CLIVE THOMPSON

Why Johnny Can't Search

Kids know how to Google—they just can't tell when the results are crap.

WE'RE OFTEN TOLD THAT young people tend to be the most tech-savvy among us. But just *how* savvy are they? A group of researchers led by College of Charleston business professor Bing Pan tried to find out. Specifically, Pan wanted to know how skillful young folks are at online search. His team gathered a group of college students and asked them to look up the answers to a handful of questions. Perhaps not surprisingly, the students generally relied on the web pages at the top of Google's results list.

But Pan pulled a trick: He changed the order of the results for some students. More often than not, those kids went for the bait and also used the (falsely) top-ranked pages. Pan grimly concluded that students aren't assessing information sources on their own merit—they're putting too much trust in the machine.

Other studies have found the same thing: High school and college students may be "digital natives," but they're wretched at searching. In a recent experiment at Northwestern, when 102 undergraduates were asked to do some research online, none went to the trouble of checking the authors' credentials. In 1955, we wondered why Johnny can't read. Today the question is, why can't Johnny search?

Who's to blame? Not the students. If they're naive at Googling, it's because the ability to judge information is almost never taught in school. Under 2001's No Child Left Behind Act, elementary and high schools focus on prepping their pupils for reading and math exams. And by the time kids get to college, professors assume they already have this skill. The buck stops nowhere. This situation is surpassingly ironic, because not only is intelligent search a key to everyday problem-solving, it also offers a golden opportunity to train kids in critical thinking.

Consider the efforts of Frances Harris, librarian at the magnet University Laboratory High School in Urbana, Illinois. (Librarians are our national leaders in this fight; they're the main ones trying to teach search skills to kids today.) Harris educates eighth and ninth graders in how to format nuanced queries using Boolean logic and advanced settings. She steers them away from raw Google searches and has them use academic and news databases, too.

But, crucially, she also trains students to assess the credibility of what they find online. For example, she teaches them to analyze the tone of a web page to judge whether it was created by an academic, an advocacy group, or a hobbyist. Students quickly gain the ability to detect if a top-ranked page about Martin Luther King Jr. was actually posted by white supremacists.

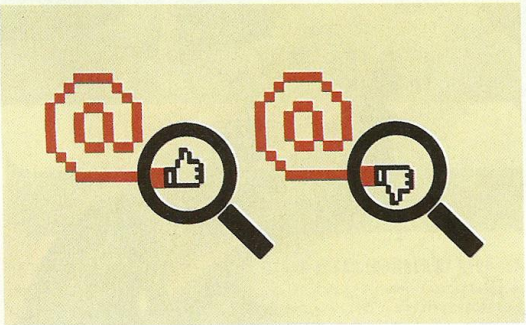
"I see them start to get really paranoid," Harris says. "The big thing in assessing search results is authorship—who put it there and why have they put it there?" Or, as pioneering librarian Buffy Hamilton at Creekview High School near Atlanta says, "This is learning how to learn."

One can imagine even more entertaining ways to help kids grok the intricacies of the search world. Why not let students start a class blog on a subject and see how long it takes for it to show up in search results?

Mind you, mastering "crap detection 101," as digital guru Howard Rheingold dubs it, isn't easy. One prerequisite is that you already know a lot about the world. For instance, Harris found that students had difficulty distinguishing a left-wing parody of the World Trade Organization's website from the real WTO site. Why? Because you need to understand why someone would want to parody it in the first place—knowledge the average eighth grader does not yet possess.

In other words, Google makes broad-based knowledge more important, not less. A good education is the true key to effective search. But until our kids have that, let's make sure they don't always take PageRank at its word. W

EMAIL *clive@clivethompson.net.*



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