

How the internet lures and then distracts you

Is constant use of electronic gadgets reshaping our brains and making our thinking shallower? **Neil Tweedie** reports on the revolution in multi-tasking

How many times do you click on your email icon in a day? Or look at Facebook, or Twitter? And how many times when reading on the internet do you click on a link navigating away from the text that was the original object of your inquiry? The web, it seems, is like an electronic sweet shop, forever tempting us in different directions. But does this mental promiscuity, this tendency to flit around online, make us, well, thicker?

The power of modern electronic media — the net, mobile telephones and video games — to capture the attention of the human mind, particularly the young mind, and then distract it has lately become a subject of concern. We are, say the worriers, losing the ability to apply ourselves properly to a single task, such as reading a book in its entirety or mastering a piece of music on an instrument, with the result that our thinking is becoming shallower.

American science writer Nicholas Carr argues in his new book, *The Shallows*, that new media are not just changing our habits but our brains. It turns out that the mature human brain is not an immutable seat of personality and intellect but a changeable thing, subject to “neuroplasticity”. When our activities alter, so does the architecture of our brain. “I’m not thinking the way I used to think,” writes Carr. “I feel it most strongly when I’m reading.” Years of internet use have dented his ability to read deeply, to absorb himself in books.

Carr cites research by UCLA professor of psychiatry Gary Small, who concluded that constant exposure to modern media strengthens new neural pathways while weakening older ones. According to Professor Small, five hours of internet use is enough to awaken previously dormant parts of the brain’s prefrontal cortex. For Carr this is proof the net can rewire the mind.

While not wanting to be a Jeremiah, Carr sees dangers. Deep thought, the ability to immerse oneself in an area of study, to follow



Multi-tasking: Questions raised.

a narrative, to understand an argument and develop a critique, is giving way to skimming. Young users of the internet are good at drawing together information for a school project, for example, but that does not mean they have digested it.

This tendency to skim is compounded by the temptation of new media users to multi-task. Watch a youngster on a computer and he could be Facebooking while burning a CD and Tweeting on his mobile phone. Modern management tends to laud multi-tasking as an expression of increased efficiency. Science, on the other hand, does not. The human brain is, it seems, not at all good at multi-tasking — unless it involves a highly developed skill such as driving.

Paying attention is the prerequisite of memory: the sharper the attention, the sharper the memory. Cursory study born of the knowledge that the information is easily available online results, say the worriers, in a failure to digest it. Perfect for our sound-bite culture, but not so good for producing an informed, subtle-minded electorate

We have been here before, of course. The Ancient Greeks lamented the replacement of the oral tradition with written text and the explosion in book ownership resulting from the printing press was, to some, the work of

Satan. In the 18th century, the French statesman Guillaume-Chretien de Lamoignon de Malesherbes railed against a new device that turned people into “dispersed” individuals, isolated in “sullen silence”. He was talking about the newspaper.

Champions of modern media point to the increased ability of young people to find and manipulate information — to marry video, stills and text for educational purposes.

The net is also supposed to consume the lives of young people yet the only reliable studies about the time spent online, collated by the World Health Organisation, suggest children spend between two and four hours in front of screens, including television screens, and not six or seven, as often suggested. Moreover, there is evidence that youngsters who use sites such as Facebook and MySpace have more rewarding offline social lives than those who do not.

Meanwhile, the tired old media do not seem to be doing that badly. An annual survey conducted by Nielsen BookScan shows that sales of children’s books in 2009 were 4.9 per cent greater than in 2008, with more than 60 million sold. The damage, if any, done by excessive computer time may not be so much to do with what is being done online as what is being missed — time spent with family or playing in trees with friends.

And as for the claim that new media is turning us into shallow multi-taskers, here are some wise words from the 18th century and the fourth Earl of Chesterfield.

“There is time enough for everything in the course of the day, if you do but one thing at once,” he said. “But there is not time enough in the year, if you will do two things at a time. This steady and undissipated attention to one object, is a sure mark of a superior genius; as hurry, bustle, and agitation, are the never-failing symptoms of a weak and frivolous mind.”

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