

**Day 3: Friday 13<sup>th</sup> January, 2011**

## **World-wide educational innovation**

### **Raising the achievement of pupils who are not reaching their full learning potential: a senior manager perspective**

*by Tony Parkin*

A key aspect of BETT over the past few years has been its ability to attract senior politicians and policy makers from around the world to see for themselves what innovations are happening in the world of education and technology. With the associated World Education Forum it has also offered them an opportunity to exchange ideas and practices with peers from other countries, and explore how policy and strategy can impact the learning in the classroom.

This workshop brought together both practitioners and international experts involved in policy reports in 2011. As well as contributors from around the globe, the assembled participants included familiar faces from the world of educational ICT in the UK, including Chris Yapp, Steve Moss, Partnership for Schools, Doug Brown, Step A international, John Galloway, Pete Bradshaw, Open University, and Chris Binns, 21st Century Skills.

In typical MirandaMod style and as per all workshops at BETT 2012, a host of technologies were in use. These included live mind-mapping, live video-streaming, and a twitter stream, with large Smartboards displaying these back into the room. MirandaNet regulars John Cuthell, Theo Kuechel and Leon Cych, with the help of Matt Pearson from Smart, kept all the plates spinning.

Professor Margaret Cox outlined the work of an international group of educational researchers that have been examining the ways technologies impact on education. In 2008 'The International Handbook of Information Technology in Primary and Secondary Education' was published, including the work of some 27 authors, to help draw together guidance from research practice and findings on the use of educational technologies in the classroom. To prevent the possible fate of such a handbook being to gather dust in universities, rather than impact practice, this was followed up in 2009 by a related international conference, at which 70 leading researchers, policy makers and educators, spanning six continents, gathered in The Hague in The Netherlands for the first EDUsummiT in 2009. Their primary goals were to: a) establish a clear view of the role of ICT in 21st century learning, and b) examine implications of ICT's emerging role for formal and informal learning.

The conference attracted three types of participants, practitioners, researchers and policy makers, though in many cases the individuals concerned wore more than one of these hats. The conference aimed to draw out the findings of the research into 21<sup>st</sup> century skills in ways that would be of particular value to policy makers, and also practitioners, who sometimes could feel detached from the work of academic researchers. The conference was particularly keen to identify what were the research findings that had had real impact on education policy and also on actual classroom practice.

Two years further down the line, and after further activity, another larger conference was arranged in Paris, organised by UNESCO (Teacher Policy and Development Section),

the International Society for Technology in Education (ISTE), Society for Information Technology and Teacher Education (SITE), Kennisnet, International Federation for Information Processing (IFIP) WG 3.3 (Research on Education Applications of Information Technologies) W.G. 3.3, the Association of Teacher Education, (ATE) and the International Journal For Computer Assisted Learning. This meeting brought together 120 distinguished policy makers, educators, researchers, journal editors and private sector leaders - those key to the field of ICT in Education - to build on the outcomes of EDUsummit 2009.. This was again designed as a working conference to continue to pursue the original objectives, but also to spread the net more widely. The aim was to engage more countries, and to try and identify common factors that were equally true for small villages in the Andes as university towns in Texas, but also the national and local variations in practice and findings.

The conference explored reports on the impact and evidence of the UNESCO programmes and initiatives in ICT in education, and the International Handbook of Information Technology in Primary and Secondary Education, which had served as the basis for the earlier EDUsummit 2009. In Paris there were additional aims of refining the national, international and regional models for the use of ICT in 21st century education, and of developing strategies to help build a global community of policy-makers, teachers and researchers in the field of ICT in Education. During the event participants worked on the original briefing papers to produce expanded versions published after the event (<http://edusummit.nl/res2011/calltoaction2011/briefpapers2011>).

Professor Cox stressed the importance of the practitioner engagement in helping with the next planned phase of their work, looking at the best research methods to enable the evaluation the impact of students' informal learning using ICT on their formal education. The myth of the digital native was already exposed, and the role of the ICT literate teacher widely accepted as crucial, but there was a real need to examine the complex factors involved in moving this research forward.

Doctor Mary Webb, who had written one of the chapters in the original Handbook, then took the floor to explain her work on the assessment aspect of this research, and progress to date. Her group in Paris had focussed on the implications and opportunities offered by ICT when it came to formal assessment in education. Two issues impacting the future of assessment had been focussed upon: firstly, to establish a clear view on the role of ICT in 21st century learning and its implications for formal and informal learning, secondly, the development of new assessments designed to measure outcomes from technology enriched learning experiences. But one key question that arose, and they kept returning to, was the actual purpose of assessment. Is it's role to serve the interests of the learner, to enable them to gauge their own performance and ability to improve, or is it primarily to monitor the performance of educational establishments or systems?

Moves towards Assessment for Learning, linked to Learning to Learn, were occurring all round the world. So is there always a dichotomy between assessment for learners, and the assessment of learners, or is it possible to have assessment models and frameworks that deliver on both, and can ICT help with this? There is a certainly a belief that ICT can perhaps afford a more personalised and granular form of assessment that could be of greater benefit to all students, and more capable of meeting their own specific needs, requirements and capabilities. The group were in favour of some of the emerging frameworks in formative assessment that primarily used peer discussion and mentoring to enable students to help monitor and assess their own performance and get feedback on the direction in which they were going, though many of these were written without any specific reference to ICT or the way it may impact on the work. However some took into account the use of such tools as discussion boards, or Facebook, to monitor the developments, and some took account of the potential of the so-called 'stealth

assessments' that could be developed through such tools, such as the number and nature of engagements or interactions. Such approaches could generate vast amounts of data, and clearly one technology aspect is the challenge of how this data can be converted into meaningful information that can help the student, their peers or their teacher assess their performance and progress. Also whether such data can also be usefully harnessed and fed into the formal assessment process, so that it enriches that aspect too, but in a way that is fully transparent to the learners, and perceived as valid and positive?

Next up were Mike Howard and Sarah Younie of ITTE, The Association for Information Technology in Teacher Education reporting on 'The changing landscape: after Becta' . Members of ITTE, Naace and other experts in ICT had gathered at Warwick University in July 2011 to review the role of Becta (and its predecessor agencies) prior to the election of the coalition government, and to look ahead to a 'changing landscape' following its abolition. The resulting report had stressed the importance of ICT to engagement and motivation in learners, which is particularly important from the Achievement for All perspective on its contribution for those who find the existing curriculum difficult to access.

As there were international visitors present Mike gave a quick overview of the nature and role of the variously-named ICT agencies that had supported ICT in schools from the days of the Micro Electronics programme (MEP) onwards. He stressed that there had always been dimensions of both procurement and pedagogy, though at different points over the 30 or so years this balance had varied. There had always been technology guidance, to help schools make informed decisions about the choice and use of technology. There was also a smallish research arm that had helped share the evidence of the impact of ICT on learning, with the aim of comparing the levels of investment and the relative impact on learning outcomes.

Becta had been a significant contributor to the understanding of how ICT could impact on learners with Special Educational Needs and Disabilities, and it is important to recognise that Becta's disappearance had indeed left an important gap in key aspects of the Achievement for All agenda. However it was equally important to recognise that there was no suggestion from the constituency of heads, for example, for the return of an agency akin to Becta to fill this gap, and whilst it was possible to look at both positive and negative aspects of Becta's loss, Mike felt that it was important to see this as a glass half full, rather than half empty, and to look at the new ways in which some of this support and provision could be forthcoming.

Sarah Younie felt strongly that there was a positive route forward via stronger partnerships between the various educational organisations and agencies that already worked in this area, including ITTE, Naace, and the many subject associations that were well positioned to fill the vacuum. Key to this was recognition and close working with practitioners, over the long term, with a clear focus on addressing how the Achievement for All agenda could best be achieved. The focus needed to be directly on evidence of impact, about what technologies demonstrably worked to address the needs of particular learners, or which clearly fitted particular pedagogic situations effectively. This was not to be achieved via one-off CPD events, but by a longer term engagement with teachers to help them share and develop effective practices.

One example was in the area of the effectiveness of handheld and mobile devices, and gaming techniques, to motivate and engage reluctant learners. Anecdotal evidence abounds, there is some research evidence of effectiveness, but there is a clear need for more practitioner research to demonstrate clearly that this is an effective strategy to address the needs of hard-to-reach and disadvantaged learners.

Becta's work on parental engagement had produced unequivocal findings on the value of ICT in this key area. The provision of technologies and access to the vulnerable families was shown to have huge impact not only on children but crucially also on their parents, which was hugely important particularly in areas where there was cycle of deprivation, and generations who had disengaged from formal education.

At this point the session shifted from presentations to a general discussion which aimed to draw out from the participants the key areas on which to move forward. Garath Jackson raised the learning around small-step assessment techniques that were of particular relevance and importance in SMLD schools. However there were many pupils, some with specific learning difficulties, out in mainstream education that would also benefit from the use of these techniques. How best could that be shared?

There was also the issue that parents now were frequently much more engaged with their children's education, and there was a need for the real-time exchange of information between school and home, rather than waiting for termly meetings or end of year reports before this information transfer could take place. It is important to stress that this was not one way traffic. In many cases the children do not demonstrate their progress in the classroom, but will be more likely to show the small-scale learning gains when in the familiar surroundings of their home. So the parent must be seen as a partner in the learning, and be able to easily and rapidly transmit the occurrence of these small steps back to the teacher in school. Parents must be treated as partners in assessment, and feel able to contribute and feedback actively, as well as able to find out what has gone on in the classroom so that they know what steps and changes that they are looking for in their children. This is becoming increasingly granular, and those working with children on P scales had already started to break the levels down into smaller steps that gave clear exemplification of the child's progress. A strong appeal from amongst the participants in the session was for increased use of technology to help bring parents more into the assessment process, so that they not only understood the P scale system, but were an equal contributor to the typically one-to-one conversation between teacher and pupil. Perhaps this might be achieved by treating the learner and parent as a unit, rather than perceiving them as completely separate- the flexibility of ICT systems would certainly allow for confidential yet transparent sharing between home and school in this way? Indeed this did not require new systems, many of those learning platforms already in schools were already capable of doing this, and it was a case of getting schools to use them in this way. There was also a need to be more flexible in terms of multimodal approaches, rather than relying on text - video and photography had proved to be extremely effective ways of increasing information exchange and engagement by parents and reluctant learners.

Another key approach can be to have a simple list of small step gains made by children available as examples to parents, so that they can see that simple gains, such as successfully taking a child to a cinema for the first time, for example, can be recorded and celebrated. Again the parents are key contributors to the learning framework of the child, and the impact all round can be immense.

As with all the other BETT workshops, though the session had been led by specified presenters, many of the contributions and observations came from the floor and assembled participants, and it was clear that the rich discussions here could have gone on for much longer, but the session was drawn to a close. Though of course the hope is that these conversations are still continuing, and that they will continue to get richer and deeper into the future.

The International Handbook of Information Technology in Primary and Secondary Education <http://www.springer.com/education+%26+language/learning+%26+instruction/book/978-0-387-73314-2>

EduSummIT 2011 <http://edusummit.nl/res2011/calltoaction2011/briefpapers2011>