Getting Started With Building Thinking Classrooms

Hand2Mind Webinar

Can you summarize the book and your findings?

- Building a Thinking Classroom is a reaction to an observed reality that a lot of students spend a lot of time not thinking.
- Thinking is a necessary precursor to learning.
- Classrooms typically aren't designed for thinking but for conformity and compliance.
- In a thinking classroom, students are standing, working in small groups, working and collaborating on tasks. The teacher is active.

Can you summarize a thinking task and explain how it is different from traditional problem solving?

- A task is inert. All tasks are potentially thinking tasks until we suck the thinking out of them by telling students how to do it. Then they become mimicking tasks.
- Not every task is a thinking task for everybody. It needs to require students to reach a little bit beyond what they know.
- We have built a monument to problems. We position problems as something other than the curricular tasks that we need to engage in while anything that is problematic is a problem. Peter can open up any textbook and see rich problems and rich tasks or he can open up a textbook and just see exercises.

How can the idea of visual stimulation relate to the content of math instruction and use of manipulatives?

- Students don't listen to what we say. They listen to what we do. They take cues from the environment around them.
- The teacher might say one thing but the environment might say something else. It says, "This teacher expects perfection."
- Manipulatives should be ever present. We have to be more strategic with them in a thinking classroom. K-3 kids are working on the floor with manipulatives and then representing their work on the whiteboards.
- Concrete, pictorial, and abstract are strung together like pearls. It's not concrete or pictorial or abstract. Sometimes it ends up like a fork. Students can do all three but don't see the connection between them. They end up being three distinct ways of doing something. It's not concrete and then pictorial and then abstract. Don't do them in isolation. If they're manipulating, they're also writing on the whiteboards. They have to be in close proximity to each other. It's not, today we're using manipulatives and tomorrow we'll write on the whiteboards.

What differences are there between a secondary and elementary thinking classroom?

- There aren't many differences, but there are differences between primary and the other classrooms.

- In primary, we're learning to collaborate so in later grades we can collaborate to learn which is not to say they stall out there. They do full-on thinking, just not maybe on day one.
- There are things we need to work on more explicitly in primary than in other grades.
- The biggest difference is the things we place importance on, for example, notes. Primary teachers don't care as much about notes as secondary teachers.
- By and large, thinking is thinking and kids are kids.

Can you explain thin slicing and how it is used?

- A sequence of tasks that get progressively harder as a student's ability increases.
- The tasks become cognitively more demanding.
- Taking a bunch of tasks and asking, "What order should they be in from a student learning developmental level perspective?"
- When students figure out one, they learn something and they're ready for the next challenge and so on. When done well, we can take a student from a rudimentary understanding to something complex.
- Build in redundancy. Include two or three more tasks that are just at the same cognitive level, although the redundancy can get a little bit harder. Learning works on partial understanding.
- We can thin slice with manipulatives, with models, with resources, with technology.

How do you encourage teachers to implement strategies when they're concerned about behavior and control of the environment?

- The majority of teachers are always working on their craft, but loss of control does scare them.
- There are different kinds of control. There's control because I'm worried about behavioral challenges. There's control because I want to maintain the pace of the content because we have a lot of stuff to get through. Control comes in different ways.
- Along with control comes teacher-centeredness. The more we have, the less control students have. Students thrive in environments when they have self-determination, autonomy, some semblance of choice, and the ability to regulate some of their own behaviors. The challenge is that the more control we take, the less control they have. If we want our class to be more student-centered we have to give up control.
- That doesn't mean we just throw the doors open to chaos. A building thinking classroom has elements of unpredictability in it, but it also has structure.
- There's very clear structure in a thinking classroom. Patterns will emerge that allow teachers to maintain pace and rigor.
- One place we give up control is who students work with and is by far what teachers are most afraid of.
- Random groups is the most powerful practice of all of the 14 practices. It creates the community on which the rest of building thinking classrooms is built. Empathy is unlocked. Collaboration looks completely different.
- It's the easiest to implement and cheapest to implement but scariest.

- One of the ways we maintain control in the classroom is through proximity, which includes the students' proximity to each other. With random groups, I can't predict who you work with or who you are working next too. Part of a building thinking classroom is about creating that freedom to move through the room to get ideas.
- We see students thrive. We have to have the courage to try.
- It doesn't mean we don't control the pace. It doesn't I don't have a conversation with a student and send them back to their board.
- We transform our spaces from where students are held accountable to where students are taking responsibility.

What do you do with students who refuse to work with random groups or students who refuse to cooperate?

- If students are refusing, that's not a thinking classroom issue. You have a bigger problem. That is a problem of relationship, respect. If that's what you're seeing in a thinking classroom, then it's happening every day, all day, elsewhere. It's just not as visible.
- In a normative classroom, the teacher might think it went great when it really wasn't. Compliance doesn't have to mean that they're on task. They can be completely zoned out and we still see that as a win. In a thinking classroom, if one student wanders away from their group, we think, "What is going on?" even though 29 other kids are 100% engaged. It's not just that they're off task, they're non-compliant. Walking around seems more non-compliant than sitting at their desk and doing nothing.
- We'll always have kids where non-compliance will leak out. It will leak out in ways that are way more visible and more psychologically challenging for us as teachers. We tend to process those behaviors as representative of the norm even though they're not. That's all the teacher sees. When in reality, it's an outlier behavior.
- We have to get good at dealing with the outliers. The wanderers, the kids with anxiety, the kids who are defiant. We have to understand that the defiance is just becoming more visible. They were defiant all along, but they were defiant in a way that we could rationalize as compliant.
- Be consistent and determined with the launch of the thinking classroom. Kids are used to teachers trying new stuff, but they start on Monday and on Thursday and they're back to how they did things before. Kids can wait you out. Do it boldly and bravely. Don't try to sneak it in meekly. Kids will resist. Overwhelm the system.

How do you help multilingual learners collaborate or take notes?

- Four to Six channels of communication exist in a classroom and at whiteboards, and only one is verbal. All the others are visual.
    - Verbal channel - talking to each other
    - Representational channel - writing on the whiteboard synchronized with what is being said
    - Pointing channel - there's a lot of pointing which is synchronized with what is being said

    - Gesture channel - it communicates emotion, it communicates mathematics, it communicates an interruption (there's a lot of interruption in the thinking classroom)
    - Manipulatives channel
    - Technology channel
- Language learners have so much access but visual cues are universal and not linked to language. They have ways to understand and be understood. There are more possibilities for them to enter into the conversation.
- Enrich the channels of communication so they have more access.
- Some typical problems with note taking are alleviated, because note making takes place collaboratively at the whiteboards.