MISSION LED LEARNING FOR SUSTAINABLE COMPETENCE DEVELOPMENT
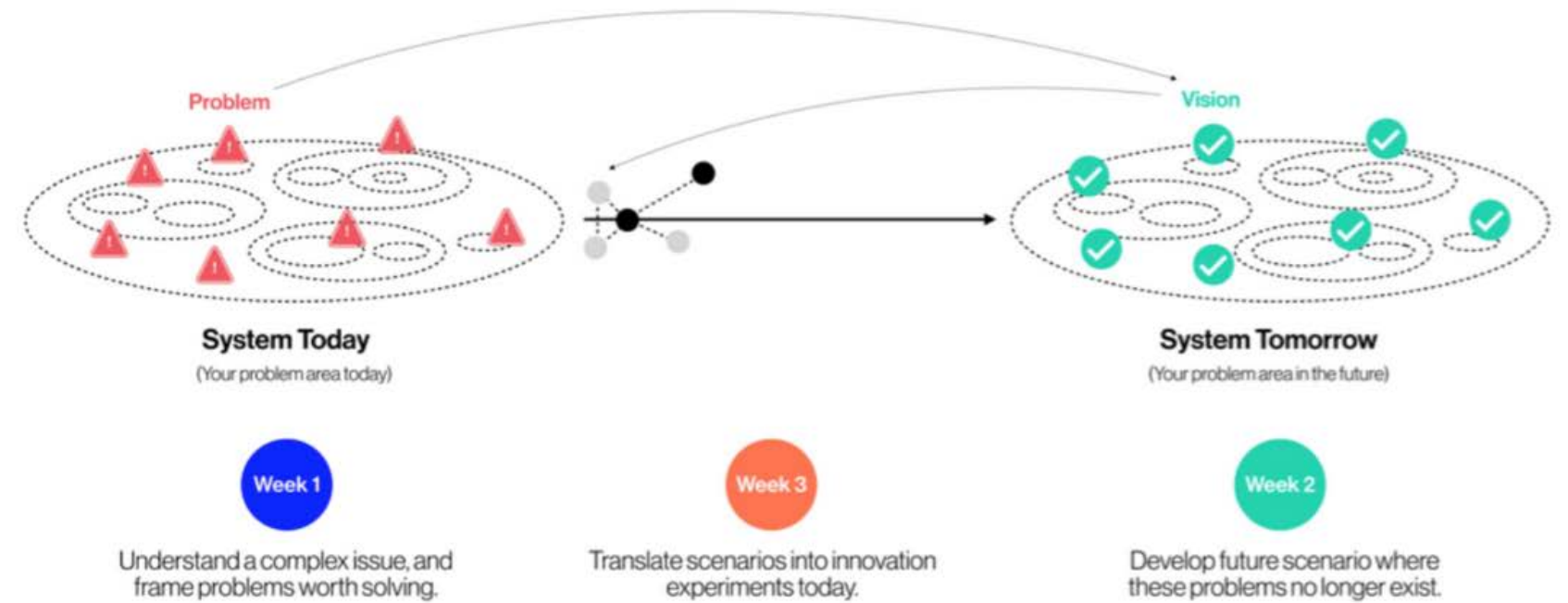
The Case of Digital Futures Lab/EUlab

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www.eulab.org

EU LAB

Digital Futures Lab — The Process

DFL->EULAB

DFL running at UL 2020-to date - 12 credit module on MSc programmes at Kemmy Business School
Is the base module for the EULab KA2 project

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BACKGROUND

EULab is an Erasmus+ funded, interdisciplinary, immersive programme developed to enable students to work on place-based wicked problems.
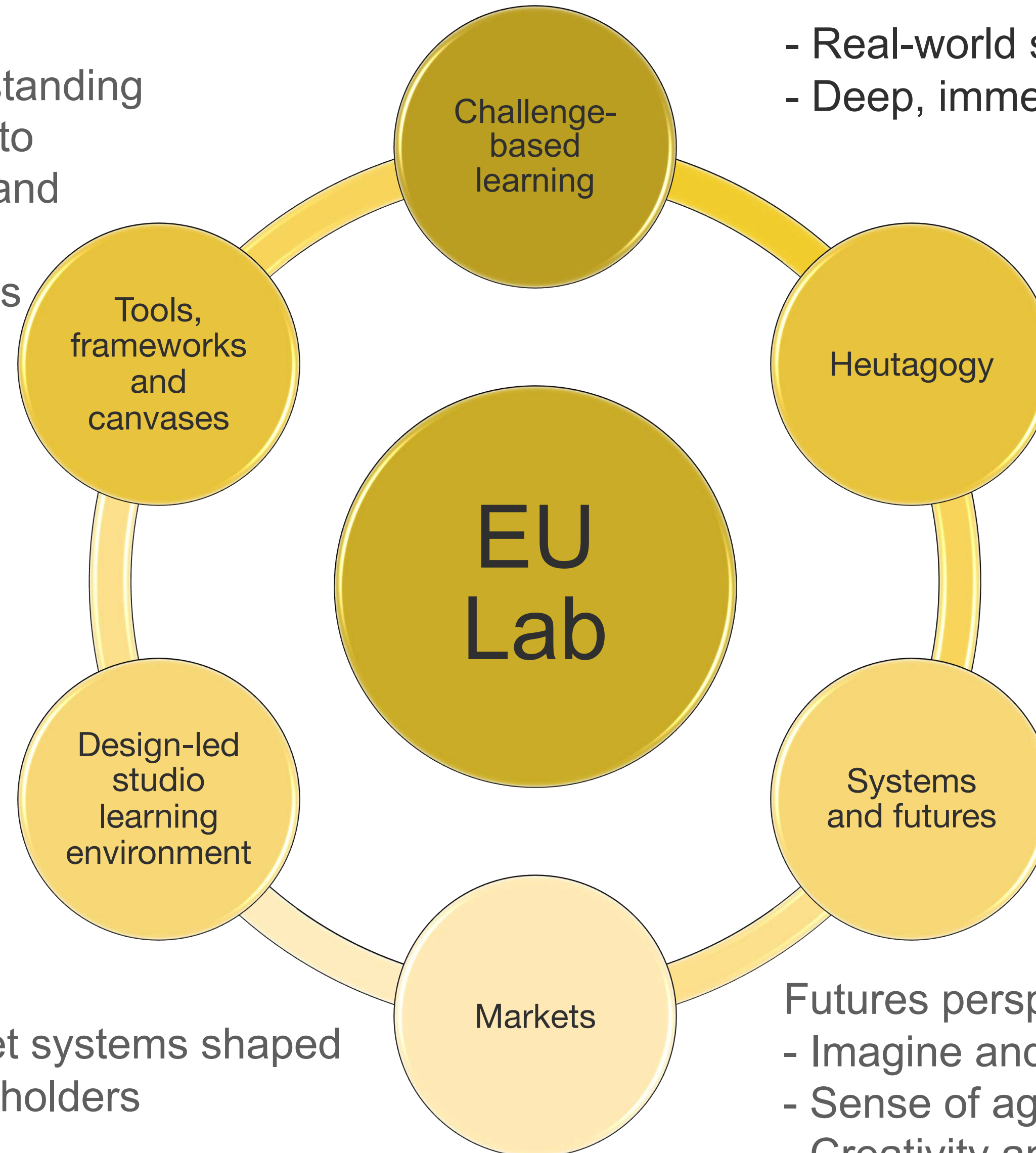
Students' learning journey:
1) Understand current systems
2) Imagine future systems
3) Identify leverage points and design interventions to shape and realize future systems

EULAB

- Used to prompt imagination
- Framing tasks for a shared understanding
- Templates and canvases as tools to structure and facilitate the creative and problem-solving process
- Templates serve different purposes

- Real-world sustainability challenges
- Deep, immersive and accelerated place-based learning

- Student-centred instructional strategy
- Emphasis on autonomy, capacity, and capability to self-determine learning
- Learners are problem finders
- Freedom and flexibility
- Less reliance on instructor as primary source of knowledge
- Life long learning

- Collaborative, dynamic learning environment
- Emphasis on participant-led inquiry through hands-on, creative engagement
- Problem finding
- Bring the context into the room (localization)
- Iteration and reflection

Systems thinking
- Apprehend interdependencies
- Distributed nature of agency and action
- In search of upstream structural dimensions

Futures perspective
- Imagine and map possible futures
- Sense of agency to create change
- Creativity and imagination to envision alternative futures

- Constructed nature of market systems shaped and reshaped by actors/stakeholders
- Mission led learning

Challenge-based learning

Tools, frameworks and canvases

Heutagogy

EU Lab

Design-led studio learning environment

Systems and futures

Markets

TOOLS, FRAMEWORKS AND CANVASES

- Used to prompt imagination
- Framing tasks for a shared understanding
- Templates and canvases as tools to structure and facilitate the creative and problem-solving process
- Understand, imagine, design
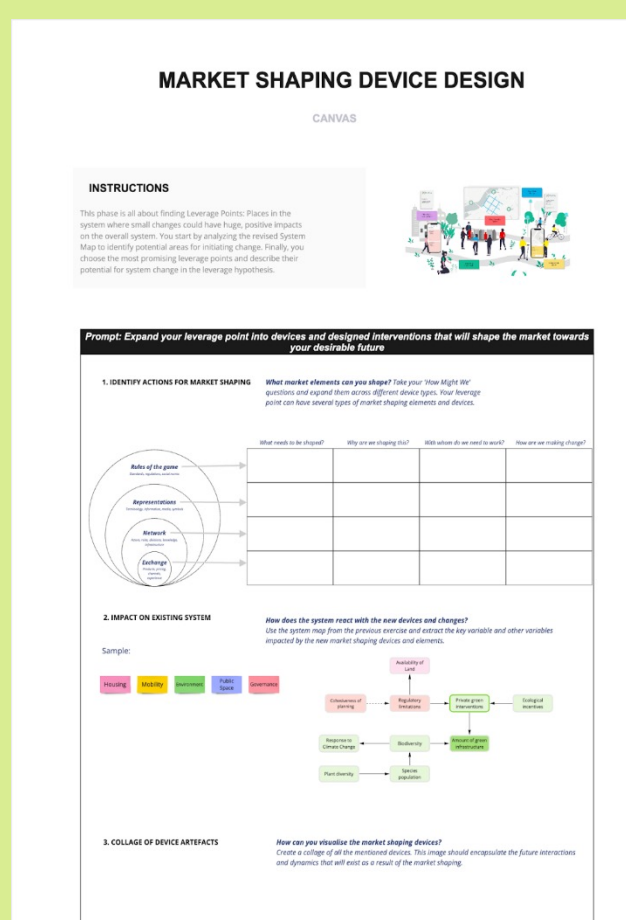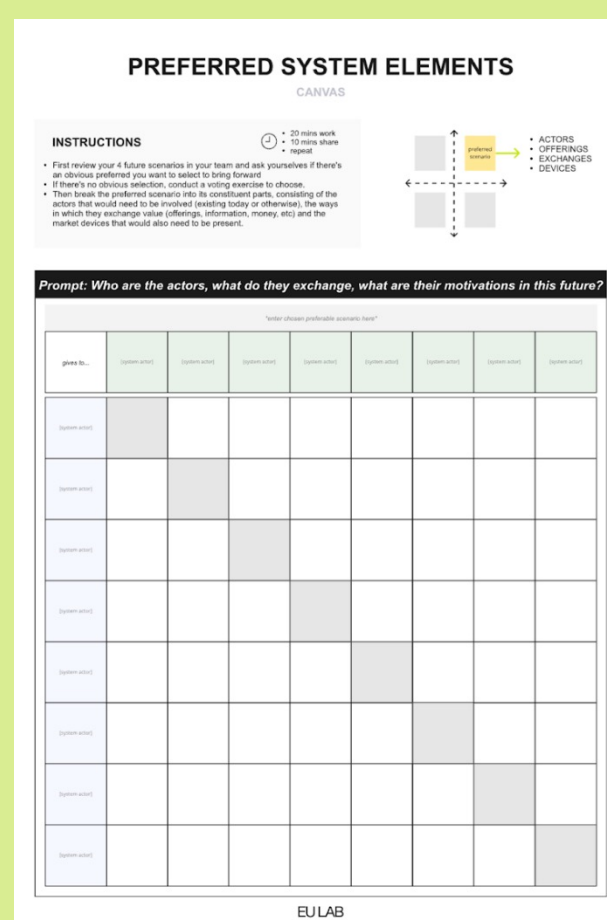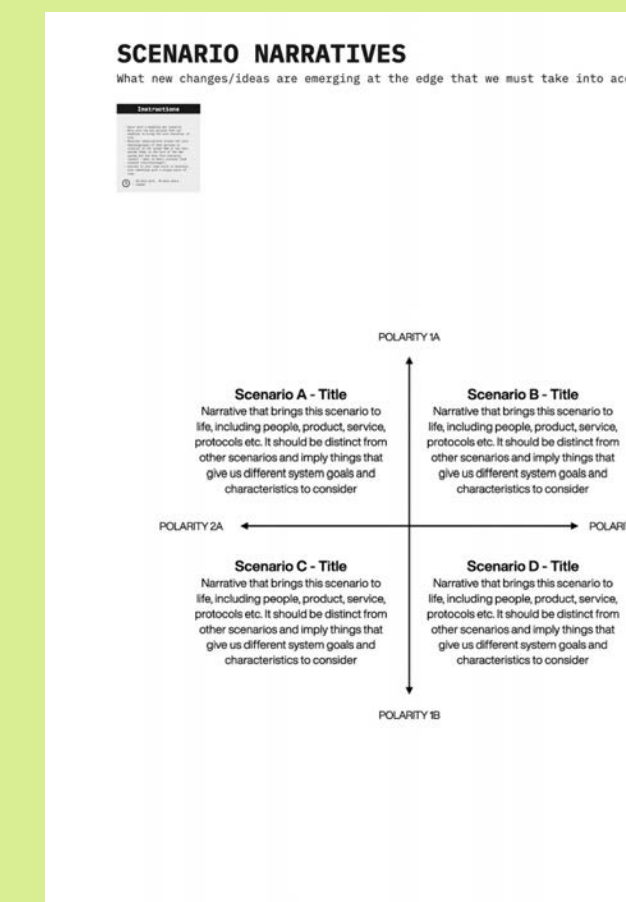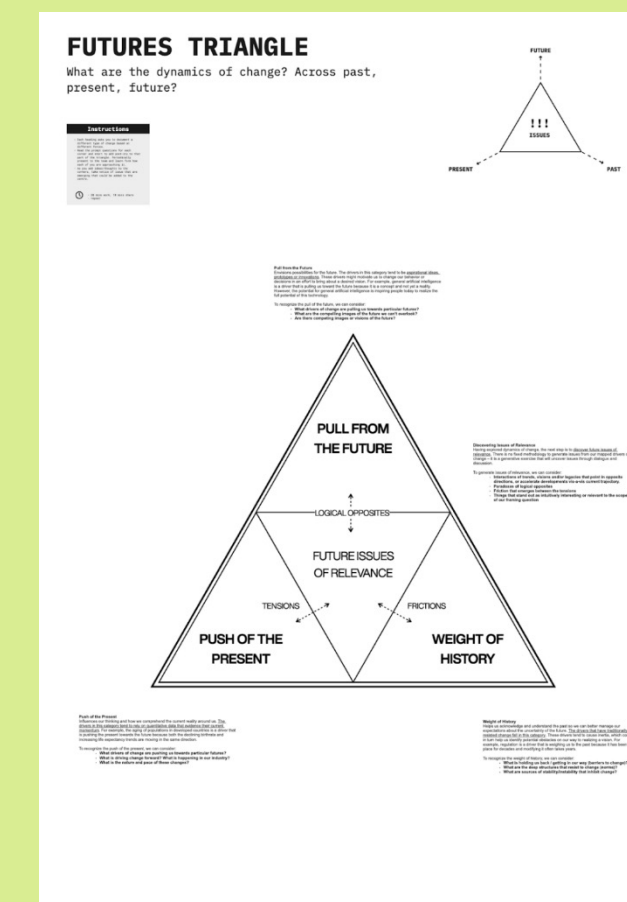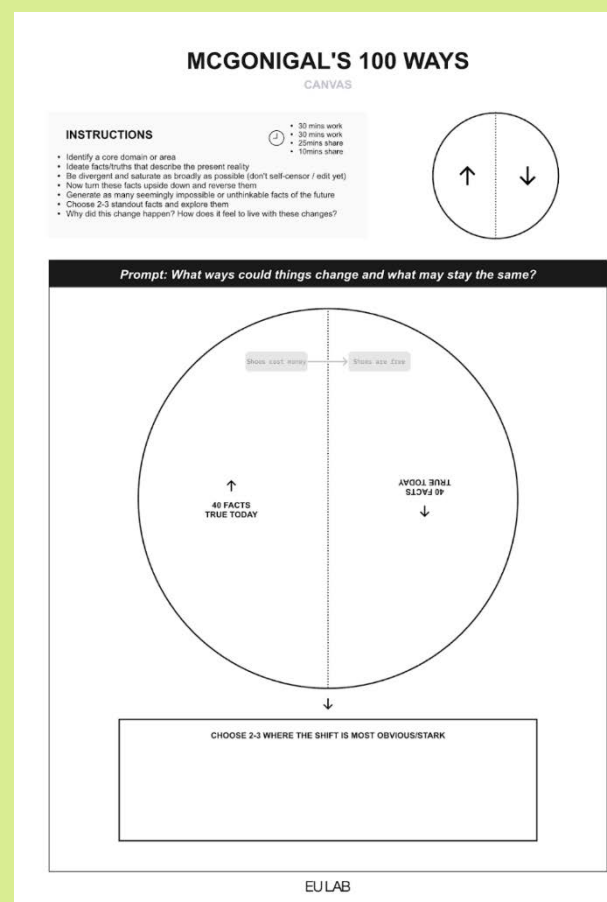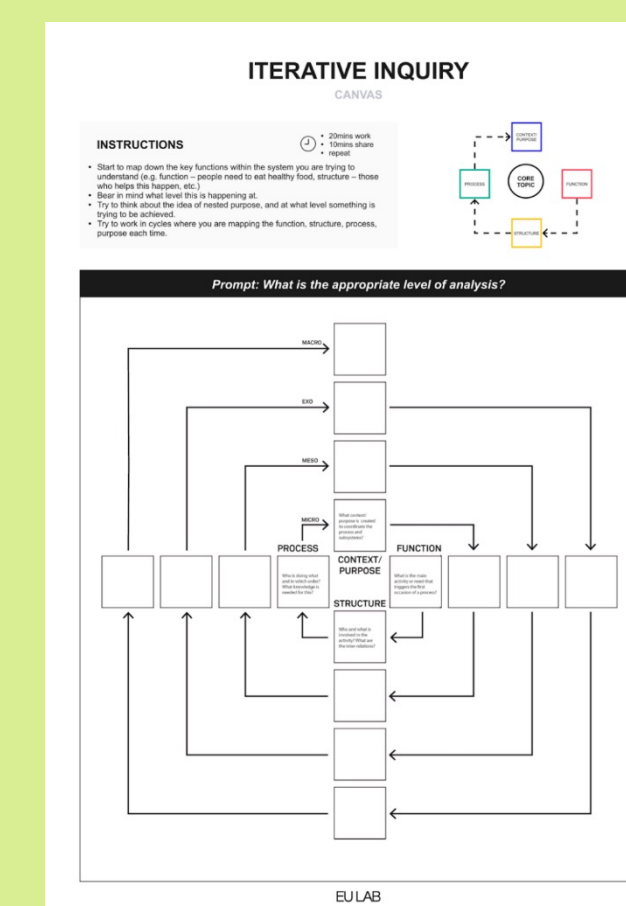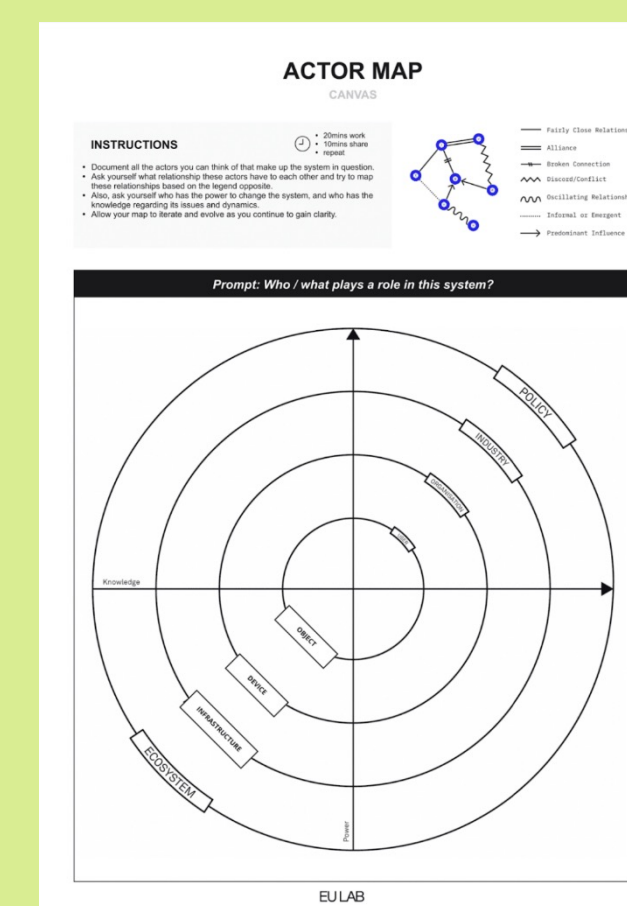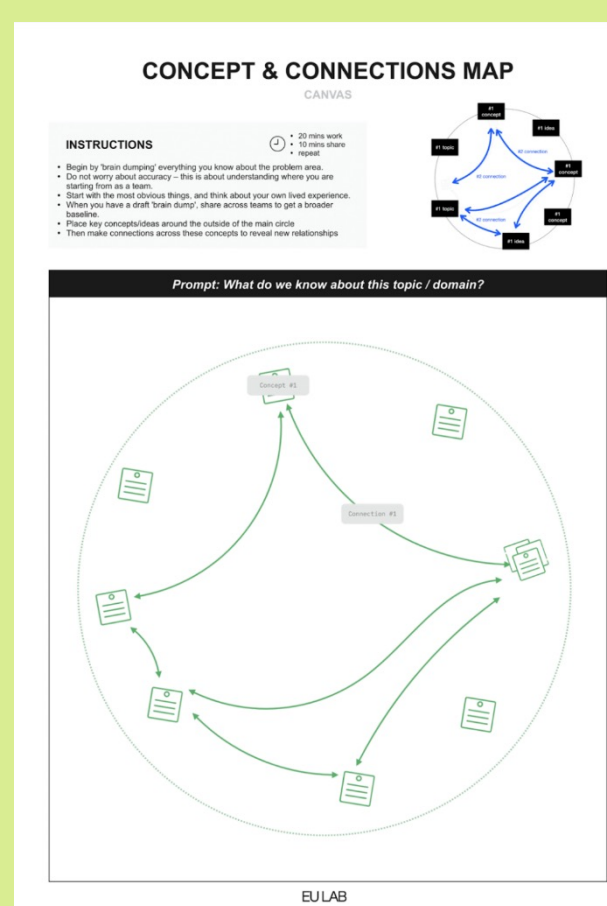
EULAB MODALITIES

EULAB: 2 MODALITIES

Pilot 1 Virtual Exchange: Digital Futures Lab (DFL)
Designing a circular economy for Limerick

Virtual: Pre-lab
- 2 day sessions
- Intercultural collaboration training
- Digital preparation

Virtual: Main DFL Lab
- 3 weeks
- Digital teamwork environment
- Weekly kick-off, check-in and crit/review sessions

Virtual: Sharing
- Virtual conference
- Lab outputs, solution, roadmap
- Faculty, students and stakeholders

Pilot 2 Blended Mobility: EULab Nantes Winter School
Feeding our cities: developing sustainable, resilient and inclusive food systems

Virtual: Pre-lab
- 2 x half-day sessions
- Intercultural collaboration training
- Digital preparation

Face to face: Nantes Lab
- Immersive week
- Physical and digital teamwork
- Daily sharing moments

Virtual: Build the Future
- 3 weeks part-time
- Ideating and prototyping solutions
- Online meetings and presentations

Virtual: Sharing
- Virtual conference
- Lab outputs, solution, roadmap
- Faculty, students and stakeholders

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PRE LAB PREPARATION

- Virtual exchange curriculum plus inter/transdisciplinary working and self-determined learning
- Developing cross-disciplinary, cross-cultural competences to support learner engagement in the Labs
- Digital preparation
- Teams/Miro/Slack

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DFL VIRTUAL EXCHANGE

- Virtual environment as part of formal learning
- Teams/Slack/Miro
- Place-based Limerick focus
- Pods, teams, roles
- Weekly deliverables
- Assessment: process over outputs. Grades for intergroup support #teamxsupport
- Final presentations
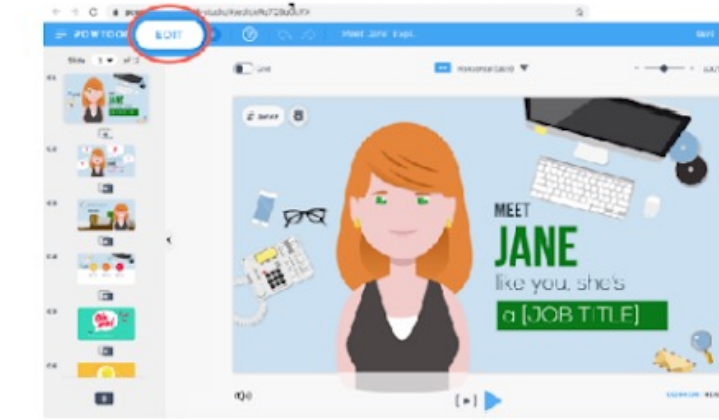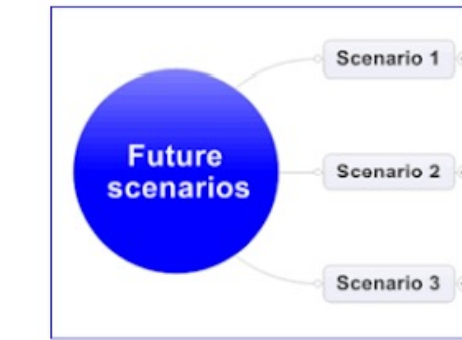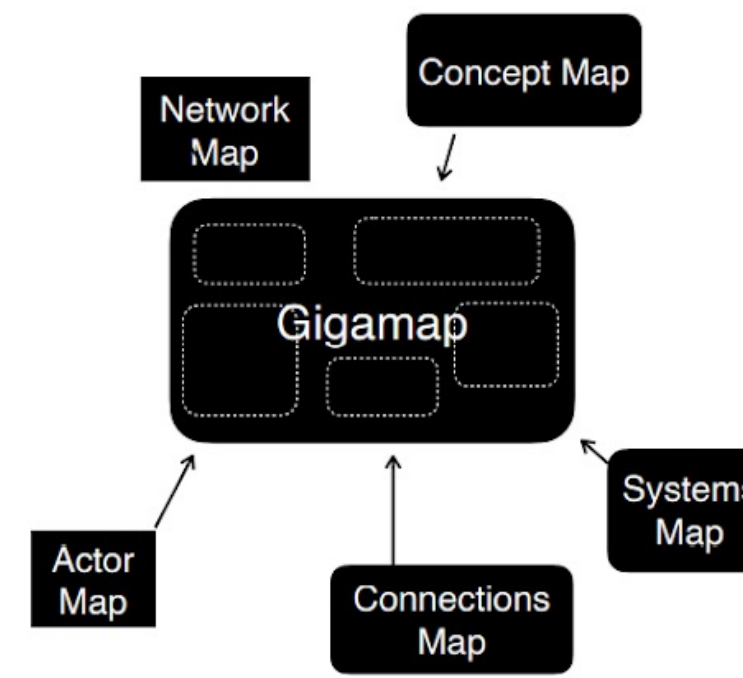
WEEK 1 DELIVERABLE
GIGA MAP

WEEK 2 DELIVERABLE
FUTURE SCENARIO(S)

WEEK 3 DELIVERABLE
MARKET SHAPING MAP/NARRATIVE

Circular food systems and their role in health
HEALTH

Systems view of the energy production and consumption in the food system
ENERGY

Regenerative circular food systems that prioritise nature
ENVIRONMENT

Purple Team   Pink Team   Red Team
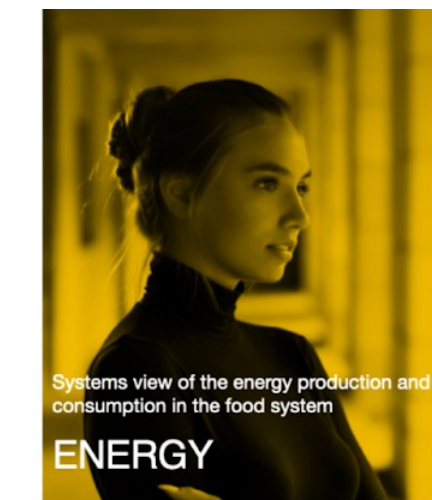
Green Team   Lime Team   Blue Team

Gold Team   YellowTeam   Orange Team

DLF22_Week 1_Health

DFL22_Week 1_Energy

DFL22_Week 1_Environment

DFL22_Week 2_Health

DFL22_Week 2_E

DFL22_Week 3_Health

DFL22_Week 3_E

Purple Team   Pink Team   Red Team

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BLENDED MOBILITY ONSITE

- Place-based Nantes focus
- Physical and social space
- Immersive: stakeholder perspectives, visits, lunches
- Workspace: lego, mapping and design tools, post-its
- Online tools: Slack, Miro, Teams
- Virtual teamwork: Build the Future, ideating, prototyping, online coaching
- Final virtual presentations

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MODALITIES AT A GLANCE

Students

- Visiting students

- Nantes graduates

- Masters, Bachelors, MBA

- Voluntary/temporary

Stakeholder involvement variations

EU Lab features	Pilot 1 Virtual Exchange	Pilot 2 Blended Mobility
Programme/module home	Exchange student volunteers joined existing 12 credit DFL module at UL	New winter school temporary module created at Audencia. All student volunteers
Number of home & exchange students	54+4	5+8
ECTS Credits or equivalent	Equivalent to 12 credits	Equivalent to 6 credits
Time commitment	3 weeks full time	1 week full time, 3.5 weeks part time
Assessment	70% teamwork (40% process, 20% output, 10% support) 30% individual diary	Pass/fail
Stakeholder engagement	1 external stakeholder engaged other groups. Twitter	Multiple visits and invited stakeholders

PARTICIPANT FEEDBACK

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STUDENT FEEDBACK (1/2)

"I liked brainstorming sessions we had, where in our group we were ==trying to figure out what to do, how to do it, and how to use tools== [introduced at EULab]." *Nantes Lab participant*

"==the way things are done== was what's stuck with me" *DFL visiting participant*

"I had a great experience even though I was abroad, I think I was the only one in my group that was abroad because this is different from other hybrid courses and different courses. It was meant to be done that way. You're alone, but together the tools that will be presented - the way it's done - ==you don't feel like you're by yourself==" *DFL visiting participant*

STUDENT FEEDBACK (2/2)

"EULab really gives you tools to create change in any situation in any organization. It sort of like enlightens you to constantly ask questions and everybody knows that OK change happens continuously and the future is changing really radically" *Nantes Lab participant*

"Visiting concretely the places versus just reading [about] them in articles was a game changer. Rarely do we get attached to do such things when we are learning. So yeah, it made it a different impact on your memory, and you sort of feel a tasty touch here, and you are there in the moment with those stakeholders for instance when we were discussing about how the urban farming is happening." *Nantes Lab participant*
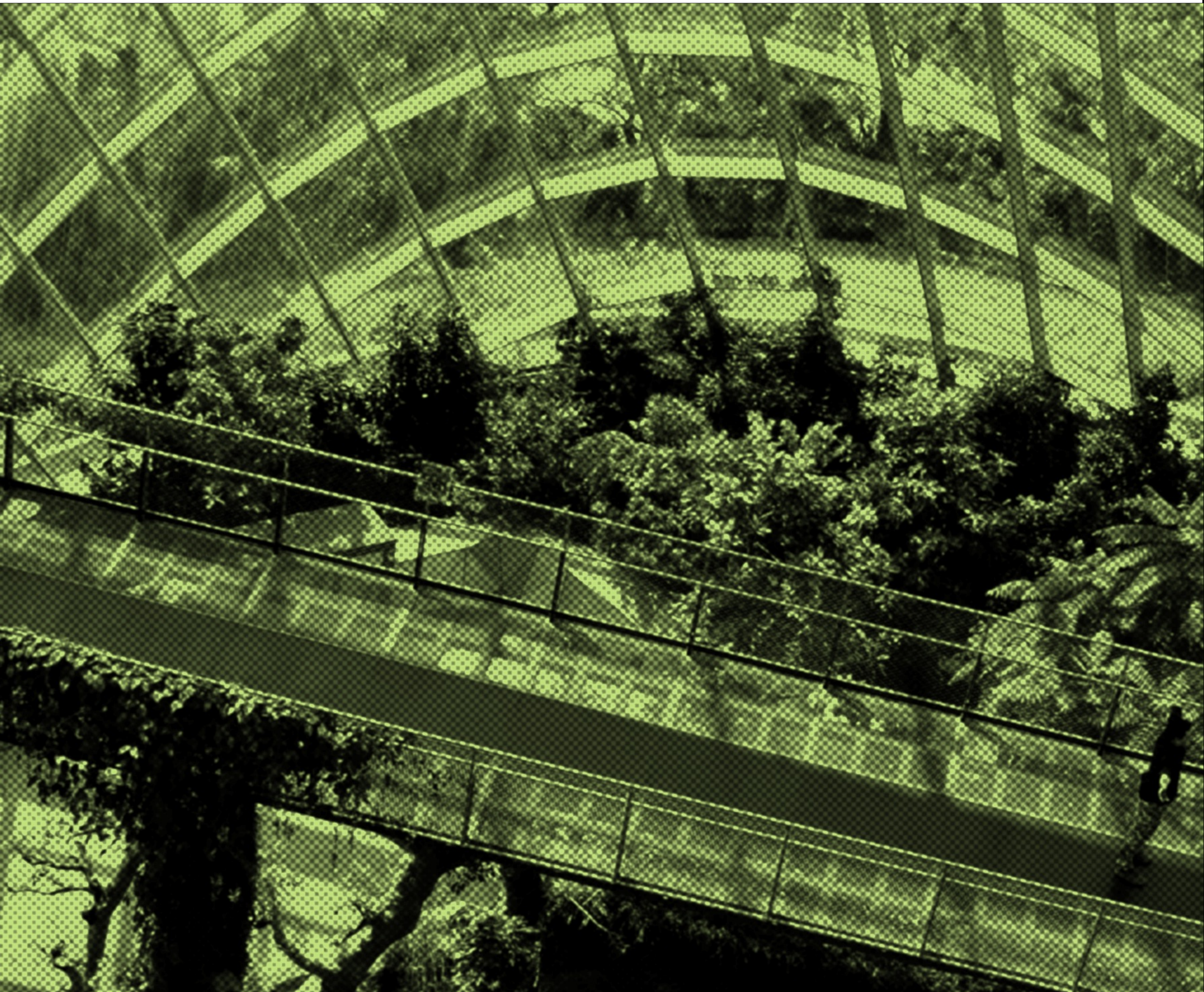
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EDUCATOR FEEDBACK

"To me, [EULab] is about fellowship, learning, and ==co-learning with colleagues, students, and the place==" *Nantes Lab educator*

"You can teach a better understanding of SDGs, if you teach them in a ==specific place==, where participants can see the initiatives, and you can get inspired by the place and by the people" *Nantes Lab educator*

"having these studio-based kind of approaches where you ==create the environment where the people can come together and collaborate==, it trains your gut to instinctively start to use futures thinking and use systems mapping and use these kind of tools going forward, and active participation" *DFL mentor*
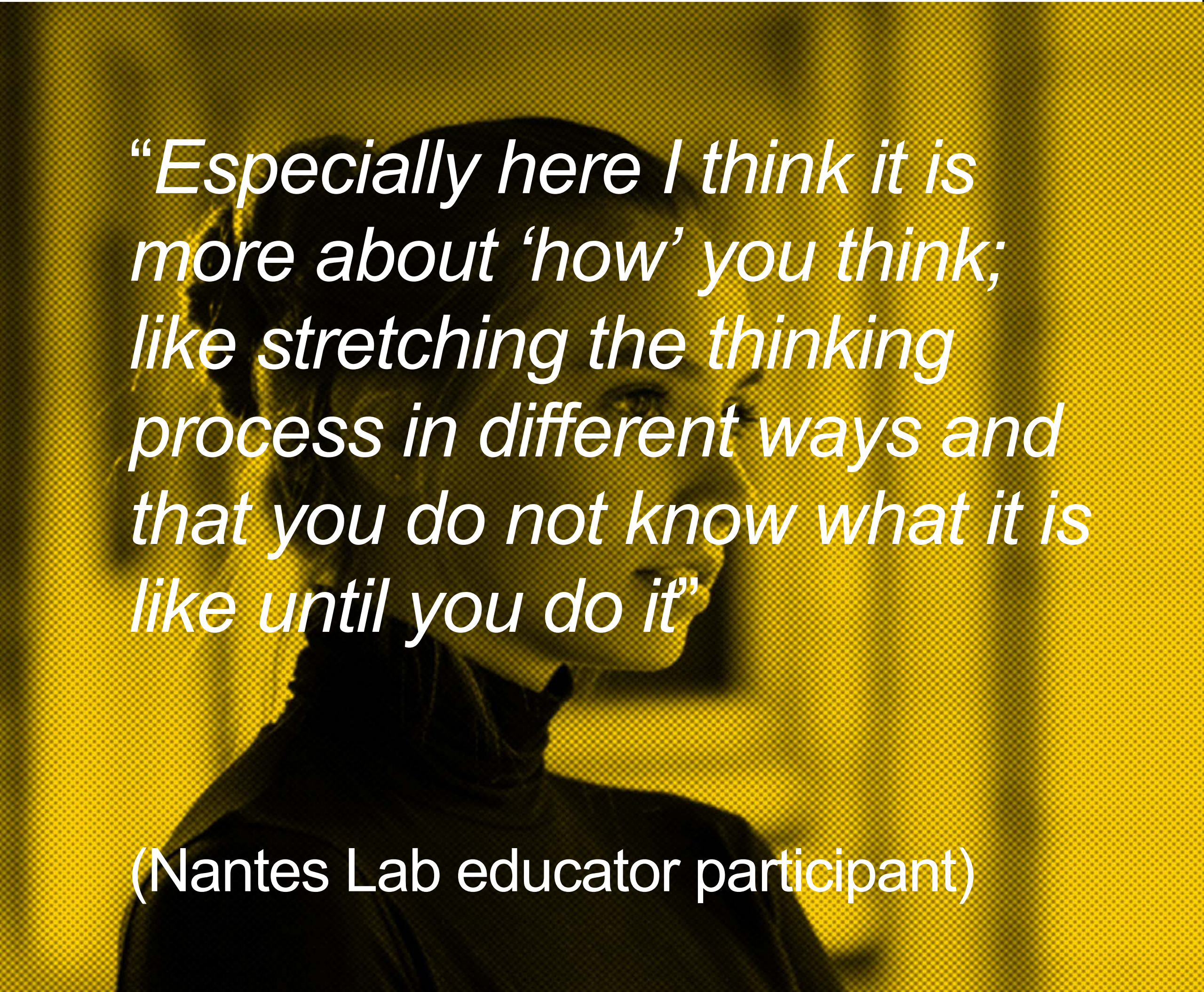
"gives you the power to look at the bigger scheme and envisage how to ==understand the system, map it and then be able to put little changes in place== even though you are at quite a small […] It gives you the power and the tools to be able to do that and that was the one thing I thought about change in that it can be a small cog in a big machine. But still it's a vital cog and you know ==you can actually influence things==" *DFL mentor*

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EULAB AND GREENCOMPS

Sustainability competence of learners	Competence details	EULab contribution to competence development
Embodying sustainability values	- valuing sustainability - supporting fairness - promoting nature	- sustainability-related problem identification and solution is largely driven by learners' values and priorities for a sustainable future - ==place-based learning== creates connection with local social and ecological environments
Embracing complexity in sustainability	- systems thinking - critical thinking - problem framing	- challenge-based learning is built on the premises of critical thinking, problem identification and presentation and requires a ==systems-analytical approach==
Envisioning sustainable futures	- futures literacy - adaptability - exploratory thinking	- learners generate ideas for sustainable futures - learners become ==system innovators==
Acting for sustainability	- political agency - collective action - individual initiative	- learners are connected with local stakeholders creating the possibility for collaboration with them - learners are encouraged to become ==active citizens==

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CHALLENGING MINDSETS

"Especially here I think it is more about 'how' you think; like stretching the thinking process in different ways and that you do not know what it is like until you do it"

(Nantes Lab educator participant)

- Moves beyond the comfort zone
- Reflects the nature of grand challenges and wicked problems
- Allows and empowers learners to dare to tackle vast, complex challenges
- Creates change agents who know what tools to bring to the discussion in physical and digital environments
- Changes roles of educators toward enabling self-directed learning

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ESD Forum 2023, Dec 01

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