

Speech: Nick Gibb: The importance of vibrant and open debate in education

Summarising the aims of ResearchED, Tom Bennett recently wrote that ResearchED is determined to break things. Not for the sake of destruction, but to break the shibboleths that have, for too long, dominated education policy and stifled the spread of evidence-led teaching.

As The West Wing's President Bartlet said to Will Bailey (borrowing a quote from the anthropologist Margaret Mead):

Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever does.

ResearchED is a grassroots, teacher-led revolt against the old order in education, a challenge to received wisdom and a rejection of the status quo. You are the small group of thoughtful, committed teachers who are changing the world of education.

These conferences are changing the relationship between teachers and education research. As many teachers have told me and as many teachers in this room will no doubt recognise, the research historically presented to teachers was monotone in content and seldom used.

ResearchED is different. By granting a platform to a wide range of views, the currency of speakers is the quality of the evidence they are presenting. And teachers can vote with their feet. As Tom Bennett put it in a recent blog:

In one room you might have a government minister taking questions of the evidence base of their latest policy, and next door there might be a teaching assistant discussing how she launched journal clubs at her school. I love that sense of levelling, of democratic representation that it embodies.

I think this perfectly sums up ResearchED. Although, I am now wondering who is speaking next door.

Not only is this conference the embodiment of teacher empowerment. It is a triumph of science over assumed authority.

Irreverence for authority is arguably the most liberating consequence of the scientific method. Whilst there is still cause to listen to and learn from learned men and women, no opinion – however authoritative – can be cause to dismiss evidence out of hand.

Science, facts and objectivity don't care about your reputation. Science

cares about your evidence, your data and your hypothesis. In science, P-values trump PhDs.

So today, I hope all participants will take advantage of the cast list of speakers that Tom has assembled and seize the opportunity to challenge Dr Becky Allen on her analysis of this year's GCSE data, probe the validity of comparative judgement with Daisy Christodoulou, debate direct instruction with Kris Boulton, explore the effectiveness of academies with Karen Wespieser or quiz Amanda Spielman on the reliability of Ofsted inspections.

There are many examples from the history of science to show reputation need be no barrier to making meaningful contributions to human knowledge and understanding. Few are more inspiring than the story of Srinivasa Ramanujan, portrayed in the film 'The Man Who Knew Infinity'.

Having had almost no mathematical training, he began a postal relationship with English mathematician GH Hardy in 1913. From the quality of the mathematics in the letters, Ramanujan's genius was immediately apparent.

By 1914 he was working in Cambridge, following a month-long voyage across the globe. In the next 6 years, before his untimely death at age 32, this previously unknown son of a sari shop clerk made important contributions to mathematical fields such as analysis and number theory, becoming one of the youngest fellows of the Royal Society.

The romance of this story shows the emancipatory power of scientific thought, but it also goes to demonstrate that any source of evidence and new ideas can cast doubt on received wisdom and generate better understanding.

And it is by permitting and embracing doubt, that humanity has made some of its greatest strides. Doubt is to be embraced, not eschewed.

Consider the early debates on quantum mechanics – as I often do – between two of the greatest physicists to have ever lived: Niels Bohr and Albert Einstein. Famously, Einstein was reticent to accept the full consequences of the uncertainty principle. He famously declared: "I, at any rate, am convinced that God does not throw dice."

Through debate, experiments, data and evidence, Niels Bohr's interpretation triumphed over that of Einstein – arguably the greatest scientific authority since Newton.

Real science and proper research is open to doubt. It does not baulk at challenge, but embraces it and evolves to improve knowledge and understanding.

ResearchED is now established around the world – with teachers in 3 continents coming together to share and debate the research that has inspired their teaching. It is a forum that allows teachers to debate what the evidence says about best practice in schools.

This movement – as I said last year – will improve the education and life chances of millions of children. Year on year, the speakers at the conference

become more diverse. Importantly, this diversity includes hosting speakers with contrasting political, philosophical and educational viewpoints.

And yet, there are still some education academics who question the motives of Tom Bennett, ResearchED and all of the volunteers who help to make these conferences a success. To my mind, this is an indictment of those researchers who choose to disparage this movement, rather than engage and contribute.

Refusal to debate one's research and share it with teachers, begs a number of questions. Notably, what is education evidence for, if it is not to be shared with teachers? And what is there to fear from presenting and discussing your research at a politically, philosophically and educationally diverse conference?

But presenting one's research to classroom teachers shouldn't be countenanced as a fear, but as an opportunity. As should the chance to present, discuss and debate in a vibrant marketplace of ideas such as ResearchED.

The Heterodox Academy is a politically pluralistic group of professors working in various academic fields, drawn together to improve academia by enhancing viewpoint diversity and the conditions that encourage free inquiry. This group – which includes the likes of Philip Tetlock and Jonathan Haidt – has highlighted the cost of a lack of 'viewpoint diversity' in social science and humanity departments.

Thankfully, there are many respected academics who are seizing the opportunity to present today. Teachers attending this conference will have the opportunity to listen to Dr Pedro De Bruyckere dispel myths and point to promising avenues for the role of technology in education. Dr Christian Bokhove of Southampton University will be arguing that some myth busting in education is oversimplistic and creates new myths. And Professor Ayako Kawaji is running a session on what we can learn from expressive writing in Japan.

But it is a shame that some would rather stay in their ivory towers than participate today.

The intellectual timidity of those who choose to smear ResearchED, whilst refusing to debate their evidence, stands in stark contrast to the efforts that ResearchED makes to be inclusive for all.

On a very limited budget, armed with little more than the goodwill of speakers and volunteers, ResearchED will run conferences in New York, Toronto and Amsterdam in the coming months. Included in the meagre entrance fee is lunch, snacks and a crèche for parents of young children. All for a fraction of the price of some education conferences. Here endeth the advertisement!

Responding to some recent criticism, Tom Bennett decided to restate the objectives of ResearchED, arguing that it is "important to continually define ourselves, in order not to be misrepresented or misunderstood."

He eloquently explained his mission to disrupt shibboleths and tip sacred cows:

ResearchED delights in debate, changing paradigms, and helping to generate a polite revolution in the classroom. I started it because I believed passionately – and still do – that education needs a revival, if not a reboot. It labours under so many false dogma and uninformed suppositions that in many ways it resembles medicine in the 18th century, when the doctor's authority was privileged, and his hunch was the final word. Just as medicine finally succumbed to empirical science, so too should education – as an aid to our decisions, not as an authoritarian mosaic tablet. It should intersect with our every action, so that when evidence is available we use it to inform our pedagogy and policy rather than stifle it. Bogus fads like Learning Styles and Brain Gym are the least of it; wild, unchecked pseudoscience abounds, untested, unrestrained. It is still possible for a teacher to be told that group work is the best way for children to learn, without any consideration of when, and where and how it might be applicable. Teacher talk is reviled, despite the enormous amount of research that suggests that careful, dialogic teacher talk is one of the most effective ways to convey information that is then retained. There are many more example of such things. None of these matters are settled, but every educator should be entitled to hear the evidence on both sides and make up their minds on the matter.

The contrast with those who eschew the international ResearchED conferences could hardly be greater.

Tom is right that it is important to restate one's beliefs. Not only can we be misrepresented and misunderstood, but we can lose arguments that we thought we had already won.

In this country, we are winning the argument in favour of a knowledge-rich curriculum; we are winning the 'reading wars'; and parents are voting with their feet on the question of free schools.

We must continue to expound the evidence in favour of how a knowledge-rich curriculum benefits all pupils, particularly the most disadvantaged. In the same breath, we must continue to make the argument for the EBacc. This policy is crucial to ensuring that all pupils benefit from a broad and balanced core academic curriculum at GCSE.

Research suggests that lower participation from disadvantaged pupils in these core academic subjects can negatively affect social mobility. Yet overall, disadvantaged pupils remain half as likely to be entered for the EBacc subjects as their non-disadvantaged peers, and the gap in EBacc subject entry persists even among the most academically able disadvantaged pupils.

Evidence from the Sutton Trust found pupils in a set of 300 schools that increased their EBacc entry, from 8% to 48%, were more likely to achieve good English and maths GCSEs, more likely to take an A level, or an equivalent level 3 qualification, and more likely to stay in post-16 education.

The authors of that study noted that “pupil premium students benefitted most from the changes at these schools”. That is why this policy is so important and why we must continue to make the case.

But there are some who argue that the EBacc is not right for some pupils – too often these are pupils from disadvantaged backgrounds.

I firmly disagree with this view.

A recent publication from the Institute of Education examining the effect that GCSE choice has on education post-16 added yet further weight to the evidence demonstrating that the EBacc is crucial to driving social mobility.

The paper found the following:

Students pursuing an EBacc-eligible curriculum at 14-16 had a greater probability of progression to all post 16 educational outcomes, while taking an applied GCSE subject had the opposite effect. There were no social class differences in the advantages of pursuing an EBacc-eligible curriculum which suggests that an academically demanding curriculum is equally advantageous for working class as for middle class pupils.

On launching the report, one of the authors, Professor Alice Sullivan, said:

The results show that controlling for both prior attainment, and a range of socio-economic and other factors, pupils who had taken EBacc subjects at GCSE were 7 percentage points more likely to stay on at school.

The EBacc is of benefit to all pupils, irrespective of their prior attainment, background or sex. Indeed, the report found that:

Pursuing an EBacc-eligible curriculum increased the chances of educational progression particularly strongly for girls and white young people, and studying an applied subject decreased the chances of girls staying on. In particular, studying an EBacc-eligible curriculum at age 14-16 increased the chances of studying subjects favoured by selective universities at A Level.

Given the importance of raising attainment for white working-class boys and increasing the proportion of girls taking STEM subjects – particularly post-16 – these results are very encouraging.

The government will continue to make the case for more pupils studying the EBacc. We believe that a core academic curriculum comprising the EBacc subjects alongside other high-quality, knowledge-rich subjects – including the arts – should be available to the vast majority of pupils, because that

is what the evidence shows.

As Tom Bennett has said:

You know who benefits most from working with evidence? Children. And of them, who benefits most? The least advantaged. Those with no second chances, no tutors, no jobs waiting for them in publishing no matter how they do. The children who are poor, marginalised, miles away from the opportunities and privileges of the elite. They are the ones who need this the most. It is our duty to overturn every dogma we have, obtain the best evidence we can, and turn that into rocket fuel for the ones that need it the most.

Many schools – including those making the most progress in the country – are providing their pupils with opportunity to study the EBacc suite of qualifications. The government is determined that schools around the country follow the evidence and grow the number of pupils given access to these core academic subjects.

With every new piece of research that confirms the importance of a core academic curriculum to social mobility and improved attainment, we must push back the voices of opposition. We must make the moral and evidence-based case for an academic curriculum for all pupils, regardless of background.

Making the case at conferences such as this, at TeachMeets or in the school staff room is vital. Consider another evidence-based argument, which is now close to being won thanks to tireless work by teachers and academics pursuing the evidence.

For over a century, war has waged in education over the most effective means of teaching children to read. Finally, this fight is coming to an end thanks to the strong evidence in favour of systematic synthetic phonics.

One of the most important interventions in this war came from America's Rudolph Flesch in 1955. In his book titled 'Why Johnny Can't Read: And What You Can Do About It' Flesch concluded that Johnny was being held back at age 12 for his poor reading ability because he had not been properly taught how to read.

Johnny had been taught to read using a method known as 'look and say', in which children repeat written words they see on the page until they recognise the whole word on sight. As they begin to recognise more and more words, so the theory goes, they pick up the ability to read.

This was regarded as easier than the time-honoured method of teaching the sounds of the alphabet and how to blend these sounds into words, the method known as phonics. Flesch was deeply critical of the existing orthodoxy in the USA about how best to teach reading.

For decades, educationalists formed 2 camps – a small group in favour of using phonics was opposed by a larger body that promoted this so-called 'look

and say' or 'whole word' method. According to this now-discredited theory, children would learn to recognise whole words or use context or other stimuli to guess what the word might be.

Thankfully, due to the overwhelming evidence in favour of phonics, there are now few educationalists prepared to deny that phonics should play a role in early reading instruction. Sadly, though, as so often when a losing argument is in its death throes, many decry the false dichotomy between teaching using phonics and using these now discredited approaches to reading.

Instead, many educationalists advocate using a mix of methods, combining guessing at words using context with some phonics training thrown in. Again, the evidence clearly shows that this is not an effective means of teaching children to read.

These fallacious and unevidenced beliefs about reading instruction have blighted the early education of generations of children around the world.

I vividly recall meeting a 9-year-old girl in a school I visited shortly before the 2010 general election. This girl had never been taught to decode. Instead, she had been given books accompanied by descriptive pictures. Rather than using her knowledge of the phonetic code, she was encouraged to guess words using pictures and the context of the story. The tragedy was that at the age of 9 she simply could not read – a situation that should not and need not have been allowed to happen. But, alas, she was not unique.

But in recent years there has been a reading revolution in England's schools. Last year, thanks to the hard work of teachers and the emphasis the government has placed on teaching phonics, there were 147,000 more 6-year-olds on track to become fluent readers than in 2012.

This achievement is the culmination of evidence-based policy and teaching.

In 2016, 81% of pupils reached the expected standard in the phonics screening check, up from just 58% in 2012. And with 91% of pupils reaching this standard by age 7, there is room for even greater achievement.

There are few – if any – more important policies for improving social mobility than ensuring all pupils are taught to read effectively. Literacy is the foundation of a high-quality, knowledge-rich education. Those opposed to the use of systematic phonics instruction are, in my view, standing between pupils and the education they deserve.

Unfortunately, the pernicious arguments that ignore the evidence in favour of phonics still abound and are having a detrimental effect on the take up of phonics in some parts of the country.

By 2014, about two-thirds of primary teachers surveyed by the government agreed that the teaching of systematic synthetic phonics has value in the primary classroom. However, 90% also 'agreed' or 'agreed somewhat' that a variety of different methods should be used to teach children to decode words.

The evidence in favour of using phonics during early reading instruction is overwhelming. Now, the battle is to spread this message to all classrooms. Events such as this one provide an excellent platform for disseminating evidence-based practice. It is important to make and remake the arguments so that all pupils benefit from the very best teaching methods in primary school.

And just as it is important to expound the evidence in favour of effective teaching practice, it is vital to reflect on and celebrate the structural reforms that are driving improvements in England's education system.

The expansion of academy freedoms to nearly 7 in 10 secondary schools and 1 in 5 primaries has improved parental choice and increased diversity of provision in schooling, injecting challenge and spreading innovation throughout the school system.

Whilst there is plenty of data to demonstrate this success, the most compelling evidence for providing teachers and schools with greater freedom comes from visiting some of the highest-performing academies and free schools in England.

This year, yet another group of free schools saw their first cohort of pupils receive their GCSE results. Whilst we do not have confirmed pupil-level or school-level data, there are a number of schools who appear to have done very well. Schools such as Reach Academy Feltham and Dixons Trinity Academy – both of which serve disadvantaged communities – have reported excellent results.

As with other leading academies and free schools, these innovative free schools pride themselves on having a strong approach to behaviour management and teaching all pupils a stretching, knowledge-rich curriculum.

As more and more of the country's leading academies and free schools – such as Harris Academy Battersea, King Solomon Academy and the Tauheedul Islam Boys and Girls High Schools – register country-leading academic results for their pupils, we will see a change in expectations and approach in schools around the country.

These high-performing academies and free schools serve as evidence of what it is possible to achieve. They demonstrate the power of having the very highest expectations of all pupils and they have raised what we now conceive of as high expectations. Importantly, they show that a core academic curriculum, serves the interests of all children.

They also dispel the myth that teacher-led instruction and the highest behavioural expectations are only right for certain children in specific regions of the country.

No longer is it tenable to argue that the success of the trailblazing King Solomon Academy can only be achieved in London. One only needs to visit Tauheedul Schools in Blackburn or Dixon's Trinity in Bradford to dispel that myth.

These arguments are not theoretical anymore. They are empirical.

As well as providing a high-quality education to their pupils, free schools have served as petri dishes. They have shone a light on what works in schools. What whole school policies, which curricula and which pedagogies work best.

And teachers can visit these schools, taking inspiration and ideas from what they see back to their school. Through their excellence and by sharing their stories, these free schools are providing and disseminating evidence.

By pursuing the evidence, fostering innovation and sharing findings with others, free schools have started an education revolution that cannot be ignored. In this way, they mirror what is happening at ResearchED.

Through innovation and a desire to challenge and create new solutions, teacher-led organisations are changing the education landscape. Evidence and empiricism now trumps dogma and received wisdom. And teachers, academics and – most of all – pupils stand to gain.

Thank you.