



Transcript for Staffroom Catch-Up Episode 8: 'We can go after it better together'

Fran: Hello and welcome to this first practitioner podcast series from Cambridge Mathematics. I'm Fran Watson and I'm a member of the writing team and school liaison lead at Cambridge Mathematics. Part of my role is talking to teachers about products we design and very excitingly, creating new opportunities like this to have conversations with educational practitioners.

This series is called Staffroom Catch-Up, and some of the things we expect to touch on are people's interpretations of the word research, how they feel about it, and how it affects the work they do in classrooms.

As all these people have been recorded in their settings, I'm going to issue a challenge to listeners to tally the number of interruptions in each episode, and then we can see if our tallies align at the end.

Today I'm here with Adil Jaffer. Adil, could we start with you telling us about your current role?

Adil: Yes, I, um. I teach one day a week with Group 1, er, which is four- and five-year-olds. Er, and three days a week I am a mathematics coordinator at an international school in Amsterdam.

Fran: Fabulous. Okay. Thank you. So to begin with, um, I'd like to share with you a line from a Sondheim musical, which goes, [sings] 'Something familiar, something peculiar, something for everyone. A comedy tonight!' Er, and ask you to share something either peculiar or familiar that you found funny, that you've experienced, connected with your work.

Adil: When I first moved to Amsterdam, um, and this is seven years ago now, I'd come from a secondary setting, er, which was special educational needs for children with social, emotional, mental health statements. Er, in a city, in Leicester, and I moved to this international school here in Amsterdam in a primary setting, and I was on, I was terrified. And it was my first day out on break time duty, um, and I was reassured by the people who brought me in, said, 'It's going to be fine. Don't worry. Nothing's going to go wrong.' And within about 3 minutes, a child comes to me and says, 'Can I go to the toilet?' It's my first day and it's about 2 hours in and I look at this child and the child

looks at me and they've said, 'Can I go to the toilet?' And I was like, 'I don't know. Can you?' [Fran laughs]

But they were 9, and they could! And so this was my first bit of learning. [Laughter] Um, really put in, into that position in a primary school and being like, 'Well, okay, it's going to be cool. They've got this. You've got this; we're going to be fine.'

Fran: I love it. Brilliant stuff. Thank you kindly. Um, okay, so let's kick off then by asking um, the question er, that we're going to talk about to begin with, um, which is what does the word research um, in an educational context mean to you?

Adil: Um, the thing it means to me most in my context, is to think about the teacher as the researcher, um, because I'm aware of the things which happen in universities. And, you know, there is RCTs, people designed to go and find out about a method or a, an idea or, or something or other.

Fran: Can I just qualify there? So RCTs are randomized controlled trials?

Adil: Yeah. People can do all sorts of things in universities and weird and wonderful stuff. And I've done a bit of action research as part of my, a master's program [clears throat] and I was finding out about a thing and I think that sits at one end. But when I think of research, I think of the teacher as a researcher and the research carried out by myself or by a teacher in the classroom trying to find out things which probably an RCT couldn't find out about.

Fran: So, I like that it's a... A colleague of mine describes it as being 'a broad church', er, and I, that's exactly what you've just described, I think. When you say finding out about things in a classroom that in, a randomized controlled trial couldn't, do you have particular things in mind?

Adil: Well, a piece of, er, I mean, an RCT cannot find out about the capabilities or the characters or the concerns of children in my class. And this is like, this is a particular philosophy. It's a philosophy of understanding the teacher, for the role of teaching as a, as a role of researching, um, and this is something which is present in my practice and in our school, and comes with a tradition from pedagogies, we like, we look to.

Fran: Okay. And when you say the role of a teacher as researcher, I see two circles, um, perhaps like a Venn diagram. Are they very overlapped? Are they slightly overlapped? Are they touching in your head? Wha – how do you see it?

Adil: I see them as the same or overlapping or the a, or th-this idea that the researcher is part of being a teacher and being a teacher is part of, of researching, you know, in, in this space. They don't, they don't come apart. As much as assessment and curriculum are sometimes split into two camps,

actually both come together and are happening together when you're working with your children.

Um, and so in the classroom, the job of the teacher, my job, is to find out about my children, about their capabilities and their characters and their concerns; how they progress, how they learn, what they respond to, how they work ... and how they're going to work with the things I'm going to give them, and how I am in the room with them and how I am in relation to them.

Fran: Amazing stuff. Let me ask two separate questions. One, are there external stimuli to that role that you're describing; and two, do you involve other people in the research that you're doing that you've described in your own setting?

Adil: So what do you mean by external stimuli?

Fran: So external stimuli might be 'I'm going to try out a thing I've read about or heard about or seen somewhere else'. Sometimes teachers talk to me about 'This thing happened in my classroom and it made me think, Oh!' And I would say that's an internal stimuli, but an external stimuli is something that might make you try something as a result of something external to your classroom, perhaps.

Adil: Ah yeah, um, no, of course there are. Um, and I think that comes in, in a, in a slightly later moment of thinking about what this even means to begin with. So who's involved in the research in the classroom is myself and any other colleague I'm working with. And we, because we care about the children in our class, as the first concern of a teacher is this care of children, and we care about them coming to learn. We care about them coming to ideas which are, which make up our world. And we want, we care about making this accessible to them. And so, you know, for context, here I'm in an Early Years setting and this is a set of ideas which come from the tradition of the [Reggio Emilia Approach](#), which is the children's centres in northern Italy. And they themselves have looked at Maria Montessori's methods, um, and it's, they don't stand alone in this, this way of working with young children or with children, which is to observe and not only to observe, but to, to really research them. Observing can be quite back, but actually we're involved with them and there's a thinking there as well. Um, [clears throat] so to begin with, together we are researching how the children learn and how they respond to things, and that makes up our pedagogy for the children in our class. And then it is advantageous to bring in external stimuli. But our primary position is to research them, how they work, and to research together with them, and, and join that research with them.

Fran: Th-there's some interesting things there that you're saying that I'm reflecting on about observing can sometimes feel third party and that that's not what's being talked about here; that you're involved and involving them.

What, what might that look like in your setting? What might we see going on in your, in your classroom, Adil?

Adil: So to move from observer to being, researching and to be with them, um, we would use documentation with the children and so we would document their learning and document what, what it is that they're doing, and with some specific focuses, with some specific intentions for that documentation. And so, I might record text or an image or make a note of something that a child did. And it, so th-the children then, I can share that with children and they get to observe themselves. And so they get to learn about how they're learning and how they're being, and think about how things were going for them.

And then I'm also doing this so I can re-propose things to them. Um, and this is an idea which people do talk about. Er, so Helen Williams talks about this. Um, er, she's just written this book, which is called [laughs] '[Playful Mathematics](#)'. [**Fran:** Mm-hm.] She talks about this in there and this comes from the Reggio Emilia tradition or approach, er, or has been used by them widely.

Um, which is we document something. So the other week there were some children and they were putting some pipes along some metal stands and they were running water down them. And then first of all, what children do quite often if you observe them or watch them play with water, is that they dump all the water out onto the floor. This is pretty good idea. Good to dump all the water out and then we run out of water. Um, but not all the children might notice that. Um, and I, someone might, a child might notice that and then I might make a note of that. And then the following week, because I work with them once a week, I might say to them, 'Last week we set up the pipes like this.' And I'd show them. 'And when this happened and the water fell all on the floor, and we ran out, this child was sad.' [**Fran:** Okay.] And then that's that.

And so I'm observing how some children and I'm researching how children respond to this. And then that's setting up what happens next. I mean, so, so what happens is I-I say this to them and then we stop, and then we just go off and play. And some of them, will choose to play with the water and some of them will choose to take that on, and think, 'Oh, maybe I don't want someone to be sad, maybe I'll do something a bit different, or maybe we will think about how we look after the water.'

I mean, they need a few weeks of really jump in the water on the floor before they [Fran laughs] decide to care about saving all the water, because that first game is really good. [**Fran:** Yeah.] Um, but then some children do start to, to get to this point where they, where they don't want all the water to be dumped on the floor because then the play stops, and they want to continue playing.

Um, so we re-propose and we give the children a chance to observe themselves by bringing them back to something. And I'm giving value when I do this as well. So I'm doing three things, maybe. I'm choosing to propose by giving, by, I can, by showing something they did, even if it's a piece of text or an audio snip; um, I'm finding questions, so maybe there are questions that we had so we can research further into those things, because I'm also researching the thing along with them. Um, that's an important disposition, the questions. We research the questions together. Um, and the things we find out we would document and share in our research of what we're researching in the classroom, or in our learning environment. And I would probably give our user connections. And these are the sorts of things I'm looking out for. Connections children make – really important as well.

Fran: Thank you. Um, so the connections. So I'm going to come back to each of those bits, if I may. The, the researching the questions together. When you talk to the children in the re-proposing of the situation [clears throat], do you have ... I'm, I'm talking as a-a an engineer and being aware that the scientific experiments perhaps I carried out when I was still a student, we had a proposal or a hypothesis or a conjecture that we were, you know, trying to disprove, prove, collect data to support or otherwise. This sounds different. And in the re-proposing, I wonder if you have thought about how it might impact the children, or not. Whether you are, you hold those things a bit like, um, improvisers don't learn a script, but they do plan for the directions it might go in and kind of what they might say in response if those things occur. Does that sound something that has a resonance or does it work differently?

Adil: It does. So a-a-the few things as an engineer. The conjectures, theories. Yeah, these, these come out of the questions for me. These are the conjectures and questions, theories that children are forming, those I will note and then share back with the children or give value to in some way by documenting it. So when we look at, back at the end of the day or at the beginning of the next day, these are some of the questions that come up. With this, these are of concern to us and they're not random. I'm not re-proposing just random stuff. Um, 'So-and-so got a pipe and put it on his head' is not a re-proposal. [**Fran:** Right.] Not necessarily. 'So-and-so got a piece of paper and folded it in a certain way and put it on their head' then maybe there's something to be gained from that which I want them to gain. Like, er, our, our role is not... it's not a free-for-all and is serious to our role as teachers, um, because this is a misconception sometimes of approaches which are, which are like, er, quite child-led approaches. [**Fran:** Right.] That it's just a free-for-all and they just do what they like. It's, it's, well, no. We have an idea of some of the things that will probably happen or could happen, we've researched this before as educators, um, we want them to learn certain things. We have this, we have our curriculum, um and we'll find the

moments as they arise and seize them. [Clears throat] And here's one to be seized – this child had this response. Because in the things that children are to learn, there is a history in them. Um, there is a value to them, to a, to a set of people. And because there's a history to them, there is a way of coming to those ideas together, um, that I can flesh out later [laughs].

Fran: Yeah! Would you like to say a bit more about that now? Because I'm, I'm intrigued.

Adil: Um, so there's er, my act..., my, my research, my actual research, my research [Fran laughs] work aside from teacher as researcher, aside from in my classroom with my Group 1, er, that I did as part of my master's work, work, comes from a study of a curriculum in, er, from, from Russia, er, made by [Vasily Davydov and Daniel Elkonin](#). And they were cultural historical activity theorists, and they believed – the, the cultural historical activity theorists, they're Vigotskians – they believed that every, um, every object which we are to learn about – so numbers, for example – have in them a cultural historical activity. They're not numbers, they didn't really present themselves on Earth with no activity to, to find, to be formed. Something happened in order for them to be formed. [**Fran:** Right.] Um, oh, this is a bit of a tangent [laughs].

But, um, but um, though yeah, so the role of, um, so what they tried to do in their curriculum was to really find the object source, the source of where these ideas came from, and recreate those moments for children.

Fran: Okay!

Adil: So numbers came from situations of measure.

Fran: Yes.

Adil: And when numbers come from situations of measure, maybe we can recreate some situations of meas... measure. And children, if you watch children, and this is again this researching with children and how they work, if you watch children, then you will see that they are keen measurers, and they are really interested in who's got more [Fran laughs].

And, and Davydov and Elkonin were really adamant on this as being a real way of working, a way of playing for children, work and play being the same thing almost, basically. Um, children are really interested in who's got more and if we tap into this, we're probably tapping into also something about where numbers come from. Um, and so my research work for my master's work and, and contin..., beyond that as well has been around this, and there's a nice little connection there because I think what Davydov did really is really go and observe children.

And when we talked earlier about, er, the Reggio Emilia Approach, this was people who really were at work in researching how children work and

play and Montessori really watched children to see how they worked in play – what are the habits of children. What are the powers of children is something we're here, and Caleb Gattegno, he developed the [Cuisenaire rods](#), really had a, a sense of doing. And I'm fascinated by this. This really, I find I've a really romantic idea about this idea of watching and observing, but researching how children are, or how humans come to do things. I'm really interested in what humans find interesting as well.

Fran: Right.

Adil: Or what children find interesting [**Fran:** Okay] because what would they find interesting, if I don't... you know, and I know children are interested in watching, oh, what's that, like in, in Ice Age – characters in films. [**Fran:** laughs] But they also are interested in trees. [**Fran:** M-hm.] This is a bit of a tangent [laughs].

Fran: No, I was reading something this morning actually, and there was a line in it where a child was kneeling up on the, their bed and in the morning looking down at the churchyard view that was outside their window, and said they found themselves wondering whether the sundial was pleased it could tell the time again because it was daylight now.

And I was like, 'Hm!' I-I mean, it's a measurement device. But I hadn't thought about, you know, a child's kind of personification of a, an inanimate object. I'm thinking, 'Ooh, how do I feel about this?' And also, this is my job. And, you know, putting themselves out there in a situation that they hadn't thought about before. So the things that interest them are multifarious, I am sure, and, you know, just huge and wide, and, as you say, you know, interested in trees as well as watching cartoons. And what can we attend to in terms of creating situations where those things can be, um, offered up rather than, you know, just given as tasks, perhaps.

I talked to a friend the other day and she'd been noticing her small toddler standing in front of the washing machine with his head moving round as the clothes went round and they went outside and she said, you know, he's, his language isn't um, fluent yet, but she was making this movement with her head and he was tracking it in, you know, kind of birds and the leaves moving in the wind. And she, you know, she was like, 'Ah, I think he's really noticing the rotational elements of things,' and spun the washing line. And he just got all excited and waved his hands about in a, you know... Clearly this was the, you know, the kind of... and he was like 'Ahh!' So, yes, those sorts of opportunities for learning more about how they're learning and what interests them sound very exciting.

Adil: Yeah. And then at that moment, the ... the opportunities to join with them in their research. Er, there's this [clears throat] I wrote this down in my notes. 'The question cannot be satisfied by waiting' is a quote from Paulo Freire. [**Fran:** Ohh!] And so children will look to adults to see how to act in situations. [**Fran:** M-hm.] And if I'm a teacher and I choose to ask a question and I see that I find the answer to my question by waiting for someone to maybe give it to me, so questions are there to be asked the answers just will, you'll wait and they'll come to you. There's one way of acting in response to a question. But if I join them in asking some questions and finding out about the water on the pipes, [**Fran:** M-hm.] and the washing machine, then I'm invite... I'm showing children how to act and they're looking to see what resources I'm gathering, some social resources or personal resources or physical resources. What am I gathering and how am I going to be in order to then go and research again? [laughs] [**Fran:** Right.] And, and answer that question. So how do I answer questions, and [**Fran:** Yes!] that's what they're there to learn from us as well. And together, so that's what we, we join them together. So we, when we document and we look for questions that children are asking and we mark those questions that are important, those conjectures and questions, because we are finding that out together.

Fran: Which is, is glorious. Yeah. And the, and the not knowing? You talked about modelling how to respond to questions and by being alongside or getting involved. But I certainly had children react to me very confused or, um, at some times outraged when I have said as a teacher, 'I don't know.' And older children have said, 'You do really, you're just pretending.' And on some occasions I've been honest and said, 'No, I, I genuinely don't.' And they've been quite upset by this. And I'm saying, 'Well, hang on a minute. My role is not to know the answers.' And they're like, 'What do you mean? Of course it is.' And I was like, 'Oh, we have very different philosophies about what it means to be a teacher or a learner or a... and where those two things intersect.'

So, yes, the, the alongside-ness and the, the modelling the not knowing, as well as the what we might do to explore. I can, walked along a beach with a small child who was talking about the haircut that they'd had. And I said, 'Oh yes, lovely.' And you know, 'Where do you think your hair would be if it hadn't been cut?' And they kind of showed me with their hands. And then they said, 'Why don't you have to cut your eyelashes or your eyebrows?' And [chuckles] I said, 'I don't know.' And they were like, 'Oh! Why don't...? Have you ever had to cut yours?' The thinking, presumably in their head, being that I'm older and therefore this might yet occur to them and they just haven't met it yet. And I was like, 'No, I never have.' And they were like, 'Mm! We should ask someone

about that.' And I was like, 'We should! Okay, let's do that!' In a, you know, and, and then where do we go? And now Google, or people, or but also the sitting with it and wondering, you know, kind of whether other people have thought about this too.

Er, Adil, in talking to you, I get a strong sense that this gives you both intrigue and satisfies curiosity, but also brings you pleasure. Am I right in this? You, you seem to enjoy this aspect of the work that you describe as being a researcher, as being a teacher.

Adil: Er, yeah, of course. Um, [chuckles] I mean, if we talk about the teacher and having the job of caring about their children, this is something which is very intrinsic to this space of being with a group of children, then yeah, as we discover, as we find things out, as we go through these moments, we'll be surprised and inspired and find joy and can be proud and absorbed and confused in a nice way, um, [laughter] er, and moved. Yeah, these, all these emotions come from this.

Fran: And that feels like, um, a dimension sometimes that can be lost, um, and that sometimes when we hear from teachers it is, um, about the challenges that they experience in their work are not connected always to the challenges of understanding their learners, and they are perhaps connected with the, the parameters of the job, the requirements of, to do things that they don't think are necessarily connected to learning and their, um, their children's learning too.

Um, and I wonder, what was it then; you talked about doing a master's. Um, what was it that prompted you to take that on board when you were already experiencing...? Or maybe you weren't, maybe I'm mis-constructing your timeline. All of this that you describe going on in your classroom, would you say is, had, was happening prior to your master's or has happened because of it, or, I'm interested in knowing where at what point and why you sought external, additional learning opportunities for yourself?

Adil: I think this way of working, I mean, I see it as sort of a scale. There is, there is research to be done into approaches in ways which are not just with my class. And there is from these moments, from the, from this type of research stuff to be brought in to our school, into classrooms, but also how we think about our whole school and what's happening with our curriculum and how we, where we imagine things and think about things.

Um, what prompted me to do research [laughs] and the master's? Um, ah, yeah, so I'd worked for a couple years, going back a few years now. I worked for two, two years or so, three years, two years, with the [Gattegno and Goutard methods for working with Cuisenaire rods with the class](#). And

I found this to be specific, particularly powerful. And I mentioned I've got a lot of respect, er, admiration for Gattegno and Goutard because I felt they really watched children, and they really understood the powers of children. And then I knew somewhere at some moment, some people had compared the work of Davydov and his studies of curriculum [Fran: Right.] to the, er, to the basic ideas of Gattegno, um, which is that it was an approach to learning number, er, [laughter] um, which was rooted in an understanding of measure, [Fran: Right.] and a relational understanding of number rather than an absolute understanding of number.

And so [Fran: Okay.] I went to go and investigate this, and we had a bit of a tradition in our school of, I had an old curriculum leader who was a cultural historical activity theorist, a Vygotskian, by, that research background.

Fran: Right.

Adil: And our assessment framework at the time had drawn heavily from sort of the ideas of Davydov, um, the Vygotskian tradition, which sort of stayed in, in the Soviet Union and then Russia for a while, it spread to some other places but didn't really transfer across, probably [Fran: Right.] because the translation, but also politically I imagine.

Fran: Okay.

Adil: Um ... and so I went to go and investigate this. Um, and so I had, I had, I took the first grade elementary curriculum from Davydov and Elkonin and translated it, um, and started to work with some of those materials.

Fran: Okay. And the, I love the – quite aside from how beautifully you've managed the fact that we can hear glorious children in the background and that other listeners won't have seen all of those intrinsic teacher, er, movements that we do with our bodies that say, 'I'm busy on another thing, could you, you know, quietly!' Um, I love the fact that what I'm hearing is you mirroring the sort of, um, opportunities that you're giving children in your class to, um, be intrigued or, er, have their curiosity piqued by things or to consider stuff that they maybe hadn't noticed before, and then go away and investigate it.

And I'm hearing the same thing happen to you. I had found out about this through a thing that I did and that I wanted to know more about it. And so I went to... So it feels like you're not following your own advice, but that there's parallels here between what you offer in your classroom and what you do for yourself professionally, um, both inside and outside of that classroom.

I was intrigued that we've talked about, um, in your classroom, we've talked about where you go, master's and other, um, places for external professional learning. And for some people those two things will sound, um, either

accessible or new as ideas. But the drawing together of it in where you currently work, being able to bring both those things, and for the school to value that and draw that together, and the fact that you've said we've changed our approach, it sounded – and I could misinterpret it – but it sounded as though that was as a result of some dialogue perhaps rather than, 'We've got a new leader and they've brought a new idea and therefore we're all going to do this now.' Is that fair to say?

Adil: Our approach has changed in our school because our school is huge, and it got bigger and bigger and bigger. So we have 60 primary classrooms, and so what we needed at some moment was a way of [laughs] having a common language and framework that helped, helped us think about what we do together and so we can go after it better together.

Um, and so we worked with the Reggio Emilia Approach in the, in the primary, in the Early Years for a long, long time. And I went to Reggio and so did many other colleagues, and this fits in, is, is harmonious with this new framework from the IB which we're two or three years into now.

Fran: Right.

Adil: And it is a constructivist Vygotskian approach, the one of I, inquiry education. [**Fran:** M-hm.] So this was not new to us. It's just a new language and [**Fran:** Right.] er, the formalizing of language as we've grown so big. So actually, the, the approach and the framework is, is perhaps not changed, but we've, we've formalized things [**Fran:** Okay.] and some of the more difficult parts of like Davydov and Davydovian ideas and assessment, which are very difficult to find in the books for €700 if you can find the odd copy from [**Fran:** gasps] 1990.

Fran: Wow!

Adil: We had to park that because it wasn't allowing us to go after it together, and we found that there are other ways of thinking about things or other ways of talking about the same thing.

Fran: Yes. Okay.

Adil: Um, so that's what's happened there.

Fran: Okay. Thank you. I, I love that phrase. I wrote it down. And you've just said it again of finding ways that mean we can go after it better together. And I think that's a glorious way of, er, kind of capturing the things that you're talking about.

Um, er, um, we could go on for ages, but I'm conscious that we're coming towards the end of our time. And I wondered if there was anything else that

you wanted to share with listeners who may or may not be in settings similar to yours, or have different feelings and experiences of what they might mean by research? Perhaps if I could ask you to say something about what you feel the benefits have been, um, for your work and your, er, love of teaching, which I think is apparent from talking to you.

Adil: For me the big, the benefit is about being present and thinking in a moment in, in relation to your children.

And because your care is for them and how to make the world, and make sense of the world for them, together with them, in ways which are part of their concerns and capabilities and their characters. That's really... Why would I make it a life fit for anybody else? Because, like we said, so no RCT could tell me how my class is going to respond to something because that's not the purpose of it.

And that's not to say RCTs aren't good, or whatever. I just, I see this as sitting at this very other end. Um, but that's why it's, it's important for us, because we're working with, with human people in front of us, and that's who we've got. And this will shift, and the, and the next class will shift in a completely different way, and we'll have different concerns.

Um ... and what was the question? [Laughter] So what's...? How...?

Fran: Um, the joy is evident. Er, I think you've done it beautifully in, in capturing that and conveying it to those people listening who may, you know, this may be new, it may not be. But who if they're sitting here like me, fizzing with excitement about what this looks like and how it feels, um, thank you! That's, that beautifully draws it together. Amazing stuff. Okay. So, er, it's been such a joyous conversation. Thank you very much for sharing your experiences.

Um, and I would like to invite you, the listeners, er, to engage with Cambridge Mathematics on X, formerly known as Twitter, or in the comments section on our website to share your thoughts about the conversation you've heard today or about any of the ideas that we've been discussing.

Perhaps you'd like to share your story too. We look forward to hearing from you. Goodbye until next time.