(But) one of the most important things is making sure you have some cell phone free time in your day. It's OK to turn it off. Focus on family, homework, knowing that cell phone message will still be there."

Does the Internet Make You Dumber?

Nicholas Carr Author
June 5, 2010 Year
Wall Street Journal

According to Nicholas Carr (2010), in Does the Internet make you dumber?

The Roman philosopher Seneca may have put it best 2,000 years ago: "To be everywhere is to be nowhere." Today, the Internet grants us easy access to unprecedented amounts of information. But a growing body of scientific evidence suggests that the Net, with its constant distractions and interruptions, is also turning us into scattered and superficial thinkers.

There was a study done that people who

The picture emerging from the research is deeply troubling, at least to anyone who values the depth, rather than just the velocity, of human thought. People who read text studded with links, the studies show, comprehend less than those who read traditional linear text. People who watch busy multimedia presentations remember less than those who take in information in a more sedate and focused manner. People who are continually distracted by emails, alerts and other messages understand less than those who are able to concentrate. And people who juggle many tasks are less creative and less productive than those who do one thing at a time.

The common thread in these disabilities is the division of attention. The richness of our thoughts, our memories and even our personalities hinges on our ability to focus the mind and sustain concentration. Only when we pay deep attention to a new piece of information are we able to associate it "meaningfully and systematically with knowledge already well established in memory," writes the Nobel Prize-winning neuroscientist Eric Kandel. Such associations are essential to mastering complex concepts.

When we're constantly distracted and interrupted, as we tend to be online, our brains are unable to forge the strong and expansive neural connections that give depth and distinctiveness to our thinking. We become mere signal-processing units, quickly shepherding disjointed bits of information into and then out of short-term memory.

In an article published in Science last year, Patricia Greenfield, a leading developmental psychologist, reviewed dozens of studies on how different media technologies influence our cognitive abilities. Some of the studies indicated that certain computer tasks, like playing video games, can enhance "visual literacy skills," increasing the speed at which people can shift their focus among icons and other images on screens. Other studies, however, found that such rapid shifts in focus, even if performed adeptly, result in less rigorous and "more automatic" thinking.

In one experiment conducted at Cornell University, for example, half a class of students was allowed to use Internet-connected laptops during a lecture, while the other had to keep their computers shut. Those who browsed the Web performed much worse on a subsequent test of how well they retained the lecture's content. While it's hardly surprising that Web surfing would distract students, it should be a note of caution to schools that are wiring their classrooms in hopes of improving learning.

medium develops some cognitive skills at the

[illegible] studies, however, found that such rapid shifts even if performed adeptly, result in less rigorous and "more automatic" thinking.

In one experiment conducted at Cornell University, for example, half a class of students was allowed to use Internet-connected laptops during a lecture, while the other had to keep their computers shut. Those who browsed the Web performed much worse on a subsequent test of how well they retained the lecture's content. While it's hardly surprising that Web surfing would distract students, it should be a note of caution to schools that are wiring their classrooms in hopes of improving learning.

Ms. Greenfield concluded that "every medium develops some cognitive skills at the expense of others." Our growing use of screen-based media, she said, has strengthened visual-spatial intelligence, which can improve the ability to do jobs that involve keeping track of lots of simultaneous signals, like air traffic control. But that has been accompanied by "new weaknesses in higher-order cognitive processes," including "abstract vocabulary, mindfulness, reflection, inductive problem solving, critical thinking, and imagination." We're becoming, in a word, shallower.

In another experiment, recently conducted at Stanford University's Communication Between Humans and Interactive Media Lab, a team of researchers gave various cognitive tests to 49 people who do a lot of media multitasking and 52 people who multitask much less frequently. The heavy multitaskers performed poorly on all the tests. They were more easily distracted, had less control over their attention, and were much less able to distinguish important information from trivia.

The researchers were surprised by the results. They had expected that the intensive multitaskers would have gained some unique mental advantages from all their on-screen juggling. But that wasn't the case. In fact, the heavy multitaskers weren't even good at multitasking. They were considerably less adept at switching between tasks than the more infrequent multitaskers. "Everything distracts them," observed Clifford Nass, the professor who heads the Stanford lab.