# Think for yourself!

Information, like air, is everywhere, and we breathe it in whether we mean to or not. If we want our students to be rational, responsible citizens and consumers, we have to help them develop a filter they can use all the time, not just when they're doing research.

BY DAVID WALBERT

Figure 1. Thinking doesn't have to be this hard. At least, I hope it doesn't.

So you've been teaching the information skills curriculum for a decade now, and you know the difference between Big 6 and Super 3. You assign step-by-step research projects — or, if you're a media specialist, you work with teachers to design better ones. And yet, somehow, YOUR STUDENTS STILL DO NOT THINK. They accept information uncritically. They can't tell the difference between a paid advertisement and a documentary.

Now what?

Maybe there's a shortcoming in the way we think about information and media literacy. Information literacy is traditionally defined as, primarily, research skills. An ALA report[1] said in 1989 that

> To be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information.[2]

But suppose you're not looking for information? What if it's just being presented to you? It's one thing to evaluate information as part of a plan of research — that skill can be difficult enough to acquire. It's something else to have to be aware, practically every minute of every day, that someone is trying to fool you — and even if they're not, they might simply be wrong.

## EVERY MINUTE OF EVERY DAY?

If that's an exaggeration, it isn't much of one. Here's the information I was exposed to yesterday *while I was at lunch*:

- Leaving the library, I passed a group of students with a large and vivid display inviting me to "make [my] own decision about abortion based on the real facts."
- Walking to the restaurant I passed a newspaper vending machine, with a visible headline screaming that the Dow had tanked again.

- The telephone poles along the street were plastered with photocopied signs, most of them advertising bands.
- A TV was on in the restaurant, turned to, I think, CNN. The sound was off, but of course it was closed-captioned. We were there for nearly an hour, so I was potentially exposed to about 47 minutes of "news" and 13 minutes of paid commercial advertising.
- Hare Krishnas were dancing in front of the bank. I'm not sure if this was "information," but I'm including it just in case.

And that's just the "information" I didn't deliberately seek out. Every single piece of that information was, in some way, an attempt to market something to me — a product, a show, a policy, a candidate, a religion.

## BREATHING INFORMATION

Figure 2. If we breathe information like air, what's the information equivalent of breathing fire? Would that be good or bad? Discuss.

Information is like air: It's everywhere, even when you can't see it; you breathe it in unconsciously whether you mean to or not; and without it, you'd die. Even the simplest animal needs information — about what might be food or whether there's a predator nearby — even if it only processes it instinctively. The trick with breathing is to hold on to the oxygen and exhale the carbon dioxide, and, luckily, our bodies handle that quite well without our thinking about it — which is good, because half the time I'd probably forget.

In fact, our brains process information automatically, too — with results that are less uniformly positive. Think of it as your information metabolism.

One of the hot topics in science these days seems to be how people are really not as smart as we like to think we are. A recent study[3] by three political scientists at the University of Nebraska found that "social conservatives react more strongly to shocking images and sudden noises by sweating more and blinking harder, compared to liberals. Such innate threat responses point to a biological, and perhaps genetic, basis for our politics." A range of psychological research over the past couple of decades has explored the ways that our brains organize information without our being aware of it — by tagging perceived information with a value[4] and adjusting visual information to meet the norms of a group[5]. Even economists, whose research has always assumed that given enough information, people will choose rationally what's in their own best interest, are now starting to accept that emotions and other unconscious influences have an impact on economic behavior[6].

None of this research says that we *can't* process information and make decisions consciously and rationally — it suggests, rather, that if we don't, it will be done for us.

For the most part, that's a *good* thing. There are obvious evolutionary advantages for an animal that doesn't have to stop to contemplate everything it sees. If you're being chased by a tiger, you don't need to stand around questioning how you know that tiger is really hungry; you need to get the heck out of there. And even in modern day-to-day life you need to be able to rely on intuition and instinct. In teaching, for example, as much as we talk about the need for accountability and formal assessments and data, you need to be able to recognize quickly that this kid doesn't get it or that kid seriously is going to wet his pants. Either way, if you wait to analyze your data, you've got a mess to clean up.

### CONSCIOUS METABOLISM

Sometimes, though, our intuition can lead us astray, as when it's based on unconscious bias. And sometimes we need to know how we reached our conclusions — not just so we can communicate them to others but so we can verify them for our own sakes. And we have to do that analysis in real time, because if we wait, we'll forget our data.

Probably we've all had the experience of being challenged on an opinion and then realizing we have no idea where that opinion came from. I recently had this conversation with my wife:

**Me**

I'm definitely rooting for the Steelers here.

**Her**

I can be happy either way.

**Me**

No, I don't like Jacksonville's coach.

**Her**

Really?

**Me**

Yeah, I hate that guy.

**Her**

Why?

**Me**

Um...

**Her**

You need an address book or something to keep track of all the reasons you don't like people.

Spectator sports are, and probably ought to be, a safe bastion of irrational behavior, but if this were a candidate for public office we were talking about — or a car I were considering spending $20,000 on — I should probably come up with a better reason. Or a reason at all.

Figure 3. These people do not have to be rational. Nor do they have to spell correctly. Unfortunately, you don't always have those luxuries.

So we have to find a way to consciously filter the information our brains take in — to develop a conscious metabolism for information. If we want to be responsible citizens and consumers we have to be aware of biases, not just in the information that's presented to us, but in how we're filtering that information.

How do we teach kids to do that?

## Building a habit of skepticism

If we want students to deal rationally and responsibly with the information that bombards them constantly, then we have to teach them, first, to be aware of it constantly, and second,

to be in the *habit* of filtering it so that filtering doesn't require a special effort. And as the saying goes, good habits start at home — or in the classroom.

We talk a lot about "considering the source" when we're doing a research project, but (let's be honest) K-12 students don't do enough independent research to make a habit of their research practices. Directed lesson plans about understanding media and advertising practices are a good start, too, but students need to be challenged to consider the source *every day*.

The difficulty with this is that considering the source means considering the *authority*, and in a classroom, the authority is, of course... the teacher. How many teachers want to openly encourage kids to challenge their authority?

## MAKE IT A GAME

Figure 4. I found this on the internet when I searched for "challenge authority" so I guess it must have something to do with challenging authority.

But of course you can invite students to challenge your authority without the classroom devolving into chaos. You can, for example, lie to them. Tell them at the beginning of the class you're going to lie to them, but don't tell them when or about what. Challenge them to identify the lie when they hear it. If they don't find it, you can point it out at the end of class.

Why do this? Because sometimes adults lie, and even when they mean well they might remember things wrong, and even when they get their facts right their interpretation might be open to argument, and sometimes they have no idea at all and just make things up.

The problem with most information literacy checklists and strategies is that we encourage kids to look for things like respectability and credentials. That's a good start, but so-called experts like teachers and professors and book authors and the talking heads on TV news programs also lie and misremember and misstate and make things up. We are not always right! If kids are going to start considering sources, they need to start with us.

Doing this without losing students' attention and respect is all about marketing, and it probably takes a certain personality to pull it off. If you can't lie convincingly, or if you think you'd just come off as a jerk, you might want to think twice. You have to be able to sell it.

## SHOW THEM YOUR THOUGHT PROCESS

A second strategy is to model media and information literacy — again, not just once as a demonstration but continually throughout the year. Read a book and question the author. Watch a PBS video and question the talking heads. Google them while the video is playing and find reviews of their books. Find out what other perspectives are out there. Then explain to students what you did. You could assign students to do something like this, of course, but then it's an assignment; you want it to seem like something natural and automatic. And they likely won't know how to do it until they've seen someone else do it first.

It doesn't have to be this dramatic; it doesn't even have to be planned — in fact, it might be better if it *isn't* planned. I had an English professor in college who, in a course on film, made snarky comments from the back of the room while the movies were playing. In one scene — I think it was in *Invasion of the Body Snatchers* — the girl forgot her sweater

and had to run back into danger to get it, ruining the hero's plan for rescue. The professor said, dryly, "Yeah, there goes the dumb broad again, forgetting her sweater." We all laughed, but because of who she was and the way she said it, we knew how we were supposed to take it, and afterwards we were more attuned to the way female characters are portrayed — without the need for a heavy-handed lesson about gender biases, which probably would have put most of us to sleep.

### LET THE AUTHORITIES QUESTION ONE ANOTHER

If the only authorities students have the opportunity to question are the teacher and the textbook, constant questioning may make for a long semester. But if you teach with, and ask students to read, a wide variety of sources, then those sources will naturally disagree — and students will be naturally drawn into the fray. They won't be able to take anything on authority.

The clearest example of this is a history or social studies classroom where you're teaching with primary sources. But it works best if students are exposed to the primary sources *first*, *before* they read a textbook explanation or hear the teacher's take on what happened. That's the reverse of the way primary sources are most often used in the classroom. Admittedly, it's more challenging for both the teacher and the student when you look at a document or an image without clear guidelines for how or what to think about it — but isn't that what we have to do in the real world, day after day?

Figure 5. Of course, in the real world, you might need a gas mask.

### MAKE YOUR CLASSROOM LIKE THE REAL WORLD

In short, we need to make schools and classrooms work more like the real world — where information is constantly present from a variety of sources, and where students have to process it as they receive it.

To return to my information-as-air analogy, students who have the answers given to them are like patients given pure oxygen. At some point, they're going to have to breathe on their own — real mixed-gas dirty smoggy air — and it's best if they start while somebody's there to help them along a little.

## A LEARN NC roundup

LEARN NC has published a wide range of resources to help you get students thinking critically about information and media.

### CONSIDERING THE SOURCE

"Five tips to improve students' information evaluation (see http://www.learnnc.org/lp/pages/1851)" offers quick pointers for students heading out onto the internet for research.

"Consider the source (see http://www.learnnc.org/lp/pages/673)" details the though process of evaluating information online.

## CRITICAL LITERACY

*Critical literacy* is an active, reflective manner of reading texts in order to better understand power, inequality, and injustice in human relationships. Like the "information metabolism" I've discussed here, critical literacy is meant to be an automatic part of "reading" anything from a book to a newscast to a t-shirt slogan.

Our education reference includes an extensive article on critical literacy (see http://www.learnnc.org/lp/pages/4437), with classroom strategies.

"Children's literature promotes understanding (see http://www.learnnc.org/lp/pages/635)" offers ways to use fiction to spark classroom discussion and to get elementary and middle-grades students thinking critically about literature.

## VISUAL LITERACY

A great deal of the information we're exposed to is non-textual. What about photographs, illustrations, even those little charts and graphs that pepper textbooks and newspapers?

"Reading images: an introduction to visual literacy (see http://www.learnnc.org/lp/pages/675)" will get you started.

"Reading photographs (see http://www.learnnc.org/lp/pages/677)" considers all of the decisions that go into taking and printing a photograph — and how to unpack those decisions in the classroom.

"A picture is worth a thousand words (see http://www.learnnc.org/lp/pages/1248)" shows how to use photographs to spark higher-order thinking.

Our collection of world cultures lessons incorporating LEARN NC multimedia (see http://www.learnnc.org/search?project_ID=20&ed_type=lesson+plan,teacher%27s+guide) provides more than a dozen specific strategies for building visual literacy skills while learning about other places and cultures.

## TEACHING WITH PRIMARY SOURCES

Our digital textbook for North Carolina history (see http://www.learnnc.org/lp/projects/history/) puts primary sources front and center, using interactive tools to model historical inquiry. For a sample, see "Amadas and Barlowe explore the Outer Banks (see http://www.learnnc.org/lp/editions/nchist-twoworlds/4.5)" or this excerpt from John Lawson's *A New Voyage to Carolina* (see http://www.learnnc.org/lp/editions/nchist-colonial/2.1), both of which address advertising and portrayals of alien cultures.

More than a dozen learner's guides (see http://www.learnnc.org/search?area=&tag=primary sources&ed_type=learner's guide) guide students through the process of reading and analyzing various types of primary sources.

### ADVERTISING AND THE MEDIA

"It's an ad! (see http://www.learnnc.org/lp/pages/770)" describes web resources for teaching students about advertising and for understanding how marketers target kids.

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## On the web

**Media Literacy Clearinghouse**

http://www.frankwbaker.com/

Provides background information, lesson plans, teacher/student readings and links to resources that will help teach about advertising, bias, propaganda, informational texts, the language of film, techniques of persuasion and more.

**Center for Media Literacy**

http://www.medialit.org/default.html

Includes 15 years of back issues of *Media & Values* magazine as well as best practices and professional development for teachers.

**More from LEARN NC**

Visit us on the web at www.learnnc.org to learn more about topics related to this article, including information literacy and media literacy.

## Notes

1. See http://www.ala.org/ala/mgrps/divs/acrl/publications/whitepapers/presidential.cfm.
2. I found this quote on Wikipedia, and because I'm trying to model best practices, I checked it on ALA's website. But the page had moved and left no forwarding address, so I had to track it down, and then I edited the Wikipedia page to correct the link. Your students could do this, too -- in fact, you might encourage it, since you know they're going to use Wikipedia anyway.
3. See http://www.newscientist.com/article/dn14761-voting-republican-may-be-a-survival-response.html.
4. See http://query.nytimes.com/gst/fullpage.html?res=990CEFD91339F93BA3575BC0A963958260.
5. See http://www.nytimes.com/2005/06/28/science/28brai.html.
6. See http://query.nytimes.com/gst/fullpage.html?res=9407E1DC1F3BF93BA15755C0A9659C8B63.

## About the author


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David Walbert is Editorial and Web Director for LEARN NC in the University of North Carolina at Chapel Hill School of Education. He is responsible for all of LEARN NC's educational publications, oversees development of various web applications including LEARN NC's website and content management systems, and is the organization's primary web, information, and visual designer. He has worked with LEARN NC since August 1997.

David holds a Ph.D. in History from the University of North Carolina at Chapel Hill. He is the author of *Garden Spot: Lancaster County, the Old Order Amish, and the Selling of Rural America*, published in 2002 by Oxford University Press. With LEARN NC, he has written numerous articles for K–12 teachers on topics such as historical education, visual literacy, writing instruction, and technology integration.

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**Figure 2 (page 2)**

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**Figure 3 (page 3)**

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**Figure 4 (page 4)**

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**Figure 5 (page 5)**

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