Awareness-based climate education and co-creation

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“No problem can be solved from the same consciousness that created it. We have to learn to see the world anew.” - *Albert Einstein*

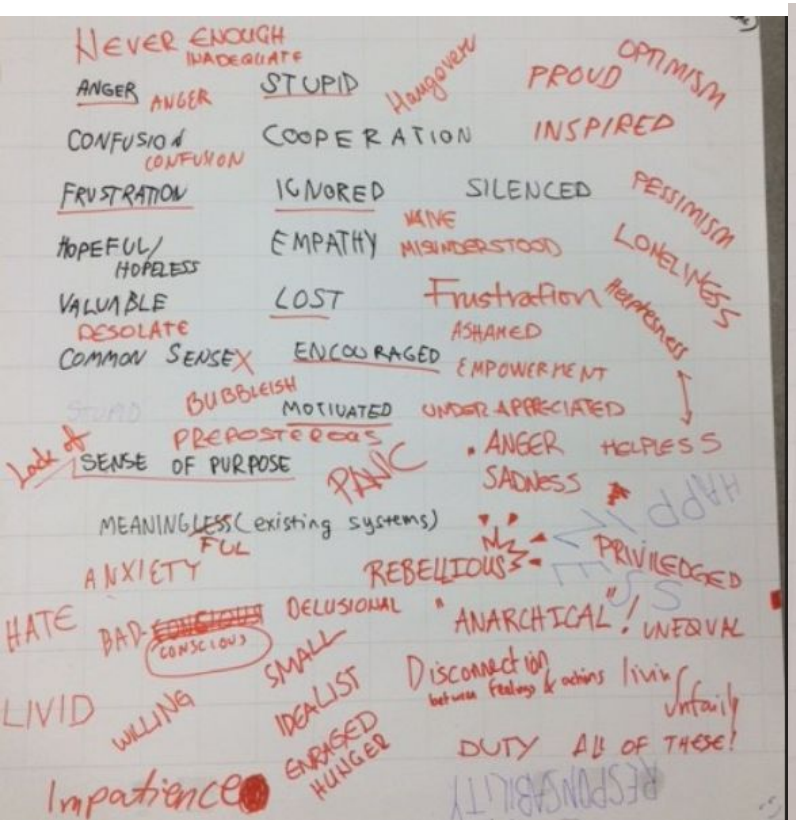
AGENDA

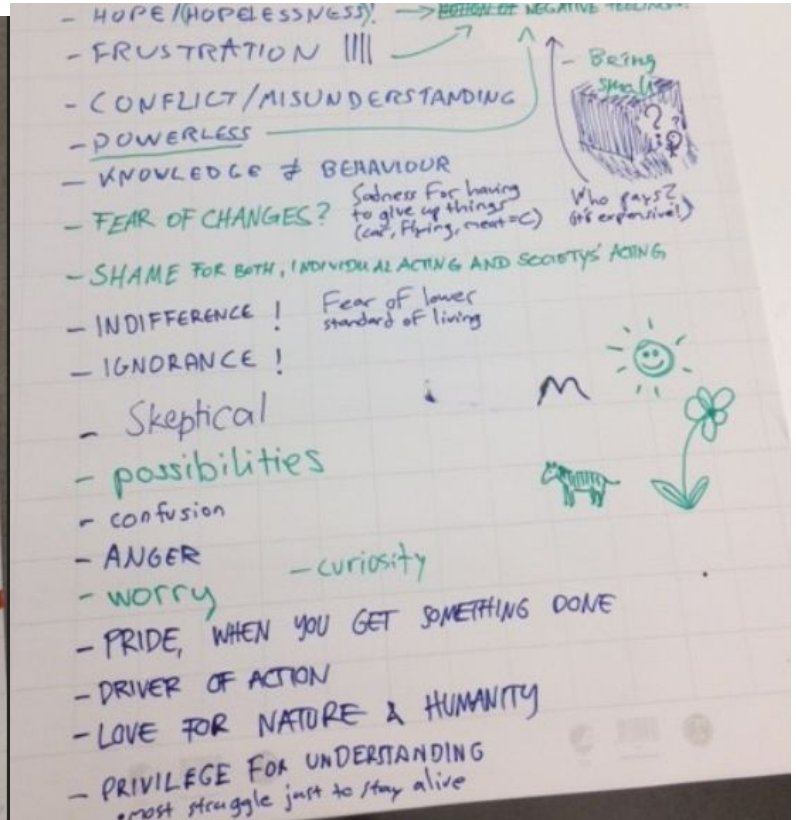
10.30-11.30

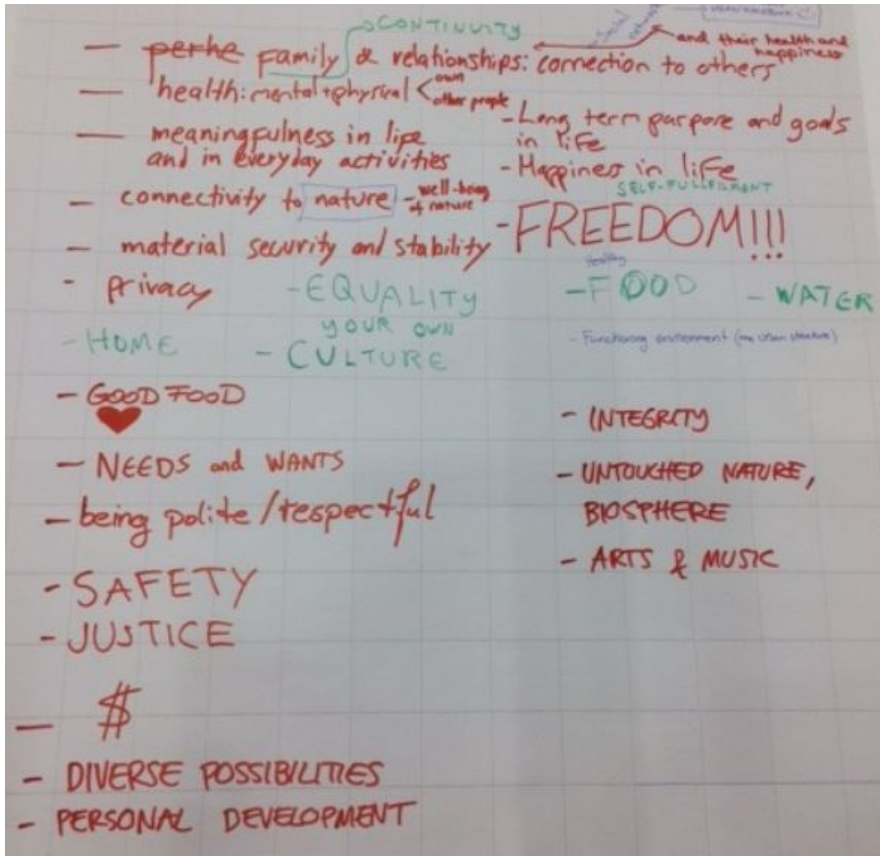
- Introduction (15 min)
- Journaling exercise (30 min)
- Reflective dialogue & takeaways (15 min)

Values and feelings in climate education

- Individual response to the planetary crisis
- The importance of meaning and satisfying life







Challenges to be addressed in education

- Difficulties in facing students' anxiety for planetary situation and requirements for practical tools for solving it
- Students may graduate without acquiring sufficient competencies for dealing with their feelings and managing the complexity. They still may feel lacking the 'right answers' concerning the different interpretations on sustainability
- Educational challenges: what to teach, how to teach, when to teach, who should teach?

  □ what is the final aim?

Transformative learning

- *a profound shift in awareness* that alters one's way of being in the world and one's view of the interconnectedness of self, the human community and the natural environment (O'Sullivan 2002; 2008)
- goes *beyond epistemological* processes of a change of worldview *to an ontological* process of a change in being in the world (Lange 2004)
- Head, hands and heart model (Orr, 1992; Sipos et al. 2008)
  - Cognitive, affective and psychomotor domains of learning

 The epistemology of awareness-based methods reinforce the shaping factors of transformative learning: critical reflection, emotional engagement and relational knowing

Key competences for sustainability education: Self-awareness

Systems thinking competency: the abilities to recognize and understand relationships; to analyse complex systems; to think of how systems are embedded within different domains and different scales; and to deal with uncertainty.

Anticipatory competency: the abilities to understand and evaluate multiple futures – possible, probable and desirable; to create one's own visions for the future; to apply the precautionary principle; to assess the consequences of actions; and to deal with risks and changes.

Normative competency: the abilities to understand and reflect on the norms and values that underlie one's actions; and to negotiate sustainability values, principles, goals, and targets, in a context of conflicts of interests and trade-offs, uncertain knowledge and contradictions.

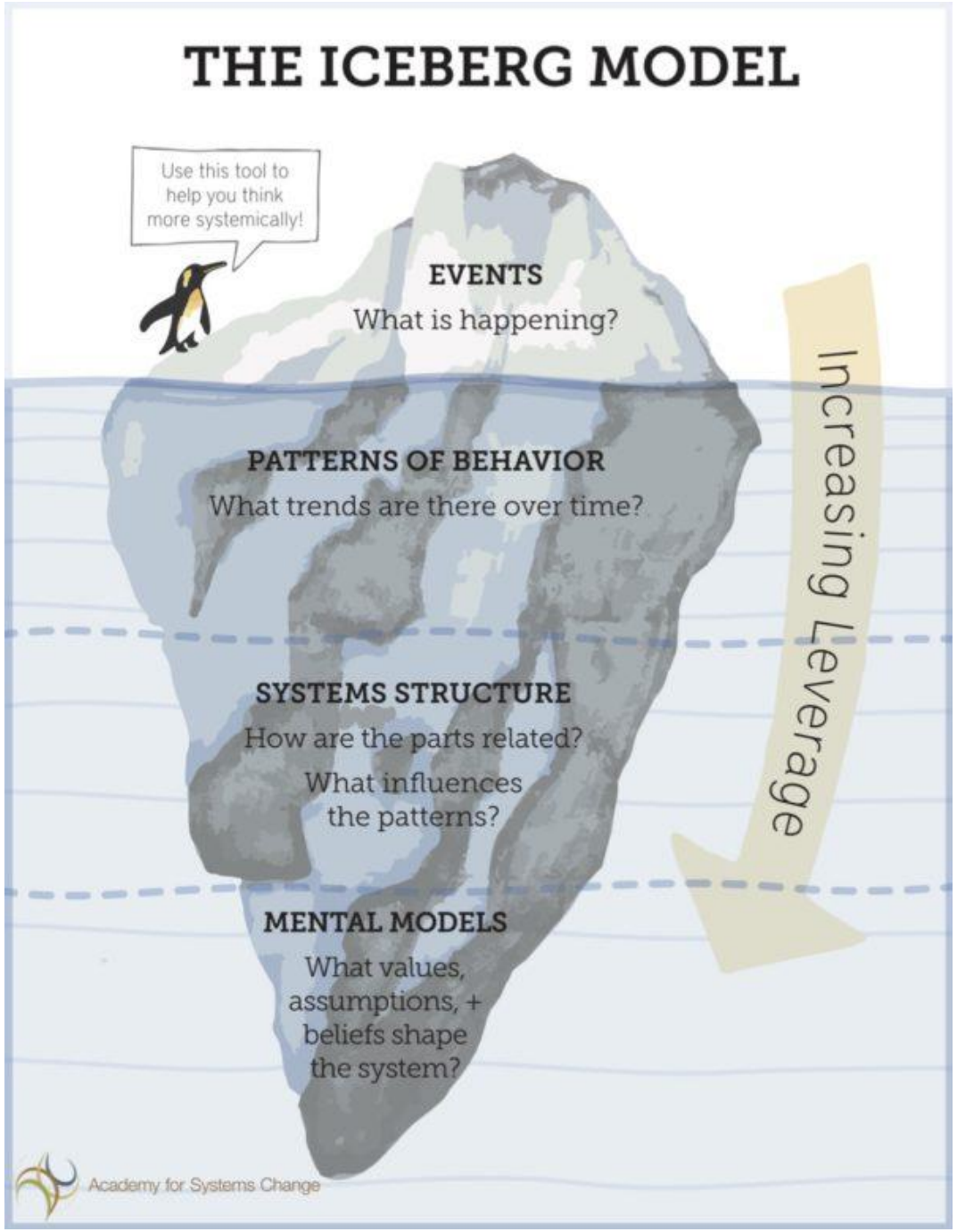
Strategic competency: the abilities to collectively develop and implement innovative actions that further sustainability at the local level and further afield.

Collaboration competency: the abilities to learn from others; to understand and respect the needs, perspectives and actions of others (empathy); to understand, relate to and be sensitive to others (empathic leadership); to deal with conflicts in a group; and to facilitate collaborative and participatory problem solving.

Critical thinking competency: the ability to question norms, practices and opinions; to reflect on own one's values, perceptions and actions; and to take a position in the sustainability discourse.

Self-awareness competency: the ability to reflect on one's own role in the local community and (global) society; to continually evaluate and further motivate one's actions; and to deal with one's feelings and desires.

Integrated problem-solving competency: the overarching ability to apply different problem-solving frameworks to complex sustainability problems and develop viable, inclusive and equitable solution options that promote sustainable development, integrating the above-mentioned competences.

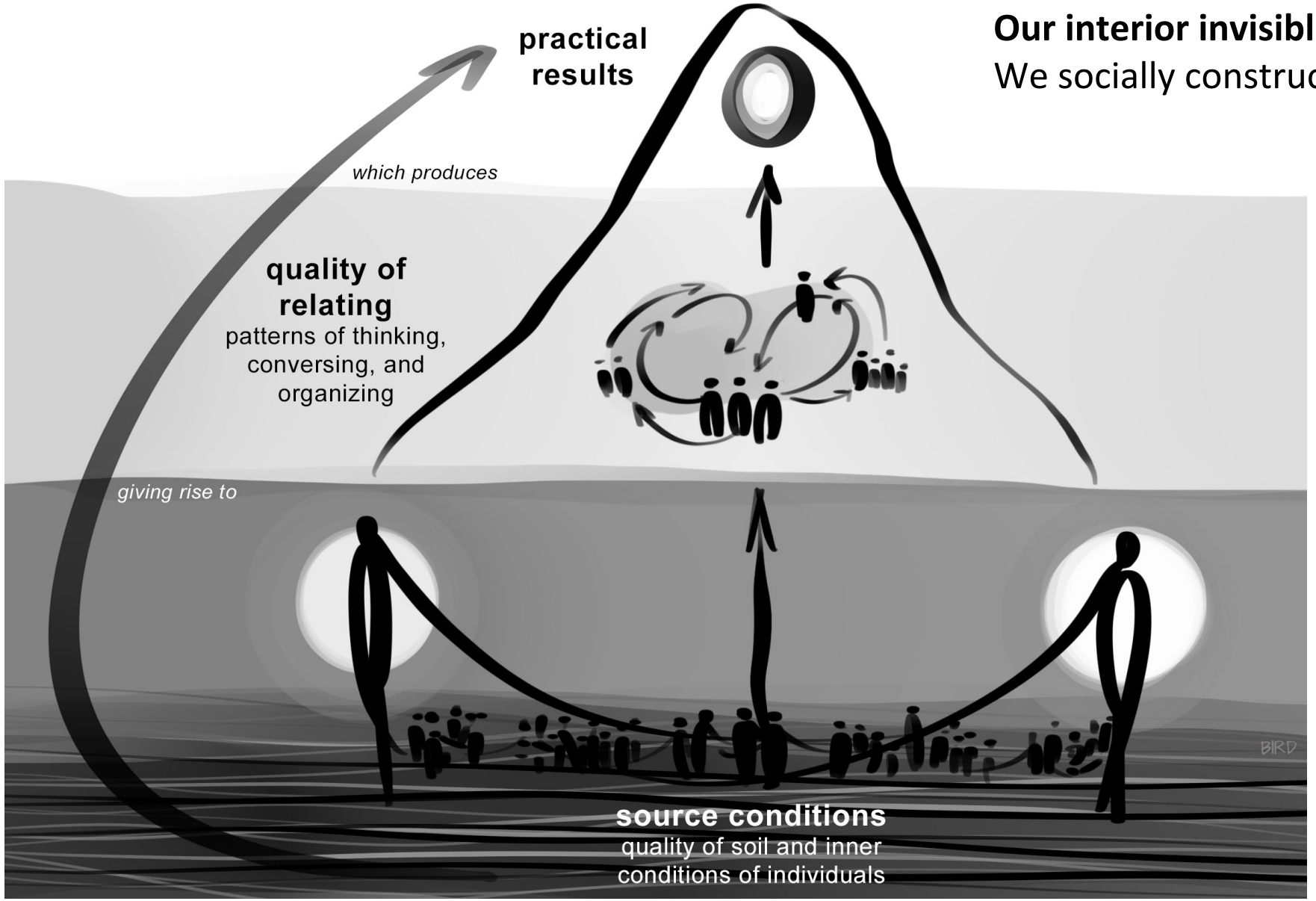


Awareness-based approach to promote and ensure the empowering, transformative potential of higher education

http://donellameadows.org/wp-content/userfiles/iceberg-model.pdf

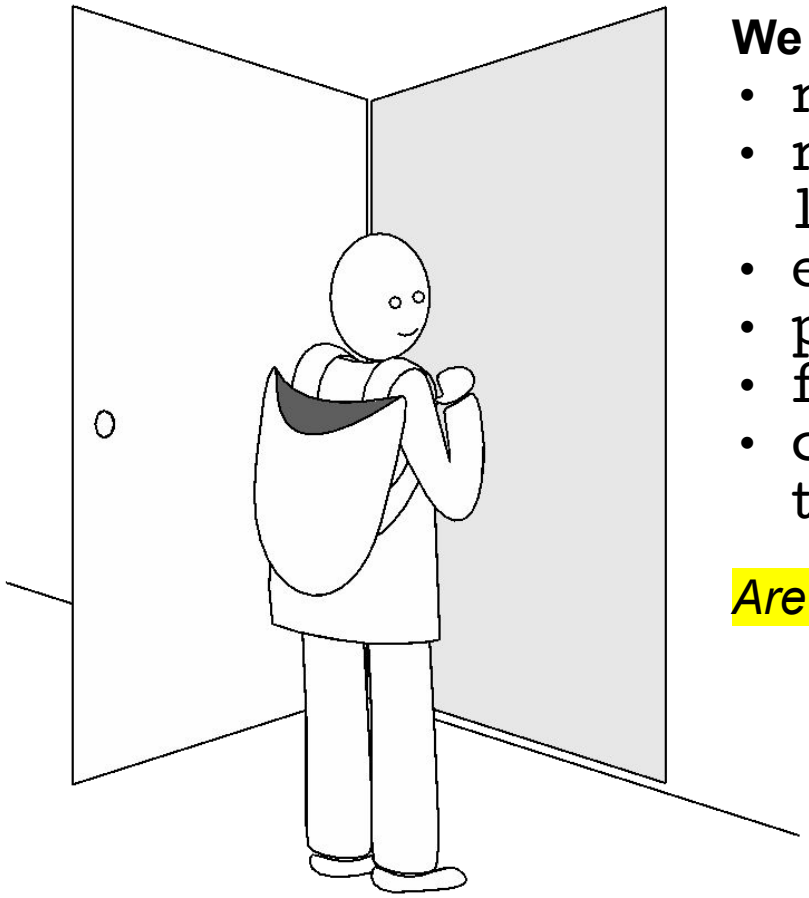
Our interior invisible world animates our actions

We socially construct our reality



https://medium.com/presencing-institute-blog/social-field-resonance-how-to-research-deep-structures-of-the-social-system-544d68654abf

BECOMING AWARE - *what do you bring with you when you enter the room?*



We all carry (hidden):

- mindsets
- mental models (Senge 1990)
- emotions
- past events
- future desires
- continuous flow of thoughts

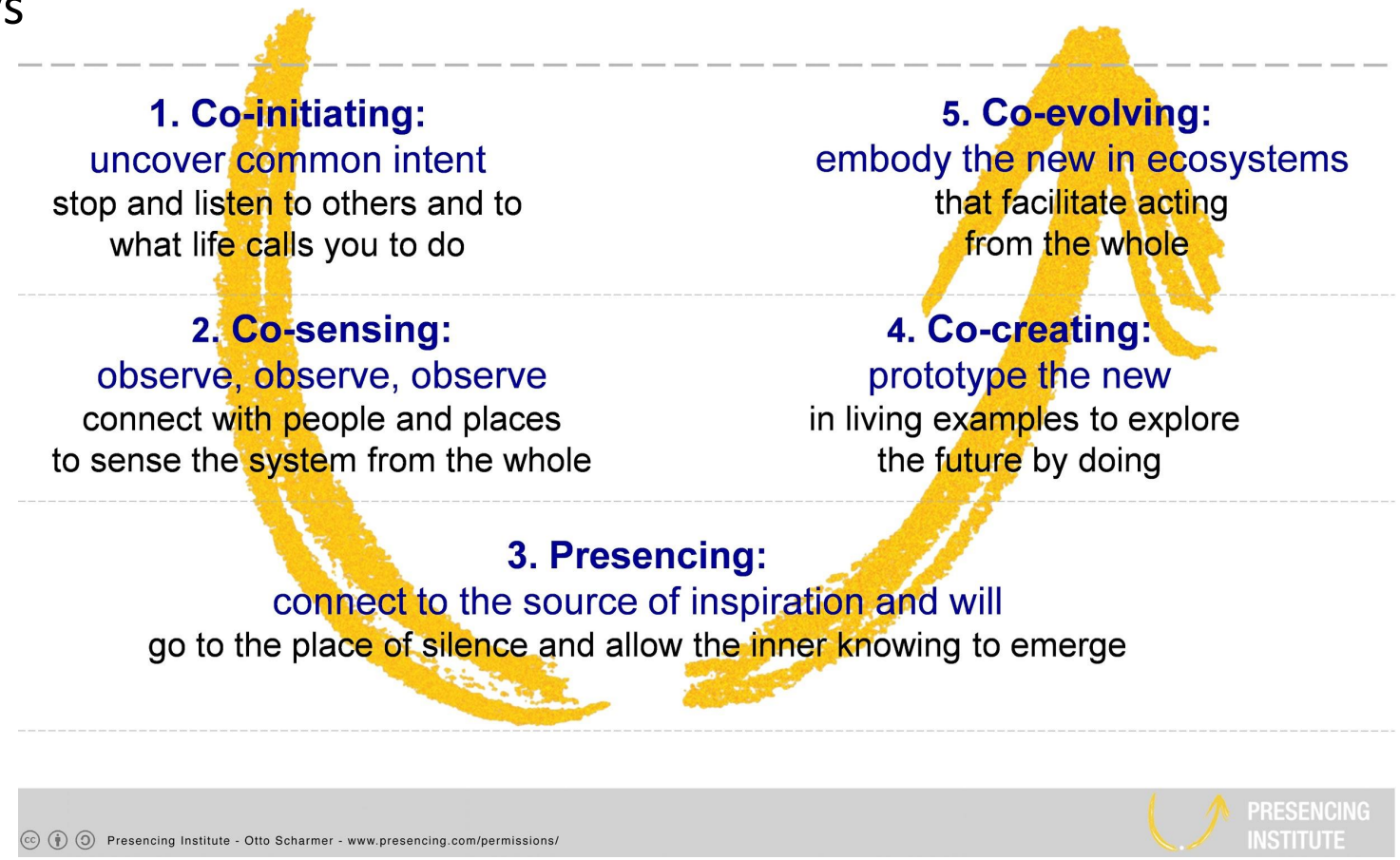
Are you here now?

Layers of 'preventing factors':

- self-criticism
- roles
- expectations
- judgements
- fears (lack of smth)
- fear of the unknown

Awareness-based systems change framework: Theory U

Two parallel transformation journeys
"transforming society and self"



Scharmer, C. O. (2009). *Theory U: Learning from the future as it emerges*. Berrett-Koehler Publishers.

DEMO: Journaling exercise (30 min)

Reflecting + future potentials

- What is my own role in the climate crisis?
- What is my field's role in the climate crisis?
- What is my desire for future directions?
- What life calls me to do?

- Reflective dialogue & takeaways (15 min)

Readings relating to sustainability education

- Jaakkola, N. (2019): ”Sä voit vaikuttaa asioihin” : Diskursiivinen analyysi kestävyyden merkityksistä yliopisto-opetuksessa. Pro gradu, Helsingin yliopisto.
- Lange, E. A. (2004). Transformative and restorative learning: A vital dialectic for sustainable societies. Adult Education Quarterly, 54(2), 121-139.
- O’Sullivan, E. (2008). Finding our way in the great work. Journal of Transformative Education, 6, 27-32.
- O’Sullivan, E., Morrel, A., & O’Connor, M. A. (2002). Expanding the boundaries of transformative learning: essays on theory and praxis. New York: Palgrave.
- Orr, D. (1992). Ecological literacy: Education for a post modern world. Albany, NY: State University of New York
- Sipos, Y., Battisti, B., & Grimm, K. (2008). Achieving transformative sustainability learning: Engaging head, hands and heart. International Journal of Sustainability in Higher Education, 9, 68-86.
- UNESCO (2017). Education for Sustainable Development Goals – Learning Objectives, ISBN 978-92-3-100209-0.
- Wiek, A., Withycombe, L. & Redman, C. L. (2011). Key competencies in sustainability: A reference framework for academic program development. Sustainability Science, 6, 203–218.

Readings relating to Awareness-based approach

- Hedlund-de Witt, A., de Boer, J., Boersema, J. J. (2013). Exploring inner and outer worlds: A quantitative study of worldviews, environmental attitudes, and sustainable lifestyles. Journal of Environmental Psychology 37, 40-54
- Horlings, L. G. (2015). The inner dimension of sustainability: Personal and cultural values. Current Opinion in Environmental Sustainability, 14, 163–169.
- Leiserowitz, A.A., Kates, R.W., Parris, T.M. (2016). Sustainability Values, Attitudes, and Behaviors: A Review of Multinational and Global Trends. A Review of Multinational and Global Trends. Annual Review of Environment and Resources, Vol 31, pp. 413–44.
- Lertzman, R. (2015). Environmental melancholia: Psychoanalytic dimensions of engagement. London and New York, NY: Routledge.
- Meadows, D. 1999. Leverage points: Places to intervene in a system. Hartland: The Sustainability Institute.
- O'brien, K. (2018). Is the 1.5°C target possible? Exploring the three spheres of transformation. Current Opinion in Environmental Sustainability*, 31*, pp. 153-160.
- Senge, P. M. (1990). The fifth discipline: The art and practice of the learning organization. New York: Doubleday Currency.
- Scharmer, C. O. (2009). Theory U: Learning from the future as it emerges. Berrett-Koehler Publishers.
- Scharmer, O. (2018). The essentials of theory U: Core principles and applications. Berrett-Koehler Publishers.
- Takanen, T., Petrow, S. (2013). The Power of Encountering - a Story of Co-Creative Process Inquiry. OGE. Bookwell Oy, Porvoo.

- journaling exercise and questions: https://www.presencing.org/resource/tools/guided-journaling-desc