Purpose and Goals of HOCH-N–Education
The UN-Decade on ESD produced a multitude of pathways for and research on integrating Sustainability in Higher Education (HESD). Yet these innovations are still localized in particular universities, programs and disciplines. Main challenges are different disciplinary cultures whose potential and openness to integrating ESD differ greatly, limited resources, and necessary capacity building for teachers.

HOCH-N–Education asks:

How can innovative HESD be further disseminated across universities in all disciplines and educational formats?

Approaches to integrating sustainability in HE

<table>
<thead>
<tr>
<th>Sustainability included as</th>
<th>Students opportunities</th>
<th>Teachers capacity building needed</th>
<th>Change required</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: “Add On” Entry level</td>
<td>topic</td>
<td>exposure to SD</td>
<td>low</td>
</tr>
<tr>
<td>B: “Weave Through” Intermediate</td>
<td>integrated in courses</td>
<td>engage SD as part of studies</td>
<td>medium</td>
</tr>
<tr>
<td>C: “Built in” Advanced</td>
<td>reorienting curricula, innovative forms</td>
<td>comprehensive development of key competencies</td>
<td>high + external experts</td>
</tr>
</tbody>
</table>

Educational formats for HESD

1: disciplinary curricula
   - single courses or study programs focused on content and conventions of particular disciplines
2: cross-disciplinary curricula
   - minors, certificate programs etc., open to students from different disciplines
3: sustainability-curricula
   - sustainability programs or disciplinary curricula with explicit sustainability focus

An Image of Dynamic Interdependence
HESD Manifests at the Intersection of all University-Fields of Action

Each field contributes to HESD
- **Education** develops interdisciplinary collaborations and real-world-oriented learning opportunities
- **Research** offers research-based-learning, includes students in actual scientific practice
- **Transfer** includes students in real-world projects; offers continuity of connections to local actors
- **Governance** integrates sustainability criteria in accreditation and hiring; offers capacity building & resources
- **Reporting** sets goals & indicators for HESD, and provides accountability in implementing HESD
- **Operations** develops the campus as a real-world laboratory

HESD contributes to each field
- HESD offers innovations in pedagogies and teaching-learning environments for all disciplines; attractive learning environments
- HESD shapes innovative ideas for socially relevant research; improves mutual learning across disciplines & in transdisciplinary contexts
- HESD provides impulses and contributions for societal innovation and functions as vehicle for transfer
- HESD inspires transformation of governance structures, organizational innovation, and democratic participation in governance
- HESD inspires development of reporting as transformative process and instrument for institutionalizing sustainable development
- HESD provides arguments for green campus development, and collaboration with students/teachers on campus projects

A Matrix for education processes with HESD

HESD Manifests in the Interplay of Different Educational Forms
- **This Matrix serves as a visual-spatial representation of where and how teaching events are located in an educational “field of tension”: on the disciplinary – interdisciplinary/transdisciplinary axis, and on the receptive/transmissive – participatory/reflexive axis**
- The matrix visualizes both the diversity of teaching events at universities as well as the different requirements they entail
- Its function is to visualize the diversity of teaching events that contribute to HESD, and to provide a tool for assessing and creatively shape individual HESD-curricula
- The learning objectives of the individual quadrants differ in their goals and their modes of teaching and learning, knowledge transfer and –production
- All four quadrants have different requirements for teachers and students

Quality-Criteria and -Management in HESD – Orientation Guidelines

HESD seeks to enable students to participate in transformative processes towards more sustainable and just societies. To achieve this, it requires several components and an educational practice that emerges at their intersection. HOCH-N–Education develops orientation guidelines for quality criteria and -management in the process of reorienting curricula. Method: a systematic review of relevant literature, and research with best-practice universities, students, and teachers. Expected publication date: 11/2018