

## **THE WIDER ANGLE**

*A report by Jim Palmer of one of the exciting events offered by U3A*

### **PLUG IN, SWITCH ON, REWIRE**

Action video games can actually help you learn. That was one of the more controversial conclusions of Dr Paul Howard-Jones' U3A lecture at the Royal Society. And it's not just those who benefit from improved hand/eye co-ordination (anyone from bricklayers to surgeons) who improve performance after a session on their X-Boxes. The very concept of uncertain reward, prevalent in video games, actually prepares us for learning, due to an increase in the release of dopamine in the relevant part of the brain.

In some ways computers are the perfect teacher. They can provide a continuous stream of rewards, they have infinite patience and they never get tired. In fact, Dr Howard-Jones is working on producing learning games with a random element to bring his ideas into the classroom.

So does Googling "re-wire your brain", as some have claimed? Well to an extent yes, but then "anything memorable re-wires your brain, otherwise it wouldn't be memorable" says Dr Howard-Jones. The challenge posed by our reliance on computers is that we are getting better at knowing how to find things out at the cost of being less able to retain the information.

There is convincing evidence to suggest that graphic, violent video games increase aggression but, equally, pro-social games increase empathy. As a parent, Dr Howard-Jones is well aware of the problems of children getting "hooked" on computer games. He believes parents should be made aware of the dangers. For a small number of people, game playing can be addictive and the effects can be similar to taking drugs. Using computers before you go to bed can cause sleep disturbance, which in turn leads to other problems. But it is wrong to demonise the technology because some people misuse it.

Overall, Dr Howard-Jones believes that computer technology, and video games in particular, present huge opportunities for learning in all age groups. There are risks, but the risks are avoidable if we just apply some "old wisdom" and use it sensibly.