

^b
UNIVERSITÄT
BERN

CDE
CENTRE FOR DEVELOPMENT
AND ENVIRONMENT

Embedding Transformative Learning in HEIs and Adapting Quality Assurance – Are We Ready?

University of Glasgow, Centre for Educational
Development and Innovation (CEDI):
Sustainability in Learning & Teaching Seminar Series

Anne B. Zimmermann, 31 October 2022

Centre for Development and Environment (CDE), University of Bern, Switzerland
COPERNICUS Alliance; Legacy17; saguf ESD Working Group

www.cde.unibe.ch, www.bne.unibe.ch, www.copernicus.org, www.legacy17.org, www.saguf.ch/en



We know what the challenges of sustainable development are...

- “wicked problems”
- “VUCA”
- Challenges taken up by the global community in the 1970s after wake-up calls, and formulated as goals
 - 1987 Brundtland Report
 - 8 MDGs (1990-2015) and Rio conferences (1992 etc);
 - 17 SDGs (2015-2030);
 - UNESCO #ESDfor2030:
 - And now: the 5 [IDGs](#)



Higher education has a key role to play in achieving the SDGs

- Deliver (systemic) knowledge and understanding of volatility, complexity, uncertainty, ambiguity (VUCA)
 - Huge production of scientific articles
 - IPCC Reports
 - Global Sustainable Development Reports, etc.
- Develop warning systems, technical solutions, but also socio-political solutions, etc....
- Work at the science-policy interface
- Interact with society to serve it better
- Educate scientists, enable them to develop “sustainability competences”
 - Most recently: Green Comp (Bianchi et al 2022), 4 areas:
 1. *Embodying sustainability values*
 2. *Embracing complexity in sustainability*
 3. *Envisioning sustainable futures*
 4. *Acting for sustainability*

What are the next steps in HE?

1. Change our understanding of science
 - Inter- and transdisciplinarity
 - Overcome the “fact-value split”
 - More self-reflexive scientists
 - Move away from commodification towards “commonification” (Wals 2021)
2. Deliver to society in a way that is different from “knowledge transfer”
 - Science doesn’t “know best” what society needs
 - Favour knowledge co-production
 - Employability *not* top outcome
3. Adapt our teaching: move away from knowledge transfer (first-order learning) to an enabling approach (second- and third-order learning)
 - Empower students to learn how to learn, be self-reflexive, critical, relate to all beings, etc.
 - Empower students to become change agents
 - Create spaces for interaction with society
 - Work *with* students

Questions to the audience

Go to www.menti.com and use the code 4353 4275

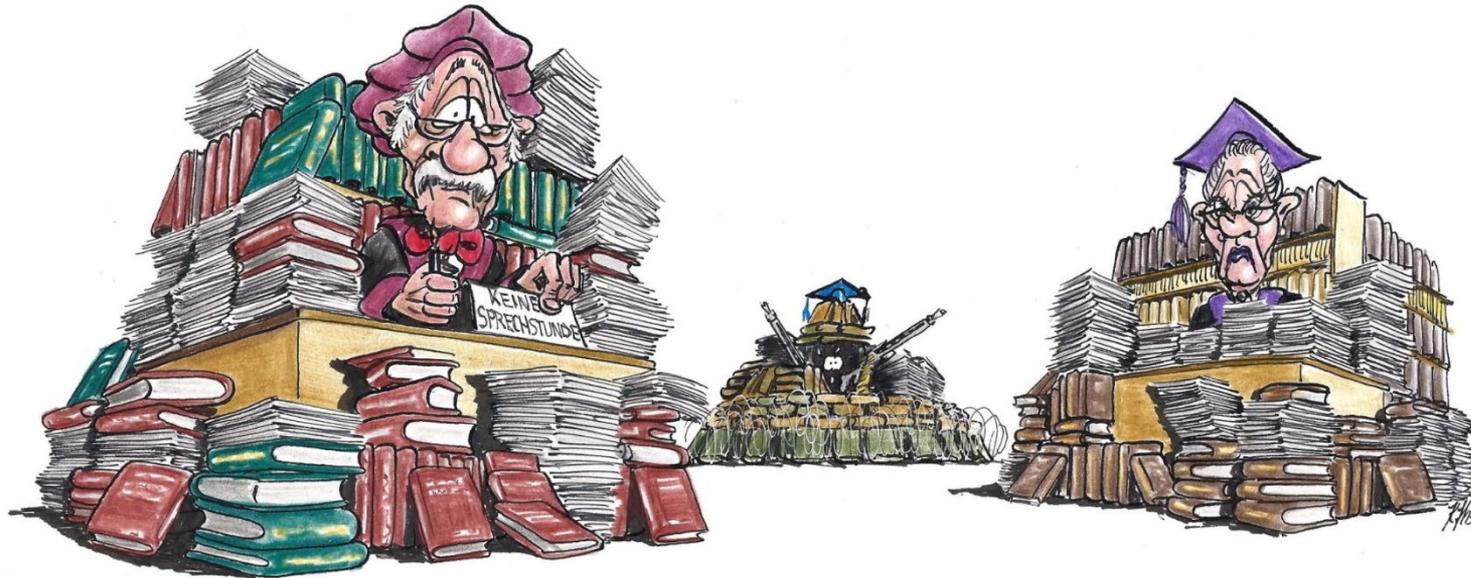


1. Are any of these changes taking place at your universities?
2. How complete is the process of change in scientific and teaching approaches? Sterling's scale from:

(Sterling 2021, Sterling and Thomas 2006, Sterling 2011)

Degree	Institution	Curriculum	Learning model
Minimal	Accommodation	Bolt-on (about sustainability)	Conformative (doing things better)
Medium	Reform	Build-in (for sustainability)	Reformative (doing better things)
Complete	Transformation	Curriculum redesign (as sust.)	Transformative (seeing things differently)

This is the dominant institutional reality in Higher Education...



... with **clear, but single perspectives** and corresponding perceptions of the Other:

Natural
science
perspective

Social science
perspective

Actors'
perspectives



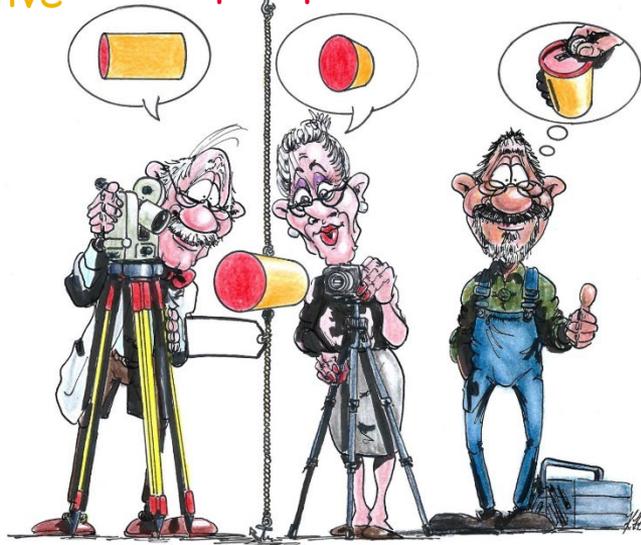
...but the knowledge
developed is **not appropriate**
for sustainable development
and does not lead to
transformation

Changes begin when you start seeing things differently,
e.g. in interdisciplinary and transdisciplinary collaboration

Natural
science
perspective

Social
science
perspective

Actors'
perspective



...this can lead to
transformative learning
(and sometimes to
changes in behaviour)

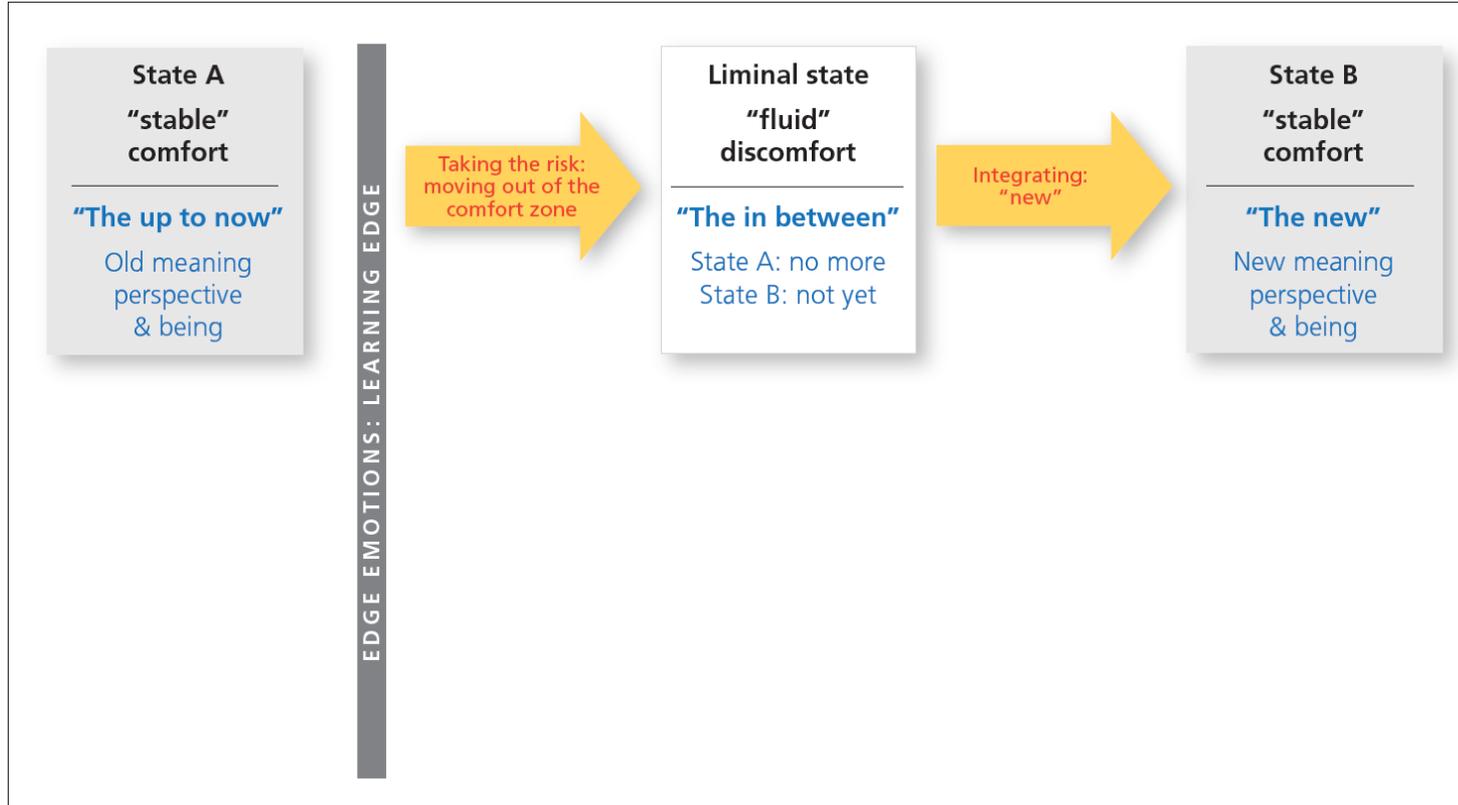
Definition of transformative learning

“Transformative learning involves a **deep structural shift** in the basic premises of thought, feelings, and actions. It is a **shift of consciousness** that dramatically and **permanently alters our way of being** in the world.

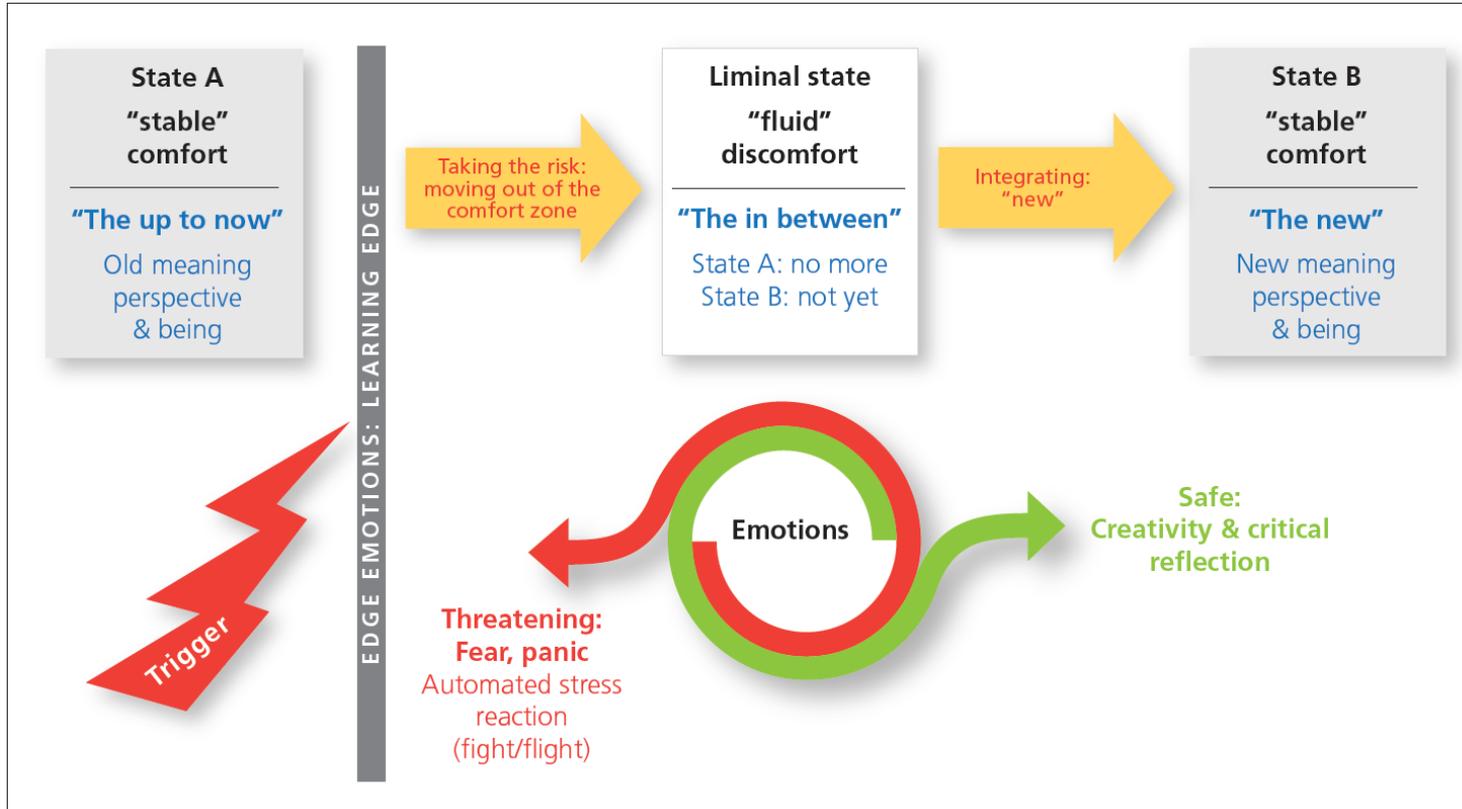
(Morrell & O’Connor, 2002, p.xvii)

Such a shift involves our **understanding of ourselves** and our self-locations; our **relationships** with other humans and with the natural world; our **understanding of relations of power** in interlocking structures of class, race, and gender; our **body-awareness**, our visions of alternative approaches to living; and our **sense of possibilities** for social justice and peace and personal joy.”

Transformative learning as a process



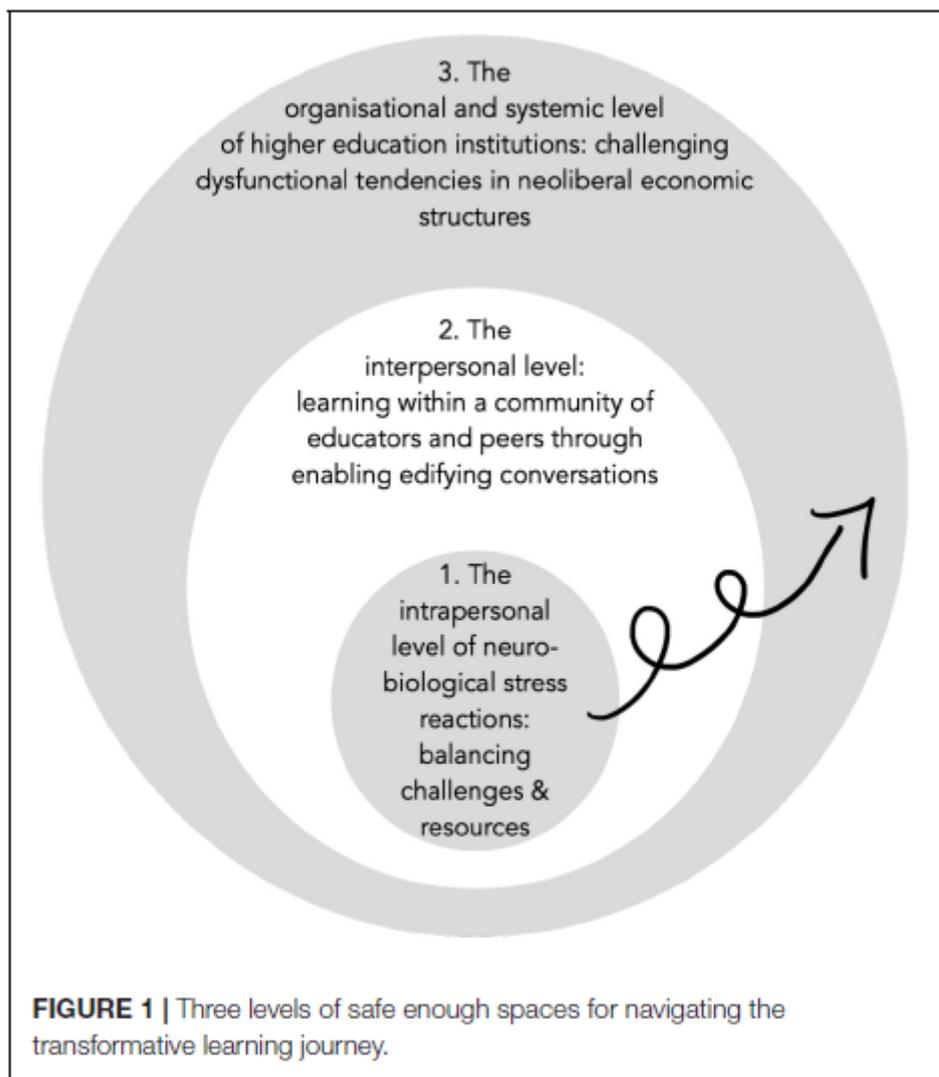
What it requires...



Source:
Förster et al 2019:
[Transformative
teaching in Higher
Education for
Sustainable
Development:
facing the
challenges](#)

Conditions for embedding transformative learning in HE

Source:
Singer-Brodowski et al. 2022: [Creating and Holding Safe Enough Spaces for Transformative Learning in Higher Education for Sustainable Development.](#)



HEIs: brick and mortar institutions



Main buildings of the University of Bern, Switzerland (© UniBE)

Eight propositions for transformative learning and teaching (TLT)

1. Higher education has **fundamental potential** for TLT.
2. Sustainability requires **value-oriented** TLT.
3. Sustainability-oriented TLT in higher education requires a **reflexive examination** of normativity.
4. **Emotions** require targeted attention in sustainability-oriented TLT in higher education.
5. Normativity and emotionality constitute **challenges for science-based** university teaching.
6. **Safe** teaching-and-learning arrangements are needed to facilitate TLT processes.
7. It is necessary to **professionalize** sustainability-oriented TLT and clarify relations with established university pedagogy.
8. **Further research** on sustainability-oriented TLT in higher education is needed.

Source: Bornemann et al 2020: [Sustainability-Oriented Transformative Learning and Teaching in Higher Education \(saguf.ch\)](https://www.saguf.ch)

Questions to the audience

Go to www.menti.com and use the code 6899 8165



1. Have you already tried to introduce normativity and emotionality in your science-based HE teaching?
2. What were success factors (+), what were stumbling blocks (–)?

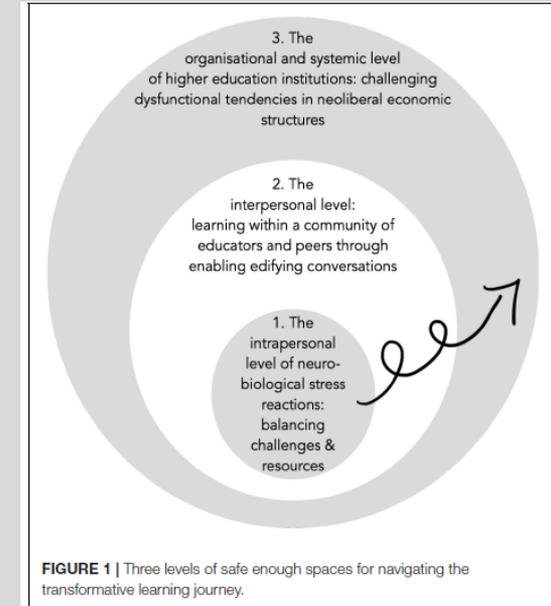
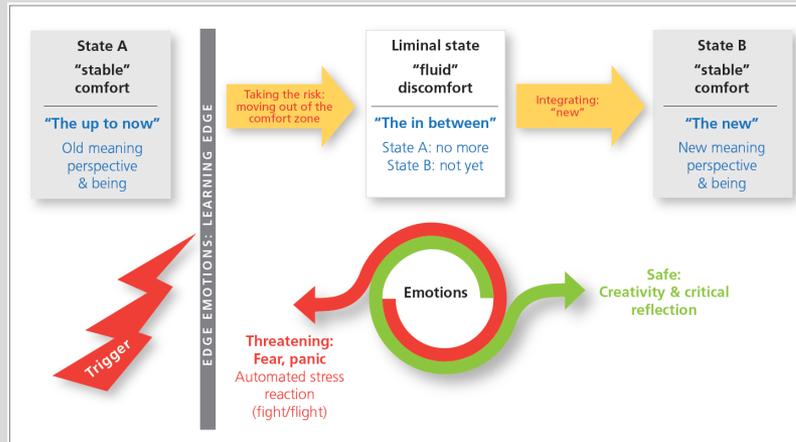
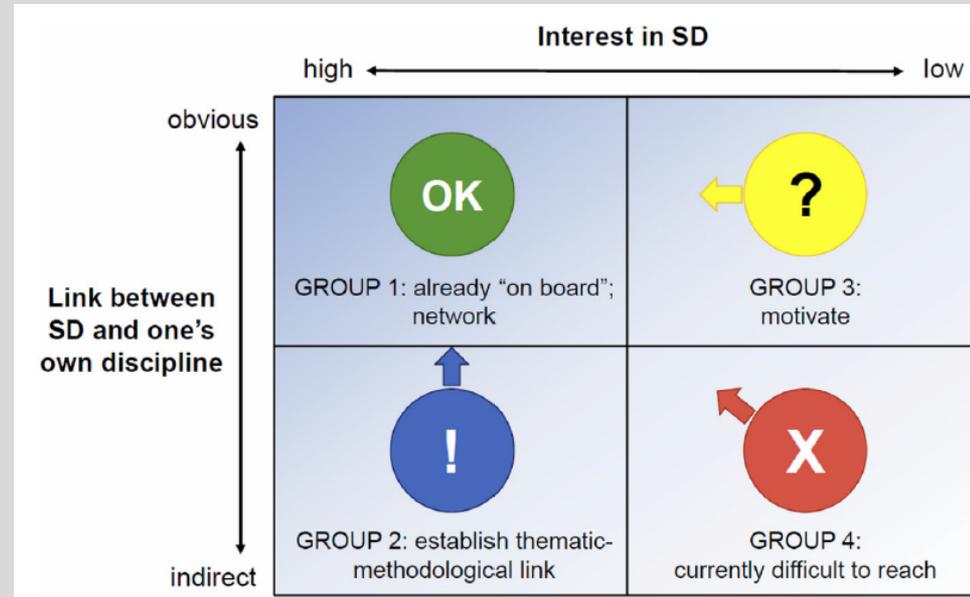


FIGURE 1 | Three levels of safe enough spaces for navigating the transformative learning journey.

The University of Bern's experience

1. Combined top-down and bottom-up approach
2. Work with a Theory of Change and a clear understanding of who to involve, in what, and when
3. Distinguish between 4 target groups
4. Provide targeted support for all those who are interested, integrate them in the process of developing further support (honest appreciation!)



Trechsel et al. 2018: [Mainstreaming ESD at a Swiss university](#)

Support from the Inner Development Goals (IDGs)!

- Meant to complement the SDGs, considered to be a clear **plan**. Gap between plan and action!
- Because we lack “the inner capacity to deal with our increasingly complex environment and challenges. Fortunately, modern research shows that the inner abilities we now all need can be developed.”

- 1 **Being** – Relationship to Self
- 2 **Thinking** – Cognitive Skills
- 3 **Relating** – Caring for Others and the World
- 4 **Collaborating** – Social Skills
- 5 **Acting** – Driving Change

Real transformation also requires a change in Quality Assurance (QA)

- 2020 [COPERNICUS Alliance conference](#): on “How can we assure quality and transformative learning for sustainable development?” (see [resources](#))
- QA processes: a mirror enabling HEIs to reflect on what their core values are: do they meet them? Do these inner values compare with outer values? (Grolimund, 2020)
- Essential for HEIs to work with QA specialists: accreditation as institutional lever!
- What does this imply for QA frameworks? See Janssens et al 2022:
 - TL for SD approach not explicitly mentioned in QA frameworks but opportunities are there
 - HEIs must work with QA agencies because (E)SD has been forgotten
 - Critical role of networks
 - Embedding transformative learning: will increase integration of sustainability

In addition: need to reflect on assessment in transformative learning

1. Assessment and in particular **self-assessment**: part of the learning process
2. Learning outcomes related to transformative learning can rarely be defined as “measurable”
3. Don’t focus on *whether* transformation has happened! (Mälkki & Green 2014). Instead: assess how the process worked
4. If ECTS or other measurements are needed: be creative!
5. But avoid measuring anything that could be understood as a manipulative learning outcome (e.g. learner’s new insights and perspectives: valid as experience, not measurable)

What do you want to assess?

Enhanced self-knowledge

Enhanced social competences

Enhanced action competence

Enhanced tolerance for uncertainty

Involvement in process

Impact of transformative learning

Satisfaction and feelings

...

What is the purpose of assessment?

Enhanced learning

Improved online facilitation

Accountability

Dissemination

Contribution to societal transformation

...

With or for whom?

Learners

Facilitators

Institutions (certification!)

"Outsiders" (funders, disseminators, ...)

Society

...

How?

A tool for thinking about assessment of, for, and as learning

Mehlmann et al, 2021: [Online transformative learning, an ongoing enquiry.](#)

More resources [here](#)

Earl & Katz 2006: Rethinking Classroom Assessment with Purpose in Mind

Manifesto: “Lifelong Learning for Transformation” – 4 key requirements

1. Everyone can and should be enabled to contribute to transformations towards sustainable development.
2. Cosmetic changes won't do: we educators need to be open to radical changes in our thinking, feeling and acting. Individually and collectively.
3. Transformative learning processes can and must be implemented everywhere in society.
4. Learning environments and learning processes need to be shaped for transformative learning in a conscious and competent manner.

For each of the 4 key requirements: 2-4 core messages, each of which will have explanations.

Original version: in German, due to be online on 2 Dec. 2022; English version to follow.

Practice-based and collaborative development of insights and tools

1. Online Transformative Learning project, resources here:
<https://hostingtransformation.eu/projects/>
2. TRACCs: Transformational, Cross Cutting people skills for the SDGs (project; will be running an **HE pilot in Lüneburg**, at Leuphana University, from 6-8 December, with a focus on the skill set “Decision making” – [Registration](#) still open!)
3. TD-NET’s Methods Toolbox for co-creation of knowledge:
<https://transdisciplinarity.ch/en/methoden/>
4. Toolbox offered by Transformation Hosts International:
<https://hostingtransformation.eu/toolbox/>
5. What about resources you know of or have developed?

Many thanks to you all!



And many thanks to my colleagues and friends at:



^b
UNIVERSITÄT
BERN

CDE
CENTRE FOR DEVELOPMENT
AND ENVIRONMENT



References

- BALSIGER, J., FÖRSTER, R., MADER, C., NAGEL, U., SIRONI, H., WILHELM, S. & ZIMMERMANN, A. B. 2017. Transformative Learning and Education for Sustainable Development. *GAIA - Ecological Perspectives for Science and Society*, 26, 357-359. DOI: 10.14512/gaia.26.4.15
- BORNEMANN, B., FÖRSTER, R., GETZIN, S., KLÄY, A., SÄGESSER, A., SCHNEIDER, F., WÄGER, P., WILHELM, S. & ZIMMERMANN, A. B. 2020. Sustainability-Oriented Transformative Learning and Teaching in Higher Education: Eight Propositions on Challenges and Approaches. . *Discussion Paper 2020*. Bern, Switzerland: Swiss Academic Society for Environmental Research and Ecology (saguf). <https://scnat.ch/en/id/NPcym>
- BIANCHI, G., PISIOTIS, U. & CABRERA, M. 2022. GreenComp – The European sustainability competence framework. Luxembourg: Publications Office of the European Union. doi:10.2760/13286, JRC128040.
- COMPAGNUCCI, L. & SPIGARELLI, F. 2020. The third mission of the university: A systematic literature review on potentials and constraints. *Technological Forecasting and Social Change*, 161, 120284.
- EARL, L. & KATZ, S. 2006. *Rethinking Classroom Assessment with Purpose in Mind: Assessment for Learning, Assessment as Learning, Assessment of Learning*, Winnipeg, Canada, Manitoba Education, Citizenship and Youth.
- FÖRSTER, R., ZIMMERMANN, A. B. & MADER, C. 2019. Transformative teaching in higher education for sustainable development: Facing the challenges. *GAIA - Ecological Perspectives for Science and Society*, 28, 324-326. DOI: 14512/gaia.28.3.18
- JANSSENS, L., KUPPENS, T., MULÀ, I., STANISKIENE, E. & ZIMMERMANN, A. B. 2022. Do European quality assurance frameworks support integration of transformative learning for sustainable development in higher education? *International Journal of Sustainability in Higher Education*, 23, 148-173.
- MORRELL, A. & O'CONNOR, M. 2002. Introduction. In: O'SULLIVAN, E., MORRELL, A. & O'CONNOR, M. (eds.) *Expanding the Boundaries of Transformative Learning: Essays on Theory and Praxis* New York: Palgrave Macmillan., pp.xv-xx.

References

- SINGER-BRODOWSKI, M., FÖRSTER, R., ESCHENBACHER, S., BIBERHOFER, P. & GETZIN, S. 2022. Facing Crises of Unsustainability: Creating and Holding Safe Enough Spaces for Transformative Learning in Higher Education for Sustainable Development. *Frontiers in Education*, 7. DOI: 10.3389/educ.2022.787490
- STERLING, S. 2011. Transformative learning and sustainability: Sketching the conceptual ground. *Learning and Teaching in Higher Education*, 17-33.
- STERLING, S. 2021. Educating for the future we want. *GTI Forum Opening Essay*. Cambridge: Tellus Institute.
- STERLING, S. & THOMAS, I. 2006. Education for sustainability: the role of capabilities in guiding university curricula. *International Journal of Innovation and Sustainable Development*, 1, 349-370.
- TRECHSEL, L. J., ZIMMERMANN, A. B., GRAF, D., HERWEG, K., LUNDGAARD-HANSEN, L., RUFER, L., TRIBELHORN, T. & WASTL-WALTER, D. 2018. Mainstreaming education for sustainable development at a Swiss university: Navigating the traps of institutionalization. *Higher Education Policy*, 31, 471-490.
- WALS, A. 2019. Specific Issues facing Education for Sustainable Development (ESD). Ha Noi, Viet Nam: University of Wageningen, UNESCO Chair in Social Learning and Sustainable Development.
- WIEK, A., BERNSTEIN, M. J., FOLEY, R. W., COHEN, M., FORREST, N., KUZDAS, C., KAY, B. & WITHYCOMBE KEELER, L. 2016. Operationalising competencies in higher education for sustainable development. In: BARTH, M., MICHELSEN, G., RIECKMANN, M. & THOMAS, I. (eds.) *Routledge Handbook of Higher Education for Sustainable Development*. London: Routledge, pp 241–260
- WIEK, A., WITHYCOMBE, L. & REDMAN, C. L. 2011. Key competencies in sustainability: A reference framework for academic program development. *Sustainability Science*, 6, 203-218.
- WILHELM, S., FÖRSTER, R. & ZIMMERMANN, A. B. 2019. Implementing competence orientation: Towards constructively aligned education for sustainable development in university-level teaching-and-learning. *Sustainability* 11, 1891.