Hello everyone, my name is Florence Grüter. I am a Curriculum Developer dedicated to Sustainability at Concordia University, and today I will speak to where Literature on Education for Sustainability is currently at, highlighting common competencies in Sustainability education. Maybe some of you know this already and include it in your teaching. Literature on Education for Sustainability and Sustainable Development both emphasize the importance of learning competencies leading to becoming a change agent, either a sustainability citizen or a policymaker, to address the climate emergency and mitigate or solve sustainability problems.

One of the most common frameworks has been created by Wiek A, Withycombe L, & Redman (2011). It offers an interplay of five competencies in sustainability.

They define a competency as a functionally linked complex of knowledge, skills and attitudes that enable successful task performance and problem solving. Five key competencies are required to get integrated in the curriculum. Systems thinking competency is being able to understand structure and dynamics of complex systems.

Anticipatory competency is being able to anticipate possible or sustainable futures. Normative competency is being able to differentiate, justify and apply values and goals for sustainability. Strategic competency is being able to create transition and intervention strategies to enact change. Interpersonal competency is having communicative and collaborative skills. The UN also advocates to work on the same set of competencies, including integrated problem solving. They add critical thinking to the list to teach and learn to the SDGs, as well as self awareness. Integrated problem solving has been recently promoted by Brundiers and collaborators to meaningfully bring together all other competencies at a meta level to solve sustainability issues.

These researchers also believe values thinking is holding a lead role in orienting the application of other competencies, emphasizing justice, equity, diversity, and inclusion, and reconciling diverse values with sustainability values.

Now let's zoom in on inner capabilities. A recent contribution from Giangrande and collaborators talks about another key competency, the intrapersonal skills to understand thoughts, feelings and be aware of what's going on inside oneself and connect within and with the world.

They also advocate for transformational learning in relation to sustainability education.

In the article titled Inside Out Sustainability, it says we need to pay attention to our inner world or emotions, thoughts, identities and beliefs. They will lead to transformation for systemic change.

The goals, values, worldviews and emotions of people are the places from which the motivations and methods for pursuing sustainability originate and can be maintained.

This concurs with Brundiers' work. If we want behavioral change to achieve sustainability, Ives and collaborators argue we need a shift in values and a change in mindsets, moving away from a growth-centered society. We need to learn to cultivate that inner awareness and openness to change paradigms in class. This effective domain is also emphasized by the UN next to the cognitive and behavioral domain. Quite recently, another set of goals called the Inner Development Goals or IDGs have been designed by a nonprofit organization advocating for the need for more inner capabilities as we are not yet well on track to reach the SDGs. This interesting framework lists some essential transformative skills grouped under five dimensions.

Being, which is relationship to self.

Thinking or cognitive skills.

Relating or caring for others and the world.

Collaborating or social skills.

And acting, which is enabling change.

Obviously it's difficult to address all those competencies in just one course, and it should be scaffolded across the curriculum. Also, some courses or disciplines might lend themselves more easily to contemplating those contents than others.

We also recognize that the inner capabilities can be tricky territories to explore in traditional academic settings.

It's ambiguous, uneasy, imperceptible, difficult to mention to address in large classes. Perhaps non-Western education can help frame this, for example, through contemplative practices and pedagogies. To build those competencies to offer transformative learning, it's not about transferring knowledge, but about including student-centered approaches, empowering the students to think, feel, and do. Those skills should be acquired through action-oriented pedagogy, an active experiential learning.pedagogy, an active experiential learning. I do encourage you to investigate this further if that resonates with you. Thank you for your attention.