

Innovations in Thinking and Learning

Craig Julseth – Exploring Integrative Thinking

CHAIG: When teachers come to the, I think, sessions for the very first time, it can be very overwhelming. And I just admit that by about two thirds of the way through the first day, that's where I was. It's a lot of kind of information to take in in terms of changing your pedagogy in terms of your strategies that you're going to be using in the classroom. I think that teachers in general, and secondary teachers in particular, when they get introduced to something like this, think that they need to do it all at the same time. So for me, that's where I got to, in the sense that I was thinking, oh my goodness, how am I going to do this in three classrooms, five days a week for an entire school year, all the time?

So I was sceptical. And I found it very difficult in the beginning to try and be able to see how these strategies that seem to work so well for me, particularly in an elementary school setting, and in the humanities or languages, where I could see -- I don't even teach those subjects, and I could see where the applications would be for these strategies there. But I found it more difficult to actually kind of find where to actually integrate those strategies into a secondary science classroom.

I went to a Bring and Brag session before we actually started the actual three-day session. And when I was there, I had the opportunity to meet a teacher who was the head of English at a school in the next community over from ours. And she showed me how to do causal modelling. And causal modelling right away seemed to be something that worked really well for me. And I went home that day, and I was so excited about it, that I wanted to actually share it with my own children, because I wanted them to see it, because I thought it was a really valuable tool to be able to allow them to succeed in their own school. And then after that, I took it into my science classroom and used causal modelling as a way to help students see connections which aren't necessarily overt, right, that are kind of removed from each other. And when you're doing science where a lot of things happened in the sort of cascade fashion, then using causal modelling where one event causes another event to happen, causes another event to happen, it seemed to fit very well. So causal modelling was the first thing.

Just kind of increased my enthusiasm in the sense that I now had a framework and a strategy that I could use to be able to teach the things that I was trying to teach that I had found difficult to teach before. So what I mean by that is, I find it very easy to teach the theory, and have a lot of strategies in place to do that. But one of the things that's very difficult to do as a teacher, particularly as a science teacher, is to teach students how to learn. And in that sense, I'm concerned with trying to teach students how to do

the scientific method. And the "I think" strategies lend themselves, in many cases, to that very well, to make that bridge for students much easier.

For me, the integrative thinking strategies that I've been able to get through Rotman and my exposure to the NPDL strategies and kind of philosophy has allowed me to actually really understand how to do that, right? It's given me the framework to understand how to make my class more student-centred.