Iceberg
Seeing What’s Below the Surface

Events
Patterns of Behavior
Leverage
Structure of the System
Mental Models
Learning
Recognizing Patterns and Trends

What patterns and trends do you need to be aware of as you pursue desired results of your job-embedded project?

Graphs help tell the story. They also help surface and test assumptions.
Behavior-Over-Time Graph Basics

BOTGs show trends and patterns of behavior in a system, rather than discrete events. They measure change over time and show “what” has happened in the system as represented by the graphed component.
The day started out cold at around 40°F and warmed up slowly until the temperature reached about 75°F before cooling off throughout the afternoon and evening.
Balloon Dynamics

✓ Draw a BOTG of the amount of air in the balloon over time.
BOTG Practice:
Think of something that has changed over time that has been important to where you are today in your career. Graph the change of this variable over time.
Practice the Habit

Exercise #1: Choose one generic BOTG graph from the previous page (e.g., Linear growth or decline, oscillation, s-shaped growth, goal-seeking). Think of a scenario or story from your work or family setting that has a trend that matches the graph you chose. With another person, talk through your story while pointing at various parts of the graph, and see what kind of conversation develops.

Questions to think about:
Which graphs were easiest to apply to your workplace or family setting?
Which trends were more difficult to connect to your workplace or family setting?
Why?

Exercise #2: If you keep a journal, identify important trends in your life that you are trying to impact. In addition to words, draw a BOTG in your journal to track your progress and make the change visible. For example, “I am trying to not be so negative when I am in team meetings.” Draw a BOTG as a part of your journal entry and use it to show how your level of negativity changes over a week's time. This is a very quick way to enter a reflection in your journal even if you do not have the time to write a meaningful entry. Use the graph to show the shape of change as influenced by causal factors.

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<table>
<thead>
<tr>
<th>Level of Negativity</th>
<th>Changing Element</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td></td>
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“Progress is impossible without change, and those who cannot change their minds cannot change anything.” — George Bernard Shaw, author
Which of these things are variables that you could graph over time?

- Job satisfaction
- # of job-related injuries in your district
- Stress level
- Cancelling of a meeting
- A vote to make a decision
- Trust in your department
- Purchase of a new piece of equipment
- Cleanliness of a neighborhood
- New software
- Youth experiencing mental health challenges
Possible examples of trends to graph

• Hard data:
  – Leaders with EC credentials
  – # of children in certified preschools
  – % of high quality preschools
  – % of schools effectively applying Gold assessments
  – 3rd grade state standardized achievement measures

• Perceptual data:
  – Legislative support for EC
  – Level of commitment to professional development
  – Quality of early childhood professional development
Other examples

• Quality of cross-sector communication
• Access to professional learning opportunities
• Awareness and skill related to DAP
• Willingness to try new things
• Commitment to children
• Attention to data
Using BOTGs to identify current and desired trends
Using BOTGs to identify current and desired trends
1. Revisit your system from yesterday.
2. Review the 2 changes you listed and identify some of the key elements that relate to those that change over time.
3. Draw 6+ quick behavior-over-time graphs on large post-its.
4. Take turns telling the stories of your graphs.
5. Make changes as needed to further clarify your BOTG stories.
How could you use BOTGs in your leadership position to gather information you currently do not have, e.g. surface mental models?
The day I realized I could cook bacon whenever I wanted.
WEARING HIGH HEELS

TIME

HAPPINESS

I LOOK AMAZING

WOW, UNCOMFORTABLE

I'LL NEVER STAND AGAIN

MY FEET MELTED

PLEASE KILL ME