

# Programme Overview



The aim of this report is to share key aspects of the EULab education programme, developed and tested as part of the EULab KA funded Strategic Partnership.

Authors: Dr Annmarie Ryan (UL), Dr Catherine Morel (AUD), Dr Jennifer Goodman (AUD), Dr Jan Hermes (OULU), Dr Anne Keränen (OULU), Dr Mari Juntunen (OULU), Dr Robert O'Dowd (UNILEON), Mohsin Rehman (OULU)

For more information, email: [annmarie.ryan@ul.ie](mailto:annmarie.ryan@ul.ie) (project co-ordinator)

# TABLE OF CONTENTS

03	INTRODUCTION
04	PEDAGOGICAL UNDERPINNINGS
05	SYSTEMS THINKING AND FUTURES PERSPECTIVE
06	MARKET SYSTEM SHAPING
07	VISUAL TOOLS
08	STUDIO BASED LEARNING ENVIRONMENT
09	EDUCATION WITH IMPACT



# EULab Programme Overview

EULab is an innovative example of challenge-based learning (CBL), drawing on heutagogy as an underlying pedagogical approach (Blaschke, 2012), that scaffolds students' learning journey with prompts and toolkits to support a methodological approach to 1. Understand current systems, 2. Imagine future systems, 3. Identify leverage points and design interventions to shape and therefore realise future systems. As part of a virtual exchange or blended mobility, learners undertaking the EULab education programme start with a future-focused challenge aimed at addressing a complex or wicked problem that prompts the learner to imagine and then design for a sustainable future in a specific place. Alongside digital competences, the EULab programme's focus is the development of **sustainability competences**, which, according to Bianchi (2022) involves the empowerment of learners to embody sustainability values, and embrace complex systems in order to take or request action that restores and maintains ecosystem health and enhances justice, generating visions for sustainable futures. This is achieved using a challenge-based approach, informed by a heutagogical approach in a design led studio learning environment.



Challenge-Based Learning (CBL) is an innovative teaching methodology that engages students to resolve real-world challenges while applying the knowledge they acquired during their professional training (Portuguez Castro and Gomez Zermeno, 2020). EULab programmes go further to enable new learning beyond existing capabilities as learners are prompted and supported in deep, immersive and accelerated place-based learning. For example, both pilots undertaken as part of the EULab Erasmus+ funded strategic partnership were founded on notions of circular economy (CE) and food systems. The students undertaking the labs came from either business analytics or more general business/marketing or responsible business disciplinary backgrounds. Learners therefore have the opportunity to learn about sustainability challenges and solution models (e.g Circular Economy), but at the same time, learn to localise or translate these ideas and models in a specific local

context or situation. To support this EULab employs heutagogy as an underpinning pedagogical approach. **Heutagogy** is a student-centered instructional strategy that emphasises the development of autonomy, capacity, and capability to self-determine learning, where learners are regarded as problem finders; they know how to find and set their destination and become increasingly independent (Hase & Kenyon, 2013). This approach affords a level of freedom and flexibility where learners do not rely on the instructor as the only or primary source of knowledge on the challenge at hand. Instead, learners engage in deep dive research alongside and supported by stakeholder engagement. Stakeholders in EULab programmes are categorised as either 'problem owners' or experts or both.

Hase, S. and Kenyon, C. (2013). The nature of learning in S. Hase & C. Kenyon (eds.) Selfdetermined learning: Heutagogy in action, London: Bloomsbury, 19-3



# SYSTEMS THINKING AND FUTURES PERSPECTIVE

EULAB

Systems thinking is essential for grasping complex sustainability challenges and helps learners understand reality in various contexts and fields, fostering better decision-making for sustainability (Bianchi, 2022). In EULab, the focus on systems thinking is to develop the learner's capacity to apprehend interdependencies but also the distributed nature of agency and action in contemporary economic and market systems. The emphasis is to 'go upstream' of the problems as experienced, which are often symptomatic of deeper, systemic or structural dimensions.

While systems thinking is a vital aspect of the EULab education programme, we view this as only a starting point. To this we add specific futures or strategic foresight perspectives and equip learners to methodically imagine and map multiple possible futures. This opens up the learners' imagination and supports in the development of their sense of agency to create change.

According to Bianchi et al., (2022) creativity, imagination and being aware of our emotions and intuitions can inform our ability to envision alternative futures.



At EULab we have explored a range of visual tools and frameworks to support and guide learner imagination. For example, we have turned an exercise taught by futurist Jane McGonigle “100 facts” into a visual canvas, whereby learners (or EULab participants with stakeholders), firstly brainstorm current reality (in relation to a specific issue, e.g. current facts on food production), secondly, they flip these facts, and finally, reflect on a future where those flipped facts might be a reality. The canvas approach enables a group of participants to work “together but alone” each armed with post-it notes, everyone's ideas literally have a place on the canvas. Following this individual work the team is better placed to discuss the emerging common themes.

*Bianchi, G., Pisiotis, U. and Cabrera Giraldez, M., (2022) “GreenComp The European sustainability competence framework”, Punie, Y. and Bacigalupo, M. editor(s), EUR 30955 EN, Publications Office of the European Union, Luxembourg, 2022, ISBN 978-92-76-53201-9, doi:10.2760/821058, JRC128040.*

# MARKET SYSTEM SHAPING

EULAB

Central to the development of the EULab education programme has been an appreciation of the constructed nature of (market) systems, which are considered mutable and therefore subject to shaping and reshaping by actors/stakeholders. Theoretically, the programme draws on Market Studies, an interdisciplinary theoretical approach that views market systems as collectives of distributed, heterogeneous sets of expertise made and shaped by market actors of all kinds: entrepreneurs, business managers, policymakers, community and activist groups, and public and third sector workers. Drawing on Actor Network Theory (e.g., Latour, 2007), this approach recognises that technologies, devices, and inscriptions are also important actors in the making and maintaining of markets.

As a programme hosted in the Business School environment, we believe that future sustainable markets and (not only) business models need to be designed and developed in order to realise truly regenerative futures. The market system shaping canvases developed and tested in the EULab partnership are an important feature to the learner experience, aimed at developing their design skills and agentic capacity to realise not only change in systems, but system change.

### PREFERRED SYSTEM ELEMENTS

**INSTRUCTIONS**

- First, make your future scenario in your team and top presentation of it, identify an objective problem you want to solve to bring forward to change.
- Then, in a second session, conduct a voting exercise to choose the most important problem to solve in your future scenario.
- Then, in a third session, identify the actors that would need to be involved (starting today or otherwise), the ways in which they exchange value (offerings, information, money, etc.) and the market devices that would also need to be present.

**Prompt: Who are the actors, what do they exchange, what are their motivations in this future?**

	Actor 1	Actor 2	Actor 3	Actor 4	Actor 5	Actor 6	Actor 7	Actor 8	Actor 9	Actor 10
Actor 1										
Actor 2										
Actor 3										
Actor 4										
Actor 5										
Actor 6										
Actor 7										
Actor 8										
Actor 9										
Actor 10										

### SYSTEM LEVERAGE POINTS

**INSTRUCTIONS**

- Analyze the previously created system map.
- Identify promising areas for intervention.
- Use the Future System Map to identify leverage points.
- Analyze those leverage points in terms of impact and feasibility using the 2D matrix.
- Choose the most promising leverage points and describe their potential for change across the system.

**Prompt: Where are the high-impact leverage points to drive positive change in the system?**

Identify leverage points (using the Future System Map)

Assess leverage points

### MARKET SHAPING DEVICE DESIGN

**INSTRUCTIONS**

This phase is all about finding leverage points in the system and then designing interventions that will shape the market towards your desirable future.

**Prompt: Expand your leverage point into devices and designed interventions that will shape the market towards your desirable future**

1. IDENTIFY ACTORS FOR MARKET SHAPING

What market elements can you shape? List your new target (or) elements and expand them into different actors and roles. Your leverage point can have several types of market shaping elements and devices.

Actor 1	Actor 2	Actor 3	Actor 4	Actor 5	Actor 6	Actor 7	Actor 8	Actor 9	Actor 10

2. IMPACT ON EXISTING SYSTEM

How does the system map onto the new devices and changes? How does the system map onto the previous scenario and what are the key variables and other variables? How does the system map onto the new scenario? How does the system map onto the new scenario?

3. COLLAPSE OF EXISTING ACTIVITY

How can you reshape the market shaping device? How can you reshape the market shaping device? How can you reshape the market shaping device? How can you reshape the market shaping device?

Sample of visual tools used by EULab learners to design future (market) systems



# VISUAL TOOLS

In EULab we offer a 'starter kit' of visual canvases across the 3 part scaffold: understand, imagine, and design future systems.

**Problem Framing:** Canvases help designers define and understand the problem they are trying to solve. They provide a clear structure to analyse and break down complex issues into manageable components.

**Ideation:** Canvases stimulate idea generation by providing a visual framework to brainstorm and explore different concepts and solutions. Designers can sketch, write, or map out ideas within the canvas.

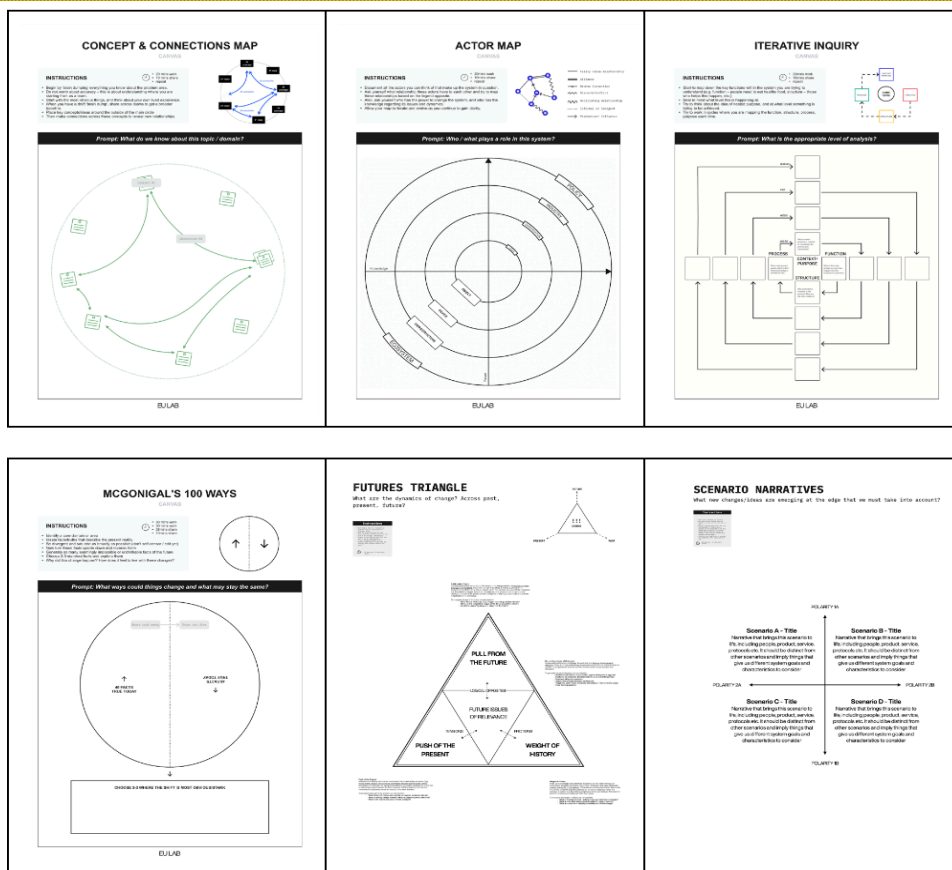
**Collaboration:** Templates encourage collaboration among team members or stakeholders. They offer a shared language and format, making it easier for different people to contribute their perspectives and ideas cohesively. Importantly, and using online tools such as [miro.com](https://miro.com), canvases enable learners to work 'together but alone', to zoom in, where each offers their perspective in intensive individual work time, but then to zoom out, to get a better whole group understanding.

**Visualisation:** Visual templates make abstract concepts or strategies more tangible. Designers can use them to create visual representations of ideas, helping to communicate and share concepts effectively.

**Iteration:** Canvases support an iterative design process. Designers can revise and refine their ideas by making adjustments within the canvas, helping to evolve and improve their solutions over time.

**User-Centered Design:** Templates often include sections dedicated to understanding user needs and experiences. This user-centric approach ensures that designs are grounded in empathy and user research.

**Efficiency:** Canvases save time and resources by providing a structured starting point. They prevent designers from starting from scratch each time they approach a new project, making the design process more efficient.



*Sample of visual tools used by EULab learners to understand and map current systems imagine future systems*



# STUDIO BASED LEARNING ENVIRONMENT

EU LAB

The EULab education programme adopts a studio-based learning environment. A studio is a context for collective learning and offers a highly dynamic learning environment. Barry and Meisiek (2015) note that numerous business schools around the world have started experimenting with studio-based inquiry drawing inspiration from design but also visual or performing art schools. According to the authors, what sets studio work apart from other problem-based or experiential practices in management is 'the strong emphasis on participant-led inquiry through hands-on, creative engagement (...)' (2015:156).

The studio is a place of creative enquiry that differs from the more dominant scientific posture adopted by business schools in many notable ways: students engage in 'problem finding' and don't start working on a problem that needs solving; studios keep bringing the context in the room and attach importance to the local dimension of an issue; creative and inspiring accidents are welcome; learning comes through making. They highlight the need for a more 'holistic' perspective to address the dilemma of today's organisations and see studio-based teaching as a well-suited method for developing the relevant skills needed by future business graduates. The EULab education programme adopts 4 key stages of studio based teaching and learning as described by Hetland et al. (2022):

1. The teaching team in collaboration with stakeholders or 'problem owners' set the brief for a future focused real life challenge area. Students work in teams to



- future possible system elements and 3. Design system level interventions for change, involving stakeholders/ users/system actors in the process. The process also involves meetings with other stakeholders and clients along with pitches and co-creation sessions.

2. Students under the supervision of the teaching team work collectively answering the question/challenge set in an iterative way using bespoke visual canvases or creative tools (e.g. Lego Serious Play).

3. Students in the process are supported by regular reflection sessions which take place at regular intervals during the challenge/lab and during which they display and explain their work in progress. They receive feedback from their peers and the teaching team in critiques or 'crits' sessions.

4. On reaching the deadline, students are required to display and explain their final work to the audience. They will take the audience through their process and explain the final output.

*Barry, D., & Meisiek, S. (2015) Discovering the business studio, Journal of Management Education, Vol. 39(1) 153–175*



EU LAB

# Education with Impact

We live in unprecedented times; the climate emergency and digital transformation are testing our assumptions on how markets and society should work. EULab is an Erasmus+ funded, interdisciplinary, immersive programme developed to enable students to work on place based wicked problems. Established as a pilot concept, its aim is to transform the role of the University's ability to make impact on real challenges. We want to enable meaningful change to happen in the University for future generations to feel empowered to tackle complex challenges.

Funded by:



Erasmus+

Project Lead:



Partners:

