Moving Forward
Mathematics 6-12 | Pathway 2 | Day 5
## The Week

<table>
<thead>
<tr>
<th>Day</th>
<th>Ideas</th>
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<tbody>
<tr>
<td>Monday</td>
<td>ALIGN</td>
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<tr>
<td></td>
<td>Should my unit of study be aligned to the standards and shifts?</td>
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<tr>
<td>Tuesday</td>
<td>ADAPT</td>
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<td>Why adapt my unit for students who have unfinished learning?</td>
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<td>Wednesday</td>
<td>TASKS &amp; DISCOURSE</td>
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<td>Why prepare for student engagement?</td>
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<td>Thursday</td>
<td>TEACH</td>
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<td>What does standards-aligned instruction look like?</td>
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<tr>
<td>Friday</td>
<td>MOVING FORWARD</td>
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<td>Why prepare to implement change?</td>
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Four days of “Practicum”
Thank You for Your Feedback!
Objectives & Agenda

Objectives

Participants will be able to:

• Diagnose the current state of mathematics instruction at school using a systems approach.

• Develop an action plan that addresses adaptive challenges and technical solutions to change.

Agenda

I. Opening
II. Planning for Success
III. Systems Thinking
   Lunch
IV. Action Planning
V. Sharing & Refining
Norms That Support Our Learning

• Take responsibility for yourself as a learner.

• Honor time frames (start, end, and activity).

• Be an active and hands-on learner.

• Use technology to enhance learning.

• Strive for equity of voice.

• Contribute to a learning environment in which it is “safe to not know.”

• Identify and reframe deficit thinking and speaking.
Keynote

- What resonated with you from this morning’s keynote?

- What new information did you learn, or what surprised you?

- How will this keynote affect your practice? What might you do differently in light of this information?
Our learning is grounded in the intersection of the standards, content, aligned curriculum, and the equitable instructional practices that are essential for closing the opportunity gap caused by systemic bias and racism.
II. Planning for Success

Based on the learning from each day at Institute, what do you want to see happening differently in math classrooms for students?

How will you know change is happening?

What will teachers and administrators be doing differently? How will you know?

Day 1 – Aligning  Day 2 – Adapting  Day 3 – Tasks & Discourse  Day 4 – Teaching
Describe Your Instructional Challenge

• How would you describe the situation as you are currently experiencing it? Are there any recent events or activities that have occurred regarding this challenge?

• How would you describe the *ideal* for this challenge and the *reality* as it exists now? How wide is that gap and in what ways?

• What successes have you experienced that could be leveraged?

• Who are some of the major players involved? What would *they* say about this challenge?
Share Your Challenge

Pairs Share

7 minutes each

Introduce your challenge using the reflection questions you completed.
"The reality is that any social system (including an organization or a country or a family) is the way it is because the people in that system (at least those individuals and factions with the most leverage) want it that way."

The Iceberg Model

EVENTS
What happened?

PATTERNS AND TRENDS
What’s been happening?

UNDERLYING STRUCTURES
What sort of structures or processes might explain what’s been happening?

MENTAL MODELS
What is the thinking that creates or allows these structures, patterns, and events to occur?

CULTURAL AND INSTITUTIONAL VALUES
What are the values that are instilled in the organization or community that are shaping this behavior?
Unpack Your System

**Individually** – 5 min to identify an Event

**Paired Exercise** – 10 min

Using the Iceberg, Partner A guides Partner B through each of the questions. Practice coaching by probing, restating, and paraphrasing. Do not tell stories of your own.

**Switch Roles & Repeat** – 10 min

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**EVENTS**
What happened?

**PATTERNS AND TRENDS**
What’s been happening?

**UNDERLYING STRUCTURES**
What sort of structures or processes might explain what’s been happening?

**MENTAL MODELS**
What is the thinking that creates or allows these structures, patterns, and events to occur?

**CULTURAL AND INSTITUTIONAL VALUES**
What are the values that are instilled in the organization or community that are shaping this behavior?
“Successful adaptive changes build on the past rather than jettison it…”

“The first step in any adaptive challenge is to take a step back to see how your system is responding to it.”

Adaptive or Technical? Or Both?

“An adaptive challenge is one which the team may have no idea how to solve.” Adaptive challenges can only be addressed through shifts in people’s values, beliefs, behaviors, priorities, habits and loyalties. Adaptive challenges require learning.

“Technical problems have known solutions” that can be implemented by someone, somewhere. Not easy or unimportant, but the problem is well-defined. Technical problems require resources and expertise.

“Problems do not always come neatly packaged as either adaptive or technical. Most problems come mixed, with the technical and adaptive aspects intertwined.”
Quick Paired Talk – 10 min

5 min each

Which parts of your challenge are adaptive? Which are technical?

Have you been applying technical fixes to the adaptive work?

What have you done to get adaptive shifts so far?

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We Take Data Seriously

Please fill out the survey located here: standardsinstitutes.org/institute/summer-2019

1. Click on the grey ‘Daily Survey’ link
2. Choose the appropriate link for today’s survey, i.e. Day 1, and continue to new window
Lunch
IV. Action Planning

Design a set of actions that integrate into one coherent intervention for this next school year.

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<th>Strategies</th>
<th>Leads</th>
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<tr>
<td>What are some strategies that align to your hypothesis?</td>
<td>Who will lead the work with the strategies?</td>
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<tr>
<th>Resources</th>
<th>Timeframe</th>
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<tr>
<td>What resources will you need?</td>
<td>When will you implement your plan?</td>
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<tr>
<th>Stakeholders</th>
<th>Outcome</th>
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<tr>
<td>Who are the people needed to support your plan?</td>
<td>How and when will you measure that you have reached your goal?</td>
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IV. Action Planning- Hypothesis

I have observed

If I (action)

then (outcomes)
The Illusion of the Broken System

“Embarrassing or not, the organization prefers the current situation to trying something new where the consequences are unpredictable and likely to cause losses for key parties.”

V. Sharing and Refining

15 min each

Share your Challenge, Diagnosis, and Action Plan.

Peers listen, probe, and make the plan stronger by responding to the presenters’ Question.
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