicator development should be promoted rather than focusing on a few isolated core functions that do not operate in interdependence with one another.**

- While measuring ESD in the context of the education process is a good start, HEIs should progressively move towards a whole-institution approach, aiming to integrate ESD in research, campus operations, organisational management and governance, among other functions. To ensure transparency of indicators, it is recommended to use indicator sets (e.g., clustered around certain themes) rather than a single, weighted composite indicator per theme.

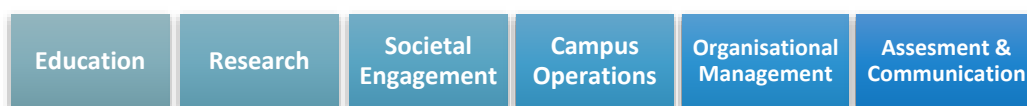


Figure 2: Key processes for promoting sustainability in Higher Education

- Professional development of staff on SDG topics is critical to embedding ESD in HEIs. Without proper sustainability knowledge and skills, the staff will not be able to effectively reach the intended sustainability goals set by HEIs. Indicators should assess staff development at all functions of HEIs.

### Build on existing reporting mechanisms in a stepwise manner

**III. HEIs should build ESD indicators upon existing international and national reporting initiatives to create synergies while reducing complexity.**

- Sustainability reporting is complex when taken at a big-picture level. The balance between data coverage, indicator accuracy, standardisation and flexibility is notorious. Rather than developing new ESD indicators and frameworks from scratch, HEIs should utilise existing reporting initiatives and framework tools. For example, HEIs can align their efforts with their national educational management information system (EMIS) and consult the standards provided by UNESCO<sup>8</sup>. In addition, HEIs can participate in rankings and ratings (e.g., THE Impact Ranking, UI GreenMetric, STARS). Such an approach allows institutions to reuse their data for different reporting initiatives while saving resources. It also supports international comparison. Gap analyses can be conducted to identify overlapping and missing indicators.

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<sup>8</sup> UNESCO. (2020). *Operational Guide to Using EMIS to Monitor SDG 4*. UNESCO Publishing.

**IV. A stepwise implementation of ESD and sustainability reporting at HEIs should be encouraged. It enables HEIs to start immediately and find their approach gradually.**

- Not many HEIs will have the capacity to implement comprehensive reporting initiatives overnight. The stepwise, iterative implementation supports institutions to attain steady progress whilst providing more time and flexibility to the users and practitioners implementing the new system.
- HEIs can utilise the framework provided by UN Sustainable Development Solutions Network, which proposes to follow a three-step approach to implementing Education for Sustainable Development Goals (ESDG):
  1. *recognise* existing activities that HEIs are already doing linked to SDGs,
  2. identify *opportunities* to embed SDGs in existing programs/activities and develop capacity without an overall university strategy,
  3. *organise* activities to integrate SDGs into all governance structures and frameworks of HEIs so “the SDGs become part of ‘business-as-usual’” for institutions (p.31).<sup>9</sup>

## Support contextualised institutional learning over competition

**V. ESD indicators should be contextualised and locally relevant.**

- While it is helpful to utilise international reporting mechanisms, the indicators should remain relevant to the local context. Indicators should be user-centric, combined with national or regional information and supported by relevant filters or conditional views.
- Regionally or locally tailored indicators can be developed when needed according to the needs and observed interests of the users on the ground.

**VI. ESD indicators should support institutional learning and progress over time rather than competition.**

- ESD indicators should recognise HEIs for attaining steady progress over time, relevant to their own context, rather than promoting competition amongst each other in international rankings. Sustainability reporting should be done in a transparent, intelligible, and meaningful manner.
- ESD indicators should help democratise both institutional and societal learning and who can be a change maker, thereby making knowledge more accessible and implementable.

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<sup>9</sup> SDSN Australia/Pacific (2017). *Getting started with the SDGs in universities: A guide for universities, higher education institutions, and the academic sector*. Australia, New Zealand and Pacific Edition, Sustainable Development Solutions Network – Australia/Pacific, Melbourne <http://ap-unsdsn.org/university-sdg-guide/>