

STUDENT ASSESSMENT

CAROL STEPHENSON: The role of the teacher is there to keep the kids on track but in a broader sense of what 'on track' means. First of all, we have to constantly be thinking about the skills that are being built, the foundational skills. So, and I think, as Ben was saying, a huge misconception is that when you get caught up in these big ideas and you have these huge discussions and, you know, when we started talking about astronomy this year, we started with a story. We just started with a story about Raven stealing the sun. And that's the way that I contextualize what was going to be a big astronomy unit. And when I finished it, and at the end, Raven has stolen the sun from the sky chief and he throws it up into the sky to give light to the people. And I asked the kids to close to their eyes and say, I want you to imagine that you were Raven. You've been able to fly up that high that you can throw the sun into the sky to stay. And I want you to imagine looking back at the earth and think about what that looks like. I'm going to ask you to draw that later.

And the drawings were beautiful. But, in truth, what was so interesting, what the most interesting thing that came out of that, beside these incredible drawings and their ideas about the earth and that it has layers or that it's round or that it has oceans or continents, or all these different bits of knowledge that came out, I was constantly gathering that kind of knowledge. I was finding out what are these early conceptions they have about it. So that's a bit of the assessment piece.

But then one of the children came to me just quietly and tugged on my shirt and said, 'Can a bird fly higher than the sky?' That's my moment as a teacher to say, "Thank you so much. That is the perfect question. Let's bring that back to the group."

That became a discussion that shaped probably the next six weeks of what happened in the class. This huge discussion where these five-year-olds were talking about and literally, we only had one child that had turned six at that point and these five-year-olds were talking about, no, a bird can't fly higher than the sky. Why can't it? Because there's no oxygen. So there's oxygen in the sky but there isn't oxygen higher than the sky? Yes, and there's no light there. There's no light there? And they wouldn't fall down. You fall down if you're in the sky but you don't fall down if you're in space. You have to have things tied to you and to the spaceship to keep you from disappearing when you're in space. You would just float away.

In this conversation that came up from this one question, that came up from this one story, that shaped our next six weeks. We started

looking at all these layers of the atmosphere and when did it switch? If I, as a teacher, had sat back and thought about what do we want to learn about astronomy? I would've never imagined that we would be talking about stratospheres and tropospheres. I would not have imagined that we would be doing any of the things that we ended up doing. It would have been so much smaller.

So my job was to figure out where are these big ideas that are coming from them? How do I bring them back to the group so it becomes really fruitful and really relevant for the whole group sitting around the table? How do I make sure that each one of these kids can feel part of this story and this journey, knowing that they're not all going to be at the same page? And I think that's another really big part that people-, they assume that when we talk about Knowledge Building that we're saying that all the kids are gonna end up with the same understanding. Well, they're not. Just as they wouldn't in any other path that you take in education. They're all going to have their different levels.

So to answer more that second question, we embed that kind of assessment in the activities that we're doing. And we watch really closely. Who are the children who are asking the questions that galvanize the group? How are they phrasing them? Who's acting upon them? How are they devising these experiments? What are their observational skills like? How are they building upon the ideas that they either see coming out through the experiments or that coming up from conversations or that they're getting from books. All these experiences that we're providing, as the teacher, we're watching how they utilize it. And then we're just gathering reams of data and because they're so engaged, they are writing. They are-, I mean, we've been doing these wind machines. The kids have made vehicles that are being blown by wind. And we have been measuring with meter sticks, which is not an SK expectation, and here are kids, because of their experience, saying, it's a 3, a 5 and a 7, 357 centimetres. Because they're so engaged, those skills are building enormously which I'm keeping track of. But also they're understanding that they can follow their own questions, that's the deep part that regardless of the content that you pick, that's being built no matter what.

DISCOURSE AND IDEA DEVELOPMENT

CAROL STEPHENSON: Some people think that we're trying to give work to kids that they don't understand or to accelerate them. But, in fact, we're using those words because they're the right words for what they need to describe and what they understand. I think for the SK's it's a little bit different because developmental piece is huge within that. These children are coming in. They're four years old. They're five

years old. And just the idea of having 22 children all in a circle, talking, taking turns, listening to each other, that's something that takes time to build. Learning what their role is within that, takes a little bit of time and you see it developing over the year and we've, kind of, hit a time in mid to late October where suddenly one of these conversations has just taken off. Where instead of a child really directing their comment to me, and me, kind of, throwing it back to the group and it's, kind of, a little bit of ping-pong between me and the rest of the group, I actually do, suddenly I'm not talking anymore. And the kids are just waiting for one person to finish 'cause they actually want to respond to that immediately. And it's absolutely beautiful watching it happen. But it takes time. It takes time for them to learn that. And the same thing would happen, in terms of the vocabulary. So when we studied weather, they were talking about rain drops and clouds and snow and sun. And then they started talking about evaporation and then some of them started using the word condensation. Not all of them but some of them did. And that was so powerful because the other kids started hearing those terms in the proper context. So it made more and more sense to them.

But I think there are children who don't seemingly participate in that discourse but you can't think that because they're not talking, they're not engaging. And that's why we also have to find different ways of figuring out how they're engaging in that discourse and again providing those experiences that let us see inside that black box. You know, what is their understanding at this point. And I like throwing the kids blank pieces of paper and saying, show me everything you know now about weather. Or show me everything you know now about trees or whatever it happens to be that we're talking about. And even that very quiet, quiet child that isn't willing to venture their voice in that huge group, might be picking up an enormous amount. And if we don't stop and take the time to find out, in other ways, what that looks like, and not just by writing but through art, through hands-on experimentation, through giving them something to make and do, we might not know that. So the discourse is enormous. But we have to find out how it affects...

TEACHER 1: Each child can...

CAROL STEPHENSON: ...each child...

TEACHER 1: ...contribute to that.

CAROL STEPHENSON: ...within that.

DIFFERENTIATION

CAROL STEPHENSON: Because there aren't 20 pieces of information that the teacher's holding and that only some of the kids in the class are going to get to. You don't have these other, you know, 12, 14, 16 kids think, "Oh, I'm never going to know as much as they know", because that's not what it's about. It's not about a competition. It's not about a race to the finish to see who's going to get the highest mark on the test. It's, this is fascinating. How can I find out more? And so the individual levels of engagement and the individual levels of these deep, deep feelings of success and motivation are so high.

Because it's not about an expectation of 22 across the board, or 30 across the board or whatever it is. And I think that's what makes it so exciting as you go along. You don't have kids pulling out because the door's been open for them to find the way that's right for them. So when the kids are making these vehicles, these wind-blown vehicles, when they were doing their redesign, they're actively using the word 'copy'. I'm going to copy what this person did. It worked really, really well. That's not a bad thing. It's what happens in the real world all the time. You find out...

TEACHER 2: That's right.

CAROL STEPHENSON: ...about the ideas that really work and you use them for your own. And hopefully improve them and then they can also use what you come up with. And the richness of that, again, it takes you so much further...

TEACHER 2: Absolutely.

CAROL STEPHENSON: ...than you could ever imagine, if you had put the boundaries around it right from the start.

TEACHERS ROLE IN INQUIRY

CAROL STEPHENSON: You see it. You feel it as soon as you're walking in the door. You don't see, in our case, 22 kids doing exactly the same thing.

TEACHER: Good point. Yeah.

CAROL STEPHENSON: You've seen children doing very different things. When I walk upstairs towards the grade 5/6 class, I'm often having to get out of the way of the kids who are working on the stairs in a small clutch. They're not even in the classroom but because they're so motivated and engaged and doing their own thing. Ben knows, he

can let them out the door and they're going to be working and they're going to be bringing things back. You get this incredible hum of energy from it. But also when you walk in the room, you see it everywhere. When the electricity was going on in Ben's class, there were bits and pieces of things all over the place. And the kids could, kind of, get up and tinker with them when they suddenly had an idea or question. And maybe it happened in the middle of a math lesson when suddenly somebody got really, really excited about an idea and Ben probably wouldn't say, you know, okay, we're going to stop math right now and tackle this but he is going to say, that's a really great question and we're going to come back to it. But right now we're going to go on with the math. But it's all there for the kids to see. And also their work is all there. And so when parents walk into the class, when other teachers walk into the class, and when the children themselves walk in, everything that's happening is there for them to see. The journey is available for them to track themselves.

And my kids stand so often in front of the work that they've done. Huge amount of writing because they're interested in what they are writing about. Yes, they do want you to know how far their wind machine went the first time compared to how far it went the second time and how much better it was. And then they go up there and they're constantly looking at it. They're looking at their own. They're looking at others. They're having conversations about, if I do this again, I'm going to change it this way and it becomes outside of what the teacher has done. It's a huge, I mean, the teacher is still an enormous part of all of that. But it takes on a life of its own. And the teacher's one member of that community not the leader of that community.