

Grotzer Clip 5 Transcript

TINA GROTZER: So I'm going to move on because I want to say a few things before break. But I want you to hold the experience of what it felt like to try to think about something deeply, and reflect on it, that metacognitive piece, and even to look at and manage your thinking processes.

So you were clearly managing as you were thinking about confirmation bias, and saying, should I be doing this, is it OK, is it not? Let me say a little bit about the research on thinking and metacognition. And then I'm going to have you look at some research findings, in groups, and really tease them apart and discuss them.

But I just want to draw two bodies of research in, from the developmental work. So one is the theory of mind research. So for a long time, people thought, well, very young kids can't engage in metacognition. If we look at Piaget, we would say, well, by eight or nine, as they become more abstract. But there's research to show that very clearly, kids as young as six, and that even kids who are preschoolers, start to think about their minds and how their minds are working.

There's a lot of information that they don't have. But we talked about the theory of mind research when we were talking about development. So this is the idea that people are doing things in their minds. So even you guys, in fifth grade, who were saying, what am I supposed to be doing in my mind, I can't just crunch up my face, I have to actually be doing something--

So they are developing ideas about how minds work. What you know is different from what they know. And they can develop theories about how, oh, so-and-so is able to think about this in different ways. Maybe I can learn from that person. Or maybe I want to know what's in that person's mind.

The cognitive-load research pertains to younger children, in the sense that, often, there's much more cognitive load to them. They're universal novices. So you guys walk around the world and a lot about the world. And for kids, it's a lot of discrete pieces. And I'll come back to the analogy of teaching my 17-year-olds how to drive. My son told me recently, now it all fits together. I step on the brake, I turn the wheel. I can do all these things at once, and I can talk to you now, Mom-- because he couldn't for a long time.

So there's that sort of cognitive-load piece of how much information you're trying to hold. So if you've never experienced lots of popcorn in the pot, you're like, OK, so what's this piece and what's that piece? Whereas we might look at that and say, oh, that's oil, that's a popcorn seed, that's-- you don't see it as one unit.

And then it also connects to the executive-functioning research. That should be no surprise because executive function is about planning. It's about how we organize things. So the idea that metacognition would be related to it, that kids who are good at executive function also have better metacognitive skills isn't really a surprise.