

Your Curriculum

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Since 1990, when the dying embers of Thatcherism finally instituted a National Curriculum (NC), the curriculum in your school has been a matter of statute, and flouting it has (theoretically) been an offence punishable with imprisonment. In reality I don't know of a single case where that happened, and since those early fiercely centralised years, the national curriculum has become ever-more loosely conceived and ever-more open to alteration. This trend continues apace with the current administration and readers will be aware that the D&T Association has for some while, been arguing the case with Ministers and others about the importance of maintaining design and technology within the framework of the National Curriculum. In that way we can be reasonably confident that at least a significant majority of youngsters will experience D&T in school. If the statutory framework excludes it, then the fear is that schools – for a variety of reasons, will reduce their provision of D&T.

The current administration with Mr Gove at the helm in the Dept of Education instituted a review of the NC with a steer to reduce its centralizing thrust and to make recommendations about cutting down on the Statutory NC, leaving within that framework only what might be regarded as the barest essentials. The rest of the curriculum could then be left to schools to decide under the wider policy ambit of 'localising' decision-making. This would make schools in England and Wales a bit more like those in the USA – where local school boards have a very big influence on the curriculum. There are of course pros and cons with localizing curriculum decision-making and two contrasted examples illustrate the thorny territory. Employment for most youngsters is local so wouldn't any reasonable person agree that the curriculum should support this by also being tuned to local issues? But on the other hand particularly in some school districts in the 'Bible belt' of USA – there has been some serious conflict over the science curriculum, especially on the issue of creationism vs evolution.

On August 11, 1999, by a 6–4 vote the Kansas State Board of Education changed their science education standards to remove any mention of "biological macroevolution, the age of the Earth, or the origin and early development of the Universe", so that evolutionary theory no longer appeared in state-wide standardized tests and "it was left to the 305 local school districts in Kansas whether or not to teach it." This decision was hailed by creationists, and sparked a statewide and nationwide controversy with scientists condemning the

change. http://en.wikipedia.org/wiki/Creation_and_evolution_in_public_education#Kansas

and see www.agiweb.org/gap/legis106/evolution.html

Anyhow, Gove's expert group¹ was to make its recommendations about the new National Curriculum before Christmas. And it duly did. And I hope that over the turkey and Christmas pudding, readers have had a chance to read the report. **The Framework for the National Curriculum. A report by the Expert Panel for the National Curriculum review.** Dept for Education: Dec 2011

I should make clear that nothing is decided at this point. This report is just recommendations from the expert group to Mr Gove and his team at the Dept of Education. They may ignore the report altogether, or they may accept some of it and not other bits. There may be another election and then everything is back in the melting pot. But the report is still interesting for us to get our heads around. And particularly in one respect.

The report describes what it sees as the current state of play with the curriculum...essentially existing in three categories:

- the *national* curriculum
(statutory core and foundation subjects defined in Programmes of Study and Attainment Targets)
- the *basic* curriculum
(compulsory elements – but left to schools to determine the specific nature of the content i.e. there would no longer be centrally prescribed Programmes of Study or Attainment Targets.)
- the *local* curriculum
(anything additional to the above that schools choose to teach)

It should be noted that the current basic curriculum elements are religious education, sex education, careers education and opportunities for work-related learning during Key Stage 4.

The National Curriculum Expert Panel Report goes on to say (para 4.7)

While there appears to be a strong argument for retaining most existing curriculum subjects in some statutory form, we believe that the National Curriculum should be slimmed down by reclassifying some subjects and topics as part of the Basic Curriculum. This would

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retain a duty on schools to teach them, but would enable schools to determine appropriate content, i.e. there would no longer be centrally prescribed Programmes of Study or Attainment Targets.

It then goes on... (para 4.8) We recommend that: Design and technology is reclassified as part of the Basic Curriculum. We recommend that design and technology programmes should be developed by schools in response to local needs and interests...

Wow...there is a bit of a show-stopper. Design and Technology (interestingly along with ICT and Citizenship) would remain compulsory subjects of study, but their specific content may be determined locally.

So what are we to make of this?

I am aware that these recommendations will create many different forms of heart-ache with various constituencies, but it is worth saying that should these recommendations be enacted by the Government, the curriculum would still be far more prescribed than at any time before 1990. When I started teaching in 1970, nothing (except I think Religious Education) was compulsory for schools. Indeed it was this very freedom of action that enabled schools to put on very different forms of crafty/designy/technology curricula. The resulting melting pot eventually crystallised into the form of design and technology as we now know it, but this would never have happened if the 1960s curriculum had made the then existing subjects compulsory (woodwork, needlework, technical drawing etc). Lack of central prescription empowers the freedom to innovate, and in the 1970s and 80s we did just that. But (as we have seen with the issue about creationism) the responsibility for building a curriculum is a very heavy one and it is worth thinking about how things might play out.

The innovations that progressively created design & technology were often inspired by individuals and small groups of teachers, but the key factor was the *institutions* that gave authority to those innovations. And there were four key institutions. Examination bodies (O & A level exam boards in the 1970s and GCSE Boards in the later 1980s), Local Education Authorities and the network of Advisers, Teacher Education institutions, and HMI. Any number of gardening metaphors come to mind to describe how these institutions contributed: as seed-beds to promote new practice; as propagation systems to spread ideas; as filters to ensure quality; as kid gloves for managing fragile seedlings; as fertilizer for rewarding and encouraging; as secateurs for eliminating and shaping.

So might these institutions once again start to play a key role if design and technology is devolved out for schools to determine? Oops – probably not.

LEA's have been slashed almost out of existence and the advisory teams are virtually gone. Teacher Education colleges are suffering the same fate with drastically reduced student numbers and Vice Chancellors making it clear that teaching courses are just not economic for the universities in which they reside. HMI I suppose we must now read as Ofsted and it has no curriculum development role. Which just leaves the Awarding Bodies. It is no surprise that the vast majority of CPD now available to teachers is provided by these Awarding Bodies and only in relation to the specifics of their examinations. But even as I write this piece, the debate rages about whether Mr Gove will eliminate them as competitive entities, giving monopoly provision to individual Awarding Bodies for individual subjects. Not – one would have thought – a very Conservative policy, and distinctly anti-competitive, but we'll see.

So, where should a head-teacher look for help and guidance in the brave new world of school-based curriculum design and development?

Some schools I am sure would be inclined to have a go at writing it all from scratch, but for guidance I imagine that there will also be no lack of pre-packaged curricula available in this future world. The D&T Association of course would be expected to take a lead and additionally, with the all-pervasive internet – programmes of study from around the world might be sampled. Publishers (Pearson et al), Awarding Bodies and private companies will all, no doubt, make their pitches for your attention. So where to start?

My suggestion as a starting point would be to write your own vision-statement. Like the 'importance' statement in the current NC – but your own. A short paragraph that summarises *what you really value* about D&T. Then use that as your benchmark for working out a programme of activity. For what its worth, my vision-statement would certainly include the following.

The hand is the cutting edge of the mind.... In the end the march of man is the refinement of the hand in action. (Bronowski 1973)

Or, as Gorman and Carlson put it when – as cognitive psychologists they reconstructed the process through which Edison and Bell invented the telephone.

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...the essence of invention seems to be the dynamic interplay of mental models with mechanical representations. (Gorman and Carlson 1990)

We know that this is how designing works, but the evidence of history is that science too and indeed the entirety of human progress relies on the same interplay. Design & technology is not so much a curriculum problem ...more a trump card.

References

Bronowski, J. (1973) *The Ascent of Man*. London: British Broadcasting Corporation.

Gorman & Carlson (1990). Interpreting invention as a cognitive process: the case of Alexander Graham Bell, Thomas Edison and the telephone. *Science, Technology and Human Values*, 15(2).