Behind the headlines

The tail end of summer is appropriately named the ‘silly-season’ for journalism, when all kinds of half-season nonsense gets into the press, or alternatively when real stories get grotesquely overblown in the desperate need to fill pages of newsprint. This year we had (as always) a reliable stalwart for the journalists to write about – exam results at age 15 and A2. This has predictably raised yet again the old debate about ‘standards’, and equally predictably thrown us (university folk) into the normal fervour of ‘clearing’ as students attempt to sort out their last minute places at university. But we also had a new issue appearing on our horizon for the first time this year – the crisis in the Criminal Records Bureau over the declaration of teachers’ criminal records. Both these issues are worthy of a brief discussion – not in terms of the normal stuff that appeared in all the national newspapers – but rather in terms of some of the facts and issues that underlie those stories and that the journalists were unable – or unwilling – to identify for us.

So first – the criminal records issue
As a postscript to this story, the villain of the Tom Cruise film was the ‘pre-crime’ boss gone bad. His huge power to arrest people who had done nothing went to his head. And Tom Cruise’s triumph was to get the department of pre-crime abolished. Hmmmm… there’s a thought.

But what about our second issue: assessment standards?
If GCSE grades are translated into points (and points mean prizes) then all subjects in the curriculum can be calculated to have an average point score for any year. In 1994, design and technology had a lower Average Point Score (APS) than any other subject – with music at the top of the list. In 2001, music was still at the top of the list, but now French is at the bottom. Design and technology had a lower APS than any other subject – with music at the top of the list. Moreover, in the process of moving up that list, design and technology has achieved the greatest improvement in APS of any subject in the curriculum.

There are several ways of interpreting these data. My preferred interpretation is that in the early 1990s there was considerable turmoil within design and technology – and not a little confusion about what exactly it was all about. We had the Parkes Report, then the National Curriculum Council Consultation Report, then the publication of the formal National Curriculum document. And then the proverbial effluent hit the fan.

Over the next four years there were (I think) three re-drafts of the National Curriculum for
design and technology, and in the middle of all that, we had Smithers and Robinson telling us we were ‘In a Mess’. And it has to be admitted that in all this upheaval there were some funny things going on in some schools under the name of design and technology. Design and technology was the only seriously different subject in the 1990 National Curriculum, making it compulsory – for the first time ever anywhere in the world – for students to study design and technology through to age 16. You will remember that it was not even one of the also-rans of the National Curriculum, but rather was talked about by Ministers as part of the ‘extended core’ of the National Curriculum: English, maths, science, and technology. There was of course no in-service training budget for teachers, to help them to adapt to the new formation of ‘design and technology’ – with all its constituent parts.

Bearing in mind all this upheaval – and all the arguing about what design and technology was (and what it wasn’t), and all the to-ing and fro-ing about how to organise it into the curriculum – we should hardly be surprised if the GCSE results of the first few years of implementation were less than wonderful. So – given this interpretation – we can understand why, in 1994, the APS for design and technology was at the bottom of the list. But how do we now account for its rise? Well again, my preferred interpretation is that by 2000 these early rows and glitches had been ironed out, teachers had developed a more authoritative grasp on the subject and had definitely wised up about how to improve student performance. So the APS for design and technology rises steadily and in fact rises faster than in any other subject.

And there is another statistic that is interesting here. For within that ‘extended core’ of subjects, the entry for design and technology has grown phenomenally. Whilst maths is taken by 95% of the cohort; English language by 94%, and science by 81%, design and technology is next highest on the list with 75%. Set this against those at the top of the APS league; music with 7% of the cohort, and art with 30%. The improvement in design and technology APS has been achieved at the same time as coping with a massive expansion of the proportion of the cohort taking design & technology.

All this is great news, right? Well ... maybe. For there are some other statistics that lurk under the surface and that deserve rather closer attention than they are currently getting. But we have to ask a set of progressively more difficult questions to highlight the issue I am interested in.

We can start by looking across the group of specialist courses that constitute design and technology at GCSE: food, graphics, resistant materials, systems and control, textiles, electronics. Specifically we might look at what happens to the A-C percentage achieved in each. Then we ask the question ‘...does the A-C percentage across courses remain constant when we look across exam boards?’ In case you haven’t worked it out, the answer is ‘no’. With food, resistant materials and systems and control, there is an 11 percentage point variability between A-C percentages across the three boards AQA, Edexcel, and OCR (these data do not include WJEC). But what if we ask another question – digging yet further into the detail of the statistics. What happens to this variability when we look at the students not as a whole – but in terms of the gender groups. How does boys'/girls' performance in the focus areas hold up across exam boards? Not too well I fear. In one focus area, one exam board has the girls heavily outperforming the boys, whilst another exam board in the same focus area has the boys heavily outperforming the girls. The resulting gender variability is far too big for comfort. Perhaps it is just as well that the journalists writing the lurid headlines of August did not appear to have access to this little bit of data.