afiDE GHANA | GSET Ghana Society for Education Technology

NATIONAL DIGITAL EDUCATION LEADERSHIP ACADEMY

MODULE 1

STRATEGIC & SYSTEMS THINKING

UNIT 1.1
UNIT 1.2
UNIT 1.3

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Foundational Level | Cohort One | Accra, Ghana | 27 June 2026

Think Systemically | Plan Strategically | Lead Effectively | Transform Learning

Participant Introductions

Please introduce yourself by sharing:

- **Name**
- **School**
- **Role**
- **Region**
- **One digital initiative currently happening in your school**
- **One expectation from today's session**

Let do this as a Starter;

Complete this sentence:

"One change in my school that produced an unexpected outcome was...".

Welcome to NDELA

afiDE GHANA

GSET Ghana Society for Education Technology

"Leading Digital Transformation, Not Simply Using Technology"

Today's journey

01 Introductions

02 Programme expectations

03 Foundations of Systems Thinking

04 Introduction to Digital Strategy

05 Basic ICT Costing & Budget Awareness







Collaborate | Think Strategically | Lead Effectively | Transform Learning

Together, we transform our schools for the future.

KEY TASK FOR WEEK ONE

DIGITAL SCHOOL STRATEGY LINK —

This becomes part of your **Roadmap** (Section 2) — **systems foundation**

THIS WEEK YOU WILL:

Draw a **systems map of your school** showing at least **five components**, their **connections**, and **one leverage point** you intend to act on.



SEE THE WHOLE | UNDERSTAND CONNECTIONS | FIND LEVERAGE POINTS | DRIVE POSITIVE CHANGE

Unit 1.1 Foundations of Systems Thinking

A school is not a collection of departments. It is a living system where every decision creates ripple effects.

Today's journey

- ✔ Introductions
- ✔ Foundations of Systems Thinking
- ✔ Introduction to Digital Strategy
- ✔ Basic ICT Costing and Budgeting

LEARNING OBJECTIVES

- Describe the **difference between linear thinking and systems thinking** using a concrete example from their own school — not a definition.
- Identify at least **three unintended consequences from a previous change initiative** in their own school, tracing who was affected and how.
- **Draw a systems map** of their school — components, connections, and one leverage point — on paper, in the session.
- Commit to **asking 'What else might happen?'** before one specific decision this week.

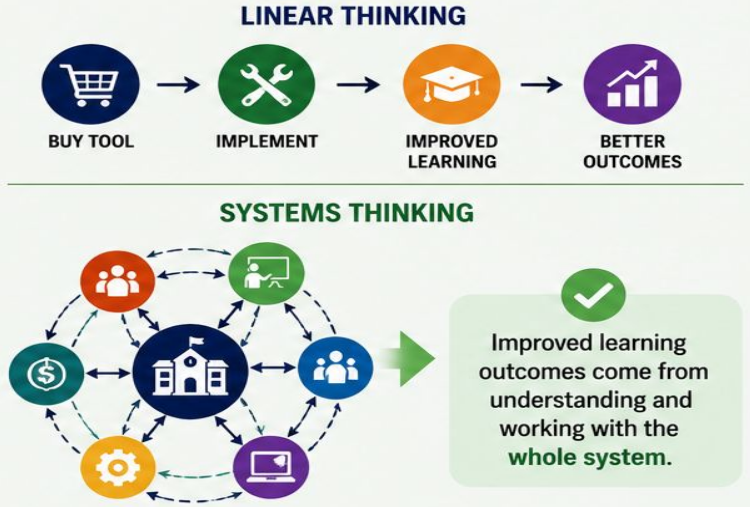
Do you have System thinking MINDSET?



SELF-REFLECTION

Think of a time your school introduced a new digital tool.

Did leaders assume purchasing the tool would directly lead to improved learning outcomes? If so, **you witnessed linear thinking** in action.



SEE THE WHOLE | UNDERSTAND CONNECTIONS | IDENTIFY LEVERAGE POINTS | CREATE POSITIVE RIPPLE EFFECTS

Unit 1.1 Foundations of Systems Thinking

Systems Thinking is **the ability to see a school as an interconnected whole rather than a collection of separate parts**, understanding that any change in one area will produce ripple effects and unintended consequences elsewhere in the system.

QUESTION FOR DISCUSSION

Can you identify a solution in your school that created a new problem elsewhere? What was the unintended consequence and who felt it most?

Unit 1.1 Foundations of Systems Thinking

The Systems Thinking Approach

A systems thinker begins not with a purchase order but with a structural investigation:

- **Readiness: Engage stakeholders before any purchase.**
- **Understanding: Face the full current reality, not just the visible surface.**
- **Commitment: Make an explicit choice for a specific vision.**
- **Focus and Correction: Bridge the gap through focused action and willingness to adjust.**

QUESTION FOR DISCUSSION

How might your current digital strategy change if you prioritised feedback loops over speed of implementation?

Unit 1.1 Foundations of Systems Thinking

📍 SCENARIO

The Takoradi head-teacher introduced an attendance app with good intentions but forgot to ask:

1. **Who will fix it when it breaks?**
2. **What will teachers stop doing while they figure it out?**

The fix was not a better app.

The fix was a five-minute daily tech support slot — and the courage to admit to teachers: *I did not think this through with you.*

Unit 1.1 Foundations of Systems Thinking

Activity 1: 15 Mins

Recall a change initiative from your own school.
What was the intended outcome?
Who was affected beyond the original target? Write names
What happened that nobody planned for?
Draw the ripple map on the paper.

Activity 2: 15 Mins

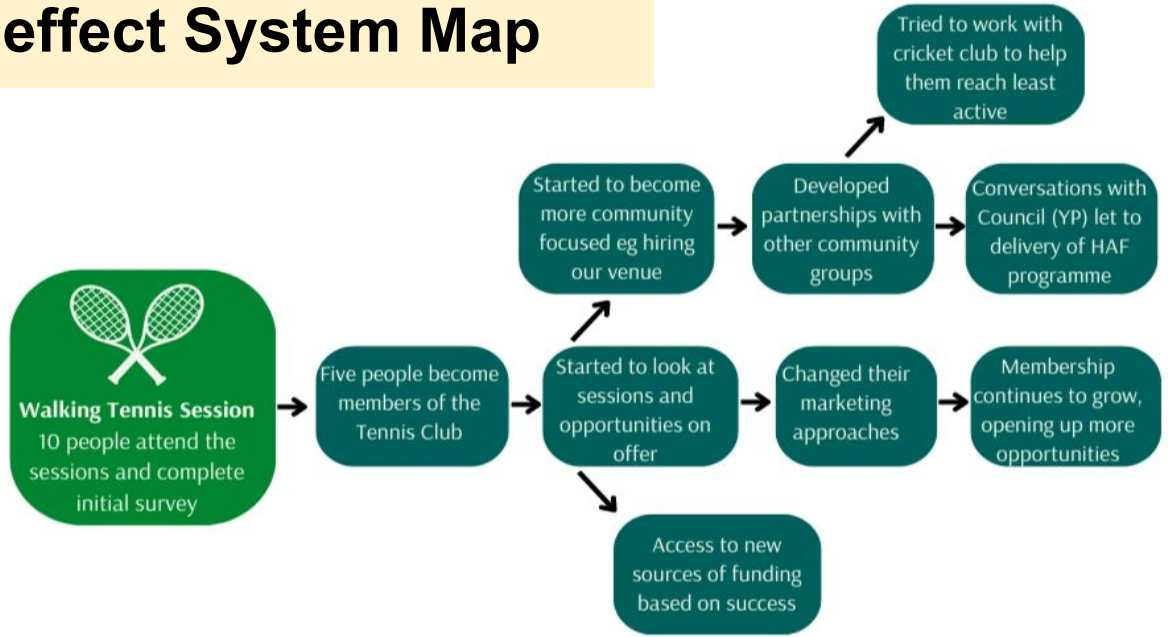
Draw the systems map. Label every node. Draw at least 5 arrows. Circle one leverage point. Write: If I change THIS, the ripple effects I expect are...

Activity 3: 10 Mins

Write the decision. Write two unintended consequences you had not considered before this session. This goes into your Digital School Strategy Roadmap.

Unit 1.1 Foundations of Systems Thinking

Sample ripple effect System Map



[My School] - Systems Map