HUMAN RESOURCES
TEXAS WOMAN'S UNIVERSITY

Thinking in Systems: Skill Overview

Skill Introduction (Step 1)

Systems thinking is the ability to understand how what you do affects the world around you, and conversely, how the actions of others impact your own environments. It means we have cultivated a perspective of viewing situations and problems as not being standalone, but rather as part of a larger network of causes, effects, and relationships. In a modern, technologically advanced world defined by complexity, interdependencies, and rapid change, systems thinking helps professionals see the whole picture and anticipate the ripple effects of our decisions.

For supervisors in higher education, strong systems thinking allows for more strategic decision-making and solution design. It ensures that our choices account for how they influence workflows, processes, and relationships beyond one's immediate team. By understanding how departments, offices, and functions connect, supervisors can strengthen collaboration, identify meaningful partnerships, and develop programs and tools that are sustainable. This contrasts with the common default mindset many supervisors fall into, where quick fixes and workarounds unravel under organizational change or pressure, *often creating new problems while trying to solve one.*

When systems thinking is an absent skill in the repertoire of managers, short-term thinking often takes over. Decisions are made without considering their broader impact. Inefficiencies, redundant fixes, and missed opportunities become norms, straining employee confidence in our systems and the capabilities of their leadership. An effective systems thinking mindset enables a manager to be **strategic, analytical, and holistic**.

The World Economic Forum (WEF) has identified systems thinking as a core workforce skill for 2030 and beyond, reinforcing that this is not a passing idea or leadership fad, but rather a developing expectation for leaders and managers in the future of work. It is also commonly seen as the analytical complement to emotional intelligence, as an understanding of structure, process, and cause-effect relationships pairs well with the ability to navigate human motivations and needs.

In 2025, the landscape of higher education, as well as the greater workforce, is considered to be VUCA, a military term which refers to environments or situations that are **volatile, uncertain, complex, and ambiguous.** The skill of systems thinking, especially in conjunction with competencies like emotional intelligence and strategic planning, are absolutely essential in helping supervisors remain adaptable, thoughtful, and effective in managing themselves and others.

Skill Development (Step 2)

It can be challenging to assess where we might fall in any given skill, and the types of practice or behaviors we should seek in order to improve our ability to practice each skill. I have provided a rubric that assigns descriptions and common behaviors or outcomes for each skill level below.

Skill Level	Description	Behaviors and Indicators
Inexperienced	Approaches problems and decisions in isolation, with limited awareness of how actions affect other areas or processes.	- Focuses on immediate issues without considering upstream or downstream impacts - Rarely examines how their team's work connects to institutional goals or functions - Solves problems with quick fixes that may create new issues - Waits for others to identify broader implications

Competent	Recognizes some interdependencies and begins to factor them into decisions, using basic tools to think through impacts.	- Asks how changes may affect other people, teams, or processes - Identifies obvious connections between workflows and outcomes - Uses simple diagrams or notes to map out ideas - Considers organizational priorities when developing solutions
Proficient	Consistently applies systems thinking to anticipate consequences, design sustainable solutions, and strengthen collaboration.	- Maps workflows and relationships to see the bigger picture - Considers both short- and long-term impacts when making decisions - Addresses root causes instead of only symptoms - Communicates the "why" and "how" of changes to all stakeholders - Builds solutions that fit within and support organizational structure and strategy
Expert	Shapes decisions and strategies across the organization through deep understanding of complexity, patterns, and long-term implications.	- Anticipates unintended consequences and mitigates them early - Connects diverse functions to create system-wide improvements - Coaches others in applying systems thinking

- Uses advanced mapping or modeling tools for high-stakes decisions

- Designs resilient solutions that can adapt to volatile, uncertain, complex, and ambiguous (VUCA) environments

LinkedIn Learning Course & Prompts (Step 3)

For this session, we will be taking the course *Systems Thinking* by Dr. Derek Cabrera (34 minutes).

Using your TWU Linkedin Learning account, you may access both of these courses. Please view instructions for first-time sign-in using this TWU Knowledge Base article. As you watch this video, I recommend considering the following questions:

1. What is one strategy or concept from the course that stood out to you, and why do you think it resonated?

2. How might you apply what you learned to your current role, team management, or interactions with others?

3. Did anything challenge an existing perspective or approach to how you evaluate problems or think about your work processes? If so, how?

4. What opportunities do you see for us as an institution to use these concepts to improve our work and meet our goals?

Exercises and Supplemental Resources (Step 4)

These exercises are optional, but recommended, as low-stakes opportunities to synthesize the material and provide an avenue for reflection and practice. The exercises should be done after reviewing the skill introduction section, skill development section, and answering the prompts for the course above.

Reflection Exercise:

Recall a recent decision or change that was made within your team or department.

- What were the immediate effects you expected to occur as a result of the decision/change?
- Who or what was indirectly affected by the decision/change? Consider: other teams, processes, stakeholder groups, technology, etc.

- What unintended consequences arose, whether positive or negative, from the decision/change? Why did those consequences come about?
- If you could redo the decision/change, what approach would you have taken instead?
- How would these wider impacts have been influenced by that different approach?

Practice Exercise:

Impact Mapping for a Departmental Change

Step 1) Before implementation, create a simple impact map on a paper, whiteboard, or collaborative tool.

Step 2) Write the proposed change in the center of the map.

Step 3) Draw or create connecting lines from the center and extending outward to different directions, each line connecting to a new text box.

Step 4) List a different category to consider in each text box, some good starting points include: other teams/departments, internal procedures, interdepartmental processes, tools and technology, stakeholders, and budget.

Step 5) Briefly describe or note the different types of impacts to each category of concern from Step 4. Some examples may include:

- Workflow changes
- Improved communications
- Training requirements
- Funding or equipment needs

Step 6) Use this map to plan communication, collaboration, and rollout to reduce disruption and increase buy-in.

Note: It is important to make this a visual representation, the mapping strategy relies on our ability to engage tactilely and visually with this information.

Supplemental Resources:

If this topic is interesting to you, and you wish to learn more, consider one of these resources for furthering learning:

➔ Listen to how a systems thinking approach could have mitigated a plague in Borneo.

➔ Read this introductory blog post by Michael Goodman on the topic.

➔ Watch this video from MIT or this video from the CDC that discusses systems thinking in different contexts.

➔ Facilitate a "DrawToast" exercise to show how people conceptualize everyday systems or ideas. (Hint: You can pick any food or familiar, procedural task. A more culturally expansive version of this game is "DrawRice", in which participants draw out in images the process of making rice in lieu of toast).