

## **‘Using International Comparisons to Refine the National Curriculum’**

**A speech by Tim Oates, Group Director of Assessment Research and Development, Cambridge Assessment, to the Mayor’s Education Conference, November 2013**

Today I have been asked to provide a brief outline of the way in which international evidence can be used to enhance domestic education policy, such as the content of the national curriculum for England.

But before I do this, I would like to address the controversial exchanges over the merits and demerits of ‘a knowledge-rich curriculum’.

Having examined the arguments of the protagonists, it is clear that the current debate should not be seen simply as ‘knowledge equals good’ on the one side and ‘knowledge equals bad’ on the other. What I find of particular concern is the impoverished concept of ‘knowledge’ apparent amongst those expressing opposition to the direction of travel of the curriculum review. In opposing a ‘knowledge-rich curriculum’ it is clear that many are seeing ‘knowledge’ as merely ‘discrete facts to be remembered’ – and thus are committing two serious errors.

The first of these is to reduce ‘knowledge’ to an extent that is inconsistent with both historical and contemporary epistemology, and inconsistent with the ideas of ‘powerful knowledge’ developed by curriculum thinkers such as Michael Young, and those used in the curriculum review. This notion of knowledge encompasses concepts, principles, fundamental operations and bodies of core factual content. It encompasses factual, procedural and conceptual knowledge.

The second error is the implicit criticism of the notion of ‘remembering’. Here I refer you to the insights from Dylan William’s work in the USA, where a ‘credit mentality’ dominated certain students’ thinking. Asked questions about, for example, an area of science, students have said ‘...no, I can’t remember the details, but I passed the tests so I have the credit...’. But this is antithetical to what we know about how education genuinely enhances life chances. John Bynner’s and Tom Schuller’s excellent work on the 1958, 1970 and 2000 cohort studies – some of the best studies we have on the impact of education in England – shows that knowledge in areas such as maths and science comprises ‘personal capital’ and substantially enhances life chances for individuals. If – as in the ‘I have the credit’ mental set – learning leaves no trace as a thing remembered or a behaviour changed, then there has been no learning. No personal capacity or capital has been gained.

The ‘powerful knowledge’ thesis emphasises both deep learning and the acquisition of person capital. But it also is relatively modest in respect of the national curriculum, relegating it to its rightful place. The curriculum review sought to clarify the distinction between the national curriculum and the school curriculum. A distinction between powerful knowledge that can, on the basis of international evidence, be laid down by the state – a statement of ‘standards’, in one sense - in contrast to the wide range of ‘goods’ that are delivered by schools, through the rich, expansive and motivating totality of the school curriculum. I will return to this in a moment.

Alongside the impoverished notion of 'knowledge' in the contemporary debate, there also exists a false opposition between 'knowledge' and 'skills'. There are two things that I wish to highlight. The first is the fact that the revised national curriculum contains a broad range of skills: applying and using mathematical techniques; wide reading; measuring and observing in science; capacity to engage in rich oral exchange. The second is that there has been a misunderstanding of what is happening in other nations. Critics say '...but Singapore is focusing on creativity and innovation...'. This criticism lapses into the false opposition between knowledge and skills, and fails genuinely to understand the policy and practice in Singapore. Rather than 'instead of', the Singaporean policy is 'as well as'. Developers and policy makers there would be horrified if you suggested that these vital outcomes of the school curriculum – providing motivated, creative and innovative learners – were obtained at the expense of high standards in subject disciplines (such as absolute security in the four number operations by the end of primary education). But I have written elsewhere how, in 2007 in England, we did see this as an opposition, with these competing for time, space and attention in the national curriculum. Like the Singaporeans, I believe we should adopt a sophisticated approach to the totality of goods secured through education: no false oppositions, but use of a position of 'as well as' and not 'instead of'.

So...what of international comparisons ... all this talk of 'PISA shock', 'international ranking' and 'policy borrowing'?

In the few minutes I have I am going to encourage you to listen to international evidence and not to write it off, as some commentators and academics do. I am going to encourage you to reject crude 'cherry picking' and those that use 'constructed paranoia' as these instil a general fear of high performing jurisdictions in order to justify domestic policy, without attending to true lessons from those jurisdictions. It is a modern-day version of cold-war paranoia '...be afraid, very afraid...the Russians are coming...'.

Can we learn *everything* from looking at other national systems? Policy borrowing of approaches used in other systems? Done crudely, seldom a good idea.

By contrast, can we learn *nothing* from other systems? Well that's absurd too...there have been great transactions between education systems, multilateral agreements and developments, and actually, some highly beneficial *export* from the UK – such as high quality curriculum-linked assessment, universal access to primary education, research-intensive HE.

We can of course learn *something*. With a keen eye, informed by sound theory on how education systems work – with due regard to history, culture and complex interactions.

I work for Cambridge Assessment, a large non-teaching department of Cambridge University, and there we work with more than 170 countries. This provides a fascinating opportunity for reflection on different systems and what works well in different settings. This encourages David Raffe's sophisticated policy *learning* not policy *borrowing*.

Let me show the importance of digging deep into evidence – and combining 'high theory' about other systems with sound detail of reality on the ground – by giving some facts about other systems that will contradict what you may have heard.

Currently, contrary to assumptions, performance in Finland is declining. But is Finland therefore now *uninteresting*? Far from it. You will have heard endlessly about the lack of external assessment and inspection in Finnish schools and how this *caused* their success. But this isn't right, and doesn't accord with the historical record.

You *won't* have heard about wide-ranging, open social and political discussion about education during the 1970s - the rigid Soviet-style control from the centre after society as a whole determined that fully comprehensive education was the way to go - and dirigiste control during their period of rapid improvement, including state-approved textbooks. Unless you look and ask the right questions, you won't spot where they place restriction in their system – and it is a very tight form of restriction. Rather than heavy formal accountability, Finland applies restriction particularly through initial teacher education – only 10 per cent of applicants are accepted, and these are selected on the basis that they genuinely love teaching and have high academic attainment. And there are five years of teacher training – dual track – in subject specialism and learning approaches.

Even with declining performance, can we learn from Finland? Yes, we can look at the form of teacher training, the model of ability in primary, the nature of learning support for all pupils of both high and low attainment. We can, and should, look at the shared ideas about ability, quality and educational purpose.

Now, Japan.

I have been criticised for examining research on pedagogy in Japan; indeed, a leading academic said to me: 'you can't emulate Japan - look at the suicide rate amongst young people...' with the implied message: 'base our learning on Japanese practice and you will be responsible for killing kids'. Apart from the fact that Japan is ranked 39<sup>th</sup> on a measure of suicides amongst 16-19 year olds, and...wait for it...Finland is 22<sup>nd</sup>, Austria 20<sup>th</sup> and NZ 6<sup>th</sup>. We are bunched with Sweden and Netherlands around 58<sup>th</sup> place. All a bit counter to assumptions.

On Singapore: again, I have been told: 'You can't emulate Singapore: it's small'. I agree with this – the population is about five million, in common with many fast-improving systems. I'm also told: 'It's a homogenous society'; but no, not so - ethnic minorities make up around 25 per cent of the population. 'It has low socio-economic status inequality'; again, not true; Singapore is 42.5 on the GINI income distribution index while Finland is 26.9 and the UK 30. 'It's an authoritarian state' – again, great care needs to be exercised on this...Singapore has a democratic process different from the UK, but it certainly operates with interesting and sophisticated consents from its population – a complex 'social deal' is in place, very different from our own politics...and that process has seen a very real increase in educational standards, with benefits distributed widely. The point is this: despite difficult facts regarding SES and social composition, Singapore's education system does a wonderful job of ensuring low spread at age 11, high attainment and high enjoyment. Dig deeper and you will find excellent pedagogic models in maths, a responsible approach to innovation, and a technical and realistic approach to challenges in the system.

What of England – are we in crisis? Is our education system falling apart? No, not in crisis. Rather, a period of chronic stasis – an inability to improve significantly and quickly. The key indicators are flat; and that's going back three decades. The ICAMMS 1976-2010

proportional reasoning – no significant change. The Organisation for Economic Co-operation and Development (OECD) Programme for the International Assessment of Adult Competencies (PIAAC) found the later generations not significantly better than previous ones. The Trends in International Mathematics and Science Study (TIMSS), the Programme for International Student Assessment (PISA) and other measures simply endorse this. Rob Coe's excellent inaugural reinforces this perspective. So there certainly seems to be a lot of sense in looking at the fast-improving jurisdictions and seeing if there's anything we can learn.

What are the stand-out elements of other systems?

Fewer things in greater depth, in Primary (Reynolds and Farrell)

Focus on the key concepts and content (the 'powerful knowledge' thesis by Michael Young)

Curriculum coherence – its two forms (Schmidt and Prawat); the right material in the right sequence, and all aspects of the education system – curriculum, assessment, accountability (14 factors in all) – pulling in the same direction, towards high standards and high equity

Models of ability (Stigler and Stevenson, Alexander) – lots to learn from Finland, South Korea and other Asian states

Teacher quality (Hattie, Sahlberg, Alexander) – and we could start with greater subject specialism in Primary

Avoiding the false skills/knowledge opposition – move to 'and' rather than 'instead of' (Singapore)

All of these were emphasised in the Expert Panel report which we presented in December 2011, and laid out clearly the principles for the Review.

So...on to England and the 2014 national curriculum.

We desperately need to re-establish the correct relation between the national curriculum and the school curriculum. The national curriculum - a list of core content in the right developmental sequence – comprises the things that can, on the basis of domestic and international evidence, be stated as a requirement of standards, by the state. It's a category error to demand that this is motivating and engaging – a lot of it is challenging, counterintuitive and difficult. But it should – and now does – include things such as rich oral exchange in all subjects, wide reading for pleasure, things we know are essential to high attainment and good life chances.

And then we have the school curriculum – rich, expansive – contextualising for children the counter-intuitive stuff of the national curriculum, and providing a wide range of personal and social goods which cannot readily be stated in detail by the state and required and policed

from the centre. It's the school curriculum which makes the dry standards of the national curriculum come alive for individual students.

This realignment of the role of national curriculum and school curriculum – placing the legislative requirement of the national curriculum in the right place – entails a big curriculum and assessment development effort from schools ... and in a time of austerity. But the evidence suggests that it is the right direction of travel.

We need to look at models of ability in Primary. This deals not with content issues but with fundamental ideas of education. Other high performing systems see all children capable of anything. In the UK we have been prone to labelling – including labelling with 'levels' (against the very reasons why Paul Black suggested levels in the first place), with implicit ideas of fixed ability or differential rates of progress. When we ask 'why hasn't this pupil grasped X yet?', we should not answer 'because they are level 3A' but instead 'because I haven't presented it to her/him in the right way yet'. We need to be less prone to simple models of progression and open up the importance of expansion and consolidation (a key feature of education in Singapore and Hong Kong) and their role in deep learning – stuff you retain as personal capital.

We *can* benchmark standards internationally – we can identify what is humanly possible for nine, 10, 11-year-olds, and the possibility of high equity, high attainment and high enjoyment. The Department for Education December 2011 reports on international comparisons are a comprehensive and illuminating scan of requirements in other systems.

We need to achieve careful alignment of the requirements of the state, the aims of the national curriculum and the school curriculum, inspection, assessment, funding, professional development and accountability measures. This is one form of Schmidt's 'curriculum coherence' and shines out of the highest-performing systems. It is not a feature of our own system at present.

I believe that the sophisticated appeal to domestic and international evidence is vital – and by being evidence-based, the national curriculum developments are taking things in the right direction.

Thank you.