

INTRODUCTION

MATTHEW DEEBLE: Hello everyone, I'm Matthew Deeble, Director at Evidence for Learning and today I'm talking with Sir Kevan Collins, the Chief Executive of the Education Endowment Foundation, based in the U.K. and a founding partner of evidence for learning.

Kevan has led a distinguished career in education, starting off as a Primary school teacher, leading the Primary Literacy Strategy as National Director and then serving as Director of Children's Services at Tower Hamlets, in London.

Kevan has also gained international experience working in Mozambique and supporting the development of a national literacy initiative in the United States. He had completed a doctorate focusing on literacy development. And as you may be aware by his title, he was knighted in 2015 for services to education.

Sir Kevan visited Australia in August and kindly sat down with me to discuss his experiences in education in England and a new global initiative that the EEF has embarked on to support teacher's use of evidence in their teaching practice worldwide. Kevan, welcome.

KEVAN COLLINS: Hi Matt.

ORIGINS OF THE EDUCATION ENDOWMENT FOUNDATION

MATTHEW DEEBLE: **Can you tell us a little bit about the Education Endowment Foundation? When was it created and why was it created?**

KEVAN COLLINS: So, the Foundation was created in 2011. And it was created essentially because England like many countries got very concerned about the fact that education seemed to be serving some children well, but not all children well, particularly the children from low income families. So, the question was - what more could you do for those children?

We tried so many ways to help those children. And this way, is to bring the evidence to bear, see if that makes a difference.

MATTHEW DEEBLE: **There was also funding on the table as well wasn't there? A pupil premium, which is a little bit like Australia's needs-based Gonski funding.**

KEVAN COLLINS: The Government in England decided that one way of helping those children was to give schools a bit more money if they supported them. So, in England every Primary school that has a child on a free school meal, which is about 20 percent of our

population, receives a thousand pounds extra a year, per child. And every secondary school receives 900 pounds extra.

And so, one of the questions about giving people more money is - we know in education that more money in and of itself, doesn't make the difference if you spend it well. So, we were charged to how do you support people to make better decisions with the money we're going to give them? How can you give them insights from the evidence, so they can make a better use of the resources they've now been allocated?

MATTHEW DEEBLE: How many schools are using the service? How many teachers are engaged in accessing your materials?

KEVAN COLLINS: So, England has 24,000 schools.

MATTHEW DEEBLE: Australia's just got under 10,000 schools, so it's a little over double the size of Australia's education system.

KEVAN COLLINS: And currently about 75 percent of all the school leaders in England, according to the National Audit Office, which is our independent government department, has reported they are using our Toolkit to make decisions.

Teachers, not as many, and that's an issue for us. How do we get the information to teachers?

But a growing number of teachers are now using it, but primarily it's about two thirds of schools that are using the materials to support decisions they're making.

MATTHEW DEEBLE: That's terrific over a seven-year period. That's great progress.

KEVAN COLLINS: Yeah it is great progress. But it only matters if they're using evidence in a way that has better outcomes for children. No one's going to win a prize because you got people to do something. It's that it actually matters to children is when you are making a difference.

THE TEACHING & LEARNING TOOLKIT

MATTHEW DEEBLE: You also created the Teaching & Learning Toolkit, which we have a version of here in Australia. Can you tell me a little bit more about that? Why did it get developed?

KEVAN COLLINS: So, when you want to bring evidence to bear in education or in any domain. It seems to me, the first thing you do, is you honour knowledge. You start from what you know. That's the beauty of evidence. That's the beauty of believing there's information in the world that has credibility and rigour that you should honour.

So, the Toolkit is gathering together the best of what we know. And essentially from the around the world - since 1980, we've examined all the research in education that we think has that quality, and we put that together, over 10,000 studies. We've gathered that together, organized it into 34 themes, and to essentially say three things. To answer three questions.

How much does the thing cost to make a change in my school? To make my classes smaller? To have more teaching assistants? To increase the amount of collaboration between children? What does it cost to make a change?

How much evidence is there behind that kind of change? Is there a lot of research on it? We allocate padlocks. How strong is the evidence?

And then the critical information is in the studies that have been done, how much difference does it make?

So, the Toolkit doesn't tell you what will work. It tells you what has worked. It tells you what in history or in time, what's happened in schools where people have made these changes.

MATTHEW DEEBLE: You've talked a little bit about the research. What kind of research is in the Toolkit? The 10,000 studies that you've described.

KEVAN COLLINS: So, the reason that there's 10,000, there could be more when you look at the number of surveys and questionnaires and qualitative research done in schools -is this 10,000 because all of our studies, we require there to be some experimental design, some kind of control. Some sort of rigour in the evaluation. That means that we're not just testing it against how people feel, but actually against a counterfactual.

So, we like high quality rigorous research using experimental methods.

MATTHEW DEEBLE: In the Teaching & Learning Toolkit you talked earlier about basing the work on rigorous studies and they're compiled into what are called meta-analyses. There have been some recent criticisms about meta-analyses. Could you respond to those?

KEVAN COLLINS: Well the thing about evidence and research is it's never - it's no silver bullet. It's not about creating certainty, but it is about reducing your uncertainty. And using evidence is the best place to go. It gives you insight which you can't have unless you are willing and ready to build from the learning of others.

Now a meta-analysis of course is a gathering of studies that's pulled together that somebody's reviewed a theme or a question. The problem with meta-analysis is that, when you pile them on top of each other, it can be quite hard to penetrate. It can leave you with lots of unanswered questions. So what we're actually doing now is we're unpicking all those meta-analyses and we're going through each study one by one to check for a whole list of potential questions that might be answered. So, you'll be able to not look at the Toolkit and look for these big generalised findings, you'll be able to read the Toolkit at a much more granular level as a teacher wanting to learn about a particular cohort of children in a particular location around a particular question.

And we will then mine the whole of the database to see where there's any information on that. But even when we do that, it won't be perfect. But it's certainly better than nothing.

MATTHEW DEEBLE: So one of the benefits of the approach that you're describing of being able to peer underneath the meta-analysis and look at individual studies would allow people to choose for themselves the studies that they're comparing. Is this a way of then dealing with the limitations of a meta-analysis?

KEVAN COLLINS: Yes, it's how we're going the next step. You know it's always interesting to me, that if you're not going to use research, what do you use? Now professional judgment and experience are really important. But they're limited to your personal experience. Why wouldn't you want to cast your net as wide as possible as you begin to think about possible solutions?

And to me if I can cast my net across the learning and lessons of teachers in thousands of schools across many, many countries, that is interesting to inform the next decision I'm going to make. And the new Toolkit version will allow you to do that in a much more personal and granular level.

MATTHEW DEEBLE: That's terrific because we know the evolution of the conversation is moving away from what works into what has worked, but also now what works for whom and under what conditions. Does the Toolkit respond to that development?

KEVAN COLLINS: Yeah. Exactly right. I mean even in the studies we do, we have to be careful, because they're very large, our studies. They can involve thousands and thousands of children. But we still are very clear in the reports to write, you know the children in *this* study lived and learned and were learning in *these* kinds of communities.

Now if your school is like that, this study is going to be much more pertinent to you. If your children aren't like that, you have to read it through that lens. That they're still children. And they're still children in your, for my studies, children in England, and you know what? All too often people worry the water's different one side of the river to another. In fact we have so much to learn together and that's where the promise lies.

RANDOMISED CONTROLLED TRIALS IN ENGLISH SCHOOLS

MATTHEW DEEBLE: Another part of your work, works on that idea of rigorous and experimental design, which is your trials work. You've conducted or commissioned more than 100 of those sorts of trials in the English system. What kinds of programs have you investigated?

KEVAN COLLINS: The first thing you do - is you synthesize what we already know. That's useful. It's good to start from what we know. But it's not enough. There are huge gaps. There's lot of things about education we haven't researched. There's constant innovation. There's constant change.

So, you have to then keep building the evidence base by answering new questions. Take questions that teachers ask you to answer, that are relevant to them, that they need solutions to.

So, we invited people to bring us suggestions or ideas of developments they're making in their classrooms, or universities have new ideas. Charities, companies in the world who are engaged in education. What is it you do and let's find out whether it's making the difference you expected.

So, we've funded to date 170 trials in three buckets. We look at things that involve families and communities. In the families one we've tested the importance of texting parents or using cash incentives to get parents involved with children's learning.

Most of our trials have looked at the classroom itself, the most important thing of all, the teaching. Different ways of teaching, modifying your teaching, emphasising one bit of pedagogy over another, trying this curriculum resource against that one.

And then finally a number of studies looking at 'bolt on' programs that people buy in endlessly into schools, to help those kids who need to catch up and keep up.

So, people bring us ideas, we run trials, many randomised controlled trials most of them, to find out what difference innovation makes.

MATTHEW DEEBLE: So, you've talked about that phrase - a randomised controlled trial. Can you tell us a little bit more about that? What does it mean?

KEVAN COLLINS: Well a randomised controlled trial means, I'll give you a real example. Some people came to us and said we think a really good idea would be that children come to work on Saturday as well as Monday to Friday. The problem with children who are struggling, the disadvantaged children that I talked about, and falling behind, they just need more dosage. Bring them on a Saturday. And so, we said okay, let's find this out. Because this is something people are doing.

And they said, well let's get some children to come in on a Saturday, this is in Manchester, and we'll compare their progress against the rest of Manchester's children and see how much more progress they made. Now the trouble with that is that that isn't really a very fair test.

We said no. You have to go and recruit lots of people who are willing and ready to take their child to school on Saturdays. Now that is a kind of parent, a kind of family, now you've got a fairer test. That within that group we then said what we'll do is we'll randomly give half the children Saturday school and half the children not Saturday school. And then we'll see what difference happens within that more comparable group. And that's a fairer test.

The group that didn't get it, by the way, in the randomisation, we offered it to them later using a wait list. So, we got around that. But that's a much fairer test than comparing the kind of families that are willing to do that on Saturday with everybody else, including people who aren't that willing.

MATTHEW DEEBLE: And have you got the results in?

KEVAN COLLINS: We got the results in that trial, and I'm afraid that just having more dosage doesn't seem to be the answer. That didn't make that big a difference. It made some

difference, but not the difference you'd expect for the cost and effort and trouble it takes for teachers and schools and everybody else to open up again on a Saturday. Dosage turns out, not to really be the answer.

And that is consistent, of course, with the evidence around schools in the world that do have good performance, it doesn't mean they have longer and longer hours. It means you have to teach more effectively in the time that you've got.

MATTHEW DEEBLE: So, you've given us a great example there of a program that might of have seemed intuitively effective, but under some more rigorous trials found to be not so much. How common is that? How effective are the trials of the 170 that you've commissioned or the ones that are reported so far?

KEVAN COLLINS: So, 74 have reported. And I don't know if it's good news or bad news for teachers, but most of the things that people bring us with high hopes, don't make the difference people expect. Many of them make a little bit of difference, but nothing out of the ordinary. One of five of the things that we funded, make significant difference, that means you should really think hard about bringing this into your practice, it's worth it. It's worth the cost. It's worth the effort. It's worth the time. Children make significant progress.

About three in five are so-so. They're not much better than business as usual. That might be useful, because it means we could stop doing things that are a waste of time. And then the other one in five, actually are things where the implementation against all good wishes and best will, are actually ineffective and children get worse.

But all this information is useful. Whether it works, whether it's indifferent, whether it doesn't. You're bringing new insight and new information, so people can make a better decision about what to do in their school.

MATTHEW DEEBLE: So how do schools and principals and teachers feel about being involved in these trials?

KEVAN COLLINS: Well at the beginning of all of this, it was unusual to do randomised controlled trials, in fact we'd had three in a decade, we've now done 170 in seven years, and they're much bigger than the ones we do than ever done before. So we're now nearly one in two schools, between one in three and one in two schools in England are involved in a trial that we're running.

Recruitment has become easier actually, not harder. Schools are interested in being involved in research. They want to be part of the solution. So, I pretty much define anybody now to tell

me schools aren't willing to be involved in it. You do need to set it up with care. You need to make them involved. You need to make sure you're asking questions that are relevant. You need to make them deeply involved in the process. But no, in England we found that schools are really willing to be involved in research in this way.

MATTHEW DEEBLE: And I've heard you make the point previously that of those effective trials, those one in five, many of them come from school innovations themselves.

KEVAN COLLINS: Sure. I mean some of our best trials, the 'disciplined innovation' as I call it, has come up from a group of teachers. I mean my favourite one is from a group of teachers in the North of England who had this approach to teaching writing that involved they'd looked at the evidence that involved children being involved in memorable experiences, lot of self-regulation and the use of self-assessment, peer assessment in their writing. And we saw significant progress in that group of children.

We've just run that trial, and efficacy trial, with those teachers with a group of about 60 schools. It worked. We then moved it and made it much bigger, an effectiveness trial. And it still worked. Now that's really exciting. That's coming from teachers and building our practice from the bottom up.

SHARING THE EVIDENCE – OCTOPUS TRIALS, GUIDANCE REPORTS AND

MATTHEW DEEBLE: So there's another challenge though isn't there, after we've learned a little bit about how effective a program is and how confident we can be in the findings and how cost-effective it is in schools. We also need to communicate that knowledge to others and to spread the news more widely. One trial that has been reported on a little bit here in Australia is the one you called the Literacy Octopus trial. Which was about communicating and engaging with evidence. Can you tell us a little bit about that study?

KEVAN COLLINS: Bringing together what we know, then synthesis. Innovating and creating new knowledge and then mobilising knowledge you have is what we're talking about.

We took a bit of fairly uncontested literacy knowledge and intorted it to teachers in eight different ways, hence the octopus. And we used pretty traditional ways of passing information to teachers. Websites, infographics, conferences, PowerPoint - you know all the kind of standard ways.

And what's interesting like that we are trying to find out whether the teachers were aware about the research, understood it, used it, and it made a difference to their children. What's interesting about what you might call quite passive ways of passing information to people, telling people what to do, may very little difference at all. We have to find much more engaging and motivating and involved ways to bring the knowledge to teachers.

But teachers know this, because they teach every day. And they know very well that if you just tell children stuff, why would they learn? And yet we don't seem to have anything like the same thought when we're bringing information to teachers.

So what we did in that trial was basically test the classic ways that people bring knowledge to teachers. And found out that they really, it is not the way that you change adults and change practice.

MATTHEW DEEBLE: And so that then means we've got a lot more work to do about how to support professional learning or engaging with educators so that they can take the knowledge and embed it in their practice?

KEVAN COLLINS: Yeah. We've got to get serious about professional development. Ongoing, involving and engaging people who are being part of it. Aligning not only information, but artefacts and the right resources and the right materials to help you bring it to your classroom - over time. It's not a vent, it's a process. And we need to learn a lot more about that.

So, we've gathered all that together actually more recently in a guidance report, and what do we know about implementation change in schools? What do we know about the science of that and make that available to all teachers.

MATTHEW DEEBLE: You've also produced guidance reports. Can you tell us what they are and how that came about?

KEVAN COLLINS: The guidance reports we produced recently are the next step in bundling up groups of knowledge, groups of information, around themes. The 11 things that teachers told us actually were the most important to them in their schools. Literacy, numeracy, metacognition. The use of teaching systems alongside of you. All these kinds of themes. And we've been bundling up the information and writing it in a very accessible, informed way, what the evidence tells us to date to guide your practice and guide your thinking about those themes. And we've been making those available, writing them with teachers for teachers.

MATTHEW DEEBLE: And how do they help school leaders and teachers?

KEVAN COLLINS: Well what they tend to do is they tend to take you the next step from the Toolkit and say based on the current evidence, based on our studies, based on other things that are happening around the educational world, these are the five or six recommendations. This is as close as we ever get to saying this is what you should do. But the evidence says that they're the most important things you should think about.

MATTHEW DEEBLE: And how are they being in schools so far?

KEVAN COLLINS: A good example would be teaching assistants. So, in England we have 400,000 people that work in our schools as teaching aides, alongside teachers.

MATTHEW DEEBLE: We often in Australia call them education assistants or teaching assistant.

KEVAN COLLINS: And when we did the first big study of their use, it turned out they weren't making the difference we all expected. In fact, there was very little impact on having a teaching assistant in a class compared to not, when you looked at the overall progress the children were making.

But we did in some schools that these people were making a fantastic contribution. And then we ran about half a dozen studies testing out different ways to employ them. And again, saw the same people deployed well could make a huge difference. So, here's a huge resource, spending a lot of money, of great people who are very variable in their impact. So, we brought all that together in the guidance report, and then we identified eight key things that need to be thought about when you're making the best use of this resource.

And they're all evidence-informed recommendations. For head teachers, for principals, for teachers and for teaching assistants themselves. So that's been an example of where you gather it all together in one place, and say with a great deal of confidence, these are the things you really need to think about if you're going to get the payback for your investment.

RESEARCH SCHOOLS NETWORK

MATTHEW DEEBLE: So great that we've now got a good evidence base with high confidence in which to talk about. You are doing the further work to put that into context with recommendations for school leaders and teachers to think about, but even then, that still risks sitting on the shelf or sitting on a website. You've had a recent initiative called research schools about mobilising or joining with the profession to make it even closer to practice and practice change. Could you talk to us a little bit about research schools?

KEVAN COLLINS: Well schools are incredibly busy places. And schools are rightly skeptical of people giving them advice and information, because they get so much of it thrown at them from everybody. So it's our view that the best people to talk to schools about what works and insights are other schools. And there's now a network of schools in England that have become very thoughtful and invested in the evidence business, being partners in evidence, both in generating it and using it, mobilising it.

And we're resourcing those schools, that network of schools across England become local centers if you like, where you can trust the information, where they'll work through with you on particular themes of interest or of need. And where there will be areas that are looking out to harvest great new innovation that we can then put through our pipeline and test. And the research schools I think are the future for us, in terms of moving it from the EEF base in London, out to all the corners of England and the work being done alongside teachers and schools.

MATTHEW DEEBLE: How many schools are involved now as a research school network?

KEVAN COLLINS: So, we've got 23 schools in the network and they each are resourced to work with about 400 schools. So that takes us to over half the schools in England. And we're evaluating, of course as we would, before we then hopefully build a network which will take us out across the rest of the country.

BHP BILLITON FOUNDATION GLOBAL EVIDENCE PARTNERSHIP

MATTHEW DEEBLE: You're here in Australia to make an announcement about a new global relationship. Could you talk to us about that partnership?

KEVAN COLLINS: We're absolutely delighted and excited to be involved in a partnership with BHP Billiton Foundation. And that's one of the world's largest organisations of course, which is involved in trying to support communities and particularly children who are at risk of being left behind.

Now we know that education is part of the solution in any society. And better education can make a huge contribution. So, BHP are funding us, to work with a set of countries where we can bring our evidence approach to bear, where we can support teachers, support those in lead schools, support those lead education systems to bring the evidence into the picture and to use that to improve their outcomes for children.

MATTHEW DEEBLE: And you have a fund involved. Are you also going to do the sorts of trials you were talking about before?

KEVAN COLLINS: The first thing we have are partners, so we have EEF, we Brookings, Teach for All and UN Women. So that's four organisations working on this endeavour, all through the support of BHP Billiton. And then we have a fund that allows us not only to introduce these materials and resources and translate them, and contextualise them locally, which is so important, we've already done that in the Toolkit in Latin America, for example and here in Australia and in Scotland and other places.

But we then have a fund to do trials, where we can find out together as teachers across the world, what approaches, what practices make the biggest difference? Because the wonderful thing about teaching is, much of what we do is universal. Of course, you have to think about context, but I was in a classroom the other watching a child in Latin America do multiplication of complex fractions. Many teachers know that is a particularly tricky bit of teaching and we could all learn from each other about some of those things.

So, improving education becomes collaborative. Not just schools around us, or in our own state or our own country. But as a global enterprise and that's what this funding will allow us to do.

MATTHEW DEEBLE: So, you're creating a global fund, but aren't countries so different, aren't the contexts so different, aren't there too many differences between the countries to learn from each other?

KEVAN COLLINS: You always have to be mindful of context and of the conditions in which children live and learn. I personally have had the great benefit of teaching in a number of countries including Mozambique, United Kingdom, America, and although there are many differences, the one thing that teaching is, there are many points of universal connection.

And what we find, what children find hard to learn in one country, many children find hard to learn everywhere. So if we take something as universal as teaching children to read. Everywhere it seems there is a small group of children who find that particularly hard. We could learn together about how we support those children. And that happens I think in lots of parts of our profession.