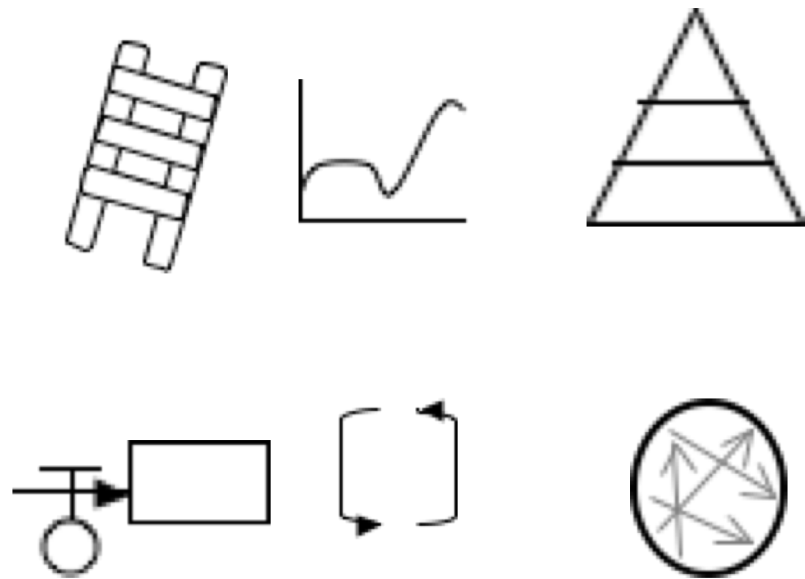


What is systems thinking?

Systems thinking offers us a powerful new perspective, a specialized language, a series of Habits and a set of tools.



Your system...any system is
perfectly designed to produce the
results you are obtaining.

(Adapted from Carr, 2008)

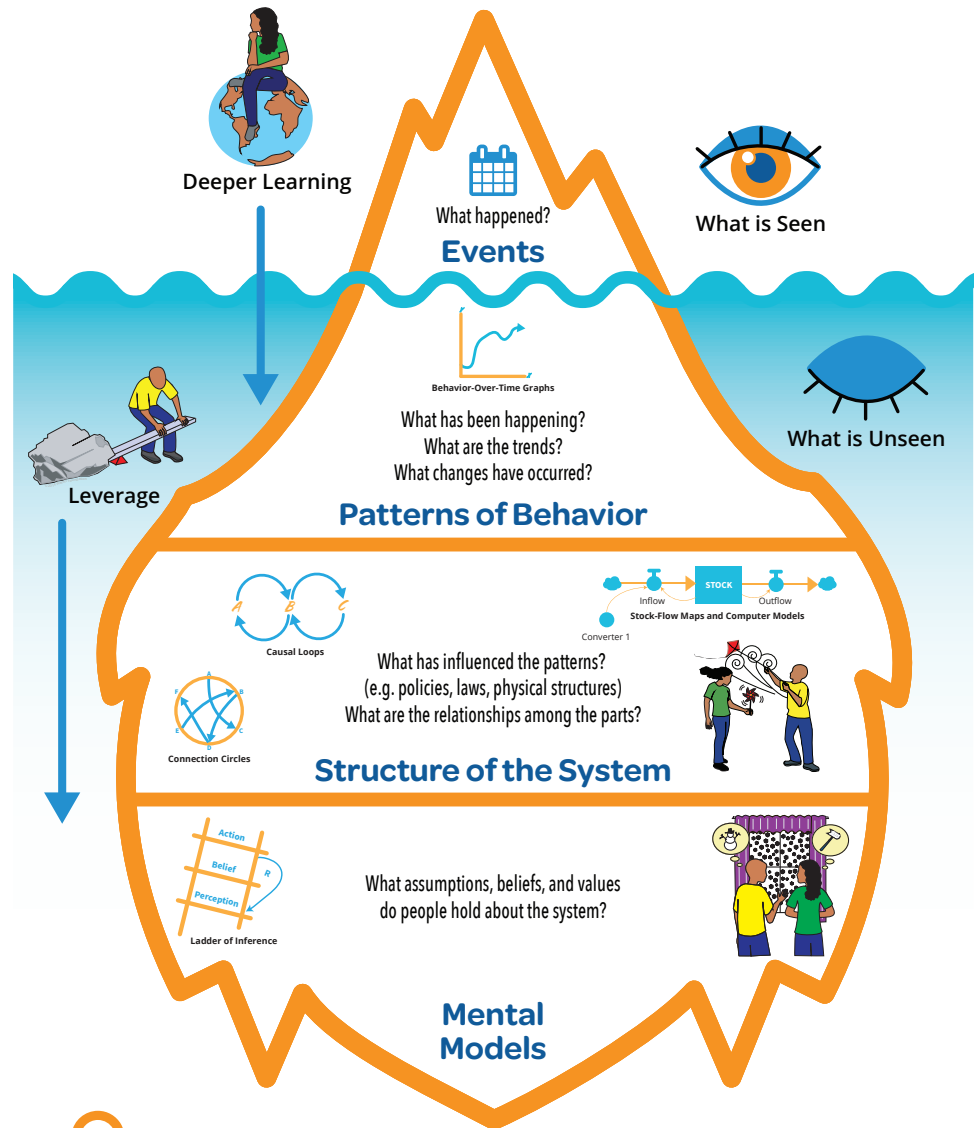
The Big Picture

Seeks to understand the "big picture"



Iceberg

Seeing What's Below the Surface

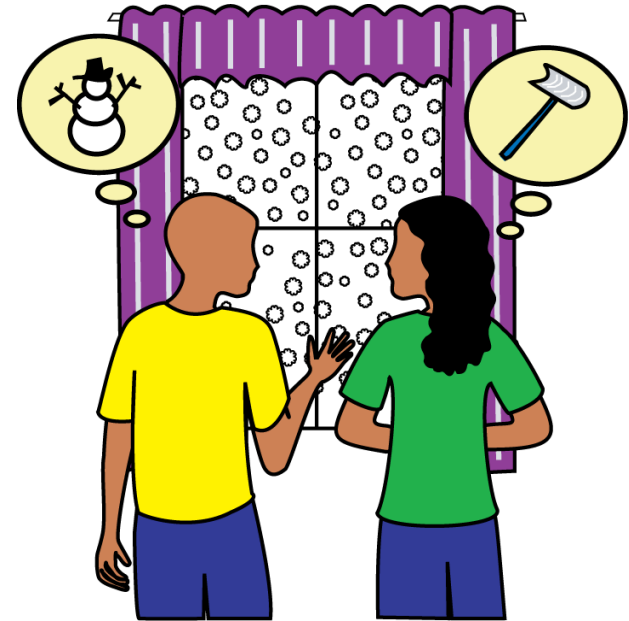


Reading, Reflection & Making Connections pp 32-33



Considers Mental Models

Mental models are deeply ingrained assumptions, generalizations, or even pictures or images that influence how we understand the world and how we take action.



Peter Senge, *The Fifth Discipline*, 1990

Have I ever?



Have I ever...?



1. Each person takes a *Have I ever...* question from the envelope.
(You can always pick again if you don't like your question.)
2. When it is your turn, read your question with a "poker face" to your small group.
3. Members of your group make a quick judgement about you:



Answer is YES!



Answer is NO!

4. Reader provides the correct answer and asks, ***What are you each paying attention to that leads you to your response about me?***

Remember Four Corners?

What role do your mental models play as you think about your preferences?

MEANING

For you, a common understanding of the meaning and vision of the work is first and foremost. You must understand the purpose of the group work before you choose to participate. If the meaning is not clear, then nothing else can be clear. From meaning comes clarity about what kind of structure is appropriate and what kind of action will reflect the meaning.



Meaning individuals want to know:

- Why are we doing this?
- What's the purpose?
- Does this matter?
- What is our vision?

STRUCTURE

It is important to you that a structure be developed so that everyone knows "the rules of the game." Everyone should be clear about how, and by whom decisions are made, the form of meetings, the way in which visions will be developed, and the progression of the work. If a structure is not in place everything else seems useless or disorganized.



Structure folks often ask questions like:

- When?
- How?
- Who says?
- How long?
- What time?

CARING

For people who choose caring as a preference, it is essential that everyone in your group is included, and time is taken to know each other well. It is important to understand the strengths and contributions that each person can make, and that a process be developed that sets group norms which will productively deal with possible conflicts and solutions to problems.



Caring folks ask:

- Is everyone OK?
- How is everyone feeling about this?
- Do we need to take a break?

ACTION

For you, action is at the core of meaningful work—don't talk forever, do something! You want to experience the steps of a plan and learn from that experience. Action people lead by example. Your motto is "JUST DO IT!" You believe that a structure and meaning will logically develop from action.



Action individuals tend to say:

- Enough talk, let's move, let's do it!

Slumber

Pillow

Dream

Night

Bed

Blanket

Quiet

Pajamas

Nap

Snooze

Practice the Habit

Think of a time when you shared your mental model about something you care about.
What did you learn about yourself when you shared it?

How can you invite others to share their mental models?

How do you respond when mental models differ?

Think about the last meeting you attended or facilitated. It could be a work-related meeting or a community-based gathering. What was your impression of the meeting?

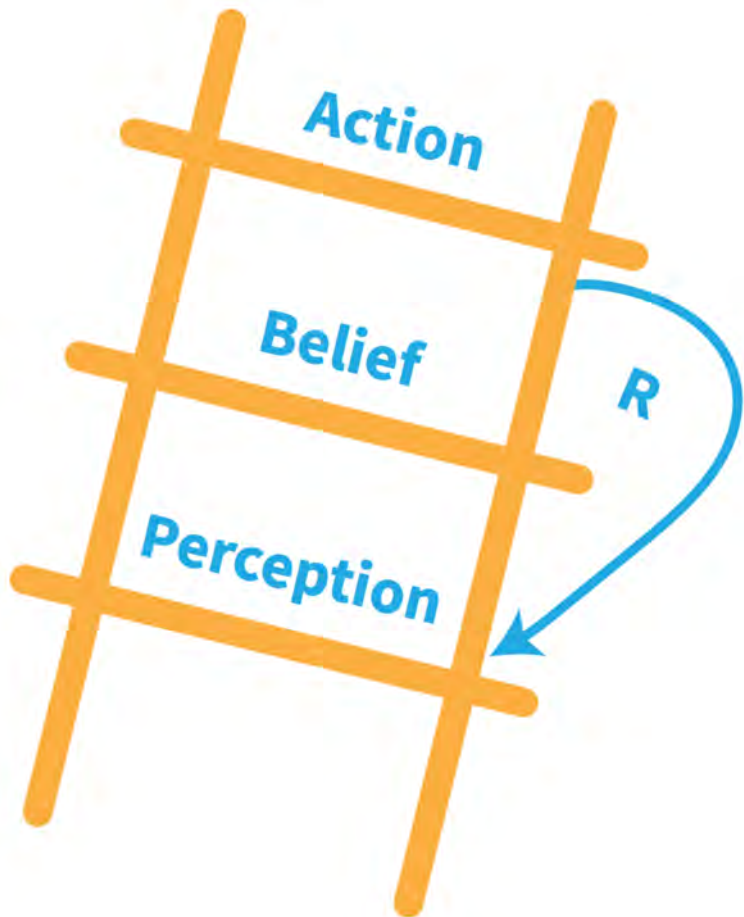
How did people hear and interpret what was being said?

How did the facilitator provide participants opportunities to voice their interpretations?

How might you interpret silence?



Considers how mental models affect current reality and the future

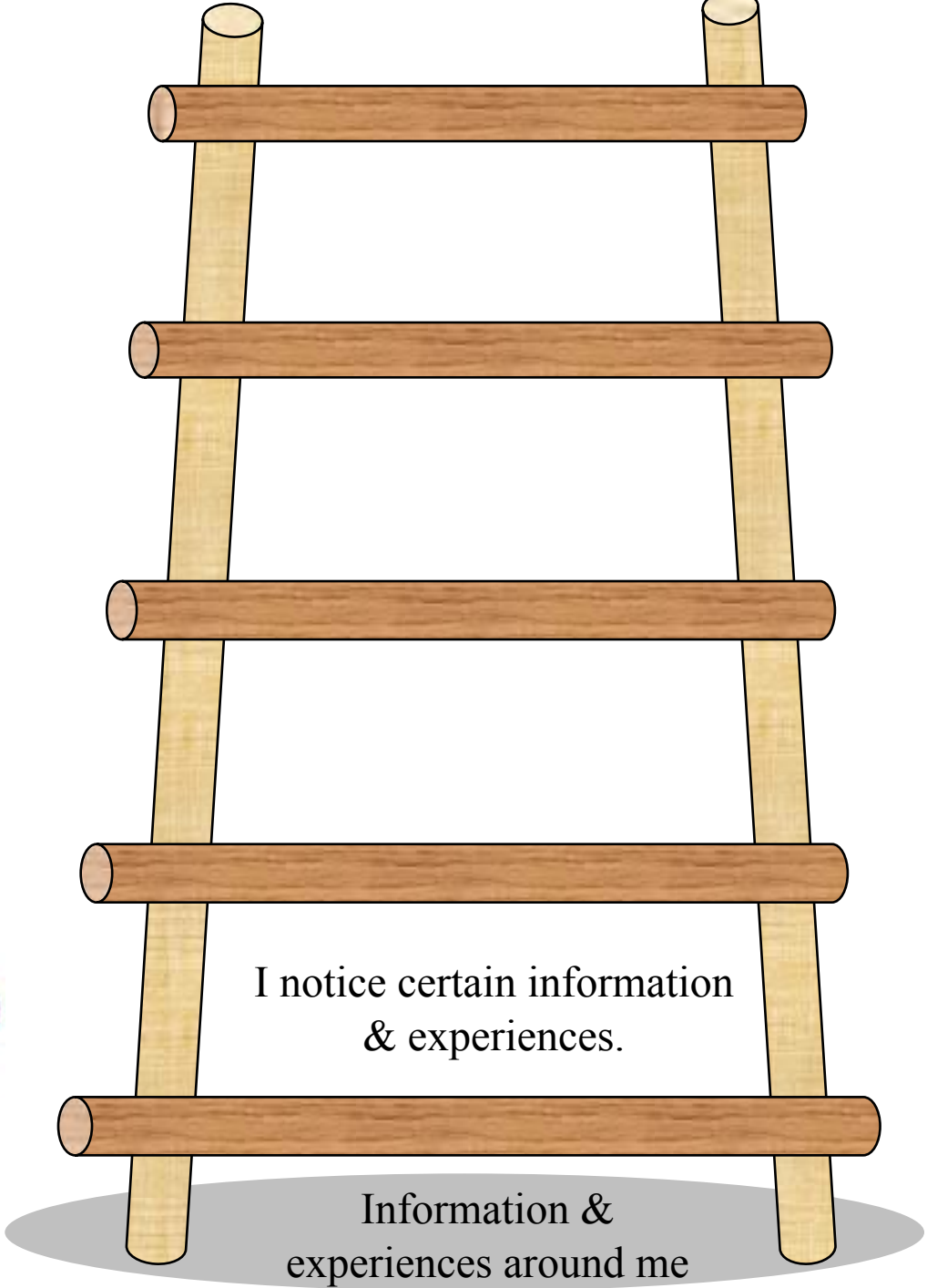


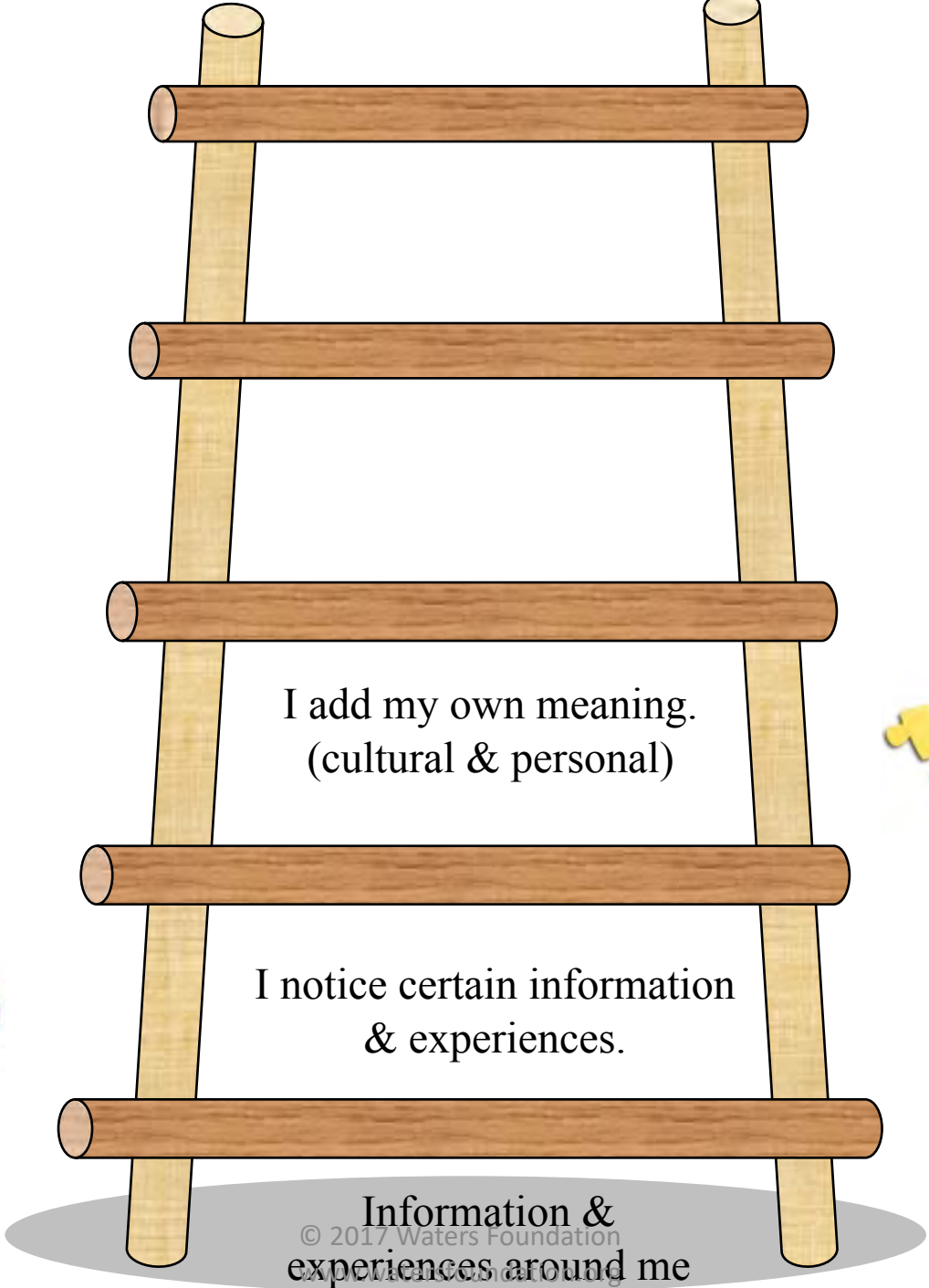
Ladder of Inference

“You never really know a man until you understand things from his point of view, until you climb into his skin and walk around in it.”

Harper Lee, [To Kill a Mockingbird](#)







I add my own meaning.
(cultural & personal)

I notice certain information
& experiences.

Information &
experiences around me





I develop beliefs
based on the
meaning I add.

I add my own meaning.
(cultural & personal)



I notice certain information
& experiences.



Information &
experiences around me

I do something based on my beliefs.



I develop beliefs based on the meaning I add.



I add my own meaning. (cultural & personal)

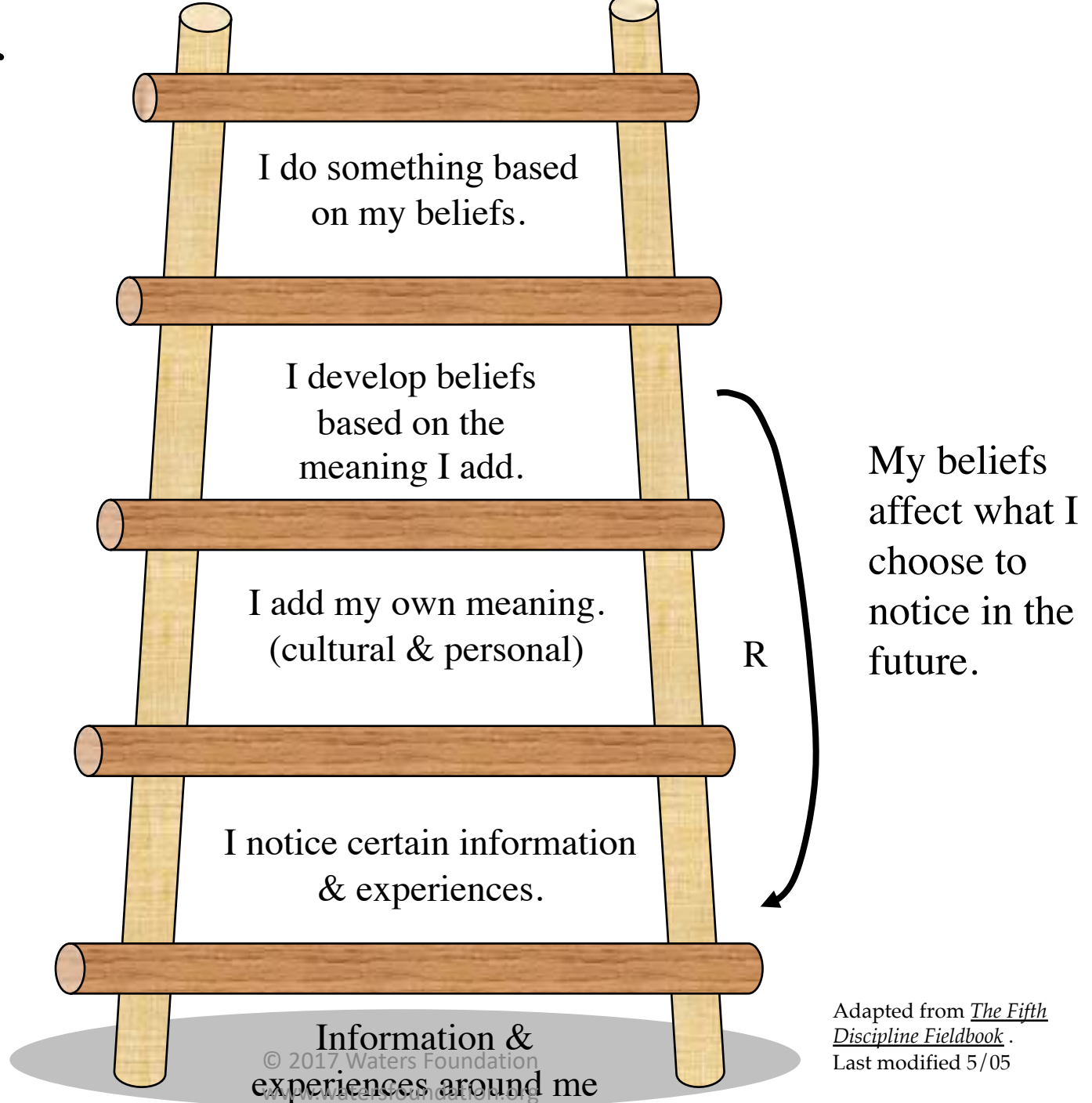


I notice certain information & experiences.



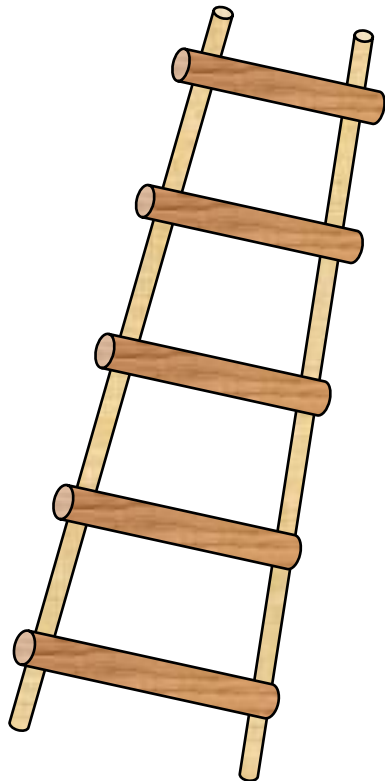
Information & experiences around me

Ladder of Inference



Adapted from *The Fifth Discipline Fieldbook*.
Last modified 5/05

Ladder of Inference



Practice Scenario #1:
Sitting in an important meeting
with a distracted colleague



Things I noticed about my colleague:

- Nonstop use of Smart Phone
- Constant clicking noise
- No eye contact with speaker
- Colleague leaves and returns to the room throughout the meeting 3 different times

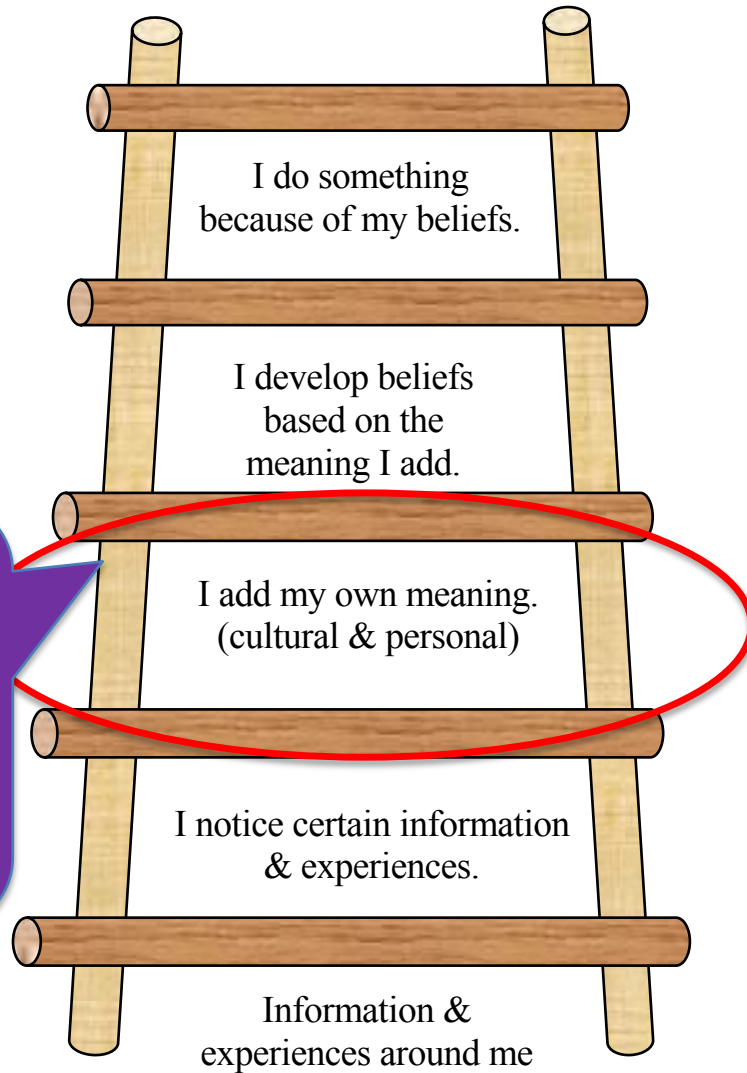
I do something because of my beliefs.

I develop beliefs based on the meaning I add.

I add my own meaning. (cultural & personal)

I notice certain information & experiences.

Information & experiences around me

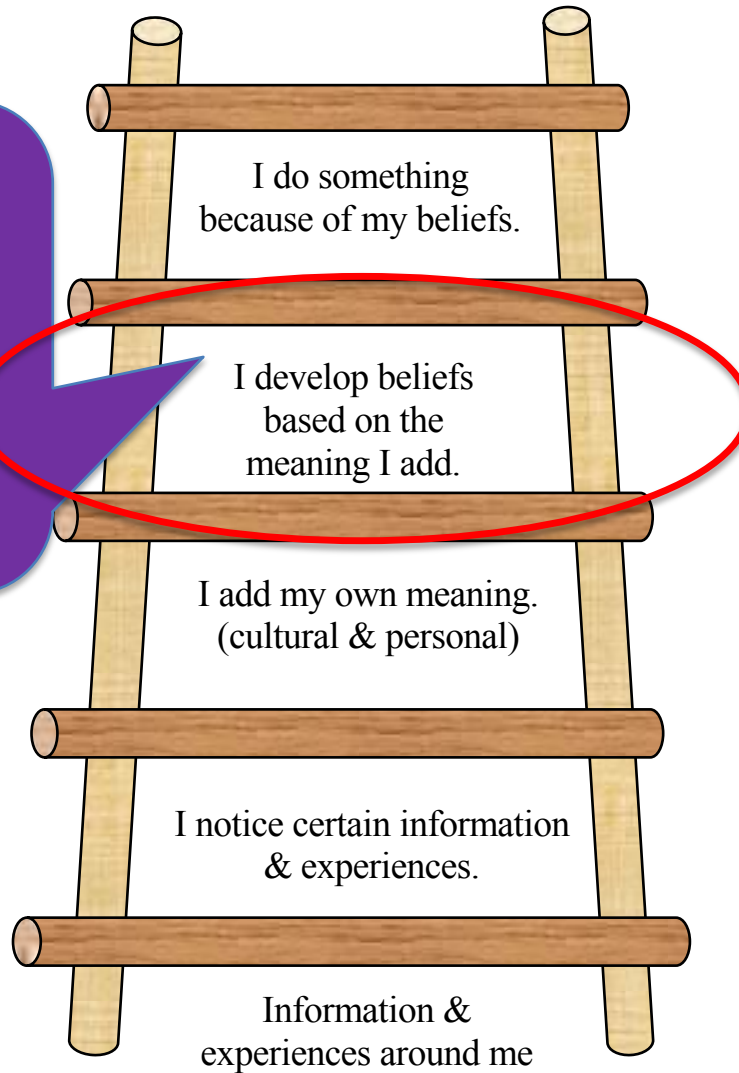


This behavior was so annoying and distracting. It was hard for me to pay attention. What would be so important?

My Mental Model:

My colleague doesn't care about what we are talking about!

Our director (meeting facilitator) must feel disrespected!



Try to suspend judgment before taking action.

I do something because of my beliefs.

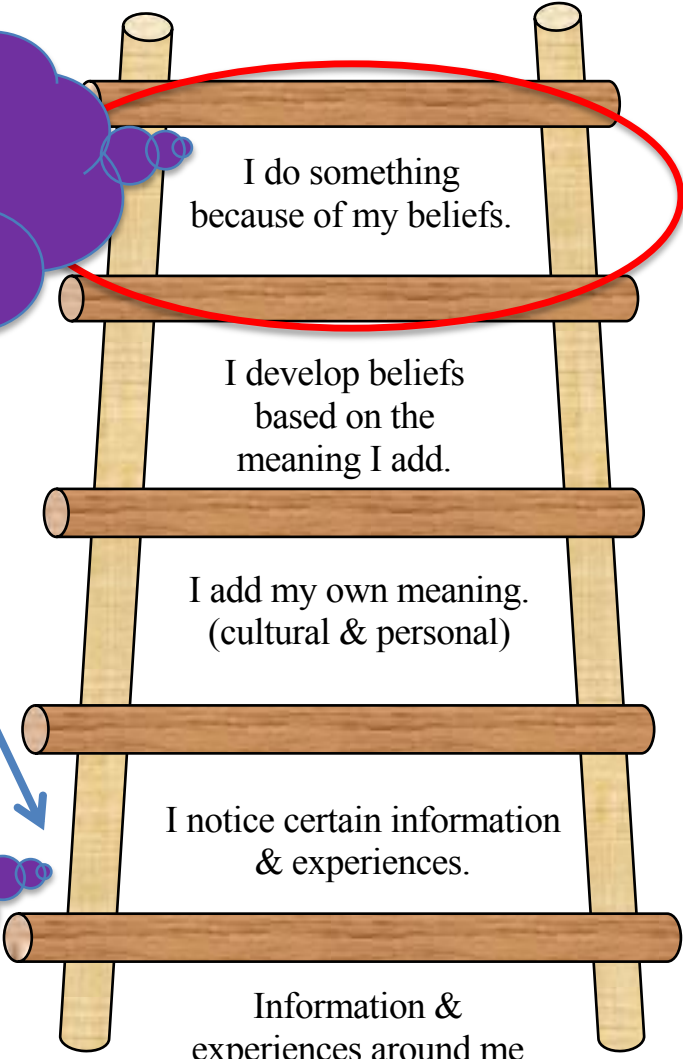
I develop beliefs based on the meaning I add.

I add my own meaning. (cultural & personal)

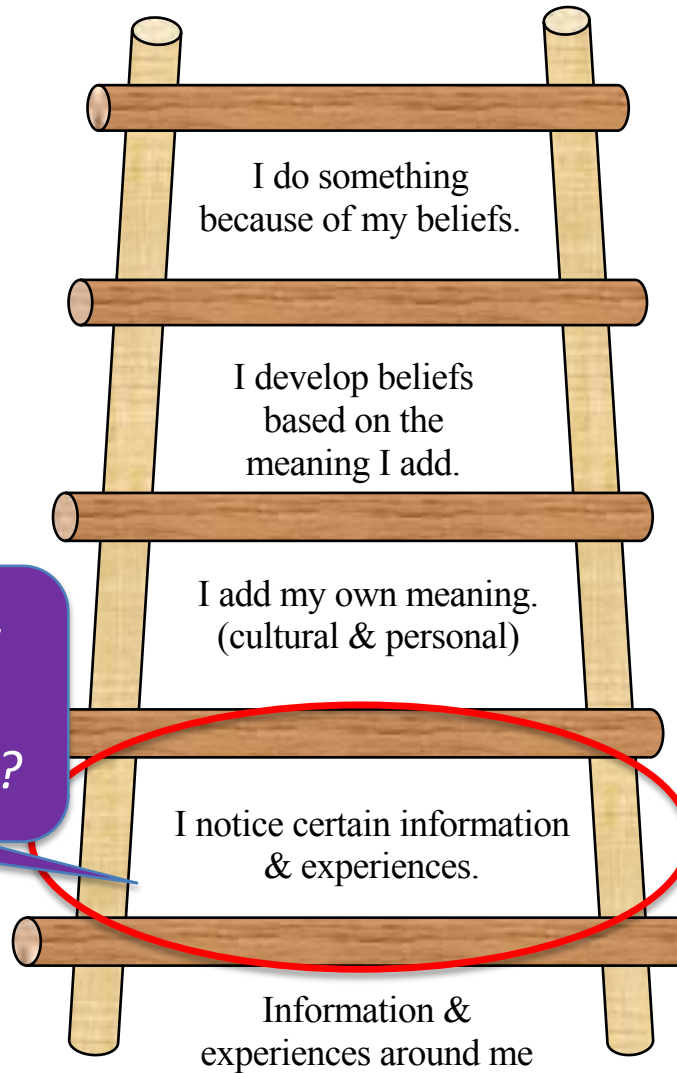
I notice certain information & experiences.

Information & experiences around me

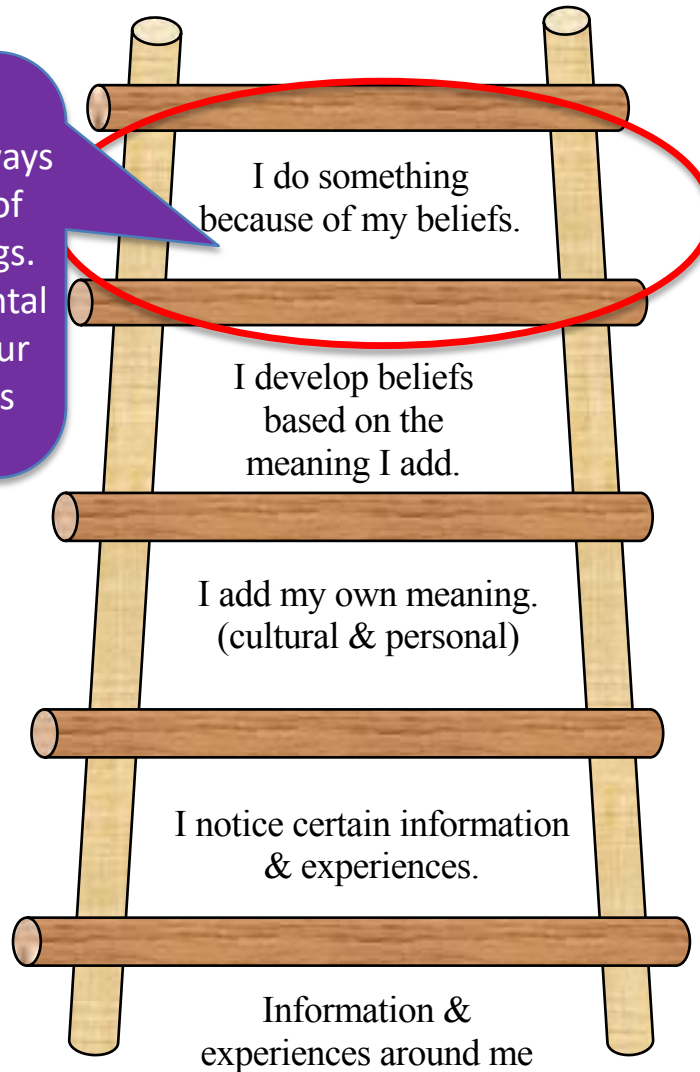
Could there be another side to this story?

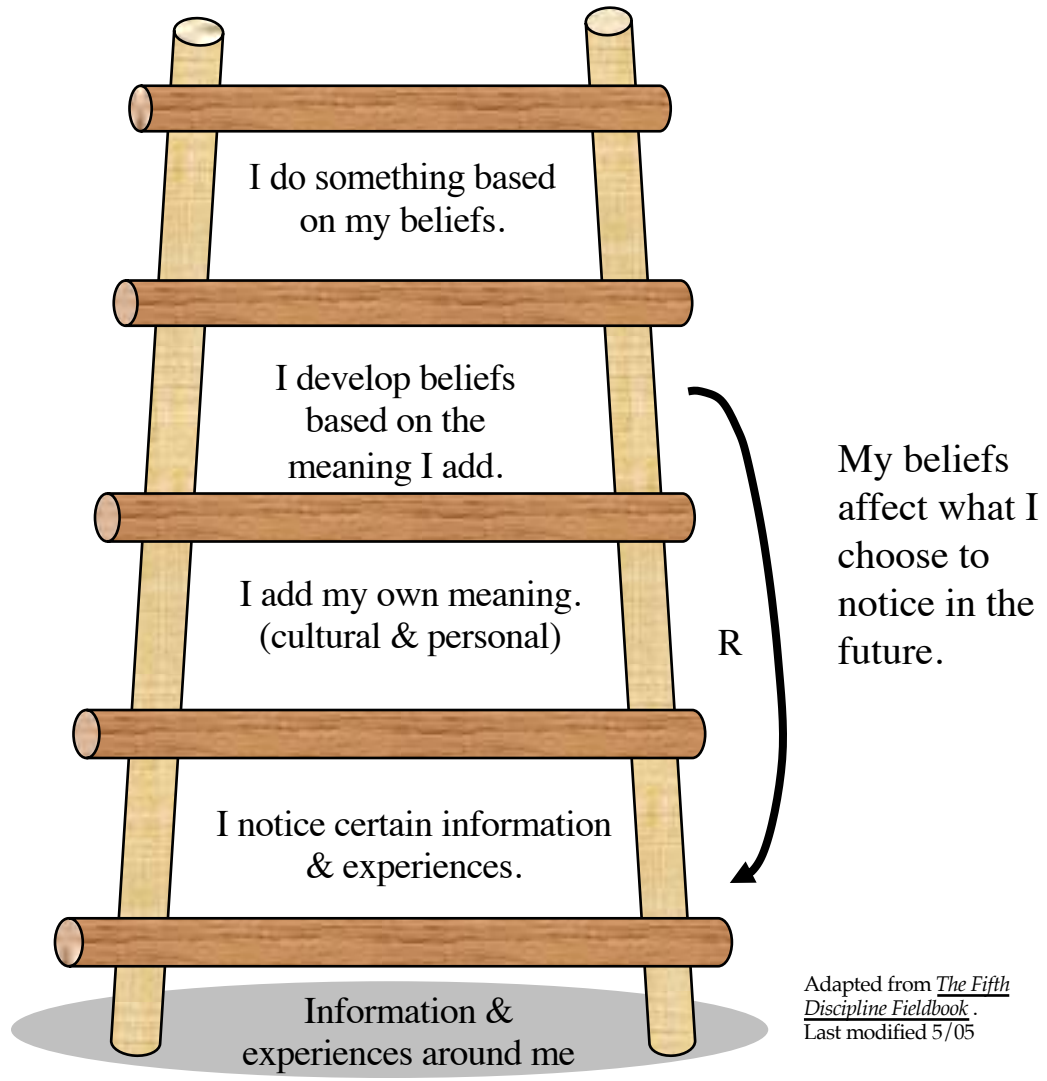


*How can I discover
new information
about this situation?*



This situation gave us an opportunity to talk about ways people interpret the use of technology during meetings. We shared our various mental models to help increase our understanding of people's actions.





Adapted from *The Fifth Discipline Fieldbook*.
Last modified 5/05

Managing your Ladder of Inference

- **Reflection**

- Try to suspend judgment
- Become more aware of your own thinking and broaden your observations



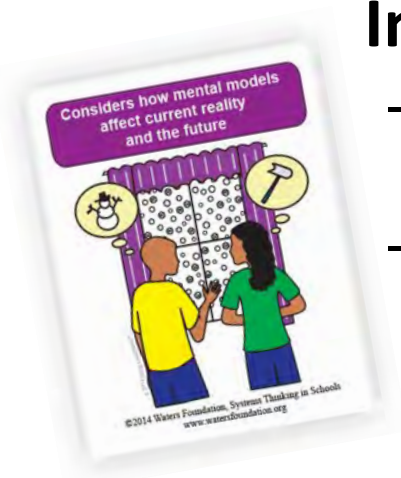
Managing your Ladder of Inference

- **Reflection**

- Try to suspend judgment
- Become more aware of your own thinking and broaden your observations

Inquiry

- Inquire into other's thinking and reasoning
- Ask open-ended questions that seek clarification



Managing your Ladder of Inference

- **Reflection**

- Try to suspend judgment
- Become more aware of your own thinking and broaden your observations

- **Inquiry**

- Inquire into other's thinking and reasoning
- Ask open-ended questions that seek clarification

- **Advocacy**

- Make your thinking and reasoning visible to others by describing what influenced your thinking and your actions





Practice Scenarios

- With a partner select a scenario
- Consider the problem
- Select relevant Habits of Systems Thinker
- Use the Ladder of Inference
 - Reflection, Inquiry and/or Advocacy
- Consider Unintended Consequences of Possible Solutions

Practice the Habit

A systems thinker looks ahead and anticipates not only the immediate results of actions, but also the effects down the road. Think about a decision you are about to make that will lead to action. Read and respond to the following questions to help you consider both expected and unexpected consequences.

What are possible unintended consequences of your decision? They might involve reactions, attitudes, results or new challenges.

Identify the benefits and trade-offs of your decision. How will you minimize the impact of the trade-offs? What structures can you put into place (e.g. communication, safeguards, modified practices) to address the potential impact of trade-offs?

Will your decision involve short-term hardship to achieve long-term success? If so, what is your plan to minimize the challenges you expect to face in the short run? If not, describe the road to long-term success.

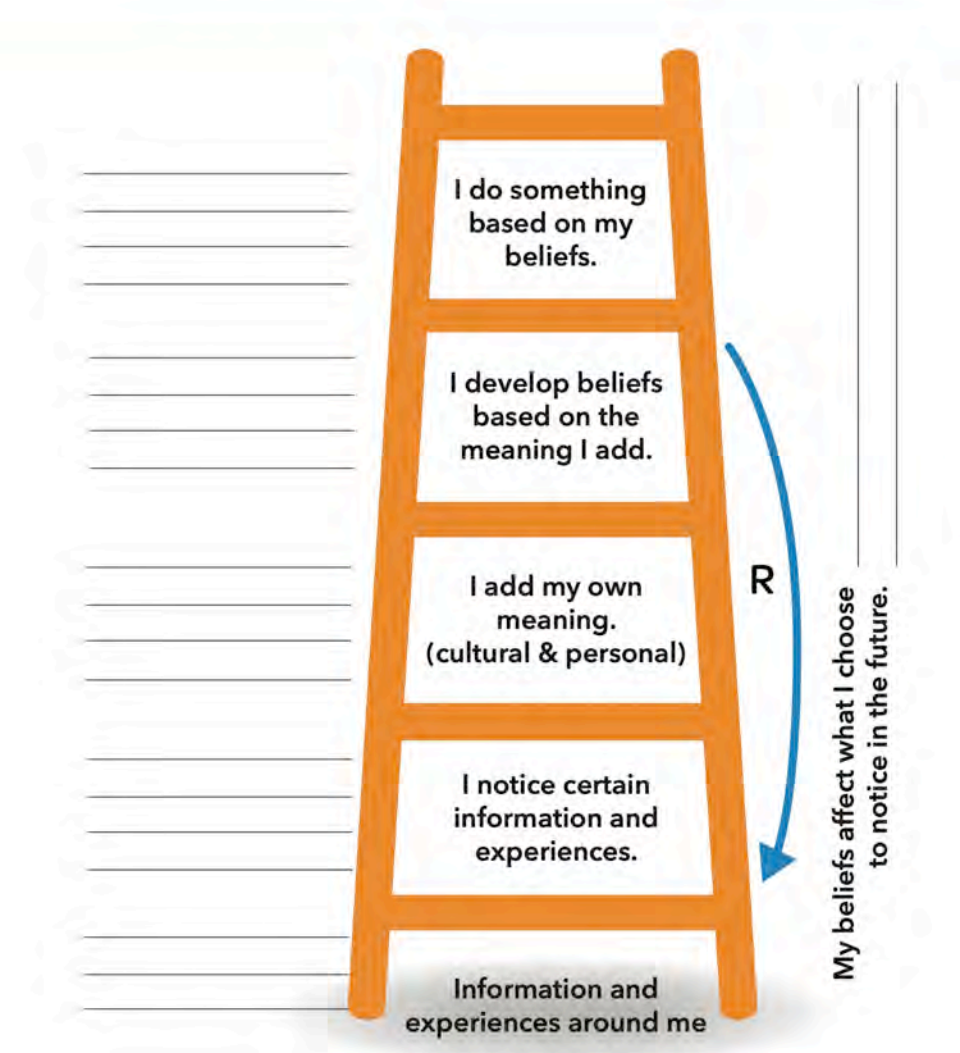
WHAT'S NEXT?

Systems thinkers carefully consider the interrelationships among key elements that influence change over time. Their full attention to the consequences of actions and the patience required when responding thoughtfully is important in the next chapter. Resisting the urge to come to a quick conclusion is a high priority for systems thinkers.

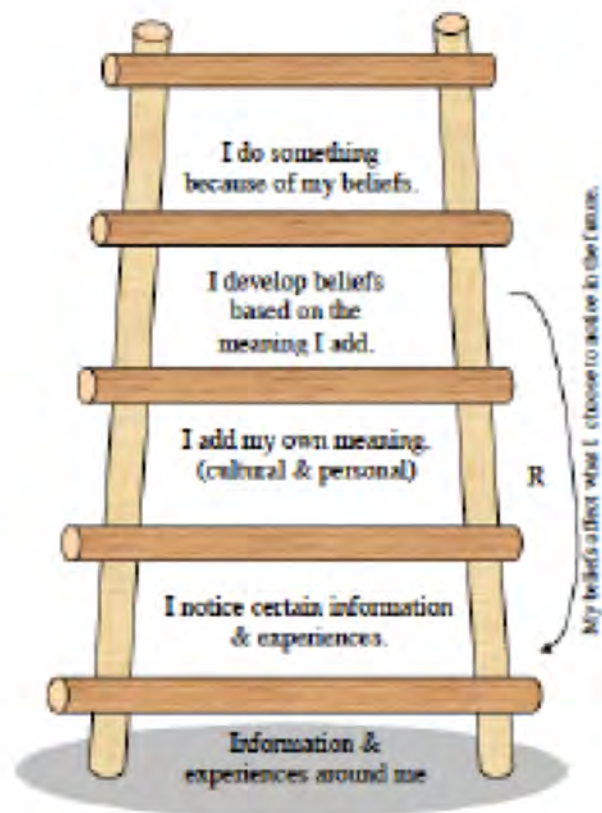




Ladder of Inference



Ladder of Inference as Tool for Debrief or Reflection



Adapted from The Art of Change Alliance
Systems Thinking in Schools, Waters Foundation

Information & Experiences:

Based on my previous experiences what was I expecting?

What did I notice? What did I pay attention to?

How did my mental models influence what I noticed, heard and saw?

Was I aware of my perceptions / mental models?

Personal & Cultural Perspective:

How did I interpret this experience – what are my assumptions?

What influenced my experience of this event?

Do others share my perceptions?

What questions do I have?

Beliefs:

What do I believe based on my interpretation of my experience?

What information led me to develop my beliefs?

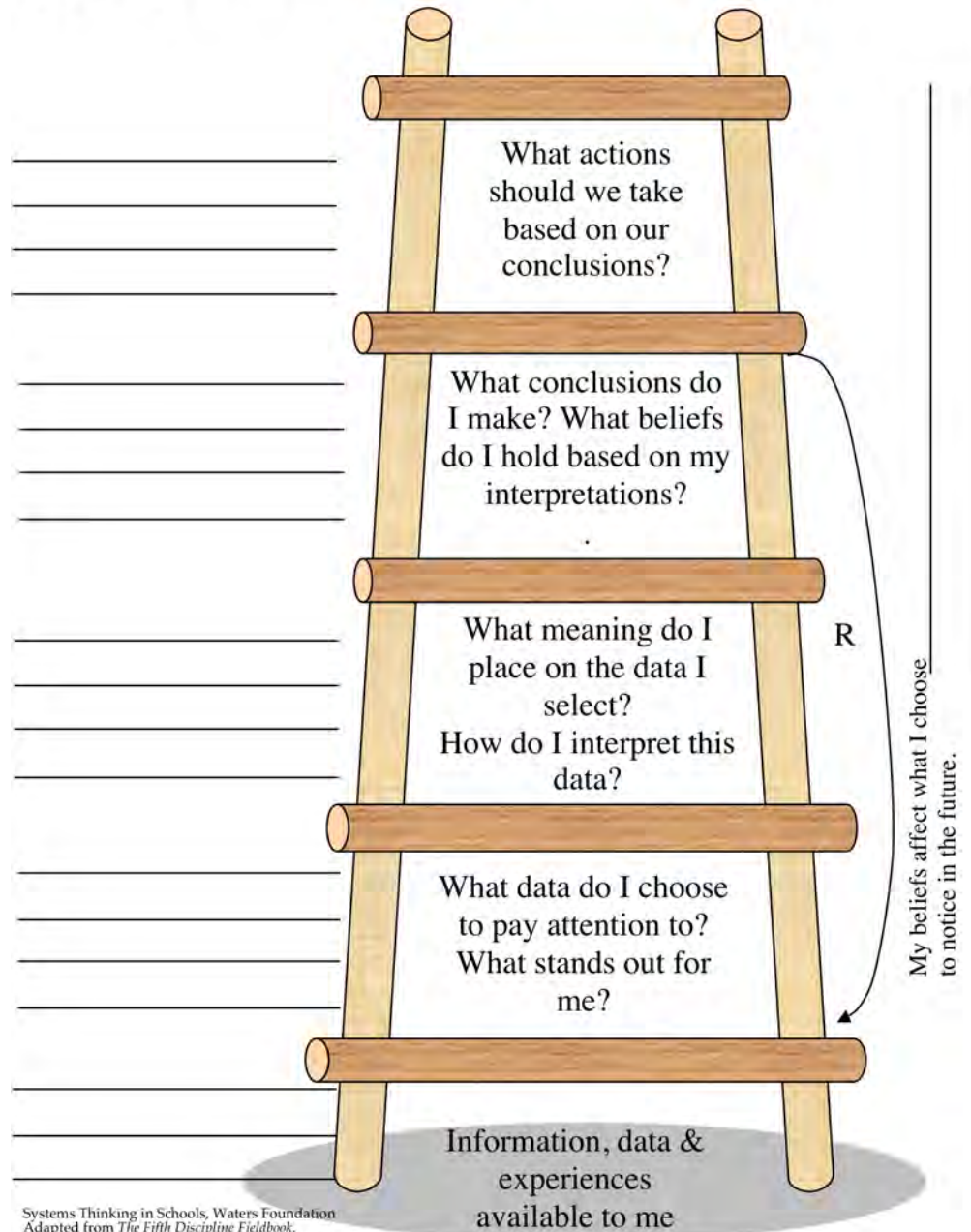
Did my beliefs affect what I noticed?

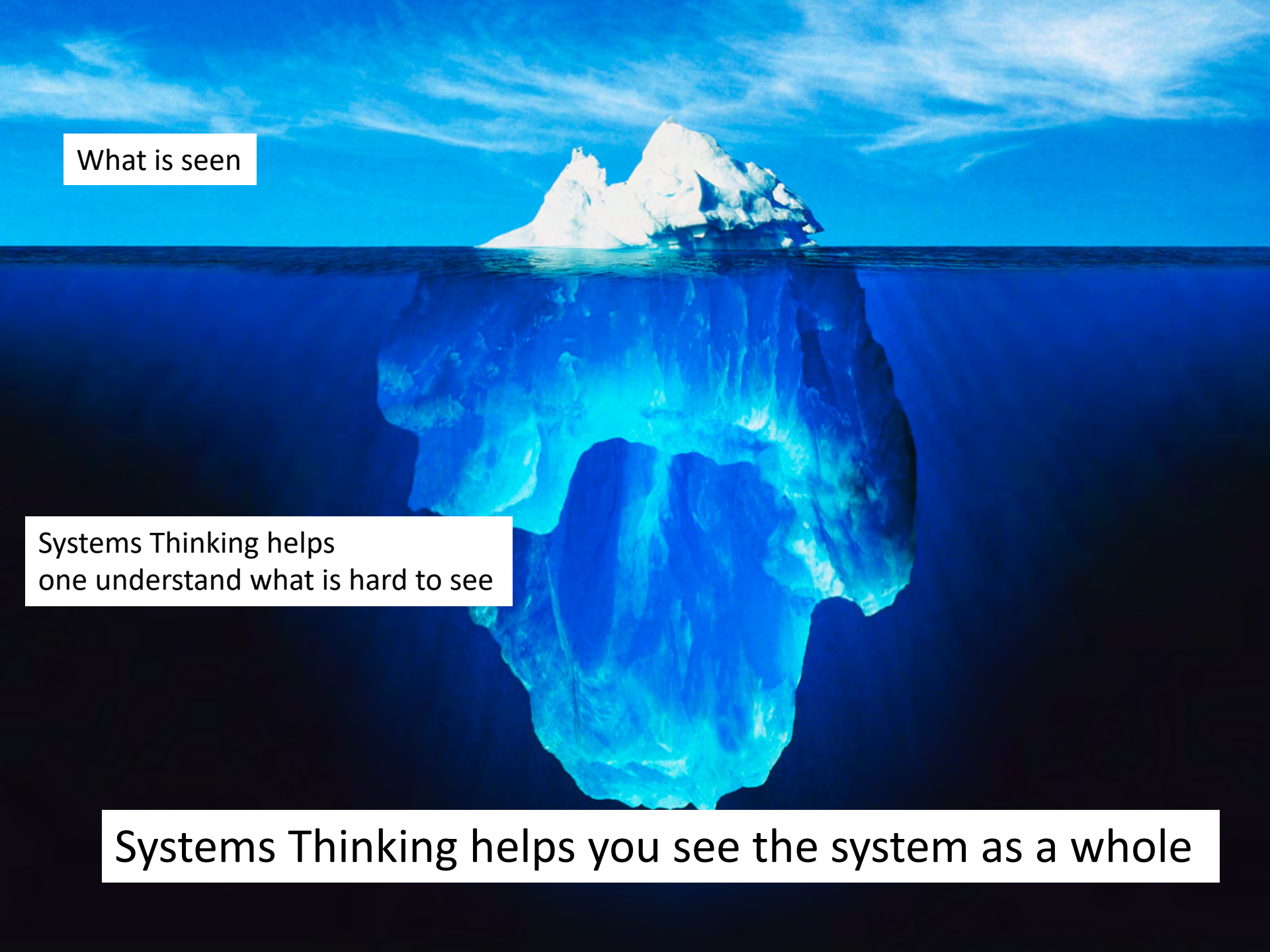
Have I any of my perceptions or beliefs changed?

What actions will I take?

NOTES:

Applying the Ladder of Inference to School or District Data





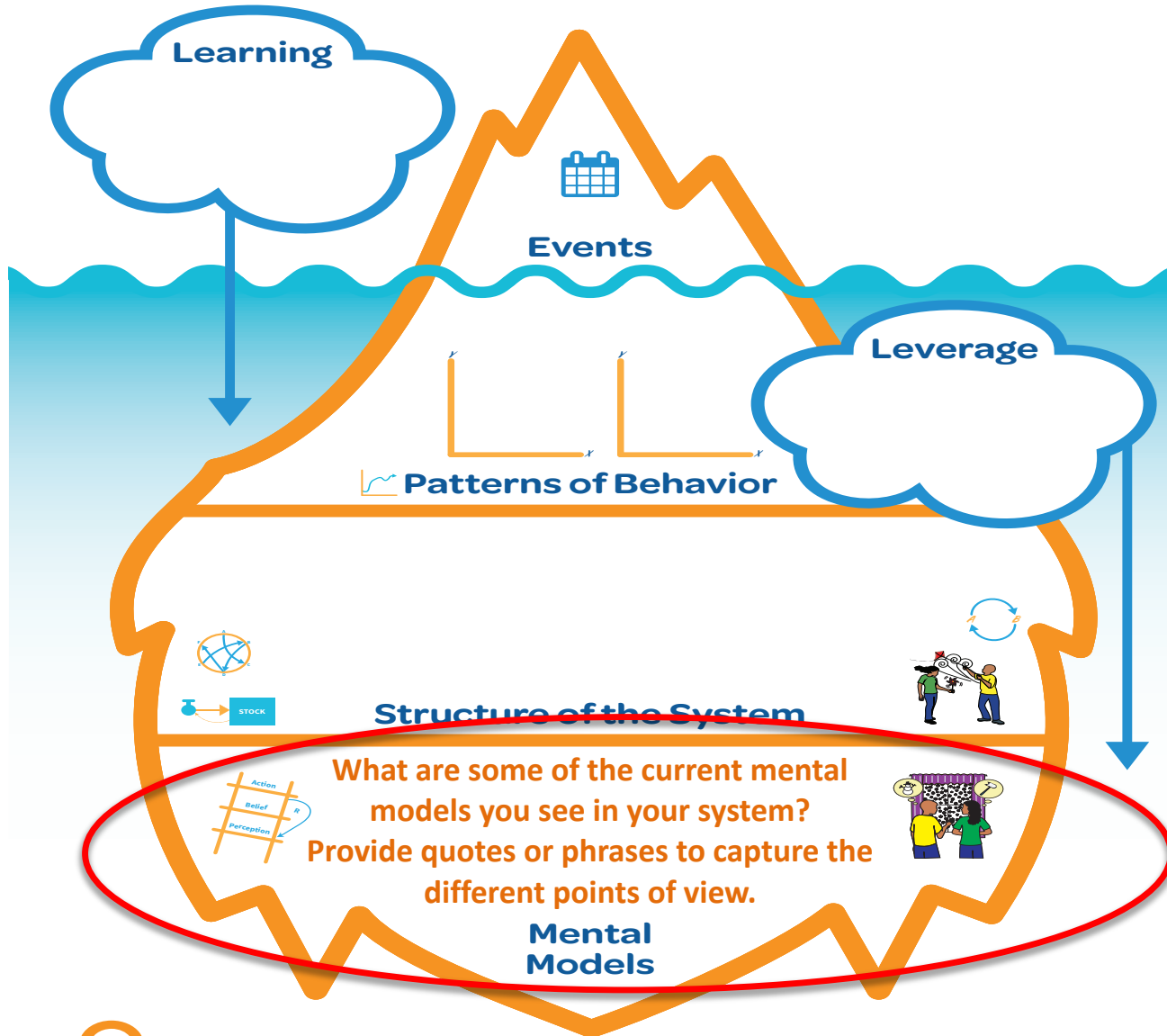
What is seen

Systems Thinking helps
one understand what is hard to see

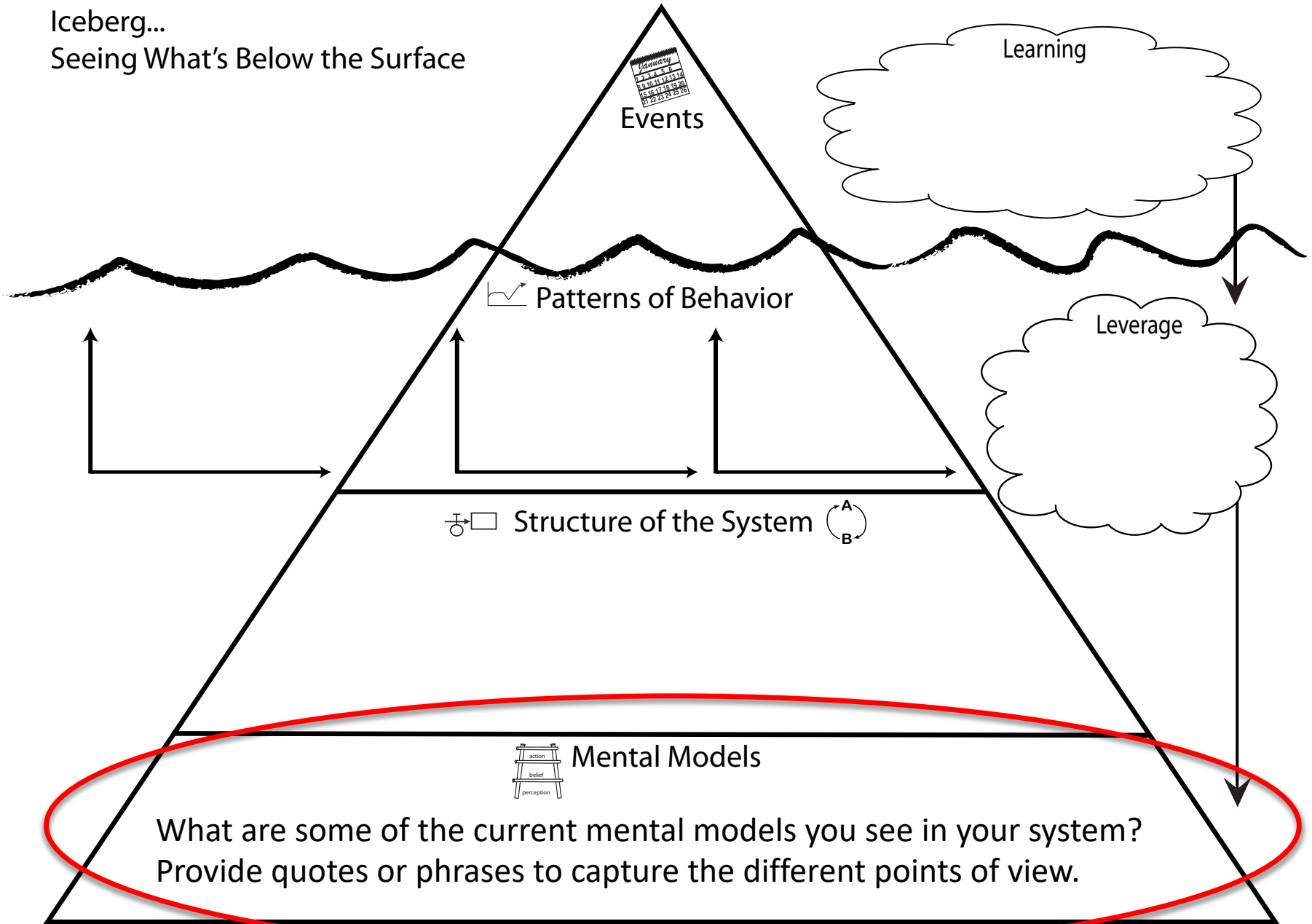
Systems Thinking helps you see the system as a whole

Iceberg

Seeing What's Below the Surface



Iceberg...
Seeing What's Below the Surface





What role do mental models play in your work setting?

What are some **mental models** you may be holding (about the system, about others) that may be **barriers to achieving your desired outcomes?**



Practice the Habit

Identify a situation where you might be able to gain some clarity by changing your perspective. Apply the following questions to the situation to help you in seeking additional perspectives.

1. How does my point of view influence my understanding of the situation?

2. How might a different point of view inform my understanding of the situation?

3. Who could I approach to help me gain new perspectives on the situation?

4. If I truly understood that other person's perspective, what would I notice about my current situation?

5. How do different points of view influence my understanding of the system?
