

LIFE SKILL EXAMPLE BOOK • 10

Systems Thinking

See relationships, patterns, consequences and leverage.

A WORKING DEFINITION

Systems thinking is the disciplined practice of understanding how relationships, feedback, delays, boundaries and perspectives interact to produce patterns and outcomes that no single part explains alone.

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IN PRACTICE

Maps actors and relationships, looks for patterns over time, tests system boundaries, traces reinforcing and balancing loops, and seeks leverage rather than treating symptoms.

It is

Relational and dynamic.

Concerned with patterns over time.

Explicit about boundaries and perspectives.

Interested in consequences and leverage.

It is not

Making a diagram for its own sake.

Treating everything as equally connected.

Avoiding decisions because complexity exists.

Assuming one model is the whole reality.

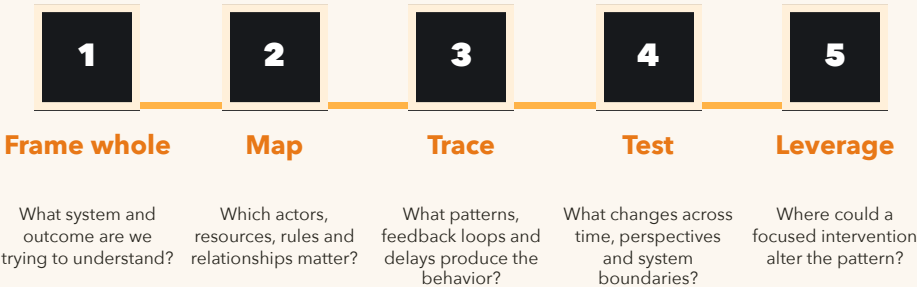
WHY THIS MATTERS NOW

AI can optimize a local task while shifting cost, risk or workload elsewhere. Systems thinking helps people see what the optimization changes across the wider human and organizational system.

THE CAPABILITY LOOP

Move from events to leverage.

Complex outcomes become more understandable when the inquiry moves beyond the visible event.



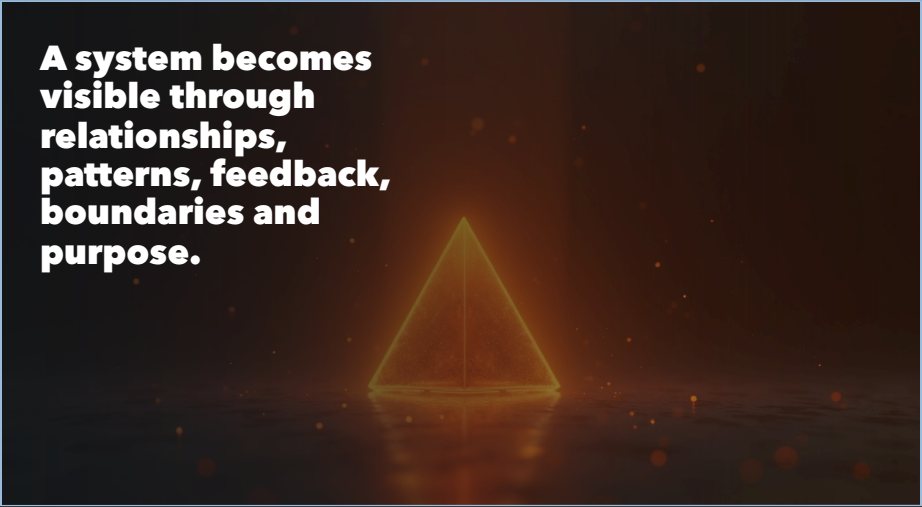
STRUCTURE What is connected? Map relationships, rules, flows and constraints.	BEHAVIOR What repeats? Study patterns and changes over time, not one snapshot.	LEVERAGE What could shift? Find interventions that change the pattern, not only the symptom.
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BEHAVIOR CLUE

Maps actors and relationships, looks for patterns over time, tests system boundaries, traces reinforcing and balancing loops, and seeks leverage rather than treating symptoms.

8 CONNECTED CAPABILITIES

Systems Thinking is a system.



Interconnection recognition Identifies direct, indirect and reciprocal relationships.	Pattern identification Recognizes recurring behavior and change over time.
Boundary awareness Chooses and tests what the analysis includes or excludes.	Feedback loop analysis Distinguishes reinforcing and balancing dynamics.
Perspective integration Examines how the system appears to different stakeholders.	Level shifting Moves between local detail and wider structures.
Change anticipation Explores delays, ripple effects and unintended consequences.	Leverage identification Finds places where focused change may alter the pattern.

The components strengthen one another. Development depends on how they are combined in context—not on maximizing one behavior in isolation.

WHY WE PROTECT THIS SKILL

Three signals—three different questions.



Human Core

How central should human agency, judgment and responsibility remain?



Human leads

Signal 4/5



Future Readiness

How strongly does this help people learn and act as roles and technology change?



Foundational

Signal 5/5



Safeguard Value

How strongly does this protect capability from over-reliance, deskilling and loss of agency?



Critical safeguard

Signal 5/5

READ THESE AS STRATEGIC SIGNALS

They describe why the capability matters—not how advanced a learner is.

AI can help map variables and simulate scenarios. People must choose the boundary, include affected perspectives, interpret meaning and own interventions in the real system.

LEARNING PROGRESSION

Five stages of systemic inquiry.

The progression describes increasingly contextual, dynamic and socially useful analysis - not intelligence or the ability to make a complicated diagram.



USE THE PROGRESSION WELL

Ask for the next observable behavior—not a label for the person.

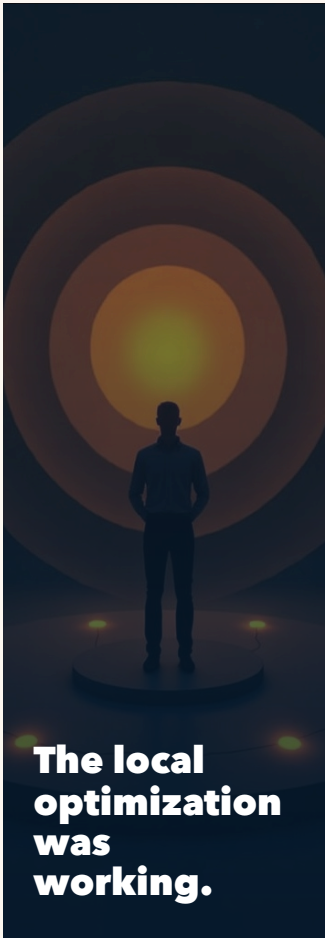
BEHAVIOR MAP

What systems thinkers do around a persistent problem.

01 Before Name the pattern Describes what repeats or changes over time. Set a boundary States what is included, excluded and why. Invite perspectives Identifies who experiences the system differently. Question the event Avoids treating the latest incident as the whole problem.	02 During Map relationships Connects actors, rules, resources, information and incentives. Trace feedback Looks for cycles that reinforce or balance behavior. Notice delay Separates immediate effects from consequences that arrive later. Shift levels Checks how local action interacts with wider structures.	03 After Test ripple effects Explores who gains, loses or carries new work. Choose leverage Targets a relationship, rule, flow or information gap. Run a probe Uses a bounded experiment instead of claiming certainty. Update the map Changes the model when reality returns new evidence.
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CASE STORY · COMPOSITE

When AI shortens calls but lengthens the customer journey.



The challenge. A service organization uses AI prompts to reduce call duration. The target improves, yet repeat contacts, employee escalation and customer frustration rise.

1 • Frame whole

The team reframes success from short calls to resolved customer needs.

2 • Map

They connect prompts, call targets, agent discretion, handoffs and repeat contacts.

3 • Trace

A reinforcing loop appears: shorter calls create unresolved issues, which create more calls and pressure.

4 • Test

Customer and frontline perspectives reveal that complex cases need continuity, not more speed.

5 • Leverage

The pilot protects human discretion and measures first-contact resolution and total journey effort.

CAPABILITY IN PRACTICE

The local optimization was working. The wider system was producing the failure.

A PRACTICAL PROTOCOL

WIDEN the view.

Use this short structure in real work, reflection or coaching. Keep the action specific enough to observe.

W Whole What larger system and pattern are we trying to understand?	I Interactions Which actors, rules, resources and relationships matter?	D Dynamics What reinforces, balances or delays change?	E Effects Who experiences intended and unintended consequences?	N Next leverage Where might a focused experiment alter the pattern?
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One-minute start: “The event is ... The repeating pattern is ... The relationship we should examine is ...”

The protocol supports practice. It does not remove the need for context, expertise, ethical judgment or appropriate human support.

LEADERSHIP AND LEARNING CULTURE

Stop rewarding local wins that damage the whole.



- FRAME** Define success across the full human and operational journey.
- CONNECT** Bring functions and affected stakeholders into the same inquiry.
- MAP** Make assumptions, feedback loops and delays discussable.
- PROBE** Use safe experiments and watch for displacement or rebound effects.
- LEARN** Update policies and metrics when the system behaves differently than expected.

RESEARCH PULSE · 2022

A systematic review of Education 4.0 frameworks linked future-skill development with character, meta-learning and active learning, and called for complex reasoning and auto-systemic thinking to address social needs.

González-Pérez & Ramírez-Montoya, Sustainability. [R1]

SEVEN-DAY EXPERIMENT

Map one persistent pattern in seven days.

- Day 1** Choose a recurring problem and describe its behavior over time.
- Day 2** Define a provisional boundary and list what sits outside it.
- Day 3** Map actors, resources, rules, information and key relationships.
- Day 4** Identify one reinforcing loop, one balancing force and one delay.
- Day 5** Add two perspectives that experience the system differently.
- Day 6** Select a leverage hypothesis and design a small, reversible probe.
- Day 7** Share the map, invite challenge and record what evidence would update it.

MY SYSTEM MAP

The repeating pattern:

The key loop:

A missing perspective:

My leverage hypothesis:

Track behavior and evidence. Reflection matters when it changes the next action.



SYSTEMS THINKING • HUMAN CAPABILITY FOR CHANGE

The system is producing the result.

Look beyond the event. Trace relationships and feedback. Test the boundary. Intervene where the pattern can change.