

LISA HENNEFARTH : I thought today's lesson was really eye-opening. I mean, I- I loved your questions at the beginning about anticipating. I will often anticipate when I write my slides, when I write- when I- when Arminda and I get together and talk about a lesson. Um, we will talk about what are gonna be barriers, what are gonna be things that they'll get, where is it gonna stretch their learning? And when I saw this task today that we were gonna do, I was really excited because I thought it would lend a creative element that we don't typically see in a math classroom. I know we talked the other day in class about the squirrel in the tree and the function of distance over time and what it meant. And I was really pleased with that when they were able to tell a story. This was a little bit different because it's not only telling a story, but it's writing a story. And this is where that- that cross-curricular component comes in.

And we recently just had a meeting, a department meeting where somebody said, you know, how are these students in this A11 program going to be successful in an English class if you are making them do so much reading that's not at their grade level? And I basically said, how do you get better at doing something unless you practice it? And if I always dumb it down, then you're never gonna get better. If I always expect you to perform here with simple one, two word sentences, I mean, at best, evaluate a function, how does that help a student in an English class, in a social studies class, in a science class where you have to read complex directions or read this- they did a great job reading through the task, understanding what it was.

One student at the front, Chris, asked me- I said, do you know what the word commentary, what it means? He goes, no. And I said it- I go, do you remember the video we watched? Remember that person talking? Oh. So who is the one that talked about defining it? He did. And he didn't use swimming, he used, it's a person that kinda talks about what's going on in the game. There's a boy that's- that's a long term English learner right there. So again, having access, letting them take a look at graphs, because now they're gonna take a look at graph and they're gonna tell a story about that graph. So again, that opening exercise of which one doesn't belong, it's really- it's a nice entry point. We call it low floor. Everybody can access it, right? So everybody is accessing it. Everybody can put something down.

And now we're gonna do the real task at hand, which is, Kate, read this task. What does it tell you? Some didn't know how to- I knew anticipating. Exactly. In fact, I was surprised the ones that struggled were not the ones I would have thought of at all. In fact, the ones that I thought were gonna struggle, yeah, they struggled, but once I kind of got them going, they knew what to do. One girl who I thought was not gonna struggle at all, really struggled until we talked about what the graph meant. She needed- so maybe in hindsight, maybe- maybe reading the graph the next time. But then I don't want to like front-load everything for them because then when they're- where are they thinking? Because this is- what's important is all too often, our students aren't thinking anymore, they're just doing. So I thought today went well.

Again, if I look around the room, I look at the whiteboards, I loved how they were then able to take that information and combine it with somebody else. And then I remember going around asking, what did you hear from somebody else? Oh, more details, oh more adjectives. What else did you hear? Oh, somebody talked about the time. Oh, so do you think you might wanna add that? So all in all. So again, just being able to see graphs that were different, being able to articulate. And I still leave them with giving students that vocabulary. How they- some really struggled. Some said points. Well, they don't know what a continuous graph is, we've never talked about that. But- and even the- the comment about that it was diagonal and in touched both axes at either side, that student couldn't articulate what that was. So trying it again to draw in some of the language, like somebody said, oh, I noticed it was not linear, it was the only one that was curved.

So again, their struggle around some of the language, around how to describe something is still lacking. Even though we've given them the language, we've given them the vocabulary, but again, if I think about students, this is the first time a lot of them have seen these. Seen these vocabulary words, seen this kind of work. So if you think about- they're just starting out on their math journey, so if you're just starting out, I'm not expecting them to be proficient. But can they call out things that, oh, I notice that one is sloping negatively, one is sloping positively, one is curved, then that's a step in the right direction because at least it's getting them engaged thinking.

So that was the opening exercise, just getting them to look at graphs and to see what was the same, what was different, which one did they feel? There was no wrong or right answer here and they know that. By now they know that they could state anything they want based on what they observe. And oftentimes I like them to write their letter down immediately because they're always gonna go to one day they like, and now support that. Because if they start thinking too much about it, then they start to second guess their thoughts. And they start to kind of like, oh, what's that person writing? And it's all about they wanna be validated because they're so afraid to be wrong. So that's what this- which one doesn't belong helps them overcome that I'm not looking for any particular answer.