

## Management Matters: Mental Models

Ellen Kagen: Hello, I'm Ellen Kagen, Director of the Georgetown University Leadership Academy and its Leadership Development Program for Professionals and Civic Leaders. On behalf of the office of Head Start and the National Center on Program Management and Fiscal Operations, I'd like to welcome you to the second in a series of Management Matters presentations on the topic of leadership entitled, "Why Did I Do That? Mental Models and Their Influence on Your Work as a Leader."

I'm looking forward to being your guide through this Management Matters session as you reflect on some of your mental models, consider where they came from, recognize how your mental models differ from those held by the people you work with. And identify strategies that you use right away to manage your mental models in order to achieve even greater effectiveness as a leader of high quality early education for young children. Are you often frustrated or disappointed when interacting with certain individuals or agencies?

As a supervisor, have you ever tried to help someone change or grow in their job and found that, despite your best efforts, they never change? As a leader, you seek to mobilize change. Change in outcomes, processes, or people. But often in order to achieve the changes you're seeking, you must first change yourself.

Doing work in the same way that you have always done it and communicating with others in the same way that you have always communicated is unlikely to change the status quo. When you are acting out of habit, even when you are trying to help others resolve a problem, you are not necessarily being your best self. Throughout your day, you're constantly interacting with others, making decisions, and taking action. All of those activities are influenced by what thought leaders, including noted author Peter Senge, call your mental models.

The way in which you see the world around you. Failing to recognize and manage your mental models can complicate your interactions with others, create frustration for yourself and those around you, limit your ability to solve problems, and cause you to miss opportunities. Here's an example. Suppose you're planning a family health and well-being program, an initiative that you developed and have run successfully for many years.

In the past, you have invited the other child-serving organizations in your community to participate in the program using an email blast that went to all of them at once. However, you noticed that few participated or even responded to your email. This year, determined to increase participation by your sister organizations, you have come up with a great idea. You will write a targeted letter to each one.

Your energy is high. And during your weekly check in with your supervisor, you proudly tell her about the letters. However, your pride and enthusiasm quickly turn to anger and resentment when she informs you that she will be reviewing all of your letters before you send them. You think to yourself, how dare she review my work. I'm a competent professional.

She is such a micromanager. Your perception of your boss as a micromanager, someone who is stifling your creativity and influence, is an example of your mental model at work. Your resentment fuels the already difficult relationship that you have with your boss. You are so upset about the situation that you decide not to send the letters at all. Your mental model of your boss as a micromanager is preventing you from being your best self.

Worse yet, you blame her for shutting you down. Sound familiar? Let's explore the concept of mental models more deeply so that you can prevent these kinds of leadership pitfalls and be your best self in every interaction by recognizing that you have mental models in the first place, acknowledging that they may be different from those held by others, and managing them.

First, let's recognize them. When you see someone driving a vehicle like this, what thoughts come to mind about the person behind the wheel? What about the person driving this vehicle? Or the person riding in the back of this? How about this person driving the pickup truck?

What kind of person drives something like this? Or this? And what do you imagine about the person driving this? Like most people, you probably have internal thoughts or images about people who drive certain kinds of vehicles. Soccer moms, cowboys, tree huggers, show offs.

But those thoughts and images don't stop there. You have them about almost everything in your world. What thoughts come to mind when you hear the word teenager? In my teaching, I have heard all kinds of words shared when I ask this question. Most of them are not very positive.

Do you think rebellious? Irresponsible? Unreliable? Energetic? Creative?

Tech-savvy? Your mental images and thoughts about teenagers, people who drive certain kinds of vehicles, or your boss are your mental models. And your mental models are different from the mental models of the people around you. So what are mental models? Your mental models are the way that you see, in your mind, the world around you.

They are the combination of your beliefs, habits of thought, ancestral voices, which are the ideas that have been passed down to you from generation to generation, assumptions, and perceptions. It is important to note that your mental models are encoded in physical structures in your brain. As James Zull, biology professor and author of the book *The Art of Changing the Brain* puts it, "it seems that every fact we know, every idea we understand, and every action we take has the form of a network of neurons in our brain."

So your mental models are literally neural pathways in your brain. They are your status quo, so to speak. The way you naturally think. Those thoughts, when habitually acted upon, will become almost hard wired. Now Peter Senge did not know this in 1990 when he wrote about mental models in his seminal work, *The Fifth Discipline*, but now with the advent of advanced neuroscience, we do.

So where do your mental models come from? Your culture has a big influence of them. And by culture, I mean the multiple cultures that you're a part of. The collection of beliefs, customs, habits, and conventions that you grew up with. Culture, in this sense, is yours alone.

It's unique to you. Your culture is part of your identity. It influences the values you hold, the choices you make in your life, and your behaviors and actions. Culture is a bit like an iceberg. Some parts of your culture-- such as food, music, or dress-- are obvious because they are visible.

Yet other aspects of your culture are below the surface and not visible. What you don't know about a person is much more than what you do know. As you interact with others, you know very little about

why they act the way they do. Most of their cultural context is what is called out of awareness. But what is out of awareness is precisely what informs their mental models.

These deeper elements of their culture, whilst less obvious, are still powerful. They still influence their mental models, the judgments they make, and the actions they take. And the same is true for you. Your individual culture is an important influence on your mental models, but it is not the only one. At work, you engage with others as part of an organizational culture which guides the norms, behaviors, and actions in the organization, including you.

Some aspects of your organizational culture may be formally determined and spelled out, like Monday morning staff meetings. Other aspects may develop informally and, like some aspects of your individual culture, you might not even be aware of them, like decisions are really made through conversations in the hallway. In addition, you and your organization work within a political climate which is influenced by people and institutions in your community, and at the state and federal levels.

Just like your individual culture, the culture of your organization and the political climate you work in can influence your mental models. In addition to culture, your mental models are developed and shaped by your life experiences and personality. During your life, you have had millions of experiences and observations, and have been exposed to millions of ideas. Your mental models help you organize all of that information into patterns that you use to analyze, evaluate, and make sense of new observations and experiences.

You may be conscious of some of your mental models but unaware of others that are deep in your unconscious mind. It can be easy to see the mental models that other people hold, but difficult to recognize your own because they are so true to you. Even though it can be difficult, it is important to be aware of your mental models because they influence your actions and behaviors, the things that others see and experience about you.

Your mental models can help move a new idea forward, or interfere with your understanding of the world and your interactions with others. Going deeper into how mental models can prevent you from being your best self, and perhaps shutting you off from innovation. Let's think about your hypothetical boss from the scenario I mentioned earlier. Your mental model was that your boss is a micromanager. And although you might not have realized that your mental model was at work, it influenced your emotions.

It shut you down. You felt insulted. And it impacted your action, which was to not send the letters inviting other organizations to participate in your family health and well-being program. So you can see why paying attention to your mental models is so important. They influence not only your perceptions of the world around you and the judgments you make, but they also may impact the way in which you behave.

They can make you open to possibilities, like inviting partners to participate in your program, or shut them down. What about your mental model of teenager? Imagine that you are on your way to a meeting with the parents of a child in your program. When you enter the meeting room, you realize that the parents are teenagers. Unconsciously, below the watermark, you see teenagers as rebellious and irresponsible.

How will that mental model impact your ability to build a positive working relationship? Before you even begin the conversation with them, you have started your own internal conversation with yourself. Your mental models can create significant challenges for you without you even knowing it. However when you and those you are working with acknowledge and respect that you may have different mental models, your ability to communicate and work together to resolve challenges is greatly enhanced.

So how do your mental models shape your perceptions, judgments, and actions? One way is through a process called the ladder of inference. The ladder of inference, postulated by Chris Argyris, describes the process of moving from observable data and experiences to taking action. You begin to climb the ladder of inference when you experience or observe something. Although there may be many aspects to the experience or a lot of data to observe, you are likely to select or focus on just some of those aspects.

Here is where a mental models come in. As with all people, your mental models naturally drive you to notice and pay attention to some things while blinding you to others. They cause your attention to be selective. They focus your attention on particular people, values, beliefs, or perceptions while making you miss others.

As you saw in the video that was recommended as pre-work for this presentation, your selective attention gets in the way of your ability to see the whole picture, and therefore limits your ability to see the entire situation. Other situations where selective attention gets in the way might be if you have a negative view of someone, selective attention can limit your ability to see their strengths. If you're too optimistic, selective attention can blind you to potential threats to your organization.

If you have a fixed mindset, you may fail to see potential solutions to difficult problems or new opportunities to pursue. One simple check-in is this-- do you even notice the piles in your office anymore? On the next rung on the ladder of inference, you assign meaning to the information you have selected. The meaning-- which could be positive, negative, or neutral-- is influenced by your mental models.

This can be especially true when your experience or observation has been of a situation or person you're familiar with because you have already developed a mental model about them. Moving up the ladder, you make assumptions based on the meaning you've given to the information you selected. Next, you begin to draw conclusions. And those conclusions can lead you to adopt beliefs about people or situations. Ultimately your actions, such as your interactions with people and situations, are based on your assumptions, conclusions, and beliefs, all of which have been influenced by your mental models.

Your new or modified beliefs contribute to the mental models that shape your future perceptions, judgments, and actions. Let's look at how you might climb the ladder of inference at work. Imagine that in your many years of experience as a supervisor, several employees have asked you for a raise. Or maybe you've overheard employees complaining about low pay at the water cooler. Although you often get requests for various perks from your staff, the requests for pay raises are particularly uncomfortable for you, so they stand out in your mind.

Because you've received two requests for raises recently and because you would like a raise yourself, you think that pay is the biggest issue among your staff. You have locked in on salary being their primary motivator. You assume that everyone on the staff want a pay raise more than anything else. You conclude that any additional resources available in the upcoming year should be devoted to pay increases.

Over time, you develop the belief that people are primarily motivated by money. Your efforts to improve staff morale begin and end with salaries. If it is impossible to increase pay, you don't consider alternative ways to motivate your staff. In fact, you don't even really think about it. The ladder of inference was recently affirmed by Daniel Pink in his book on motivation entitled Drive.

Your ladder of inference might lead you to believe that motivation starts with income and salary level. However, when Daniel Pink looked at the research, he found that autonomy and the feeling of contributing to a larger goal was significantly more motivating than raises. Pause for a moment and think of a time when you might have moved too quickly up the ladder of inference. When you might have taken some action that was based on missing important data, applying a faulty mental model, making dubious assumptions, jumping to conclusions, or adopting misguided beliefs. How often have you tried to fix something when all your team member wanted was to share frustration?

How often have you labeled someone disorganized or disrespectful just because they were late? Examples like these demonstrate why being aware of your mental model is so important. Awareness of your mental models can keep you from climbing the ladder of inference too quickly. It can prevent you from doing great harm to yourself or to others. So now that you have some understanding of how mental models shape your perceptions and judgments, and know that they influence your actions, what can you do to manage your mental models so they don't just run up the ladder of inference too quickly?

Of course, one important thing you can do is to acknowledge that your mental models exist. That they shape your perceptions, judgments, and actions, and that they need to be held lightly. Other strategies which we will explore in more detail include pausing your assessments, testing your mental models by distinguishing between assessments and assertions, using inquiry instead of advocacy, and using dialogue instead of discussion.

Pausing your use of assessments is one way to manage your mental models. To do so, it will be important to understand the difference between assessments and assertions. An assessment is an idea or statement that cannot be shown to be true or false. On the other hand, an assertion can be shown to be true or false. Let's look at a couple of examples.

Saying that a room is too cold is an assessment because it cannot be shown to be true or false. Some people in the room might feel cold while others in that same room might feel comfortable. But saying that the temperature is 67 degrees is an assertion because it can be shown to be true or false using a thermometer.

A statement, like hiring additional staff would not be worth the added cost, is an assessment. It cannot be shown to be true or false because different people can have different yet very legitimate ideas about whether additional staff would be worth the cost. An existing budget and projected salary costs could show that the cost would be more than it has been budgeted for personnel. So it is an assertion. That fact may or may not change your assessment about whether hiring additional staff would be worth it.

Facts or assertions are simply additional pieces to the assessment puzzle. The distinction between assessment and assertions, however, does not lead to an answer. It merely shows you that what you think is fact or truth is only your assessment about what you observe or what you experience. You can have a conversation and can document the words that were said-- the script-- and yet there's much

more going on that is not stated explicitly. Your assessments are always on because human beings are assessment-making machines.

Thinking back to the scenario about your hypothetical boss, when you decided that she was micromanaging, you were making an assessment. When working with others, relying on your assessments as truth can make it difficult to develop shared understandings and make meaningful progress on an issue. Because you each have different mental models, and therefore naturally see things differently.

Instead, try to manage your mental models by pausing your assessments and holding them lightly. Pausing your assessments gives you the space to test your mental models and those of others, which brings us to another strategy for managing your mental models. Consider for a moment this quote from Professor Daniel Kies.

"If we believe something to be true that is not tested or not true, we often act as if it is true." Another way to be more effective in working with others is to consider whether your mental models are relevant, and test them against reality. Ask yourself, is it really true that your boss is a micromanager? As you test that mental model, you might recall that you have had an awful lot of autonomy in other work. Is she really trying to stifle your creativity and influence?

Really? Is that what motivated her to ask to review the letters before you sent them out? Some of your mental models may be based on what we call grounded assessments. They are warranted because they are relevant, and there is objective evidence over time to support them. So they will match reality pretty well.

Other assessments, however, are not so grounded and are unwarranted. They surface quickly and can be based on biases or cultural messages, and there is no objective evidence to support them. Just because your teenagers were rebellious and unreliable, you cannot assume that the teenage parents sitting in your office are rebellious and unreliable. Before you jump to judgment, pause your assessments so you can make sure they are grounded.

Keep those that are relevant and warranted, and discard those that are irrelevant and unwarranted. In other words, hold your assessments lightly until they are tested. The more you are aware of your mental models, the stronger and more powerful your capacity for effective interactions will be with everyone.

Another way to manage your mental models is to use inquiry rather than advocacy. Advocacy means stating your point of view, expressing your opinion, or urging a particular action that you think is best. Inquiry means asking questions, clarifying information, or being curious. Sometimes your initial inquiry is internal.

Getting back to your micromanaging boss, your internal question might be, I wonder why she said that? It allows you to ask yourself a question as you pause and test. As a leader, there are times when you will need to use advocacy. Advocacy reinforces your mental models. But when working with others to solve complex problems with many different perspectives, you can manage your mental models by moving to inquiry.

Let me show you what I mean. Take a look at the four square of the relationship between advocacy and inquiry. Let's look now to the upper left hand corner. When you are telling or explaining, you are using

high advocacy and low inquiry. This is one-way communication from you to others, which can be good for sharing your perspectives with others based on your mental models.

High advocacy and low inquiry can be appropriate when you are bringing already conceived ideas to a group of people. To manage your mental models, you can move to low advocacy and high inquiry. This is asking. Also, one-way communication from others to you. It is useful for gathering information for discovery, for exploring others' mental models, and the experiences and thinking on which they are based.

Often we can learn what is below the surface by choosing inquiry. Let's move to box number three. As a leader, there will be times when you need to simply step back and observe. In this case, you are using low advocacy and low inquiry. You say very little here.

You are in a watchful mode, highly sensitive to process, watching the conversation flow without saying much. Remaining keenly aware to all the mental models that are present. You can help a group move to box four, high inquiry and high advocacy, when you have many legitimate competing perspectives, and ideas are new and complex. In this space, everyone monitors their own mental models.

This is a two-way communication. High inquiry and high advocacy is generative and offers great opportunities for learning and generating ideas because all parties can state their own views and ask for the views of others. Imagine if you took a generating approach with your boss. You could've paused your assessments and, from a place of curiosity, asked, what was the meaning behind her wanting to review the letters before they were sent?

If you had, you might have learned that, unbeknownst to you, past efforts to collaborate with other organizations had actually led to bitter disagreements over funding, visibility, and turf. And your boss wanted to review the letters only to ensure that they would not trigger some of those very same issues. Would that piece of data cause you to shift your mental model and lead you to a different conclusion? The handout from this presentation on advocacy and inquiry provide you with more guidance on how to use this concept to manage your mental models.

One final way to manage your mental models is to increase your use of dialogue instead of discussion. In a discussion, you've already identified the challenge and the solution. Your mental model of the situation is fixed. You present your idea for all to analyze and discuss, you state your case clearly and with passion as you try to build support for your idea so that it wins.

Discussion is how most people communicate most of the time. Most staff meeting agendas are discussion. Of course, it can include brainstorming and improving your idea, but in the end, it is still your idea. So how is dialogue different? When you use dialogue, you don't define the challenge.

You engage the group in defining the challenge and the best possible outcome. Doing so helps to ensure that everyone has a shared mental model about the nature of the challenge which makes it easier to identify a potential solution that everyone can support, and that has a good chance of solving the challenge. Dialogue is less common than discussion, but is a good way to manage your mental models. More is achieved as everyone works together and contributes to the idea.

Let's consider an example. Imagine that you believe that parents are not as engaged as they should be in their children's education. Your mental model is that parents do not know how to support their child's

education. And why should they? Unlike you, they do not have the education needed to teach young children.

They know only their own child. You have so much experience working with children, so you decide to conduct a parent education program. Can you identify all of the mental models that led you to that decision? What would it look like if you started the conversation not with the solution, like a parent education program, but with questions?

How do we understand parent engagement? Does it need to be supported? What would be different in our agency if parents were more engaged? What do we know about the parents' perspective? What do they think of us?

What is our current relationship with them? And how important is their relationship with us? Are we satisfied with the current relationship? How are our relationship with parents and their engagement in their child's education related? What might we do to strengthen the relationship what is the best possible outcome?

Each question allows us to look at the challenge through a different lens. Collectively you might come to realize that the challenge might be in the relationship they have with us, not parents' lack of knowledge. Through dialogue, a solution will emerge, and then the conversation can shift to discussion with everyone on the same page. The result is that mental models, maybe even yours, have shifted through the process, and a new, shared solution has been discovered and allowed to emerge. The handout from this Management Matters on dialogue and discussion provides you with more guidance on how to use dialogue to manage your mental models.

So to summarize, mental models are conceptual, indeed. But if you can manage them by holding them lightly, testing them, and using more inquiry and dialogue, you can limit your false starts, create better relationships, find yourself more curious and energized by the generation of new ideas, and avoid some of the pitfalls that mental models can pose. Like all leadership skills, developing an awareness of and managing your mental models is a process.

Your mental models do not disappear or change immediately. Yes, you might still think of teenagers as rebellious. You might still cringe when your boss asks to see letters you've written before you send them. But if you are persistent, your efforts to manage your mental models, pause your assessments, and tell a different story will be successful. And that success will translate into greater effectiveness as a leader, and ultimately, in your ability to create even stronger outcomes for young children and their families.

I would like to end with a story by Margaret Wheatley from her book *Leadership and the New Science* that shows what can happen when we manage our mental models and are open to seeing things differently. "I listened one night to a radio interview with a geologist whose specialty was beaches and shorelines. The interview was being conducted as a huge hurricane was pounding the Outer Banks of the eastern United States.

The geologist had studied the Outer Banks for many years and was speaking fondly about their unique geological features. He was waiting for the storm to abate so he could get out and take a look at the hurricane's impact. The interviewer asked, 'what do you expect to find when you go out there?' Like the interviewer, I assumed he would present a litany of disasters.

Demolished homes, felled trees, eroded shorelines. But he surprised me. 'I expect,' he said calmly, 'to find a new beach.'" May we be able to see our mental models, hold them lightly, and then manage them over time so we too can see the new beach.

The new opportunities to work together. The new capacities to grow together. And the new courage to change our minds so that together we can all lead more effectively on behalf of children and their families.

Thank you.

[End video]