

## QUEST 2016

### Heidi Siwak Thinking and problem-solving

HEIDI: Well, my transformation as a teacher began about six years ago. And at the beginning it was really all about the technology piece. Web 2.0, how can we connect globally, how could we engage in authentic meaningful projects. That was incredibly exciting. Having discovered integrative thinking -- I shifted to now it's all about the thinking piece. And I have four pedagogies that I've blended together. One is inquiry, one is design thinking, knowledge building, and integrated thinking lies at the foundation and supports everything.

And what I do is take the kids on a one-year thinking, problem-solving, collaboration journey. And we leverage our curriculum to create experiences where the students can develop insight about those three things. And we just have a lot of fun. And we push boundaries and we test ideas. And we come -- become better and better and better at understanding what it means to be a thinker and a problem solver.

So the Web 2.0 piece was me stopping being a [INAUDIBLE]. As I observed my own children and my husband who works with technology and how they were using it, and the kinds of interests the students in my classroom had, I realized at that point I needed to make shift.

The next piece came from really accepting an invitation to Rotman I think. And that day was eye-opening for me because I realized two things. The first was that just because my students were engaged in meaningful, authentic problem-based learning didn't necessarily mean they were altering their assumptions or conclusions about the world. And here was a set of tools I had that I could see if I began using those with students I would produce a different kind of a learner. And that was probably two-and-a-half years ago.

Last year was the year where I felt like, "Oh my goodness, I've produced a different kind of thinker." I can see it; the evidence is there. These kids are different from any other child that's emerged from my classroom.

They're such great thinkers. And when they encounter a problem, they have this toolkit of strategies that they just pull out to explore ideas and then find solutions. So I can give you an example of what happened in the classroom at one point. We were considering the desks in the classroom, how we could make those desks better. And as soon as that question was asked, like, a group of them just broke into design thinking. And began, you know, mapping out their ideas on the board and building on each other's ideas. "We could do this and this and this and this." They learned how to build ideas rather than reject. Or every idea gets included. And they just -- I could see visible before me, my students drawing upon everything they learned about thinking and problem solving.