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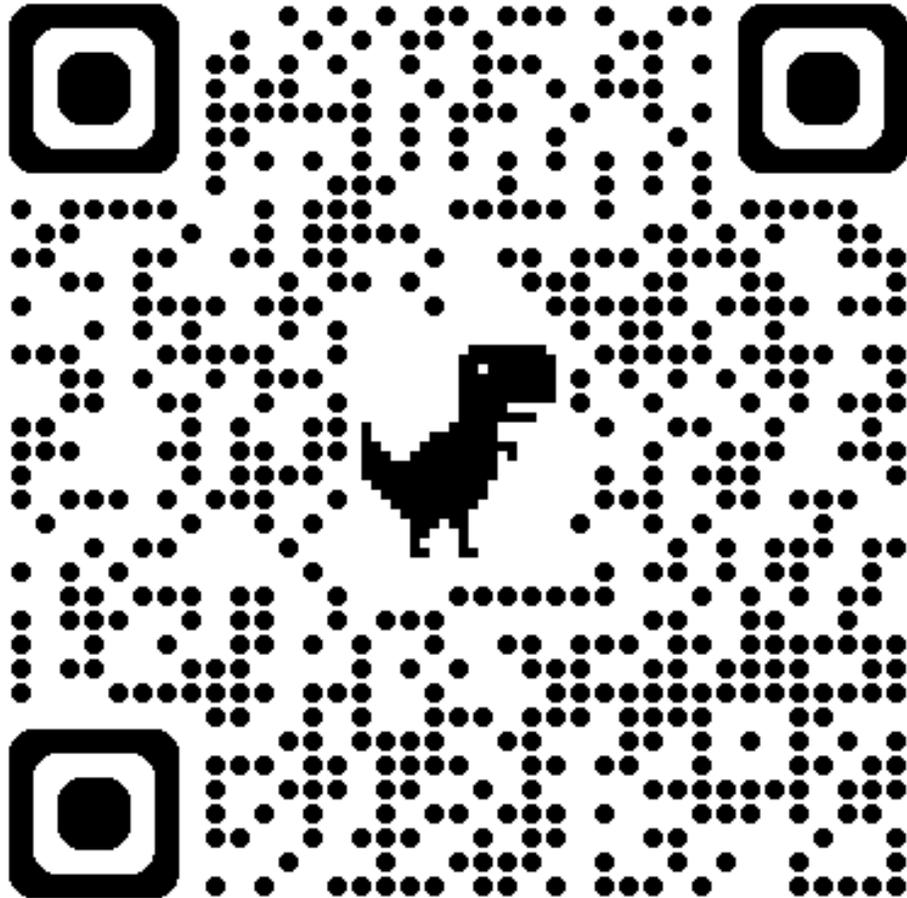
AHU seminar series, session 2
“Teaching for Sustainability”
Practicing for a sustainable future
through sustainable pedagogies

MIRJAM S. GLESSMER



Download slides for today?

<https://teachingsustainability.blogg.lu.se/downloads/>



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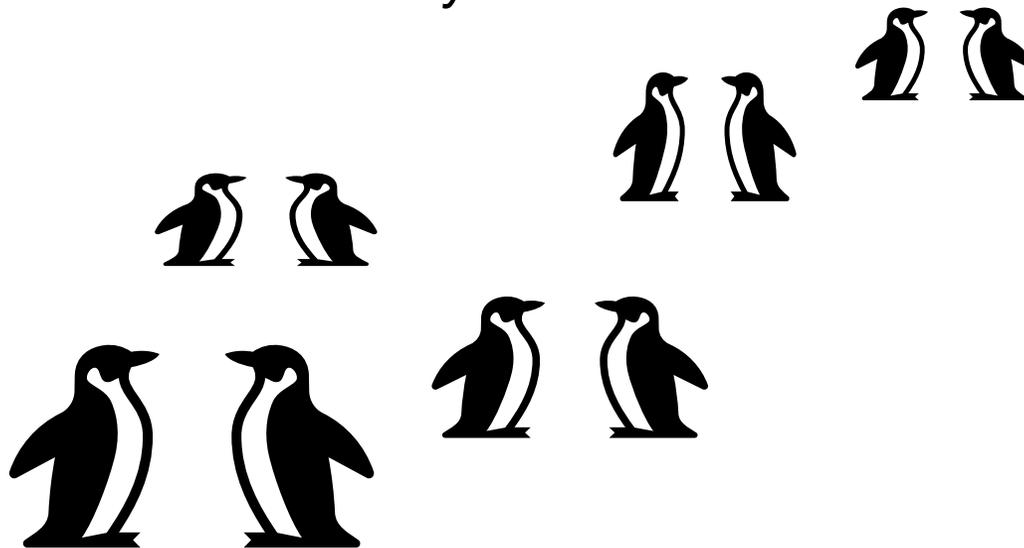
“Impromptu networking”

Rapidly share challenges & expectations, build new connections

- 2 rounds:
 - Walk around, find someone you have not met before
 - In pairs, 2 min per person
 - *“What challenge do you want to work on today? What do you hope to get from and give to this community?”*

Why?

- Warm up shy people, initiate participation immediately for everyone
- Little things can make a big difference!
- Deep engagement around challenges
- Stories deepen as they are repeated
- Affirm individual contributions
- Emphasize the power of loose and new connections



← <https://www.liberatingstructures.com/2-impromptu-networking/>



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1 minute for yourself to take notes

Write down anything that seems like you might want to remember it, for example

- Who you met and what they do
- Anything they said that made you think
- Anything you said (or thought) yourself that surprised you or that you want to remember
- Your intention for what you want to get done before 12:00 today



HANDOUT

Teaching about, with, in, through, for sustainability?

Think of examples for the 5 categories below, both that you have seen or heard about in any context, and that you could imagine for your own context!

Approach	Description	Examples
<i>about</i>	Teaching general sustainability concepts and challenges	
<i>with</i>	Including examples of sustainability applications within the discipline	
<i>in</i>	Positioning the discipline as part of a sustainable world	
<i>through</i>	Using sustainability as a framework for teaching	
<i>for</i>	Inspiring action for sustainable development	

Course "Teaching for Sustainability" 2025, Mirjam Glessmer, mirjam.glessmer@lth.lu.se



Teaching

Sustainability

“about”

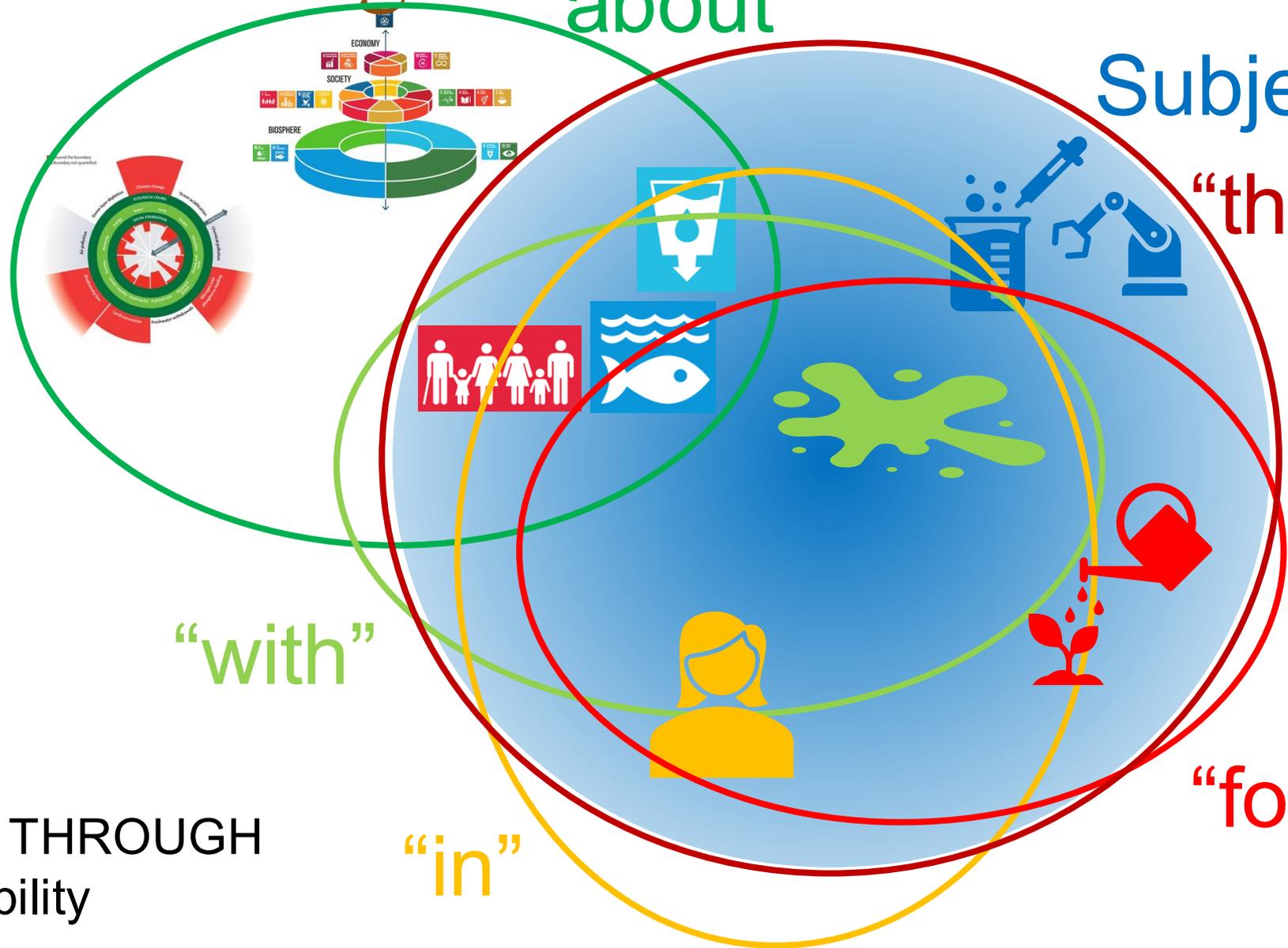
Subject

“through”

“with”

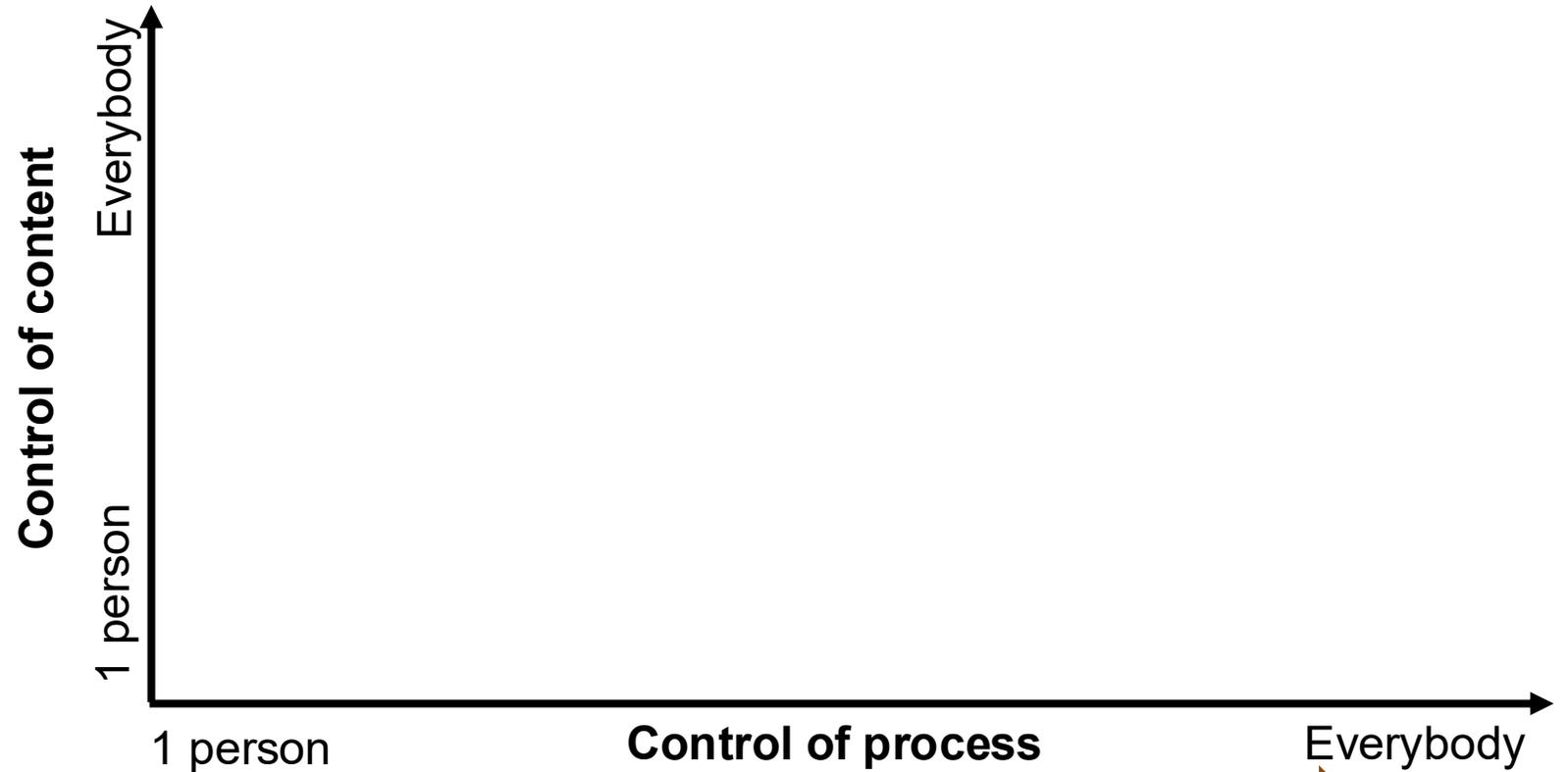
“in”

“for”



Today:
Teaching THROUGH
Sustainability

Control of content and process in the classroom

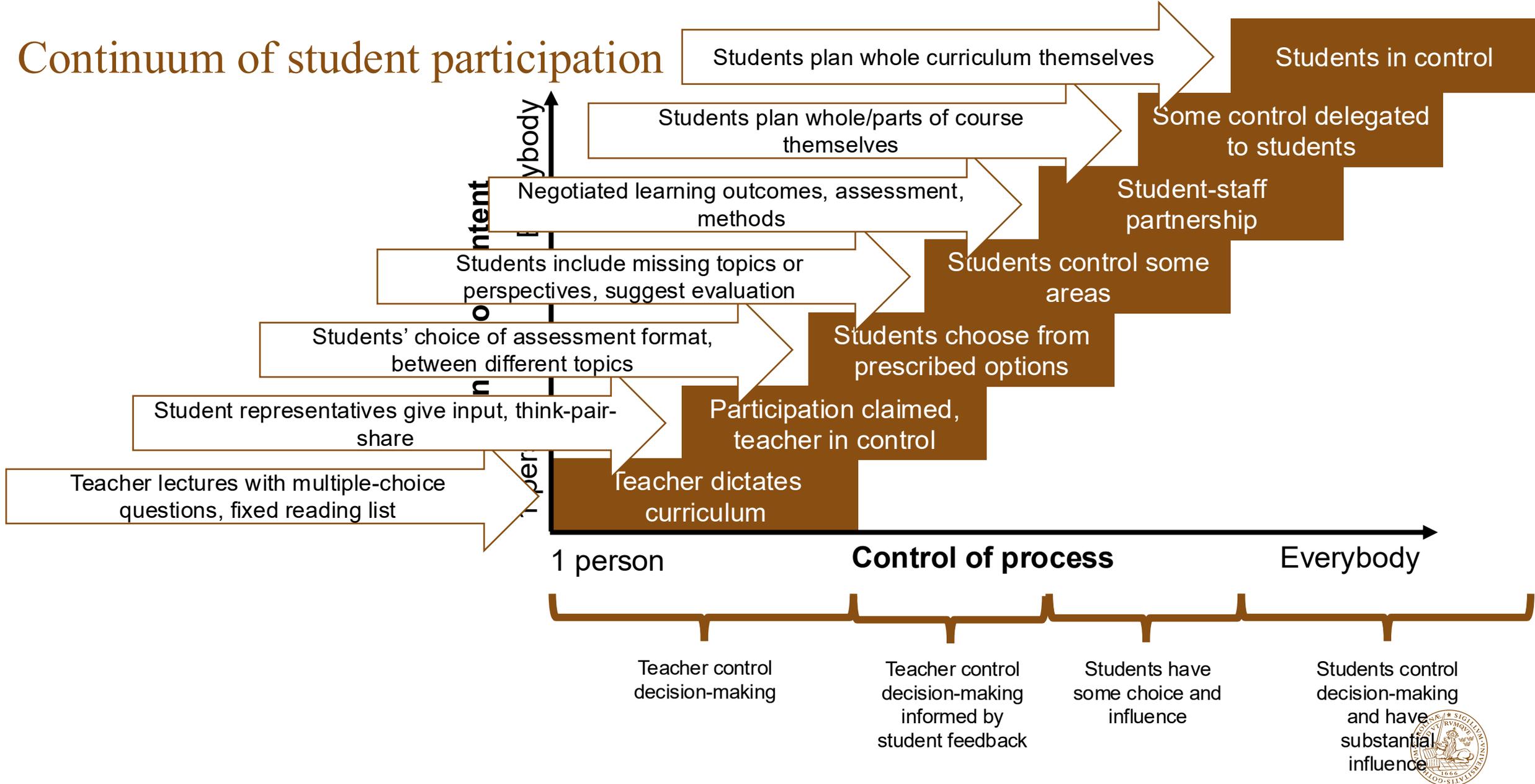


Organize collaboration

- first: think & write individually
- everybody gets to speak in small groups
- structure to make sure all voices are heard
- welcome input without judgement
- evaluate statements independent of who made them

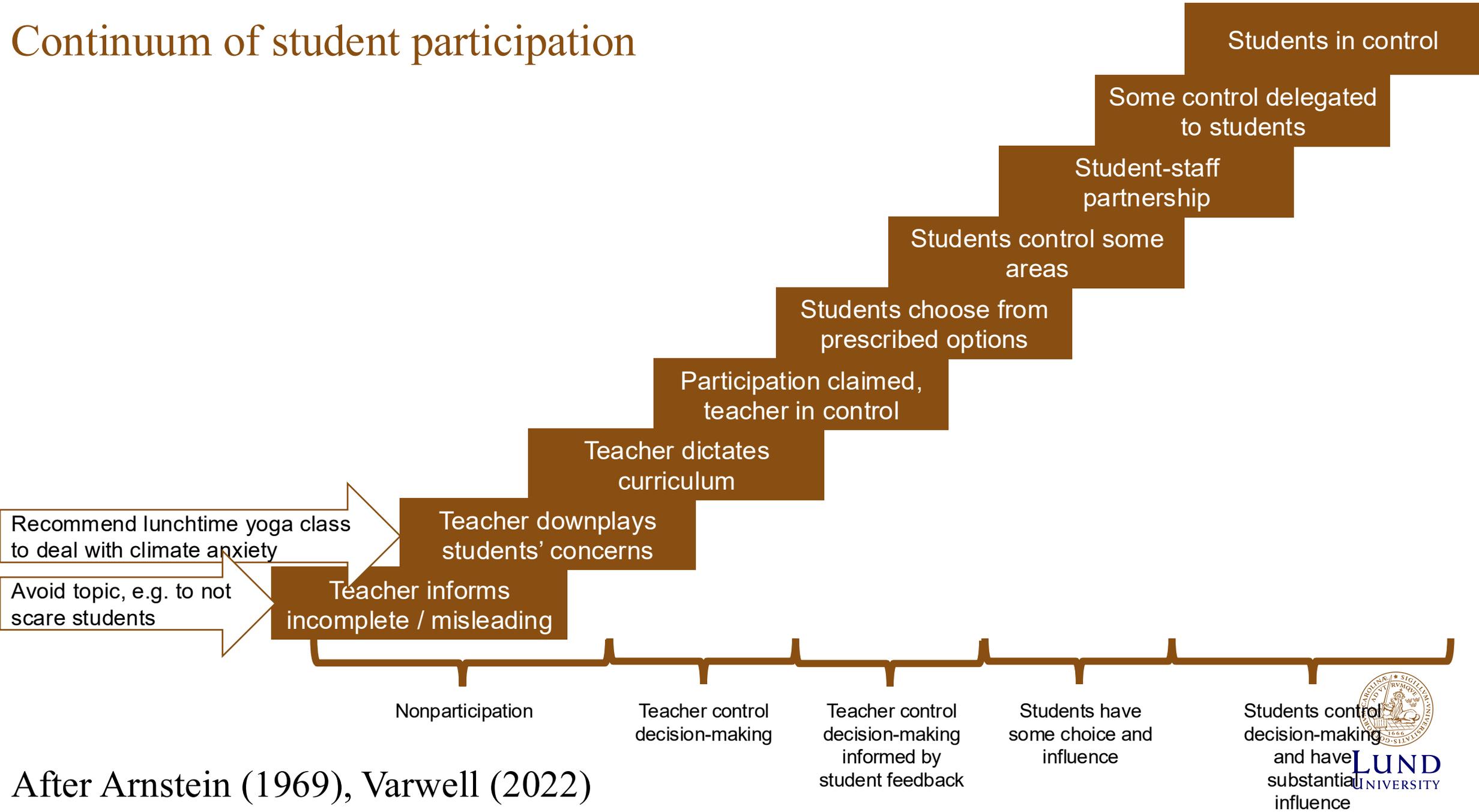
After Liberating Structures (n.d.)

Continuum of student participation



After Bovill & Bulley (2011)

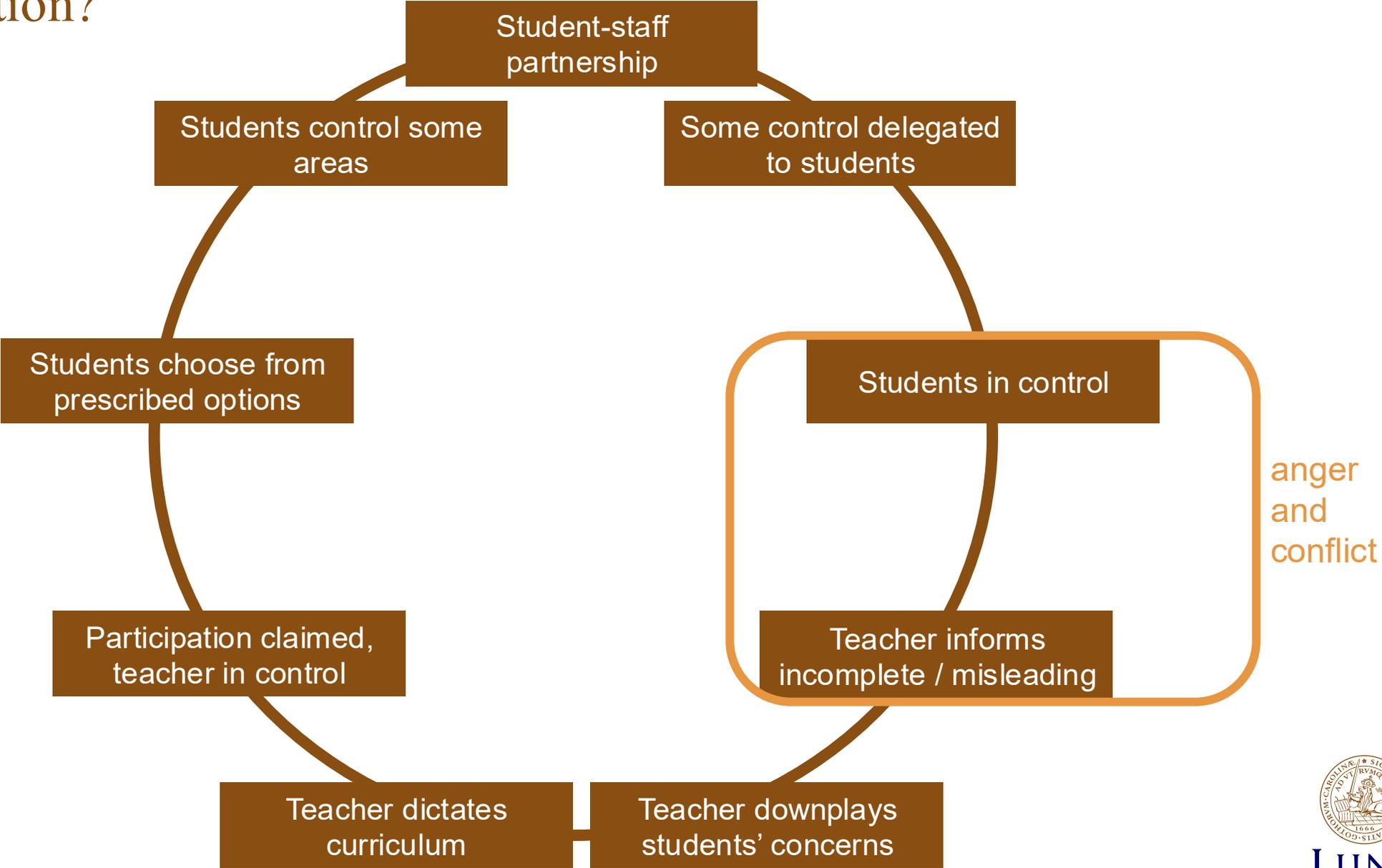
Continuum of student participation



After Arnstein (1969), Varwell (2022)



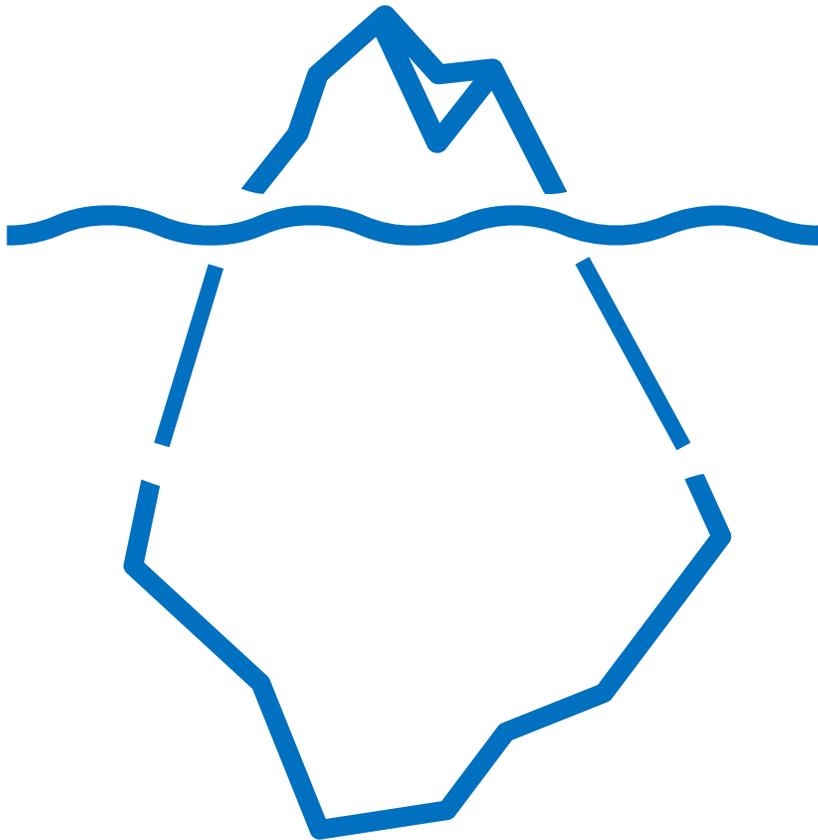
Nonparticipation?



anger and conflict

After Varwell (2022)

What do we mean by ‘pedagogy’ in sustainability education? (Sandri, 2022)



Teaching methods, e.g. activities (think-pair-share, role play), assessments (authentic, portfolio), ...

Educational approach, e.g. content framing, assessment style, learning objectives and delivery structure

Pedagogy: “*educator’s worldview or ‘lens’, in the context of learning and teaching, which shapes the way they see their practice, the role of education, and the processes and purposes of learning*”

Sandri, O. (2022). What do we mean by ‘pedagogy’ in sustainability education? *Teaching in Higher Education*, 27(1), 114-129. <https://doi.org/10.1080/13562517.2019.1699528>



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HANDOUT

Teaching for Sustainability: Pedagogy, educational approach, teaching methods



MCQs
Minute papers

Opportunities for practice
Frequent testing

Drill & practice!
Behaviorism

Teaching methods: What does your educational approach mean for your activities, assessments, ... ?

- Impromptu interviews
- Think-pair-share

- *Advance organizers*
- *Minute papers*
- *Think-pair-share*

Educational approach: What does your pedagogy mean for your content framing, assessment style, learning objectives and delivery structure, ... ?

- Diversity of voices
- Empower & unleash
- ➔ Liberating structures

- *Peer discussions*
- *Opportunities to apply learning*
- ➔ *Active learning*

Pedagogy: What matters to you in learning, teaching, sustainability?

- Good relationships
- Trust
- Listening to each other
- ➔ Relational pedagogy

- *Optimizing for how we know the brain works*
- *Practice!*
- ➔ *Constructivism*



HANDOUT

Teaching for **Sustainability**: Pedagogy, educational approach, teaching methods



Teaching methods: What does your educational approach mean for your activities, assessments, ... ?

- *“Carving space” / Active lunch break*
- *Role play*
- *Include feeling & doing*
- *Student participation*
- *Work on community challenges*
- *Tanner (2013)*

Educational approach: What does your pedagogy mean for your content framing, assessment style, learning objectives and delivery structure, ... ?

- *Place-based*
- *Equitable teaching, Liberating structures*
- *Community-based*
- *Head-hand-heart*
- *Service learning*

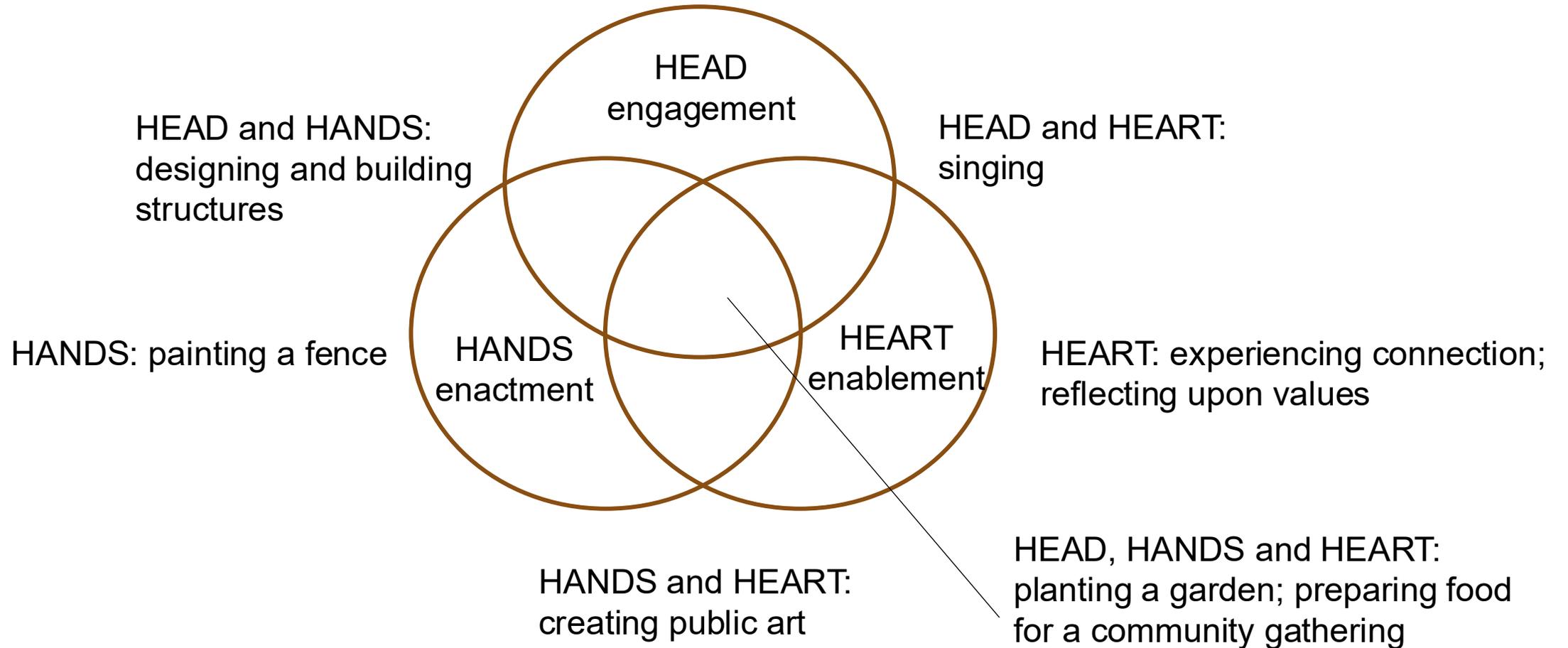
Pedagogy: What matters to you in learning, teaching, sustainability?

- *Care & responsibility*
- *Democracy*
- *Commitment*



Head-hand-heart

HEAD: learning through readings, lecture, discussion; includes critical thinking

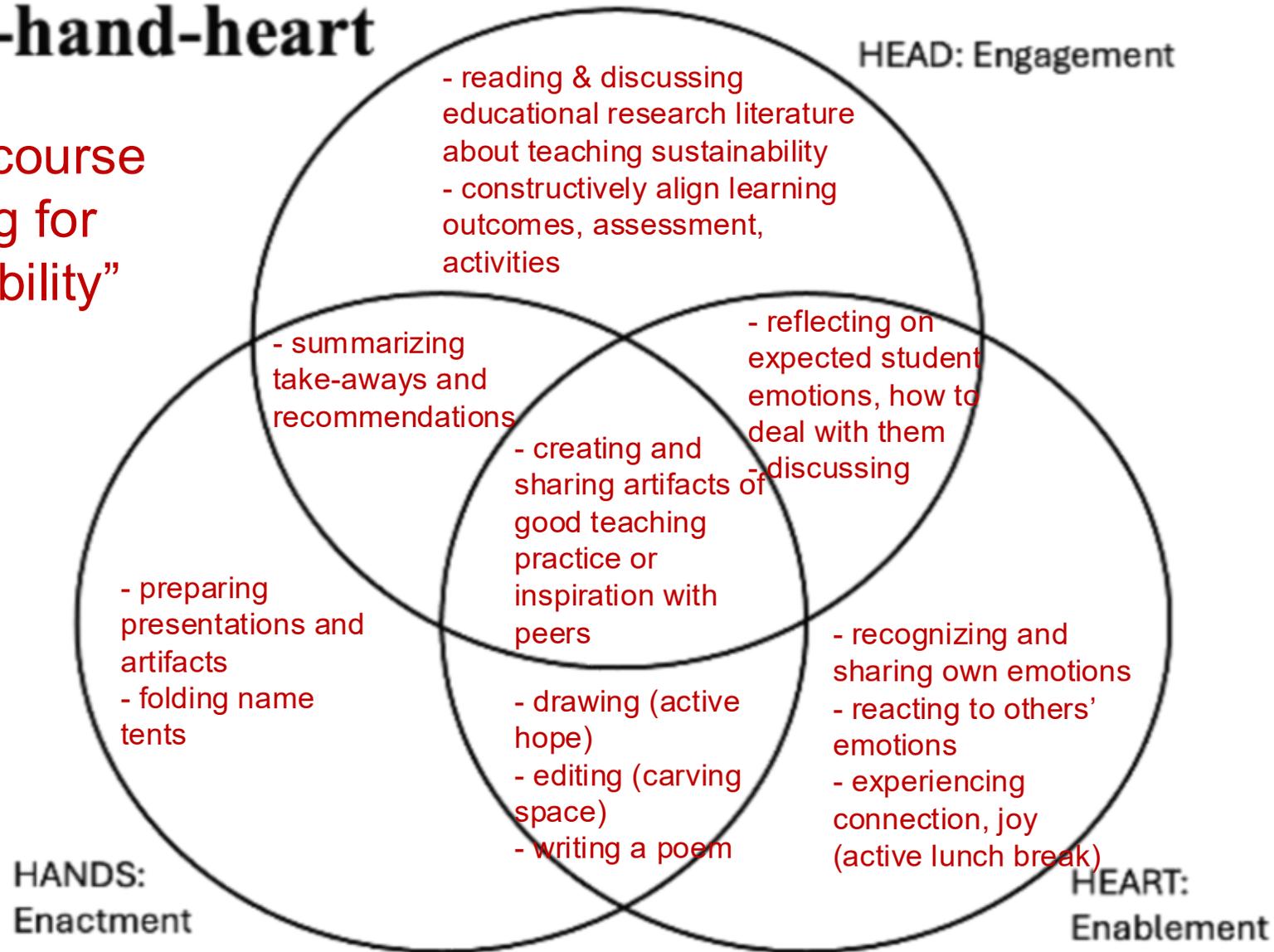


Sipos, Y., Battisti, B., & Grimm, K. (2008). Achieving transformative sustainability learning: engaging head, hands and heart. *International Journal of Sustainability in Higher Education*.

Öhman, J., & Sund, L. (2021). A didactic model of sustainability commitment. *Sustainability*, 13(6), 3083.

Head-hand-heart

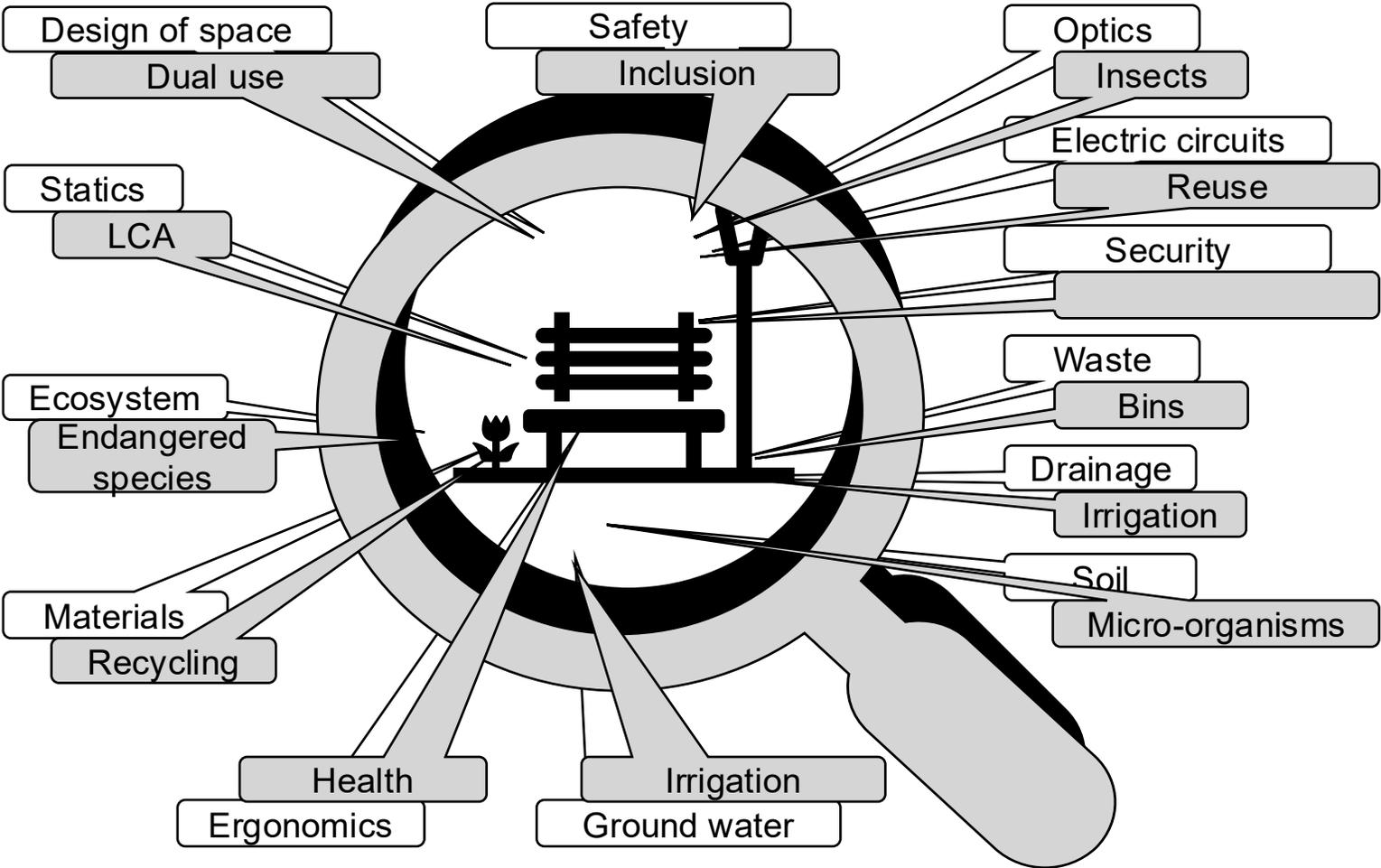
My own course
“Teaching for
Sustainability”



Sipos, Y., Battisti, B., & Grimm, K. (2008). Achieving transformative sustainability learning: engaging head, hands and heart. *International Journal of Sustainability in Higher Education*.

Öhman, J., & Sund, L. (2021). A didactic model of sustainability commitment. *Sustainability*, 13(6), 3083.

Your disciplinary lens shapes what you see



Your focus shapes what you see

Active lunch break

Exploring sustainability topics on our doorsteps



1. Go outside and take a random walk

“random”:

- Follow something yellow
- Take a left turn
- Follow a smell
- Stand still and follow the first noise you notice
- Turn right



2. Look at the world through your subject's and the sustainability lens



3. Snap a picture of something that catches your eye



4. (Edit and) upload the picture & an explanation

Ditch the perfection!!

Why?

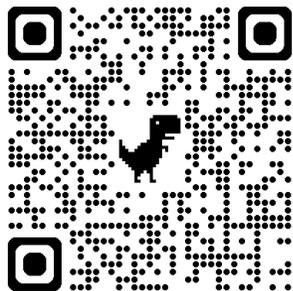
- Motion, oxygen, natural light during a long online meeting 😊
- Relax and reconnect with what makes us happy
- See the world through specific lenses
- Include real-life experiences in conversation later on



Carving space for sustainability

- Holmqvist, D., & Millenberg, F. (2024). Carving space to learn for sustainable futures: A theory-informed adult education approach to teaching. *European journal for Research on the Education and Learning of Adults*, 15(3), 299-315.

<https://rela.ep.liu.se/article/view/5237/4405>



Recommended reading! ->

Figure 1. Overview of the seed package we designed.

Learning for sustainable futures

A seed package of teaching and learning activities

The aim of this package is to provide the seeds for a pedagogical practice informed by theoretical knowledge from the fields of *adult education research* and *sustainability education research*. The included teaching and learning activities are meant to help learners realise or gauge the responsibility and freedom that we have as persons in the world. In other words, they are meant to emancipate learners to a desire to 'actively' be in the world. On the left-hand side, we describe the teaching and learning activities. A *pathway* of sorts or *use instruction* for the seeds we have designed. You are welcome to use it yourself or draw inspiration from it. On the right-hand side, we have listed the main theoretical assumptions, concepts and key references which have informed our design choices.

Part 1 – individually, at home

Learners are presented with material that highlights some aspect of sustainability issues that is relevant to them. This could be in the form of a text, video, podcast etc. Choose carefully. If possible, offer choices, as this can increase the chance of each participant finding something meaningful for them to latch onto. E.g. a book with thematic chapters where learners are free to choose the theme that most resonates with them.

Using this material as a lens, the learner then goes on a **reflexive wandering walk in their surroundings** (in or around their home, workplace, school, grocery store, or any other place that is central to their life space). Ask the learner to **document their reactions and experiences** through photography (video and audio can be offered as alternatives but may be more difficult to process in the next part of the module).

Part 2 – together, on site

Learners share their discoveries and narrate their experiences aided by the documentation (what did you see?). This should be done in small groups, and it is essential that everyone is given space and time to speak without being interrupted or rushed.

Each learner then chooses one image from their portfolio and ponders: what do I dream of for this place? What could it become? What do I wish could be accommodated here? (important to anchor the imagination exercise in the world). Ask learners to **intervene in the chosen image**, i.e. edit the image by pasting stickers, drawing over it, cutting out parts, etc. This can be done digitally (e.g. on the mobile phone that the picture was taken with) or physically (i.e. on printouts of the image).

Next, **learners share their place-grounded future-oriented imaginings** by showing and narrating their creations. This is done in the same small groups as before and it is again important that the exercise is allowed to take time, so everyone may speak and be heard.

Depending on the outcome, you could now capitalise on the collective excitement to maintain momentum. How might we enact, to bring about such imaginings?

Key assumptions, concepts & sources

Sustainability should be approached **holistically** and with recognition of **complexity**, and **dialectical relationships** (Hamilton, 2017; Lange, 2023). Tracing a theme, phenomenon or example can be a fruitful approach to highlight these aspects.

Meaningful learning is **anchored in the participant's lifeworld** (Millenberg, 2022); it becomes powerful when **connected to broader issues and patterns of society** (Rasmussen, 2021; von Kotze & Walters, 2023).

Places are pedagogical social constructs which invite certain modes of being-in-the-world and with each other. **Learning to 'read' places for unsustainable patterns** of social and ecological domination is part of a **critical pedagogy of place** (Gruenewald, 2001)

Reflexive wandering (Maximović, Joksimiović & Utić, 2020) to change the mode and pace of moving through space; to be in and outside at the same time.

When engaging with sustainability, **community and collaboration** are important (Lange, 2023). E.g. for emotional support (Gruenewald, 2003) nuance understanding (Hamilton, 2017), recognise embodied ways of knowing (von Kotze & Walters, 2023) & make democratic transitions (Arias-Maldonado, 2022).

Embrace pauses, silence, and gaps – **waiting as, disruptive and generative experience** (Bailey & Suddaby, 2023)

Sharing gives us a chance to experience and practice **conviviality** (Martinsson & Mullinari, 2023), **compassion** (Neff, 2011), **empathy** (Nichols, 2011) and **dialogue**.

The capacity and capability of **imagining futures** is crucial both for sustainability (Gyberg, Anshelm & Hallström, 2020) and democracy (Rasmussen, 2021) and must be practiced (Jickling & Blenkinsop, 2021).

Prefiguration, i.e. thinking, behaving and being as if that which we'd like to bring about already exists – as if we were already free (Graeber, 2004, 2013). This can be seen as a **chosen margin** or liminal space (hooks, 2014/1990).

Collecting and sharing examples of place-anchored future imaginings can foster community and invite **radical openness** (Gruenewald, 2003; hooks, 2010, Arias-Maldonado, 2022).

Equitable teaching strategies (Tanner, 2013)

Give students opportunities to **think and talk** about the topic

- Wait long enough before giving an answer
- Give students time to write (notes, minute paper)
- Use think-pair-share
- Less is more: don't try to do too much



Encourage, demand, and actively manage the **participation** of all students



- Hand raising
- Multiple hands, multiple voices
- Assign reporters for small groups
- Do a round where everybody speaks
- Monitor student participation

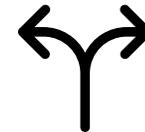
Teach **all** of the students in your classroom

- Teach them from the moment they arrive
- Collect assessment evidence from every student, every class



Build an **inclusive and fair** classroom community for all students

- Learn (or have access to) students' names
- Integrate culturally diverse & relevant examples
- Work in small groups
- Use varied active-learning methods
- Be explicit about promoting access and equity for all students

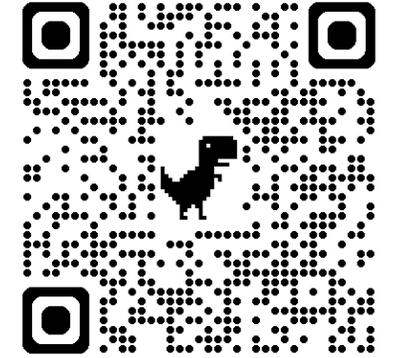


Monitor (your own and students') behavior to cultivate **divergent thinking**

- Ask open-ended questions
- Don't judge responses
- Use praise with caution
- Establish classroom community and norms

Initiative *Teaching for Sustainability*: Activities

I am looking for:	Information & Inspiration	Conversation & Community	Collaboration & Consultation	Visibility & Career Opportunities
<p>Myself, on my own</p>	<ul style="list-style-type: none"> • Read our blog • Join our MS Teams • Sign up to our newsletter 	<p>Book us for a chat</p> 	<p>Book a consultation</p>	<p>Welcome to:</p> <ul style="list-style-type: none"> • Write for our blog • Present at the Roundtable
<p>Myself, and a group of my colleagues</p>	<p>Invite us for a presentation on:</p> <ul style="list-style-type: none"> • Intro to Teaching for Sustainability • Key Sustainability Competencies • LU-policies 	<p>Invite us for a workshop on:</p> <ul style="list-style-type: none"> • Teaching for Sustainability • Transformation • Sustainability Competencies 	<p>Book us for a:</p> <ul style="list-style-type: none"> • Consultation • Collegial project course (LTH only) 	<p>We support you to:</p> <ul style="list-style-type: none"> • Offer a workshop • Initiate a discussion series
<p>Myself, with a new group of people</p>	<p>Join:</p> <ul style="list-style-type: none"> • Our workshops or courses • Our MOOC 	<p>Join:</p> <ul style="list-style-type: none"> • Transformation Thursdays • Our book club • Our MS Teams 	<p>Join:</p> <ul style="list-style-type: none"> • The Roundtable • The Coordination Team • The Serious Games group 	<p>We support you to:</p> <ul style="list-style-type: none"> • Offer a workshop • Try a new serious game with colleagues • Join our team



Please don't hesitate to be in touch, we look forward to hearing from you! 😊

More information: teachingsustainability.blogg.lu.se  **Contact:** education@sustainability.lu.se



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