How to cut through 'data fatigue' and lead school improvement: expert



Dr Selena Fisk is a data storyteller: and she wants all educators to share the same title. Aware that many teachers and school leaders don't know how to make sense of the data they're collecting, let alone how to use it to inform their practice or decision making, Fisk works with schools to detangle the data maze and build clear data plans that align with learning goals. This week she's sharing her expertise at EduTECH. Here's a slice of what to expect.



Dr Selena Fisk

Hi Selena, can you tell us about your background in teaching and how your passion around, and research in, data-informed teaching and learning came to be?

I have 15 years teaching experience; I taught in Brisbane for most of my career and taught in the UK for just under four years. The school I was in in the UK was really data driven, to the point that the Year 9 science students were ranked in the main science corridor from top to bottom. It was a pretty intense workplace.

As a middle leader, there was a lot of expectation on me to use data to improve the impact of teaching and learning in my department, and there was a lot of accountability attached to whether or not I hit the targets that the school had.

While there were a lot of things that I would never, ever want to replicate in Australia, and a lot of things I now advocate against, I learned while I was in that role that using data helped me have really good conversations with students about what they were capable of doing and where their gaps were, and where their strengths were.

It helped me as a teacher, in terms of targeting my pedagogical decisions and my teaching in the classroom to meet their needs a little bit better. And then into a senior leadership role that I took on, it enabled me to see a bigger picture and to look more strategically at the areas of department in the school that were having a greater impact and working maybe better than others.

So, I came back to Australia, I started my doctorate, and I was originally going to write my doctorate about the use of data in Australia versus the UK, because I came back into an Australian school in Brisbane where there was just very little data.

I finished my thesis over a number of years, wrote my first book, and it's just all happened from that. Now I'm self-employed ... and I work with organisations to help them make sense of the data that they've got. I love it.

You're speaking about the power of 'data storytelling' for schools at EduTECH. Can you reveal any more about what your presentation will cover?

Data storytelling is my big thing, because at the end of the day, we're collecting an awful lot of data across all of our schools and across systems - but until we actually get to the point of data storytelling, that data is not having an impact on kids. And ultimately, they need to be the ones that are benefiting from the time and effort that we put into using and analysing data.

So, my session will be talking about data storytelling and how we build a culture of that in schools. For me, data storytelling has two main parts: the first one is being able to look at the data and ascertain 'what are the insights in the information - what's the data actually telling me?' And then the second part of data storytelling is thinking about our response, or our actions, as a result. It's [about] 'what do I now do now, now that I know that'.

Those questions apply for classroom teachers, for middle leaders, senior leader, system leaders, it's just that your actions and the data that you look at will be at a different level - you'll have a different sphere of influence in your decision making.

The other lens through which I'm discussing data storytelling is, I've now worked for two-and-a-half years as a full-time consultant, essentially working in schools. I've got a data diagnostic that I run, and I've had about 2500 teachers across the country do the data diagnostic.

I've got a lot of data where teachers and educators have reported stuff back to me that I'll share in that presentation, just to hopefully leave us thinking a little bit about how they build that culture in their school.

In your view, how confident are Australian school leaders in in their ability to collect and use data effectively - what are some of the challenges that they face here?

I would say there's a lot of people who are not confident, but are also not confident enough to say that out loud. The big challenge that we've got is that there have been these increasing expectations on all of us to use data more in our roles, and yet, there hasn't necessarily been the training and support for people to build the skills in this area.

It's not a quick fix. It's not something that we can just learn through a one-day PD or we can spend a couple of hours on and then know how to do it. It's a long-term game...

The thing I do know from my data diagnostic is that senior leaders rate their skills at a higher level than middle leaders do, and middle leaders are rating their skills higher than teachers. So there's kind of this filtering down effect. I feel like a lot of training that's happening is targeting the senior leaders, which is great, because we're getting them in the room talking about data, but it's not necessarily filtering down to classrooms.

So teachers are reporting their skills to be quite significantly lower than middle and senior leaders - that's certainly the challenge.

We hear about 'data fatigue' in schools, with reports of mounting administration demands and a sense of data overload in schools - is this the case? How can school leaders simplify requirements around data collection for teachers?

Data fatigue is absolutely a reality. I was working with a teacher about two months ago, and she said she's currently having to collect four different types of reading data for her Year 4 students. She said, 'I'm in a constant cycle of collection and people keep saying to me I have to use data to inform what I do'.

She said, 'I actually don't know what that means, because every time I'm running reading groups, I'm having to assess them. So how am I then expected to use it?

So yes, data fatigue is definitely a thing. One of the ways I think [we can address it is] that schools and systems need to be super clear about what data they actually value and what they want people to focus on, and what they want them to do with the data once they've collected it.

So, a lot of schools that I work with are in the process of writing data plans. And data plans are really useful, because they can help to filter down [specific data to be used by specific staff cohorts].

That's actually been a really useful process for senior leaders to go through and to think about, 'Well, what actually do we care about as a school? What do we value? What do we need to be paying attention to?' And then being able to articulate that to their staff.

It's been really good for teachers to grab their part of the data plan and say, 'OK, this is really clear about what I need to collect and when I need to collect it, and what's expected of me in terms of what I do with it'.

I worked with a school recently, and I asked them to list all the different types of data that they've got and that they could potentially use in their roles. They came up with 46 types of information. It's not possible for people to use and act on 46 types of data, so the clearer that leaders can be about distilling that down to the key things that matter for their teachers, the more likely they are to actually get some change in practice as a result of it.

You also talk about the importance of schools being data-informed and not data-driven. What do you mean by this?

When I was talking about the UK before, I said that they're really data-driven, which they are. Data-informed is where we understand the numbers, we use the numbers, we take into consideration all the quantitative information that we've got, but when we're

making decisions, we also consider the context and the things that are sitting around all those numbers.

Things like the demographics of the school, parent involvement, the teaching team, strengths of different teachers or subject areas or whatever it might be. It's class sizes, it's classroom dynamics - all of those other things you could possibly argue are qualitative information or qualitative data, but essentially, it's just information about the context.

That means that when we're making decisions with data, we're making decisions that are relevant and useful for our context, we're not being driven by just a number or one metric.

Because if it was that simple, if it was as simple as just pulling a metric out and then reacting in the same way all the time, schools would just have a bank of things that they could do, and it would be a relatively easy fix. Humans are not that simple. Schools are complex places. So, it's about finding what works for you and your school and your context, but using the data to inform those decisions.