Teaching Zack to Think
by Alan November

Is your high school teaching students to access the Internet for research? Then it is essential that students also learn how to validate the information. The Internet is a place where you can find "proof" of essentially any belief system that you can imagine. And, for too many students, "If it is on the Internet, it is true."

The following story is also true.

Fourteen year old: "I'm working on a history paper about how the Holocaust never happened."

Long pause. "Zack, where did you hear that the Holocaust didn't happen?"

"The Internet. It's on a Web page at Northwestern University."

Zack found his "information" from a Web page at http://pubweb.acns.nwu.edu/~abutz/index.html, titled *Home Web page of Arthur R. Butz.* On his low-key home page, Butz explains that he wrote "A short introduction to the study of Holocaust revisionism" and that his material is intended for "advanced students of Holocaust revisionism." At the top of the page Butz identifies himself as "Associate Professor of Electrical and Computer Engineering, Northwestern University."

His article begins with the following:

I see three principal reasons for the widespread but erroneous belief in the legend of millions of Jews killed by the Germans during World War II: US and British troops found horrible piles of corpses in the west German camps they captured in 1945..., there are no longer large communities of Jews in Poland, and historians generally support the legend.

During both world wars Germany was forced to fight typhus, carried by lice... That is why all accounts of entry into the German concentration camps speak of shaving of hair and showering and other delousing procedures, such as treatment of quarters with the pesticide Zyklon. That was also the main reason for a high death rate in the camps, and the crematoria...

Look at the above from the perspective of a 14-year-old untrained to think critically about information. He's researching the Holocaust, and suddenly finds this Web page. His teacher told him to find a unique topic, and this certainly fits the bill - he's never heard these ideas before. The page is simple and clear. It's written in a calm, logical tone. The page is clearly intended for experts in its field.

Best of all is the source: Northwestern University! And a professor to boot! Perfect.

I'm afraid that kids use the Internet without being taught *how* to use the Internet. To survive in the future economy, kids must learn how to research, publish, and communicate working with the Internet and other information tools. What skills will be important for kids to learn and for schools to teach? Not how to use Windows or Netscape.

Instead, the most vital skills will involve applying knowledge to produce information and facilitate communication. And one of the most important skills will involve evaluating the resources you decide to use. As much time as we spend teaching kids how to find things on the Net, we need to expend 10 times more effort teaching them how to interpret what they've found.

So how could Zack have applied those skills to Butz's Web page?

Thinking About What We've Found
The fact remains that kids will increasingly depend on the Internet for information. As they use the Web, they need to evaluate their findings using several techniques, which I will place into three main categories: Purpose, Author, and Meta-Web Information.

Purpose
We should always try to ascertain a Web site's purpose. What is it trying to do? Why was it created? Most Web sites are designed to sell services and products, present information, advocate ideas, or entertain. Many sites do several of these at once.

A Web site's purpose will not always be clear. Look at Butz's site. His purpose is surely advocacy, although he comes across as an objective information provider, especially in the closing sentence of his article: "Surely any thoughtful person must be skeptical." Would that ring any warning bells for a 14-year-old? Are ninth graders taught how to distinguish between objectivity and advocacy? Make sure that kids understand the purpose(s) of a Web site, and that those purpose(s) may not be entirely obvious.

Author
The next step in validation involves the site's author. We all know that it's easy to fool people. Many people, especially kids, will believe someone if he sounds authoritative. When I've talked to adults about Butz's Web site, they never fail to point out that Butz is a professor, sure, but he's an *Engineering* professor. How does that qualify him to speak as an expert on the Holocaust? It doesn't. But people see "Professor" and take what he says as gospel.

Zack didn't know anything about Butz but could have researched his background. ProFusion: www.profusion.com is a meta search engine that takes queries and searches several search engines at once, including AltaVista, Excite, Infoseek, Lycos, and Yahoo.

If Zack ran a search for "Arthur Butz," he would find Butz's name on a page titled "Holocaust Deniers" at a site called HateWatch: http://hatewatch.org/. Similarly, Zack would find Butz's article listed on HateWatch: An Educational Resource Combating Online Bigotry: http://hatewatch.org/. Zack would find Butz mentioned negatively in a March 1998 *USA Today* article titled, *College anti-Semitism on the rise, according to new report* www.collegenews.com/headlines/news173.htm Zack would find Butz's book described as popular among "anti-Semites" in a review of Deborah Lipstadt's *Denying the Holocaust* found at www.skeptic.com/02.4.siano-holocaust.html. Zack would find Butz mentioned appreciatively on the "Aryan Re-Education Page," at the frightening address of "whitepower.com" (which contains a section for *anti-hate* sites labeled "The Hall of Shame: JEWS SCUM.").

If Zack had run this multi-search on Butz, he would have seen how other people categorize Butz.

Meta-Web Information
Meta-Web Information allows Zack to look at Web sites as part of the Internet; in other words, meta-Web information validates Web pages solely within the context of other Web pages.
Let's start with the URL, or address, of a Web page. Kids need to know when they're accessing a personal home page. Most Internet Service Providers give their subscribers a few megabytes of free space on a Web server to use as they please.

Here are two sample URLs: "www.cdsinet.net/users/bartlett" and "www.alphalink.com.au/~jdm/index.htm". An experienced Web user knows that both URLs point to personal home pages.

In the first example, the word "users" is the tip off. "bartlett" is the user name of someone who accesses the Internet through cdsinet.net. In the second example, focus on the "~". A tilde -- the "~" -- indicates a Web site created by someone given space on a Web server. "stefan" is the user name of someone who accesses the Internet through icon-stl.net.

Knowing the above, if Zack looked at Butz's URL –http://pubweb.acns.nwu.edu/~abutz/index.html - he'd see the "~," a dead giveaway that this is a personal Web site. Instead of assuming that Butz's

Web site was sponsored by Northwestern, Zack would know that it was equivalent to a bulletin board posted outside an office.

Just as Zack can read people by their clothing, he can learn about a Web site by looking at its URL. But even though clothing tells us a lot, the company a person keeps tells us more.
Learning how a Web page interacts within the network of all other Web sites is valuable information. Zack has a powerful tool that can place a Web site in context - the link command.

To apply the link command to Butz, Zack should go to AltaVista at www.altavista.com, type "**link:pubweb.acns.nwu.edu/~abutz/index.html**" (*without* the quotation marks and *without* a space after the colon), and then click the Search button.

Zack will get nothing. It doesn't work. I don't know why, and it could lead Zack to give up in frustration. He should try this instead: "**link:pubweb.acns.nwu.edu/~abutz/**". For some reason, truncating the URL works. At AltaVista, we find out that 879 Web sites point towards Butz's Web page.

The 879 Web sites referencing Butz basically fall into two categories: hate monitors and hatemongers. Among the hate monitors, Butz is a shining example of a Holocaust denier. Among the hatemongers, Butz is a shining example.

One site particularly stands out. I doubt if Zack would have had any problems evaluating Butz after he went to "White Nationalist Links" at www.crusader.net/resources/links.html. Once you see who thinks Butz is a great source of information, the game is up. Could there be any doubt when Butz is on the same page as links to Online Fascist Resource Page, Knights of Michigan KKK, White Power Central, and Texas Aryan Nationalist Skinheads?

A Happy Ending
In the end Zack's high school arranged for an interview of a Jewish woman who lived in Europe during World War II. It is always a good idea to look beyond the Internet for sources of authentic information.