Multimedia presentation and intellectual progress

The challenges of multimedia in teacher education

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OFSTED inspectors have expressed concern that, despite the British investment in IT education, teachers across the curriculum are still not teaching about computer applications in sufficient breadth and depth. On the other hand, teachers need space, training and equipment to address these issues.

In the wider world, advanced multimedia products are having a profound impact on teaching and learning. These changes are underpinned by the shift in communication from written to visual forms in the mass media and the drift to constructive learner-centred teaching methods. Yet most world class academics, teacher educators, politicians and government officials rely on lectures devoid of illustration to convey their message. Charismatic performers have no need for multimedia resources: average lecturers need to rethink. Screen bullet points, for example, are a courtesy to second language English speakers: little use is made of drawings and photographs, still less of sound and animated sequences. Do keynote speakers fear that illustration will trivialise serious thought? In fact, their ideas may actually be in danger of being dismissed by an audience used to more effective presentation. In sharp contrast, many key industrialists use the full range of multimedia computer tools to make their point. Illustrative computer models and graphs are integral to the argument. Good design helps to underline a cogent point. But then business people will often have the design staff to add the finishing touches.

How can teachers be introduced to multimedia presentation as a teaching and learning tool across the curriculum and in their management roles ? One teacher education in service model was a full week's workshop in which Project Miranda fielded a mixed team of sixteen teachers, undergraduates and school students from 13-60 at the World Conference of Computer Education (WCCE'95) in Birmingham. Resourced by Adobe, Apple, BT, , Microsoft, Research Machines, TAG and Toshiba, the team were creating the conference newspaper and multimedia news stacks with the help of professional journalists. In the last edition an anguished editorial was written by the Miranda team undergraduates who 'with three or four high grade 'A' levels are labelled 'the top ten percent.' These young editors went on to say, 'Without exception, in the light of the WCCE '95 conference, we are computer illiterates. There are primary school displays here which use better integrated multimedia systems than we presently are subject to at university or have seen during our sixth form. Highly educated arts students largely do not rate technology beyond the capacity to word-process. Can we afford this level of ignorance from our most educated minds?'

Amongst the WCCE'95 presentations that had shocked these academically brilliant young people was a collaborative multimedia essay, I Hate School by a team of Scottish six year olds in the NCET National Educational Multimedia Awards (NEMA). These Inverkeithy primary pupils demonstrated an intuitive understanding of the hypermedia connections that resembled the free flow of human ideas in the mind. The six year old authors were able to handle multilayered narrative with the skills of film directors and dramatists, as well as writers and artists. Their teacher

deserves an accolade as well. Who taught her? And who else on the staff can mark the six year old essays?

Another in service model is the Toshiba Scholarship Programme. The emphasis is on the teacher educators' learning needs in a professional context. Teacher trainers and advisors have submitted proposals over the last two years that indicate a high level of understanding of the opportunities that advanced technologies offer. Their institutions are backing plans for on-line tutoring in inner cities, staff induction into computers, beginning teacher mentoring, curriculum projects with international links, developing multimedia resources as staff development and flexible lifelong learning in community contexts. On-line conferencing with peer and tutor support, as well as workshops for reflective teachers has helped to develop and share the professional use of the mobile Toshiba computers and Xemplar pocket books. In the final workshop, scholars' Power point and Hyperstudio presentations indicate the intellectual progress they have made in integrating professional practise into their own teaching and their learning. Publication of their case studies is also planned.

One scholar, Gordon James, is at Wickham Market Primary. His classroom has been fully resourced by BT for two years so computers offer no novelties. Gordon is convinced that technology will not determine curriculum content, but will decide how children are taught. Many teachers will be demoralised by this attack on pedagogy, unless they have ownership of it. Nor will it be truly effective unless they do. As Anthea Millett, TTA's chief executive recently pointed out: '.... educationalists and national bodies have made an unspoken deal with teachers – 'we'll stay off the pedagogic grass provided we can landscape everything else.' Teachers themselves have sometimes said to me – 'they have taken control of my school and my curriculum – it will be the last straw if they touch pedagogy, it will be the end of teachers' only remaining area of independence and professionalism'. I think it is important that we recognise the strength of that plea, which so often signals a real love of teaching ....' Anthea Millett also said, with a poetic turn of phrase that would defeat an overhead, ' Teaching is a task, with many complex variables, every teacher has a heap of assumptions, hidden in their secret garden, which feed everything else in their teaching.'

This professional growing process requires more than the ownership of a spade, although another scholar, Judith Webb, Monkwearmouth School comments, 'How can teachers educate the next generation adequately if we are in the Dark Ages of Communications Technology?' The scholars value the high specification computers, mobility, internet connections, expandability, industrial standard software, dealer support – and professional designers to help with their presentations.

But it is also evident that to internalise new pedagogy requires long term face to face and on-line support and training, as well as time to reflect. In the Toshiba Scholarship model this digging, seeding and mulching cost as much as the new-fangled spade.