

Reading Practice Exam 2

Questions 22-32

Passage 1 is adapted from Nicholas Carr, "Author Nicholas Carr: The Web Shatters Focus, Rewires Brains." ©2010 by Condé Nast. Passage 2 is from Steven Pinker, "Mind over Mass Media." ©2010 by The New York Times Company.

Passage 1

The mental consequences of our online info-crunching are not universally bad. Certain cognitive skills are strengthened by our use of computers and the Net. These tend to involve more primitive mental functions, such as hand-eye
5 coordination, reflex response, and the processing of visual cues. One much-cited study of video gaming revealed that after just 10 days of playing action games on computers, a group of young people had significantly boosted the speed with which they could shift their visual focus between
10 various images and tasks.

It's likely that Web browsing also strengthens brain functions related to fast-paced problem solving, particularly when it requires spotting patterns in a welter of data. A British study of the way women search for medical
15 information online indicated that an experienced Internet user can, at least in some cases, assess the trustworthiness and probable value of a Web page in a matter of seconds. The more we practice surfing and scanning, the more adept our brain becomes at those tasks.

But it would be a serious mistake to look narrowly at such benefits and conclude that the Web is making us smarter. In a *Science* article published in early 2009, prominent developmental psychologist Patricia Greenfield reviewed more than 40 studies of the effects of various types of media
25 on intelligence and learning ability. She concluded that "every medium develops some cognitive skills at the expense of others." Our growing use of the Net and other screen-based technologies, she wrote, has led to the "widespread and sophisticated development of visual-spatial
30 skills." But those gains go hand in hand with a weakening of our capacity for the kind of "deep processing" that underpins "mindful knowledge acquisition, inductive analysis, critical thinking, imagination, and reflection."

35 We know that the human brain is highly plastic; neurons
and synapses change as circumstances change. When we
adapt to a new cultural phenomenon, including the use of a
new medium, we end up with a different brain, says Michael
Merzenich, a pioneer of the field of neuroplasticity. That
40 means our online habits continue to reverberate in the
workings of our brain cells even when we're not at a
computer. We're exercising the neural circuits devoted to
skimming and multitasking while ignoring those used for
reading and thinking deeply.

Passage 2

45 Critics of new media sometimes use science itself to press
their case, citing research that shows how "experience can
change the brain." But cognitive neuroscientists roll their
eyes at such talk. Yes, every time we learn a fact or skill the
wiring of the brain changes; it's not as if the information is
stored in the pancreas. But the existence of neural plasticity
50 does not mean the brain is a blob of clay pounded into shape
by experience.

Experience does not revamp the basic information-
processing capacities of the brain. Speed-reading programs
have long claimed to do just that, but the verdict was
55 rendered by Woody Allen after he read Leo Tolstoy's
famously long novel *War and Peace* in one sitting: "It was
about Russia." Genuine multitasking, too, has been exposed
as a myth, not just by laboratory studies but by the familiar
sight of an SUV undulating between lanes as the driver cuts
60 deals on his cell phone.

Moreover, the effects of experience are highly specific to
the experiences themselves. If you train people to do one
thing (recognize shapes, solve math puzzles, find hidden
words), they get better at doing that thing, but almost nothing
65 else. Music doesn't make you better at math, conjugating
Latin doesn't make you more logical, brain-training games
don't make you smarter. Accomplished people don't bulk up
their brains with intellectual calisthenics; they immerse
themselves in their fields. Novelists read lots of novels,
70 scientists read lots of science.

The effects of consuming electronic media are likely to be
far more limited than the panic implies. Media critics write

75 as if the brain takes on the qualities of whatever it consumes,
the informational equivalent of “you are what you eat.” As
with ancient peoples who believed that eating fierce animals
made them fierce, they assume that watching quick cuts in
rock videos turns your mental life into quick cuts or that
reading bullet points and online postings turns your thoughts
into bullet points and online postings.