

Students brains 'rewired' by the internet

British students are unable to concentrate on reading an academic book for study, because the internet is "rewiring" their brains, a new documentary claims.

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Experts say the internet encourages users to dart between pages instead of concentrating on one source such as a book, the traditional staple of student research.

This new 'associative' thinking leaves the majority incapable of 'linear' disciplines like reading and writing at length because their minds have been remoulded to function differently.

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And within three years, hundreds of thousands of British teenagers will require medication or hospital treatment for mental illnesses caused by excessive web use, psychologists warn.

The claims will be made on the final episode of BBC2's The Virtual Revolution on Saturday, February 20.

The programme teamed up with Professor David Nicholas, of the University College of London, to launch a groundbreaking study into the web's impact on our brains.

Initial findings from 100 volunteers who were asked a series of questions on a computer found that most 12 to 18-year-olds gave their answers after looking at half the number of web pages and only one-sixth of the time viewing the information than their elders.

It follows recent research published by Prof Nicholas, who was the first academic to systematically study people's online behaviour by analysing millions of anonymous data records, which suggested the web's hyperlinked network of information was rewiring youngsters' minds.

He found that four in 10 people never revisited the same web page and that they viewed only up to three pages from the thousands available online.

In contrast, people who grew up before the age of the internet repeatedly return to the same source instead of flitting between sites.

Prof Nicholas said: "The really big surprise was that people seemed to be skipping over the virtual landscape.

"They were hopping from sites, looking at one or two pages, going to another site, looking at one or two pages and then going on. Nobody seemed to be staying anywhere for very long."

Documentary presenter and social psychologist Dr Aleks Krotoski said: "It seems pretty clear that, for good or ill, the younger generation is being remoulded by the web.

"Facebook's feedback loops are revolutionising how they relate.

"There is empirical evidence now that information overload and associative thinking may be reshaping how they think.

"For many, this seems to be a bleak prospect - young people bouncing and flitting between a thoughtless, throwaway virtual world."

Dr David Runciman, political scientist at Cambridge University, told the programme: "What I notice about students from the first day they arrive at university is that they ask nervously, 'What do we have to read?'

"When they are told the first thing they have to read is a book, they all now groan, which they didn't use to do five or 10 years ago.

"You say, 'Why are you groaning?' and they say, 'It's a book. How long is it?'

"Books are still at the heart of what it means to be educated and to try to educate. The generation of students I teach see books as peripheral."

Leading neuroscientist Baroness Susan Greenfield, a professor at Oxford University, told the documentary that the web and social networking sites were 'infantilising' children's minds and detaching them from reality.

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