



Training for Regenerative Leadership

Module 2

Applying Systems Thinking in Work and Learning Ecosystems

Developed by Edensol | 2026

PROJECT NUMBER: 2024-1-FR01-KA220-VET-000244092



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Let's protect our environment!

2. Applying Systems Thinking in Work and Learning Ecosystems

Analysing systems, recognising interconnections, and identifying leverage points

by Edensol

2.1 Introduction

Topics and Key Concepts

This module explores the shift from linear, reductionist approaches to a holistic *Systems Thinking framework* within professional and educational environments. Learners will investigate how organizations function as interconnected living systems rather than static machines.

Topic of the Module: This module focuses on the transition from linear, task-oriented management to a systemic diagnosis of work and learning environments, treating them as dynamic, living ecosystems rather than static machines. For example, instead of just giving an employee a checklist of tasks to complete, a manager looks at how their workload, their stress levels, and the help they get from colleagues all affect their work.

By mapping the invisible web of relationships and information flows, participants learn to identify recurring patterns and strategic leverage points where small interventions can trigger large-scale, positive change. For instance, instead of just hiring temporary workers to handle a sudden rush of work, leaders can look at why employees are burning out and burning through sick leaves, solving the real problem rather than just covering a shift. This approach is highly relevant in today's volatile landscape as it moves beyond departmental silos and quick-fix solutions, which often just shift problems elsewhere, to foster long-term efficiency, strategic agility, and a regenerative culture that balances organizational performance with human and environmental well-being.

Key Concepts:

- **Systems Thinking:** A holistic approach that looks at problems not as a single cause-and-effect event, but understanding how different parts affect each other over time.
- **Work and Learning Ecosystems:** Viewing a company not as a rigid pyramid where people just follow orders, but as a flexible network where people constantly share ideas and learn from each other.
- **Interconnectivity:** The principle that no organizational element exists in isolation; every change in one area creates ripple effects across the entire system.
- **Leverage Points:** Strategic places within a complex system (such as a specific rule, power structure, or mindset) where a small, targeted intervention can produce significant and lasting shifts in behavior.
- **Feedback Loops:** Situations where the result of an action affects the next action, creating a continuous loop. **Reinforcing loop (Growth):** The more managers praise teamwork, the more employees cooperate. This improves business results, which leads managers to praise teamwork even more. **Balancing loop (Block):** When a team works overtime, they get tired and make mistakes. Correcting these mistakes takes extra time, which slows down the project and cancels out the benefits of overtime.
- **Regenerative Practice:** Going beyond just preventing damage (like preventing burnout or stress) to actively building a workplace that makes people healthier and more energized over time.

Overall Goals and Learning Objectives

The primary goal of this module is to equip participants with the analytical tools to perceive organizations as interconnected ecosystems rather than fragmented hierarchies. By the end of the module, learners will be able to identify systemic patterns and apply regenerative strategies to improve the resilience and health of their specific work and learning environments.

Learning Objectives

Knowledge:

- **Identify** the core principles of systems thinking and how they differ from traditional linear problem-solving.
- **Describe** the characteristics of a living system within an organizational context.
- **Explain** the function of feedback loops and their impact on long-term organizational stability.
- **Define** leverage points and their role in facilitating systemic change.

Skills:

- **Analyze** a specific work or learning environment to map its internal interconnections and external influences.
- **Apply** systems mapping techniques to visualize complex relationships and identify potential bottlenecks.
- **Evaluate** current organizational practices to determine whether they are merely sustainable or actively regenerative.
- **Demonstrate** the ability to propose strategic interventions at key leverage points to solve recurring challenges.

Attitudes:

- **Reflect** on their own role and influence within the broader ecosystem of their organization.
- **Discuss** the importance of diversity and adaptability as essential components of a healthy system.
- **Adopt** a holistic mindset that values long-term systemic health over short-term, isolated gains.
- **Value** collaboration across departments as a requirement for systemic resilience.

Resources

Booth Sweeney L., Meadows D., *The systems thinking playbook: Exercises to Stretch and Build Learning and Systems Thinking Capabilities*, Chelsea Green Publishing, 2010

Collen, A. and Minati, G. *Seven activities to engage systems thinking*. In J. Wilby and M. Hall (eds), *Proceedings of the Forty-Third Annual Meeting of the International Society for the Systems Sciences*, 1999

Helmer N., Stompff G., Terzieva L., Van der Lugt R., Van Onselen L., *ESCuela ESC & Education*, ExpertiseNetwork Systemic Co-Design, 2025

Hutchins G. and Storm L. *Regenerative leadership, The DNA of life-affirming 21st century organizations*, Wordzworth, 2019

Minati, G. and Collen, A., *Introduction to Systemics*, Eagleye Books, 1997

2.2 Activities

Activity 1: Icebreaker

Learning Objectives:

- Participants break the ice by engaging in a shared physical challenge.
- Move from a theoretical understanding to a physical experience of interconnectivity and interdependence.
- Gain firsthand insight into how individual micro-decisions lead to macro-shifts within a complex system.

Procedure and methods:

Procedure	Group format	Materials	Time
Participants stand in an open space, forming a circle. The facilitator instructs everyone to silently select two other people in the room as their points of reference without making it obvious. No verbal or non-verbal communication is allowed during the selection.	Plenary session	None	2 minutes
When the facilitator says “Go,” everyone must move to keep themselves at an equal distance from their two chosen people at all times, forming an equidistant triangle. As each person moves to adjust, the entire group enters a state of constant, fluid readjustment, demonstrating how the whole system shifts to find a new equilibrium.	Plenary session	None	3 minutes
The facilitator pauses the movement to lead a reflective discussion. Key prompts include: “ <i>What happened when a single element changed?</i> ”, “ <i>How did it feel when your system moved without your control?</i> ”	Plenary session	None	5 minutes
The facilitator introduces the concept of systems thinking.	Plenary session	Canva presentation	5 minutes



MODULE 2 | APPLYING SYSTEMS THINKING IN WORK AND LEARNING ECOSYSTEMS



Activity 1

Icebreaker

Total time: 15 minutes.

Materials: Canva presentation.

Space needed: A large, open room clear of tables and chairs.

1 The selection (2 minutes)

Format: Plenary session.

Action: Direct the group to stand up and form a large circle.

Script / Instructions to participants:

"Please stand in a circle and look around the room. Silently, select two other people as your points of reference. Do not tell them, do not point, and do not make eye contact. Keep your choice completely secret. From this moment on, no talking or signaling is allowed."

2 The movement (3 minutes)

Format: Plenary session.

Action: Start the activity and observe the system's behavior.

Script / Instructions to participants:

"When I say 'Go,' your only job is to move so that you are always at an equal distance from your two chosen people. You are trying to form a perfect triangle with them. As they move, you must move to adjust. Ready? Go."

Facilitator Note: Let the group move. You will see chaos at first, followed by a fluid, collective wave of movement as the system tries to find balance. After 3 minutes, call a halt.

3 Reflection and debrief (5 minutes)

Format: Plenary session.

Action: Gather the group to connect the physical experience to the module's key concepts.

Guiding Questions:

1. *"What happened when a single person in the room made a small move?"* (Key takeaway: A micro-decision by one person instantly creates a macro-shift for the whole system).
2. *"How did it feel when the group moved around you, completely out of your individual control?"* (Key takeaway: We are all interconnected; you cannot control a system, you can only react and adapt to it).
3. *"How does this relate to our daily work environments and teams?"* (Key takeaway: Departments and projects are not isolated; a change in one area creates ripple effects across the whole company).



Activity 1

Icebreaker

4

Canva presentation (5 minutes)

Format: Plenary session.

Action: Explain what a system thinking is.

Script / Instructions to participants:

Slide 1: *"Today we are going to explore a powerful approach called Systems Thinking. In our daily work, we are constantly solving problems. But often, the way we solve them creates new issues somewhere else. Today we will learn how to look at our working environments not as a list of separate pieces, but as a living, interconnected ecosystem."*

Slide 2: *"So, what exactly is Systems Thinking? It is a holistic approach. This means we move away from the traditional logic of linear cause-and-effect. Instead of looking at a single event in isolation, we train ourselves to understand circular processes and recurring patterns. We want to analyze how different parts of our environment interact with each other over time. By expanding our perspective, we bring immediate clarity to complex situations that usually feel overwhelming."*

Slide 3: *"To understand this better, let's look at the contrast. Linear Thinking is what we are used to: it isolates problems, reduces complexity, and looks for a quick fix. But because it ignores the bigger picture, it often fails to provide a viable, lasting solution. Systems Thinking, on the other hand, recognizes that everything is interdependent. It shifts our minds from linear causality, where A causes B and that's it, to circular causality, where A affects B, and B loops back to affect A."*

Slide 4: *"Let's quickly define the core pillars we will use in our activities today."* [Proceed reading and briefly explaining the key concepts of System Thinking].

Slide 5: *"Why do this? Because systems thinking reveals hidden patterns. Look at these corporate and systemic examples from the slides."* [Read and explain the examples provided]. *"Systems thinking helps us anticipate these long-term, hidden consequences before we make a decision, bringing true organizational stability."*

Slide 6-7: *"Let's test your default approach right now. Look at these three elements: a cow, grass, and a dog. Which element doesn't belong here?"* [Wait for a few answers from the crowd, then reveal the next slide]. *"If you chose the grass, you used Linear Thinking. Why? Because you categorized them: the cow and the dog are animals, the grass is a plant. It's logical, but it isolates them. But if you chose the dog, you used Systems Thinking! You didn't look at categories; you looked at relationships. The cow eats the grass: they share a direct, functional loop. The dog is completely outside of that dynamic relationship. This is exactly how we need to look at our working environments today."*





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Systems Thinking:
a holistic approach within professional
and educational environments.



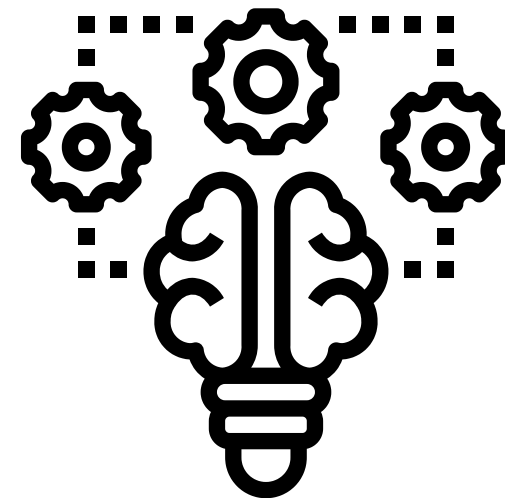
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What is System Thinking?

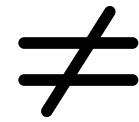
System Thinking is an holistic approach that moves away from linear cause-and-effect logic toward understanding circular processes and recurring patterns, analyzing how different parts of a system interact over time.

- it offers an alternative perspective to understand how things influence one another within interconnected environments
- expanding perspectives brings clarity to complex situations



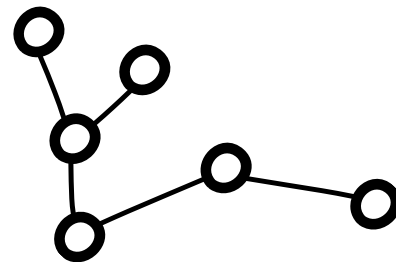
What is the difference with Linear Thinking?

System Thinking

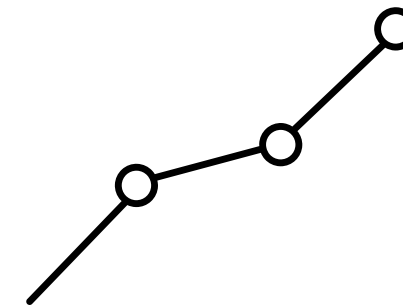


Linear Thinking

The key concepts of System Thinking include recognizing the interconnected and interdependent nature of systems and shifting from linear to circular causality.



Linear Thinking refers to all approaches that isolate problems and reduce complexity to understand a system, often failing to provide a viable solution.



Key concepts of System Thinking

Interconnectivity

The principle that no organizational element exists in isolation; every change in one area creates ripple effects across the entire system.

Leverage Points

Strategic places within a complex system where a small, targeted intervention can produce significant and lasting shifts in behavior.

Regenerative Practice

Going beyond just preventing damage (like preventing burnout or stress) to actively building a workplace that makes people healthier and more energized over time.

Work and Learning Ecosystems

Viewing a company / education centre not as a rigid pyramid where people just follow orders, but as a flexible network where people constantly share ideas and learn from each other.

Feedback Loops

Situations where the result of an action affects the next action, creating a continuous loop. It can be positive (reinforcing loop) or negative (balancing loop).



→ It reveals hidden connections and patented patterns

Ex. To solve a product bug, management forces employees to work overtime. However, this fix causes severe burnout, which leads to even more human errors and doubles the defects a few months later.

→ It is uniquely capable of untangling issues like sustainability, inequality, or emerging diseases

Ex. A medical crisis cannot be solved just by building hospitals. Systemic thinking untangles the issue by showing how deforestation, poor public transit, and economic inequality collectively fuel the outbreak.

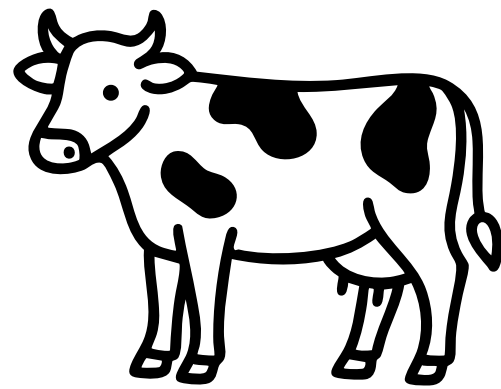
→ It anticipates the longer-term consequences of potential actions, revealing secondary and tertiary effects that may otherwise go unseen

Ex. Switching to 100% remote work immediately cuts office costs. However, it also triggers secondary effects like lost casual interactions, which ultimately damage long-term innovation and company competitiveness.

→ it makes decision more effective and bring long-term organizational stability

Ex. Forcing suppliers to lower prices saves money today, but risking their bankruptcy damages the company tomorrow. Systemic leaders build strong partnerships instead, protecting the entire supply chain from future crises.

Which element doesn't belong?



cow



grass



dog

If you have chosen:

cow and dog

they belong to the same category:
both are animals



LINEAR THINKING

cow and grass

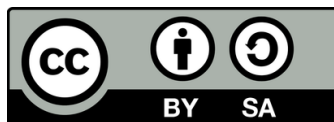
they share a direct relationship:
the cow eats grass, the dog doesn't



SYSTEM THINKING



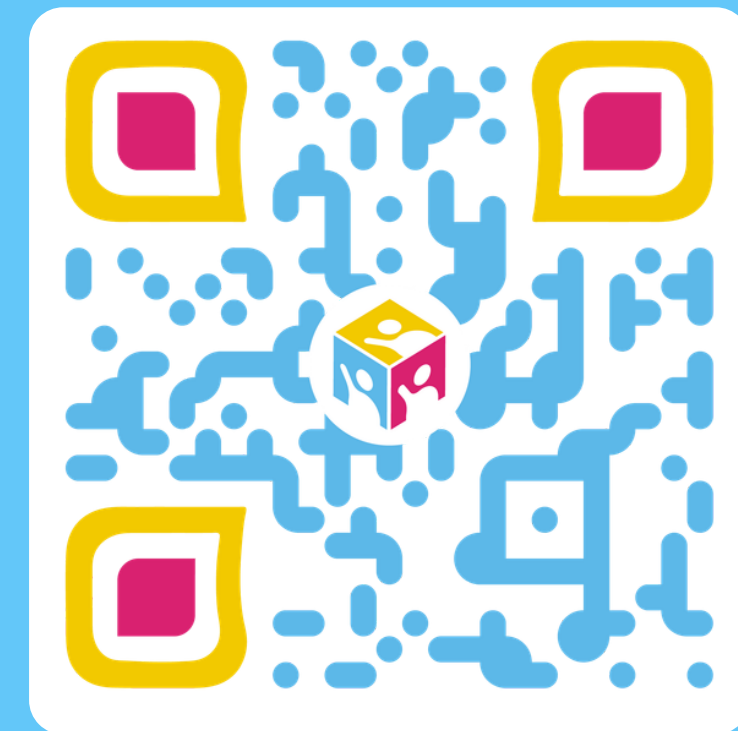
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Activity 2: Mapping the learning environment ecosystem

Learning Objectives:

- Participants learn to visualize their professional environment not as a static organization chart, but as a living, breathing network of relationships.
- Recognize the agency of non-human elements (technology, space, time) and their impact on human behavior.
- Identify bottlenecks, hidden resources, and areas of systemic tension that affect daily working life and well-being.

Procedure and methods:

Procedure	Group format	Materials	Time
The facilitator explains that organizations are not just hierarchical structures but living webs. Groups choose a central focus (e.g., <i>the employee experience</i> ; <i>internal communication</i> ; <i>well-being in the learning environment</i> ; ecc.).	Group work	Tables and chairs. Large paper sheets, different colored markers, color-coded post-its.	2 minutes
Groups identify all the people and groups that influence the system, and write them down on different post-its. At this stage, it's very important that the post-its are all of the same color. Then, participants distribute them across a large paper sheet as in the example provided in the materials.	Group work	Tables and chairs. Large paper sheets, different colored markers, color-coded post-its. Map example.	3 minutes
Participants expand their maps by using different colored post-its to add non-human factors that influence the system, following a "one color, one category" logic. For example, in a school setting, these factors could include physical spaces (classrooms, hallways), tools (digital registers, Wi-Fi), and intangible elements (schedules, parent expectations).	Group work	Tables and chairs. Large paper sheets, different colored markers, color-coded post-its. Map example.	5 minutes
Groups draw lines to represent the quality of interactions: - solid lines represent strong, daily flows - dotted lines represent weak or fragmented connections - lightning bolts mark points of friction, anxiety, or recurring conflict	Group work	Tables and chairs. Large paper sheets, different colored markers, color-coded post-its. Map example.	8 minutes



The group observes the map and discuss about which connections are the strongest, where are there bottlenecks or failures, which elements have the greatest influence on the system, and if there are invisible factors with a significant impact (for example, a non-human element that has a surprisingly large impact on people's behavior).	Group work	Tables and chairs.	5 minutes
Each group presents their Ecosystem Map to the rest of the participants. They should explain not just who is on the map, but why certain connections are stronger, weaker, or marked with tension. Groups highlight one unexpected discovery.	Plenary session	Tables and chairs.	5 minutes
The facilitator closes the activity by connecting the ecosystem maps back to the concept of Leverage Points. Participants observe the collective work to recognize how human difficulties are often caused by underlying non-human factors, preparing them to find strategic points where a small change can resolve systemic issues.	Plenary session	Tables and chairs.	2 minutes



Activity 2

Mapping the Learning Environment Ecosystem

Group Size: Small groups of 4 to 6 participants per table.

Total time: 30 minutes.

Materials: Large flipchart paper sheets, different colored markers, color-coded sticky notes, and a printed map example for each table.

Space needed: A room with tables and chairs.

1

Introduction and topic selection (2 minutes)

Format: Group work.

Action: Briefly explain the goal of the activity, contrast it with a standard organization chart, and help tables pick a topic.

Script / Instructions to participants for a working context:

"When we think of a company, we usually think of a rigid pyramid showing who reports to whom. But that doesn't show how daily work actually happens. It doesn't show who you really talk to, what stresses you out, or where the real bottlenecks are. Today, we are going to map our workplace as a living network. At your tables, you need to choose one central focus for your map. Pick one of these three options now:

- *The employee experience: How does a worker feel during their normal routine?*
- *Internal communication: How does information actually flow between teams?*
- *Well-being: What factors make our environment healthy or stressful?*

Take 30 seconds to agree on one topic at your table."

Script / Instructions to participants for an educational context:

"When we think of a school or an educational center, we usually think of a traditional hierarchy: the principal or director at the top, teachers in the middle, and students at the bottom. But that official structure doesn't show how school life actually happens. It doesn't show how a slow Wi-Fi connection frustrates a teacher, how an outdated classroom layout blocks teamwork, or how parent expectations increase anxiety. Today, we are going to map our educational environment as a living network. At your tables, you need to choose one central focus for your map. Pick one of these three options now:

- *The student experience: What does the daily learning journey look like from the students' perspective?*
- *Teacher and staff well-being: What factors make the school a healthy, supportive, or stressful place to work?*
- *Knowledge and information flow: How do ideas, updates, and feedback actually move between teachers, students, and families?*

Take 30 seconds to agree on one topic at your table."





MODULE 2 | APPLYING SYSTEMS THINKING IN WORK AND LEARNING ECOSYSTEMS



Activity 2

Mapping the Learning Environment Ecosystem

2 Mapping the human elements (3 minutes)

Format: Group work.

Action: Ensure groups use only one specific color of sticky notes for people.

Script / Instructions to participants:

"First, look only at the human side. Brainstorm all the people, teams, or groups that influence your chosen system. Write each one on a sticky note. Use [Color A] for everyone. When done, spread them out across your large paper sheet, using the provided map example as a guide."

3 Adding non-human factors (5 minutes)

Format: Group work.

Action: Guide participants to introduce tools, spaces, and intangibles using the "one color, one category" logic.

Script / Instructions to participants:

"Now, let's add the non-human factors that shape how people behave. Use different colors for different categories. For example: use [Color B] for physical spaces like offices or hallways; [Color C] for tools like Wi-Fi or software; and [Color D] for intangible elements like schedules or client expectations. Stick them onto your map where they fit."

4 Drawing the connections (8 minutes)

Format: Group work.

Action: Walk around the room to ensure tables are using the correct line symbols to map relationship quality.

Script / Instructions to participants:

"A network is defined by its connections. Use your markers to draw lines between the notes based on these rules:

- *Draw a solid line for strong, daily communication.*
- *Draw a dotted line for weak, broken, or rare connections.*
- *Draw a lightning bolt where there is friction, anxiety, or recurring conflict."*

5 Internal table discussion (5 minutes)

Format: Group work.

Action: Prompt the groups to step back and look at the whole picture they just drew.

Guiding questions for tables:

- *"Where are the lightning bolts clustering? What is causing that friction?"*
- *"Look at your non-human notes (tools, spaces). Are any of them causing a surprisingly large impact on how people behave or feel?"*
- *"Where are the bottlenecks or missing connections?"*



MODULE 2 | APPLYING SYSTEMS THINKING IN WORK AND LEARNING ECOSYSTEMS



Activity 2

Mapping the Learning Environment Ecosystem

6 Plenary presentations and unexpected discoveries (5 minutes)

Format: Plenary session.

Action: Have each group briefly present their map to the room.

Facilitator Note: Keep presentations rapid (approx. 1–2 minutes per group depending on the number of tables).

Script / Instructions to participants:

"Let's share our maps. When your group presents, don't just read the names on the notes. Tell us why certain lines are broken or tense, and highlight one unexpected discovery your team made while mapping this ecosystem."

7 Final reflection moment (2 minutes)

Action: Guide participants to introduce tools, spaces, and intangibles using the "one color, one category" logic. Close the activity by connecting the maps back to the concept of Leverage Points before moving on.

Closing Prompt:

"Look at all the maps in the room. Notice how often a problem with a person is actually caused by a broken tool or a bad schedule. In our next step, we will look at how changing just one of these non-human elements can act as a leverage point to fix a human problem."

Potential challenges and facilitator tips

- Getting stuck on a traditional org chart: Participants might naturally try to draw a standard boss-to-employee hierarchy.

Tip: Remind them: "Forget about official roles. If a slow Wi-Fi connection or an uncomfortable classroom affects your day more than the school principal does, map that relationship instead."

- Running out of time during drawing: Groups can get bogged down arguing over every single line.

Tip: Give a 2-minute warning during Step 4: "Don't overthink it. Go with your instinct: if a connection feels weak, draw a dotted line and move to the next one."



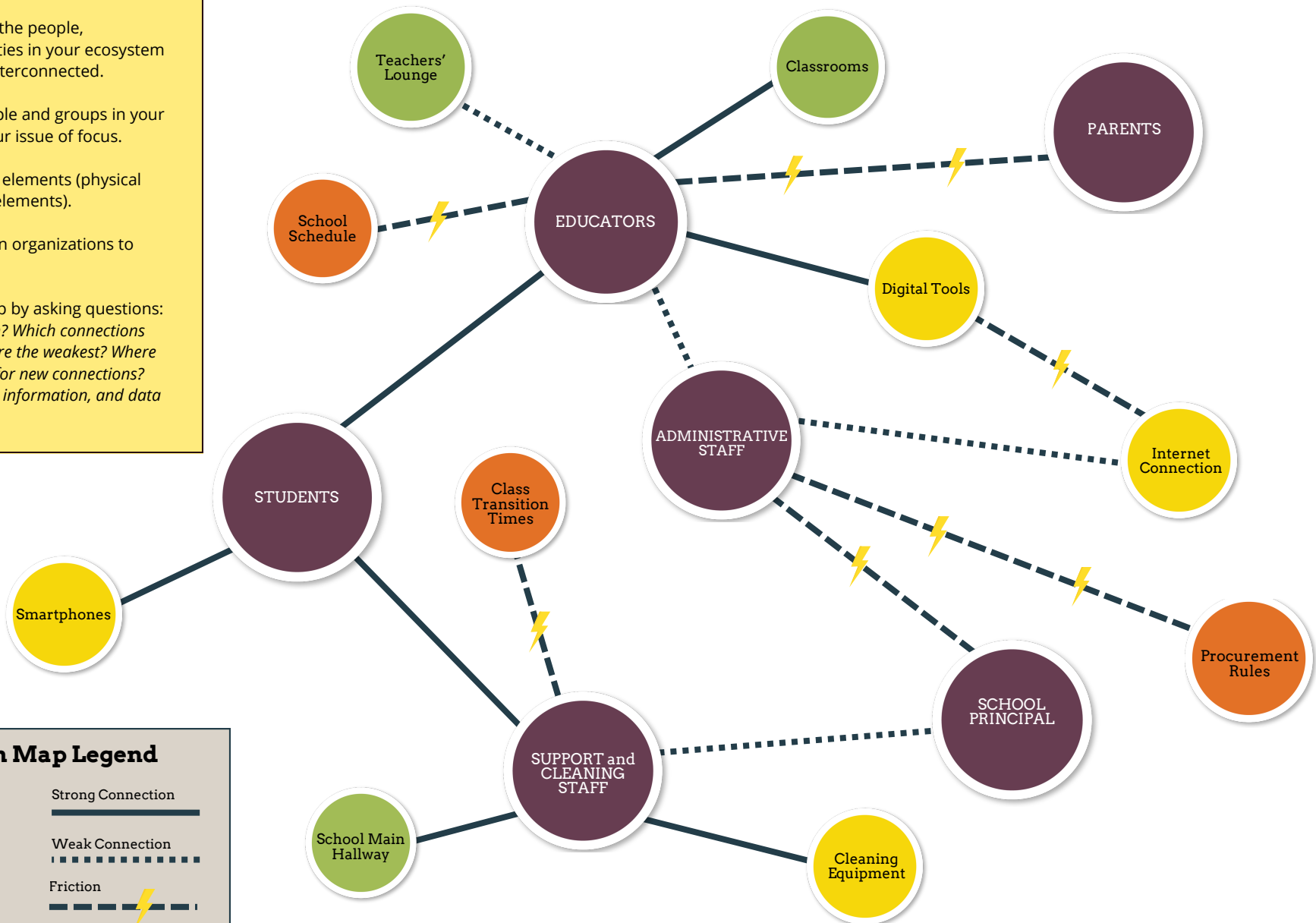


Ecosystem Mapping Example

Use this template to identify the people, organizations, and communities in your ecosystem and visualize how they are interconnected.

- **First**, identify all the people and groups in your community related to your issue of focus.
- **Second**, add non-human elements (physical spaces, tools, intangible elements).
- **Third**, draw lines between organizations to show their connections.
- **Fourth**, analyze your map by asking questions: *Who is connected to whom? Which connections are the strongest? Which are the weakest? Where are gaps or opportunities for new connections? How are shared resources, information, and data flowing?*

School Ecosystem Map: Educators' Well-being and Daily Experience



School Ecosystem Map: Educators' Well-being and Daily Experience

Strong, Daily Flows (Solid Lines)

Teachers - Students: Core daily interaction inside the Classrooms.

Teachers - Digital Tools: Continuous use by teachers to take attendance and insert grades.

Support and Cleaning Staff - School Main Hallway: High-frequency presence to manage cleanliness and student movement.

Students - Smartphones: Constant interaction during breaks and used as a distraction when they lose focus.

Support and Cleaning Staff - Cleaning Equipment: Direct, daily use to maintain school hygiene.

Weak or Fragmented Connections (Dotted Lines)

Teachers - Administrative Staff: Communication is slow.

Teachers - Teachers' Lounge: The rigid School Schedule leaves no time for teachers to gather there for peer support.

School Principal - Support and Cleaning Staff: The principal rarely interacts directly with the cleaning staff, leading to a lack of recognition for their work.

Administrative Staff - Internet Connection: The network in the Administrative Office is unstable, delaying the upload of official school documents.

Points of Friction and Anxiety (Lightning Bolts)

Teachers ⚡ Parents: High tension due to conflicting expectations about grading rubrics and communication outside hours.

School Principal ⚡ Administrative Staff: Tension caused by urgent bureaucratic deadlines handed down from the principal's office.

Support and Cleaning Staff ⚡ Class Transition Times: The 5-minute gap causes massive chaos in the School Main Hallway.

Administrative Staff ⚡ Procurement Rules: Bureaucratic rules delay the purchase of new Cleaning Equipment.

Digital Tool ⚡ Internet Connection: The software crashes, creating data backlogs for the Administrative Staff.

Teachers ⚡ School Schedule: The schedule forces heavy rotation; teachers must pack up and change Classrooms instantly.

A **linear approach** would say: "*The administrative office is slow, the hallways are dirty and chaotic, and the teachers are stressed: we need three separate interventions.*"

Instead, the **systemic map** shows that these problems are fully interconnected: rigid Procurement Rules block cleaning supplies, short Class Transition Times create chaos in the School Main Hallway, and an unstable Internet Connection causes the Digital Tools to crash, overloading the Administrative Staff and frustrating the Teachers.

The **Leverage Point**: modify the internal Procurement Rules to immediately unlock a budget to upgrade the School Wi-Fi and purchase new Cleaning Equipment. This single intervention stabilizes the digital tools, unblocks the workflow for the Administrative Staff, reduces delays for Teachers, and instantly relieves systemic pressure across the entire school staff.



Ecosystem Mapping Example

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School Ecosystem Map Legend

- Human Elements
- Physical Spaces
- Tools and Technology
- Intangible Elements

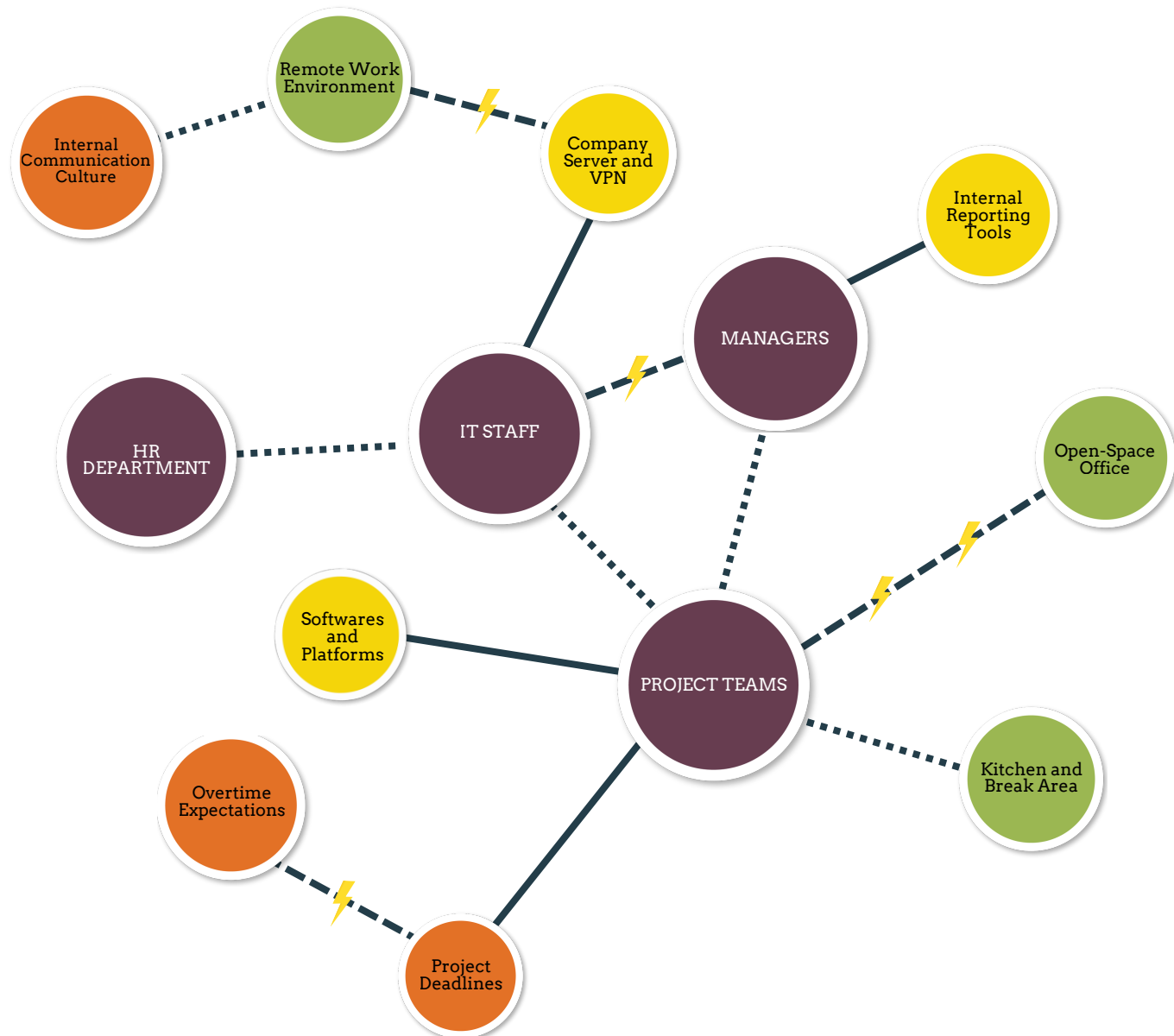
Strong Connection

Weak Connection

Friction



Work Ecosystem Map: Workers' Well-being, Engagement and Productivity



Company Ecosystem Map: Workers' Well-being, Engagement and Productivity

Strong, Daily Flows (Solid Lines)

Project Teams - Softwares and Platforms: Continuous, high-frequency digital communication and task tracking throughout the day.

Project Teams - Project Deadlines: Direct, heavy psychological pressure shaping daily priorities.

IT Staff - Company Server/VPN: Daily technical maintenance, infrastructure monitoring, and security management.

Managers - Internal Reporting Tools: High-frequency use by managers to pull data, analyze metrics, and monitor overall company productivity.

Weak or Fragmented Connections (Dotted Lines)

Project Teams - Kitchen and Break Area: High workloads prevent shared breaks, cutting off informal brainstorming and cross-team connection.

Managers - Project Teams: Slow, top-down communication that passes down decisions but lacks a direct feedback loop from the ground level.

Remote Work Environment - Internal Communication Culture: Remote employees feel isolated, as the company's culture still strongly depends on physical presence.

HR Department - IT Staff: Disconnected software systems force manual data cross-checking, stalling permission approvals.

Points of Friction and Anxiety (Lightning Bolts)

Project Deadlines ⚡ Overtime Expectations: Tight deadlines force continuous overtime, triggering a negative loop where severe burnout causes human errors and drops productivity.

Project Teams ⚡ Open-Space Office: Constant noise destroys employees' focus time, driving staff to work late from home just to find quiet.

Company Server/VPN ⚡ Remote Work Environment: The VPN crashes constantly under heavy load, blocking file access and causing daily frustration.

IT Staff ⚡ Managers: High tension as Managers demand fast deployments, while IT Staff warn that rushing creates technical debt and compromises stability.

A **linear approach** would say: "Projects are running late and employees are stressed: we need penalties for missed deadlines and a time-management course for the team".

Instead, the **systemic map** shows that the constant noise in the Open-Space Office distract employees from their daily tasks. As a result, employees move to the Remote Work Environment, which overloads the Company Server/VPN managed by the IT Staff. The system crashes, halting all work and forcing teams to rely heavily on Overtime Expectations to compensate. This triggers severe burnout, causes project errors, and alarms Managers who see productivity metrics drop.

The **Leverage Point:** Upgrade the VPN infrastructure by unlocking an extraordinary budget to allow the IT Staff to stabilize the Remote Work Environment. At the same time introduce quiet hours, establishing two hours of absolute silence per day in the office. This single technological and organizational intervention restores stability to work tools, regenerates employees' focus time, drastically reduces the need for overtime, and eliminates project errors, realigning team performance with Managers' expectations.

Activity 3: The perspective mirror

Learning Objectives:

- Develop the ability to step out of one's own role and mental model to anticipate how others experience the system.
- Reveal the discrepancy between how we believe we are perceived and how others actually see us.
- Use group emotions as data points to diagnose the overall vitality, trust, and communication climate of the professional environment.

Procedure and methods:

Procedure	Group format	Materials	Time
Participants divide into small groups. The facilitator introduces a realistic, high-tension scenario tailored to the group's context (e.g., <i>"A major project deadline is moved up by two weeks"</i> or <i>"A sudden change in leadership priorities"</i>). Pre-written scenarios will be available in the activity materials.	Plenary session	Tables and chairs.	2 minutes
Each participant identifies their genuine emotional response and tactical reaction to the described situation on a small piece of paper.	Individual work	Tables and chairs. Paper, pens.	3 minutes
Each person then imagines the reaction of the other members of their group. They write down what they believe is the reaction of each person in their small group. Each guess is written on a separate slip, folded, and labeled with the recipient's name on the outside.	Individual work	Tables and chairs. Paper, pens.	10 minutes
The slips are sorted into piles by name. Each person receives their pile and reads the imagined reactions aloud, finally revealing which one was their actual original reaction. This often uncovers systemic biases. The group discusses the gaps between reality and perception.	Group work	Tables and chairs.	15 minutes
Each group presents a summary of their findings. The facilitator guides the room to look for patterns:	Plenary session	Tables and chairs.	5 minutes



- <i>“Are there roles that are consistently misunderstood?”</i> - <i>“Does the system tend to assume negative intent?”</i> - <i>“To what extent did you write the reaction based on the person’s character versus their professional role?”</i> - <i>“Are there emotions that are 'forbidden' or 'hidden' in our system (e.g. vulnerability)?”</i> - <i>“Does our system have a 'default' emotion? (e.g., Are we a 'stressed' system or a 'supportive' one?)”</i>			
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MODULE 2 | APPLYING SYSTEMS THINKING IN WORK AND LEARNING ECOSYSTEMS



Activity 3

The perspective mirror

Group Size: Small groups of 4 to 6 participants per table.

Total time: 35 minutes.

Materials: Small slips of paper, pens.

Space needed: A room with tables and chairs.

Before launching the activity

Facilitator note: Choose one scenario among the suggested options or create your own based on the participants' work reality. Make sure to project it clearly on a screen so all participants can read it throughout the activity.

Tip: If the scenario mirrors the actual daily work reality of the entire group, participants keep their real-life roles (they play themselves). If the group is highly heterogeneous, the facilitator should assign specific roles from the scenario to the participants so that the exercise can simulate that specific situation accurately.

1 Scenario introduction (2 minutes)

Format: Plenary session.

Action: Read the scenario out loud.

Script / Instructions to participants:

"Please give me your full attention. Imagine this real and imminent situation happening right now in your work environment... [Read the Scenario]. Do not think about how to solve it yet. Just feel the immediate impact of this news."

2 Real reaction (3 minutes)

Format: Individual work.

Action: Ensure no one talks or looks at their neighbor's paper.

Script / Instructions to participants:

"Take a single slip of paper. Write down your genuine emotional response (e.g., anger, panic, resignation, numbness) and your immediate tactical reaction (e.g., 'I will log off and ignore Slack', 'I will schedule an emergency sync', 'I will work through the night'). Keep your reaction for yourself for now."

3 Guessing the others (10 minutes)

Format: Individual work.

Action: Walk around the room to check that participants are writing separate, folded slips for each person at their table.

See script on the next page.



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Activity 3

The perspective mirror

Script / Instructions to participants:

"Now, look at the colleagues at your table. For each of them, you must guess their reaction to this crisis. Take a clean slip of paper for each colleague, write what you think they would feel and do, fold it, and write their name on the outside. No talking."

4 Reveal and gap discussion (15 minutes)

Format: Group work.

Action: Tables collect the slips, sort them into piles by name, and hand them to the recipients.

Script / Instructions to participants:

"Distribute the slips so everyone has their own pile. One by one, read aloud the reactions the others imagined for you. Only after reading all the guesses, reveal your original answer. Once everyone has shared, discuss at your table where you guessed correctly, where you were completely wrong, and why you think that happened."

5 Plenary synthesis and pattern hunting (5 minutes)

Format: Plenary session.

Action: Bring the room back together and guide participants to map systemic biases using the listed questions.

Facilitator questions to the room:

- *"Are there roles that are consistently misunderstood?"* (e.g. Did people assume IT Staff were just angry, when they were actually overwhelmed? Did people think Managers were unfeeling, when they were panicked?)
- *"Does the system tend to assume negative intent?"* (e.g. Do people assume others react out of selfishness or laziness?)
- *"To what extent did you guess based on character versus professional role?"* (e.g. Did you write about the friend, or the job title?)
- *"Are there emotions that are forbidden or hidden in your system?"* (e.g. Is vulnerability allowed here, or must it be hidden?)
- *"Does your system have a default emotion?"* (Under pressure, is it a stressed system or a supportive one?)





Activity 3

The perspective mirror - Scenarios

Business Scenarios

1 The 40% budget cut

The scenario: "Your team has worked for six months on a critical company project, investing huge amounts of time and energy. This morning, without warning, you receive a cold email from management announcing a 40% budget cut for your project. As a result, two external collaborators are fired immediately. The money is being moved to another company project. No one knows why. The company's goals and deadlines remain exactly the same, but with almost half the budget."

Role assignment:

If the group matches this reality, everyone plays themselves in their real-life job.

If the group is mixed, assign one specific role to each person or pair at the table:

- Role A: The member of the team suffering the budget cut.
- Role B: The colleague whose project gets the moved money.
- Role C: The manager who sent the email.

2 The two-week deadline advance

The scenario: "Your team is managing a highly visible project. The delivery date was set for three weeks from now. Your timeline was perfect, calculated down to the millimeter with zero margin for error. This morning, the client calls: due to a sudden regulatory change, the project must be delivered two weeks early. If you refuse, the project is canceled and the company loses everything. The manager decides to accept and demands an immediate, massive overtime effort from the team."

Role assignment:

If the group matches this reality, everyone plays themselves in their real-life job.

If the group is mixed, assign one specific role to each person or pair at the table:

- Role A: The project team member.
- Role B: The manager
- Role C: The client

3 The open-space seating shuffle

The scenario: "To encourage cross-department collaboration, management decides to eliminate assigned desks. Starting next week, a hot-desking policy is introduced: every morning you must sit at whatever desk is free. Additionally, HR introduces a new rule: to keep the office quiet, all casual chat must happen in the break room, while desks are strictly 'Silent Zones'. This happens right as the company transitions to a hybrid model where some people work from home, leaving the office half-empty and disconnected."

Role assignment:

If the group matches this reality, everyone plays themselves in their real-life job.

If the group is mixed, assign one specific role to each person or pair at the table:

- Role A: The introverted / deep-focus employee
- Role B: The social / extroverted employee
- Role C: The HR / Facility manager



Activity 3

The perspective mirror - Scenarios

Education Scenarios

1 The group project disaster

The scenario: "A group of students has been working for two months on a high-stakes final group project that represents 50% of their final grade. Two days before the submission, the professor discovers that one student copied a large part of their section from the internet. The professor sends a group email: due to plagiarism, the entire group will get a zero score unless they completely rewrite that entire section from scratch by tomorrow morning."

Role assignment:

If the group matches this reality, everyone plays themselves in their real-life job.

If the group is mixed, assign one specific role to each person or pair at the table:

- Role A: The hard-working student.
- Role B: The plagiarizing student.
- Role C: The professor.

2 The safety vs. speed conflict

The scenario: "During practical workshop hours, management introduces a strict new rule: for safety and insurance reasons, every single step of machinery usage must be visually checked and signed off by the instructor on the logbook before the student can proceed. This creates massive lines inside the workshop. Students cannot finish their practical assignments on time, get frustrated, and start losing focus or using their phones, which ironically increases the risk of accidents."

Role assignment:

If the group matches this reality, everyone plays themselves in their real-life job.

If the group is mixed, assign one specific role to each person or pair at the table:

- Role A: The student.
- Role B: The instructor.
- Role C: The centre director.

3 The theory and hands-on friction

The scenario: "To comply with new regional educational standards, the VET Centre must increase the hours of classroom theory (laws, safety regulations, administration) and reduce the hours of hands-on workshop practice by 30%. The students, who chose a vocational path specifically because they wanted to learn a practical trade and hate sitting behind a desk, start checked out. They disrupt classes, refuse to take notes, and the classroom trainers are exhausted. The workshop instructors feel the students are losing their manual edge, while the direction risks losing accreditation if the theory hours aren't certified."

Role assignment:

If the group matches this reality, everyone plays themselves in their real-life job.

If the group is mixed, assign one specific role to each person or pair at the table:

- Role A: The VET student
- Role B: The classroom trainer
- Role C: The VET Centre director

Activity 4: The future backwards tool

Learning Objectives:

- Develop the ability to imagine a regenerative future that isn't just an extension of current problems.
- Identify the domino effect of actions needed to reach a long-term goal.
- Realign the daily work with a deeper sense of mission.

Procedure and methods:

Procedure	Group format	Materials	Time
The facilitators divide participants in groups and explains the activity as explained in the facilitator guide	Group work	A large room with long tables with 10 chairs each, representing a 10-year timeline (one chair = one year). Paper, colored markers.	2 minutes
Each group sits on one end of the tables, representing the present (Year 0). The facilitator invites the groups to provide a quick, honest scan of the current climate, reflecting on how the organization feels in the present. Groups map the current vibe, tensions, habits, and strengths on the Year 0 end of the table in order to create a realistic starting point.	Group work	A large room with long tables with 10 chairs each, representing a 10-year timeline (one chair = one year). Paper, colored markers.	5 minutes
Participants physically move to the opposite end of the long tables, representing the future. They are asked: <i>"What does the organization look like in 10 years if it becomes a healthy, thriving ecosystem?"</i> . Participants are invited to describe the symptoms of success (e.g. <i>"How do people talk to each other?"</i> <i>"How does the space feel?"</i>)	Group work	A large room with long tables with 10 chairs each, representing a 10-year timeline (one chair = one year). Paper, colored markers	10 minutes



Walking back toward the present, chair by chair (year by year), groups identify key milestones: <i>"What must happen to reach Year 10?"</i> , <i>"If Year 10 is the goal, what must have already changed by Year 5?"</i> , <i>"What is the very first seed we must plant in Year 1?"</i>	Group work	A large room with long tables with 10 chairs each, representing a 10-year timeline (one chair = one year). Paper, colored markers	10 minutes
Each group narrates their timeline. They explain the logic of their journey and the most critical pivot points they discovered. The facilitator highlights common themes across different groups.	Plenary session	A large room with long tables with 10 chairs each, representing a 10-year timeline (one chair = one year).	5 minutes



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Activity 4

The future backwards tool

Group Size: Small groups of 4 to 6 participants.

Total time: 35 minutes.

Materials: Paper sheets, different colored markers, timeline template (optional)

Space needed: A large room with long tables with 10 chairs each, representing a 10-year timeline (one chair = one year). In case of lack of space, replace the long tables with regular ones and use the timeline template provided in the materials.

Before launching the activity

Before starting, configure the materials on the tables based on the composition of your group:

- **Homogeneous groups** (same organization): the objective is to build a single, shared collective vision by providing one single sheet per group. You can either lay out a continuous strip of blank paper sheets taped along the length of the table, or place one copy of the timeline template in the center of the table.
- **Heterogeneous groups** (different organizations/realities): the objective is individual reflection supported by peer-to-peer coaching. Each participant receives their own individual copy of the timeline template. The facilitator must explicitly prompt active table discussion and peer reflection, encouraging participants to help each other challenge assumptions, even though everyone is mapping their own distinct professional reality.

Tip: Give a time warning during Step 3 and 4. Feedbacks must be direct and short. The goal is to stimulate the reflection, not to create a discussion on the topic.

1 Introduction (2 minutes)

Format: Group work.

Action: Split the room in small groups and briefly explain the goal of the activity.

Script / Instructions to participants:

"Today, we are going to map a 10-year timeline to explore how your organizations can evolve into truly healthy, thriving ecosystems. Please split into small groups of 4 to 6 people and look at your tables: if you are from the same organization, you will work together on one single shared template to build a collective vision; if you are from different realities, each of you will map your own individual timeline while using your table partners as a board of consultants to challenge and sharpen your ideas."

2 Year 0 - The present (5 minutes)

Format: Group work.

Action: Guide the groups in the analysis of their current situation. Ensure a quick discussion within groups to respect times of the activity.

Script / Instructions to participants:

"Each group is currently at the end of the table representing the present (Year 0). I invite you to provide a quick, honest scan of your current climate, reflecting on how your organization truly feels right now. Map the current vibe, the tensions, the daily habits, and your core strengths right here on the Year 0 section to create a realistic starting point."



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Activity 4

The future backwards tool

3 Year 10 - The future (10 minutes)

Format: Group work.

Action: Coordinate group's movement around the table and guide them in the development of their future aspirations. Ensure a quick discussion within groups to respect times of the activity.

Script / Instructions to participants:

"Time to jump into the future! Everyone stand up and physically move to the opposite end of your long tables, representing Year 10. Now, ask yourselves:

- *What does the organization look like in 10 years if it becomes a healthy, thriving ecosystem?*
- *How do people talk to each other?*
- *How does the physical space feel?*
- *How are mistakes or failures handled when things go wrong?*
- *How do different departments or teams interact with one another?*
- *Who has the power to make daily decisions? Is it top-down, or decentralized?*
- *How do people balance high performance with personal well-being?*
- *What kind of behaviors are rewarded or publicly praised here?*

Discuss your answers within your groups."

Facilitator note: In case of lack of space, eliminate the physical movement along the rows of chairs. Instead, instruct participants to remain seated and write their answers on the right-hand column (Future - Year 10) of the provided timeline template.

4 The milestones (13 minutes)

Format: Group work.

Action: Guide participants to work backward from their future goals down to the present moment.

Script / Instructions to participants:

"It is time to return to the present, but we are going to do it step-by-step, working backward from your Year 10 goals to build a realistic bridge.

Everyone stand up and physically move to the middle of your tables, right next to chair number 5. Look at the ideal future you just mapped out for Year 10, and ask yourselves:

- *If Year 10 is our ultimate destination, what structural milestone must be already achieved by Year 5 to make it possible?*
- *What major policy, process, or organizational rule needs to change by Year 5?*
- *What new collective habit or leadership style must be fully consolidated?*
- *What structural barriers or old habits must we completely phase out by this point?"*

[Pause for 5 minutes to let them map Year 5]

"Now, take the final step back. Look all the way back to today, at Year 0, and look toward Year 1. Ask yourselves:

- *What is something we can do in Year 1 to trigger this entire chain reaction?*
- *What is one concrete habit change or process that you can actually start next Monday morning?*
- *What is a small, easy change you can make right away with zero budget?*
- *Who needs to be involved right immediately to get this first step moving?"*

Facilitator note: In case of lack of space, eliminate the physical movement along the rows of chairs. Instead, instruct participants to remain seated and write their answers on the center column (The Mid-term - Year 5) and the intermediate spaces of the provided timeline template.



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Activity 4

The future backwards tool

5 Final discussion (5 minutes)

Format: Plenary session.

Action: Sum up the common themes among the groups to conclude the activity and outline the main goal of the activity.

Script / Instructions to participants:

"Now that your maps are complete, let's share the results to wrap up the activity. I invite each group to briefly narrate their timeline. Please explain the logic of your journey from the future back to today, and highlight the most critical pivot points you discovered along the way. The main goal of this activity was to demonstrate that a sustainable future is built backward: long-term systemic change is the direct result of the specific, practical actions we choose to implement starting next week."





MODULE 2 | APPLYING SYSTEMS THINKING IN WORK AND LEARNING ECOSYSTEMS
ACTIVITY 4 – THE FUTURE BACKWARDS TOOL



Year 0 - The present

Year 5 - The mid-term

Year 10 - The future



Activity 5: Closing Reflection

Learning Objectives:

- Summarize the key insights and lessons from the module.
- Identify concrete actions they can take personally in their mindset, behaviour, or daily work.
- Recognize opportunities to initiate or contribute to changes at team or organisational level.

Procedure and methods:

Procedure	Group format	Materials	Time
The facilitator hands out the Reflection Worksheet. Participants are encouraged to look back at the maps created in Activity 2 and the timeline from Activity 4 to find their personal leverage point. As they fill out the worksheet, participants should identify one systemic habit they will start, and one linear habit they will stop (e.g., <i>"I will stop assuming negative intent during staff meetings"</i>).	Individual work	Worksheet: Reflection Pens	5 minutes
The facilitator invites participants to voluntarily share their personal insights, commitments, or key takeaways with the rest of the group. Conclude the workshop by wrapping up the core themes of the day and thanking the participants for their active contributions.	Plenary session	Worksheet: Reflection Pens	5 minutes

REFLECTION



Name:

Module:

- **Key Takeaways**

What are the main insights or lessons you gained from this module?

- **Immediate Personal Actions**

Which concrete changes can you start making in your own behaviour, mindset or way of working within your organisation?

- **Structural or Long-Term Actions**

Which changes could you initiate or contribute to in your team, department or organisation over time to create lasting impact?

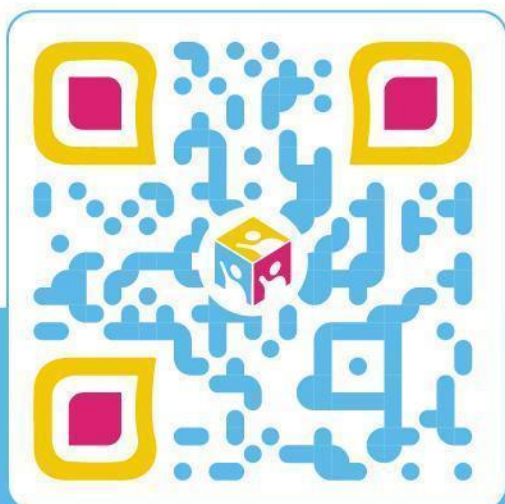


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