

The levers of e-learning

A better understanding of how new technology affects the way we learn will shape tomorrow's education policy, say **Martin Westwell** and **Jonathan Sharples**

Dr Martin Westwell is deputy director of the Institute for the Future of the Mind; Dr Jonathan Sharples is policy officer at the Institute for the Future of the Mind

The all-party parliamentary group on scientific research in learning and education has attracted the support of over 30 MPs and peers, championed as it is by Phil Willis MP and crossbench peer, Professor Susan Greenfield.

Baroness Greenfield is director of the Institute for the Future of the Mind (part of the James Martin 21st Century School at Oxford University), where researchers focus on some of the issues being addressed by the APPG. In addition, the institute helps a number of organisations, particularly within education, to engage with the latest brain science research to improve evidence-informed decision-making.

The APPG is exploring how the growing body of scientific understanding of learning and development can be used more effectively in informing education policy and practice. One of the crucial areas of focus that emerged is the need to assess the role of information and communication technologies (ICT) in influencing the way that young people think.

As technologies become increasingly pervasive – through mobile phones, text messages, wireless internet access and online social networks – the line between young peoples' real and virtual lives is rapidly fading. Future meetings of the APPG will consider specific aspects of learning, including how our increasing intimacy with our machines may influence key abilities and cognitive skills, such as creativity, attention, independence and imagination.

Also director of Royal Institution, Baroness Greenfield is an active researcher in this area. "When used appropriately, it is clear that ICT can engage young people in education, reinforce learning and provide valuable and transferable skills," she says.



Baronesses Williams, Shephard and Morris met with neuroscientist and crossbench peer Baroness Greenfield (2nd right) before the launch of the APPG

"Nevertheless, we should not sleepwalk into a world that is directed by modern technologies; rather, we should establish which skills we want our young people to develop, then use technology to help construct the richest lives possible."

Concurrent with the growth in the use of technology by young people, there is an ever-increasing understanding of the processes underpinning the learning of key skills, such as numeracy, literacy, language and memory. Educationalists can incorporate this understanding into their own practice, particularly when it complements their own expertise and is easily available to them. One of the key challenges, therefore, for the APPG is to help bridge the gap between education practitioners and the scientific research communities – so they may work collaboratively to build on their joint expertise.

Excellent initiatives such as the Teaching and Learning Research Programme's 'Collaborative Frameworks on Neuroscience and Education' (funded through the Economic and Social Research Council) have made great steps forward in fostering the dialogue and collaboration between scientists

and educators. Successes such as this have laid the foundations for future developments.

Before the inaugural meeting of the APPG, Baroness Greenfield met up with three former secretaries of state for education: Baronesses Williams, Morris and Shephard. Estelle Morris said: "This generation of educators has more knowledge on the brain sciences at their fingertips than ever before. Traditionally, there has been too big a gap between those institutions who practise education research, and schools that actually deliver education. It therefore falls to us to use the significant advances in technology and science research to reshape our education system around the needs of children."

The launch of the APPG coincides with the release of the Commons science and technology committee's report on the use of scientific evidence in informing government policy. At the recent launch of the report, chairman of the science and technology select committee Phil Willis commented: "Science and technology play such an important part in so many policy questions today, they need to be better embedded in the policymaking process." ■

The next meeting of the APPG on scientific research in learning and education will be at 5pm on Monday February 26, 2007 in Committee Room 4 of the House of Lords