

Teachable MOMENTS

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Is the Internet Making Us Dumber?

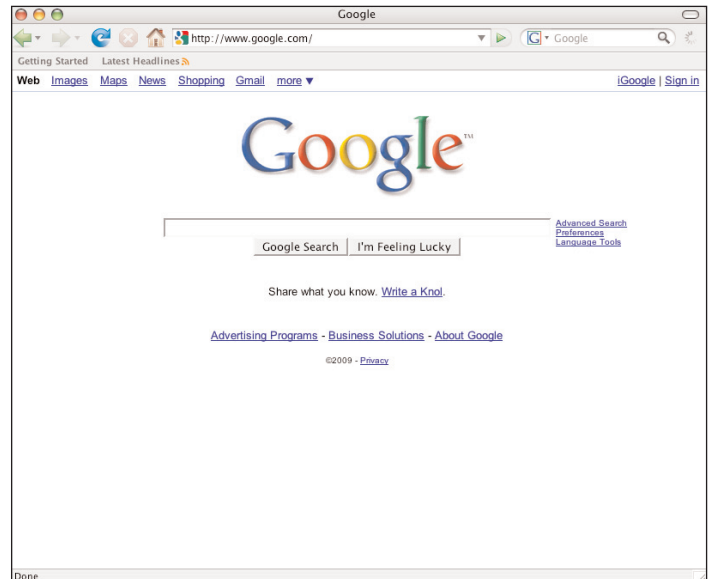
To the Teacher

In the summer of 2008, an *Atlantic Monthly* magazine article called “Is Google Making Us Stupid?” by well-known technology observer Nicholas Carr generated a flurry of chatter about the impact of the Internet on our lives—and our brains. That same month, Emory University English professor Mark Bauerlein released a new book provocatively titled *The Dumbest Generation: How the Digital Age Stupefies Young Americans and Jeopardizes Our Future, or Don't Trust Anyone Under 30*.

Both authors pursue a similar theme. The Internet, while invaluable, changes how our brains work, restructuring us and rewiring us in ways that may not be for the best. Use this Teachable Moment to pull your students into the latest round in an ongoing, often impassioned discussion about the good, bad, and debatable effects technology has on us.

Options for Using Student Activities and Worksheets

- Worksheet 1: Upper level high school students could read Nicholas Carr’s original *Atlantic Monthly* article. The link is included in Web Resources—More Teacher Background.
- Worksheet 2: During group discussion for Worksheet 1, discuss the term *dumb*, what the various authors mean by it, and why they chose the term (e.g., to provoke, etc.).
- Worksheet 3: Can be done as an optional extension activity.



National Standards Addressed

NCTE Language Arts Standards

- Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge.
- Students participate as knowledgeable, reflective, creative, and critical members of a variety of literacy communities.

NSTA Science Standards

History and Nature of Science: All students should have an understanding of:

- Science as a human endeavor
- Historical perspectives

ISTE Educational Technology Standards

- Digital Citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

Web Sites and Online References



NPR: Is the Internet Making Us Stupid? (Article and Audio)

<http://www.npr.org/templates/story/story.php?storyId=91543814>

NYTimes.com: Technology Doesn't Dumb Us Down. It Frees Our Minds

<http://www.nytimes.com/2008/09/21/technology/21ping.html?n=Top/News/Business/Companies/Hewlett-Packard%20Company>

BusinessWeek Debate Room: Google Is Making You Dumber—Pro and Con

http://www.businessweek.com/debateroom/archives/2007/05/google_is_makin.html

LA Times: How dumb are we? Thanks to the Internet, dumb and dumber, this author writes

http://www.latimes.com/features/books/la-et-book5-2008jul05_0,3980465.story

Boston.com: 8 Reasons why this is the dumbest generation

<http://www.boston.com/lifestyle/gallery/dumbestgeneration/>

Newsweek: The Dumbest Generation? Don't Be Dumb

<http://www.newsweek.com/id/138536>

FactMonster.com: Internet Timeline

<http://www.factmonster.com/ipka/A0193167.html>

PBS: Nerds 2.0.1. A Brief History of the Internet

<http://www.pbs.org/opb/nerds2.0.1/index.html>

About.com: The History of Communication

http://inventors.about.com/library/inventors/bl_history_of_communication.htm

FCC History of Communications

<http://www.fcc.gov/omd/history/>

Google's 10th Birthday

<http://www.google.com/tenthbirthday/>

More Teacher Background

The Atlantic: Is Google Making Us Stupid?

What the Internet is doing to our brains
(Nicholas Carr's original article)

<http://www.theatlantic.com/doc/200807/google>

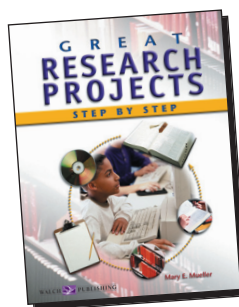
The Reality Club: On "Is Google Making Us Stupid?"

http://www.edge.org/discourse/carr_google.html

Britannica Blog: Is Google Making Us Stupid?

<http://www.britannica.com/blogs/2008/07/this-is-your-brain-this-is-your-brain-on-the-internetthe-nick-carr-thesis/>

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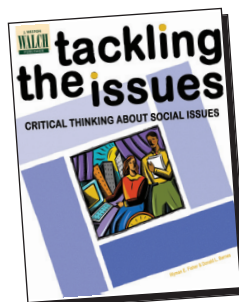
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www.walch.com/product/848

Teacher Background Information

It's hard to imagine life without the Internet. Yet, as a mass market communication tool, it is a relatively new technology. In September 2008, Google turned 10 years old. In only the span of a decade, it has become a more recognizable brand name than Microsoft and, in the company's own words, the "closest thing the Web has to an answer machine."

Especially with the increased popularity of social networking sites, sharing tools, and other "Web 2.0" technologies, it's easy to see some of the impact the Internet is having on us. But the story is still unfolding. Observers from a variety of fields—technology, psychology, education, neurology—are beginning to suggest deeper, more troubling individual and social effects. They acknowledge the tremendous value of the Internet and the digital tools it enables but want people to understand (or at least debate) the potential costs.

Examples

- Technology writer and blogger Nicholas Carr argues that the Web's dominant behaviors—search and browsing results, skimming, jumping, multi-tasking amidst distractions—make our brains less able to concentrate. We can handle nuggets of information but can't focus on longer material. As a result, we may be losing the ability and the "quiet places" we need in order to read and think deeply. Instead of developing real human knowledge, we could rely on machines and information fed to us to mediate our understanding of the world.
- Emory English professor Mark Bauerlein takes a more provocative stance. He suggests that today's digital culture enables young people to isolate themselves into a "youth cocoon," which feeds potentially negative aspects of youth culture and cuts youth off from the adult world, historical and cultural context, and from knowledge. The focus is on socializing and pop culture, rather than learning, and vertical connections between generations. He also suggests the Web's path to easy answers allows people, particularly young people, to care only about what is relevant for them directly, right now. We avoid intellectual challenge. Because information is at our fingertips, we no longer internalize it and let it "shape who we are on the inside." "Is Abraham Lincoln just a fact? Is the Civil War just an event with dates and sites?," he asks. (Or, which would help deepen a relationship: text messaging or writing and posting a letter?) He believes all of this is weakening the intellectual habits of an entire generation.
- Tufts professor Maryanne Wolf, a cognitive neuroscientist who studies reading development in children, believes that "we are what we read and how we read" and that our digital culture may short-circuit some of the brain development we need in order to make rich mental connections.

Other observers point out that new technology always brings benefits and possible costs. This is particularly true of media. While the Internet may be altering our mental habits, it is all well within our power to control, and these alterations may be for the better. Some examples include:

- Instead of devoting brain power to memorization and the retention of information, we can use it for analysis and creative uses of information.
- We become better evaluators of information.
- The Internet model of linking and cross-referencing helps us connect disciplines and solve problems in interdisciplinary ways. (e.g., Interdisciplinary studies are on the rise in colleges.)
- It "shrinks" our world and connects us. We can find people who have the answers or perspectives we need much more easily and directly.

Worksheet 1: Is the Internet Making Us Dumber?

Do you spend lots of time surfing the Web, bouncing here and there, skimming blog posts, watching short spurts of video? Doing five things at once . . . power-browsing Google results for a homework assignment while IMing friends and updating your Facebook page?

Ever forget what you were searching for and why you went online in the first place? Do you start reading Web articles and lose your focus after a paragraph? If so, you may be suffering from what one author calls “Internet-influenced attention deficit disorder.” And your symptoms may not be temporary, according to some people. Your use of the Internet may be changing your brain’s ability to think—and for the worse.

Use your Web resources to find out why people think the Internet is making us “dumber” and answer the following questions.

1. According to people such as Nicholas Carr, what might the Internet be doing to our brains? What negative effects might Internet use have on us? What abilities might we lose, or what might we no longer be able to do?
2. Why is Google identified as a key reason for these effects?
3. Author Mark Bauerlein refers to people under 30 as “the dumbest generation.” Putting your own emotions and reactions aside for a moment, what is his argument? Give examples of points made to support his position. Do you think any of the points have merit? How so?
4. While many experts agree that the Internet is changing us—and may even be changing how our brains work—they see positive effects. How, according to the sources you reviewed, is the Internet changing us for the better?

Worksheet 2: The Internet and *Your Brain*

Think about all the Internet-related technologies you use: Google, Wikipedia, chat, text messages, Twitter, Facebook, YouTube, blogging, iTunes, and so forth. Use the chart on the following page to log your Internet use over the course of several days. See if you can detect any patterns in how Internet use is affecting you.

1. Which Internet-related technologies or tools did you use most often? Least?
2. Did you notice any patterns in how you use the Web?
3. What positive behaviors, attitudes, skills, or mental abilities does your Internet use encourage or develop? If you didn't have these technologies, what skills or abilities might suffer?
4. Which behaviors does Web use seem to weaken or diminish (or help you avoid)? What negative effects might it have?
5. Share some of your findings with your class. As a group, discuss the pros and cons of Internet use on our brains and lives. Do you think the Internet is making us "dumber"? Is it affecting our ability to think? As Internet tools become more and more integrated into the fabric of every minute, what will we gain? What might we lose?

(continued)

Worksheet 2: The Internet and *Your Brain* (continued)

| Online music service | | | | | |
|----------------------|--|--|--|--|--|
| Blogging | | | | | |
| YouTube | | | | | |
| Facebook | | | | | |
| Twitter | | | | | |
| Text Messages | | | | | |
| Chat | | | | | |
| Wikipedia | | | | | |
| Google | | | | | |
| Date | | | | | |

Answer Key

Worksheet 1: Is the Internet Making Us Dumber?

1. It shortens our attention span and makes it harder to focus on books, longer articles, and other materials that require “deep reading.” We are becoming skimmers. We are losing mental capacity required to contemplate and understand complicated topics and internalize knowledge. The Internet use fragments and/or flattens our intelligence.
2. Google encourages surfing, skimming, and jumping because it provides so many options. Most users only stay on a site they find for a few minutes then click elsewhere— “superficial visits” to many sites rather than digging into one.
3. Answers will vary but should reflect the following:
Bauerlein argues that the Internet and digital culture are changing the way young people engage with information and with adults. He worries that young people are isolating themselves from learning, history and historical context, and deeper intellectual knowledge. Key supporting points include:
 - People aren’t using the Internet to learn about the world, history, culture, etc. It’s more about pop culture.
 - Fewer youth read for pleasure.
 - Social networking and other tools allow young people to have peer-to-peer contact “24/7”—youth become insulated within a peer culture instead of developing connections with adults and the adult world.
 - The Internet makes it easy and quick to find things, with little effort.
 - People don’t stick with anything boring or challenging—the Internet feeds “juvenile mental habits.” People don’t care about anything if it is not “relevant to me now.”*Note:* You may also want to discuss what Bauerlein means by “dumb.” (He believes young people are “as smart and motivated as ever;” he’s concerned with deeper, more contextualized knowledge and the quest for it.)
4. Answers will vary but should reflect some of the following:
 - It can make us more productive.
 - It makes it easier to communicate.
 - It trains us to multitask and to manage distractions.
 - It makes it easy to find information. This frees our minds and allows us to focus on analyzing information.
 - It allows us to see connections (interdisciplinary view).

Worksheet 2: The Internet and *Your* Brain

Answers will vary.

Worksheet 3: Have We Been Here Before?

Answers will vary depending on the technology selected.