

# Systems Thinking in 60 Minutes

*Teacher Guide: An Introductory Lesson*



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*An introductory lesson for all upper secondary school programs*

**Target Audience:** Years 1-3, all programs **Time:** 60 minutes **Subjects:** Social Studies, Science Studies, History, Religion, Mathematics (adaptable) **Prerequisites:** None

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## Lesson Objectives

After the lesson, the student should:

- Be able to give an example of a system in their everyday life
  - Understand that systems can create problems not caused by any single individual
  - Have tools to see "decision distance" and "feedback" in their surroundings
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## Lesson Structure (60 min)

Time	Activity
0-5	Intro: "Who decides on your lunch?"
5-20	Group Exercise: Mapping an everyday system
20-30	Concepts: Systems, feedback, decision distance
30-45	Application: Analyzing a new situation
45-55	Discussion: What does this mean for us?
55-60	Conclusion + tools for further work

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### 0-5 min: Intro – "Who decides on your lunch?"

**The teacher asks:**

*"Think about school lunch. Who decides what is served?"*

Students guess:

- The kitchen staff?
- The principal?
- The municipality?
- The state?

**The point:** Most people don't know. Decisions are made far away, by people they have never met.

*"Today we are going to learn a tool to see invisible structures like this."*

## 5-20 min: Group Exercise – Mapping lunch as a system

**Instruction (on the board or big screen):**

*"Draw a system that shows why you get the food you get. Include:*

- People who influence
- Money
- Rules
- Suppliers
- Decisions

*Draw arrows between the parts. Show who influences whom."*

**Materials:** Large paper, pens (colored pens if possible)

**The teacher circulates** and supports with questions:

- Who decides the budget?
  - Who decides the menu?
  - Who decides the portion size?
  - Who decides where the food is purchased?
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## 20-30 min: Concept Introduction

**The teacher gathers the class and points to examples from their maps:**

**System** = parts that are connected and influence each other

- Show a map: "Here we see that budget influences menu, menu influences purchasing, purchasing influences quality..."

**Feedback** = when the result of an event influences the cause. Examples

- (Politics) "If the food is bad, students complain. If students complain, politicians change the budget next year."
- (Nature) Ice melts → Dark water → More heat absorbed → More ice melts. (No one "decides", it just happens).

**Decision Distance** = how many steps between the problem and the person deciding

- Example: "Students see the problem every day. Politicians see it once a month on a piece of paper."
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## 30-45 min: Application – Analyzing a new situation

**Students receive (in the same groups) a new case to analyze:**

Choose a case that fits the subject:

Subject	Case
Social Studies	Why is it difficult to build rental apartments in your municipality?
Science Studies	Why does eutrophication in the Baltic Sea continue despite measures?
History	Why could World War I start from a single assassination?
Religion	Why do religious communities split internally?
Mathematics	Why do rumors spread so quickly on social media?

### **Questions to answer:**

1. Who are the actors? (Draw a simple map)
  2. Where is the decision distance?
  3. Are there feedbacks that reinforce or dampen the problem?
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## **45-55 min: Discussion – What does this mean?**

### **The teacher leads a whole-class discussion:**

- "What happens when the decision distance is large?"
- "Can a problem exist without any single person being the villain?"
- "How could you use this tool in your other courses?"

**The Goal:** Students begin to see that many societal problems are *system failures*, not just *individual failures*.

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## **55-60 min: Conclusion + Tools**

### **Summary:**

"Today you have learned:

- *To see systems in everyday life*
- *To identify decision distance*
- *To discover feedback loops*

*This is the foundation of **systems thinking**. It is a tool for understanding why complex problems rarely have simple solutions."*

### **Tools for further work:**

"If you want to explore more:

- [svensksubsidiaritet.se/verktyg/kompass](http://svensksubsidiaritet.se/verktyg/kompass) – measure decision distance in your municipality
- [svensksubsidiaritet.se/verktyg/maktanalys](http://svensksubsidiaritet.se/verktyg/maktanalys) – map who decides
- [svensksubsidiaritet.se/studiecirkel](http://svensksubsidiaritet.se/studiecirkel) – in-depth study in groups

*Feel free to ask your teacher in [Social Studies/Science/History] if you want to do a longer module later."*

## For the Teacher: Cheat Sheet

### Goal of the lesson (for you as a teacher)

This lesson is designed to:

- Arouse curiosity about *structures* rather than *individual actors*
- Give students a simple tool they can use immediately
- Create a bridge to in-depth study (the 6-week module) if interest exists

### Adaptations

#### If time is short (30 min):

- Only do the lunch exercise + concepts
- Skip the application cases

#### If the class is weak in English/Swedish:

- Use visual support
- Let students draw instead of write

#### If the class wants more challenge:

- Ask them to identify at least two feedback loops
- Ask them to propose a system change (not just point out problems)

### Common Questions

**"This sounds like leftist politics."** Systems thinking is not ideological. It is used by everyone who wants to understand complex phenomena – from military strategy to business management to ecology. It does not question values, only our

ability to see wholes.

**"I don't know enough about systems theory."** You don't need to be an expert. Students learn by doing, not by listening to you. Your role is to ask questions, not to have answers.

**"My class is rowdy, this won't work."** Start with the lunch question. Everyone has an opinion about food. It is a low-threshold entry that usually engages even the otherwise quiet ones.

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## Teacher Reflection (after the lesson)

- What worked well?
- Where did students get stuck?
- Would you like to do a longer module (6 weeks) with this class?

Please feel free to send your reflections to [bjorn.kenneth.holmstrom@gmail.com](mailto:bjorn.kenneth.holmstrom@gmail.com) – they help us improve the material.

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**Thank you for building systems literacy in Sweden!**

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