APPROACHING SOURCE ILLITERACY, OR HOW A SOURCE IS LIKE A FROG

Nora G. Murphy nmurphy@fsha.org

What Is Source Literacy?

When a kid gets ready to dissect a frog, she understands certain basics about the frog itself-that it's dead, that her older brother dissected one, that this is what happens in biology class. She doesn't know everything there is to know about a frog, but she has a framework for placing the frog in the context of her educational life. She is frog literate in a sense; she knows where frogs fit into her world, how they relate to school, to ponds, to lily pads. Keeping that in mind, consider that a frog is to dissection as a source is to research. When a student is presented with a source, what framework does she have for identifying its role in her research? Has she seen it before? Does she know where it originates, how it relates to other sources, and whether it belongs in her pool of potential sources? Is she source literate? For most of our students, the answer is probably no, at least not yet.

If being literate means possessing a competency or a body of knowledge that allows one to access, process, and further his or her own learning in a certain area, then being source literate means knowing about sources and source types, how they are named, how they are produced, by whom, why, and how they interact with other sources. This knowledge stands apart from source selection and evaluation, both of which depend on source literacy, just as selecting a mystery novel depends on knowing how to read the words themselves. The key is thinking about that frog. Source literacy isn't defined by what you do with the source once you've selected it, but instead what you understand about the source in the first place. It's about scrolling past the Huffington Post because you know what it is and that it's not the kind of source you need. It's knowing the Onion is satirical, or that Charlie

Rose is considered a more serious interviewer than Kelly Ripa, or intuiting that Wired probably has something to do with tech, just based on the name. Knowing these things impacts the moment just before selection and evaluation begins; in the blink of an eye, one's level of fluency in terms of source literacy determines how one proceeds when conducting research, formal or informal.

Just as fluency isn't knowing every word in a language, source literacy isn't knowing every source. It is, instead, the ability to interpret from context, to know what to ask, to read the clues, and to use the understanding brought from knowing about other sources. A person fluent in source literacy is able to do this automatically, the way you are reading the words on this page or the way you know a frog is a frog. You know about Charlie Rose and the Onion because you are source literate, which you have probably become through experience rather than instruction. You are source literate because you know things and can do things, but mostly because you know things. So, who taught you? If the answer is no one, then you begin to see the problem.

Why Do Students Need Source Literacy?

Students can find relevant content, but they often select material that is not suitably challenging for their academic development. There's a flash of evaluation that, for a fluent researcher, comes before the examination of the content of the source, the credibility of the author, or the relevance to the topic. It's the moment in which one considers whether the source itself indicates a degree of likelihood that anything within the source will be useful. The student conducting the frog dissection doesn't begin to evaluate

the contents of the frog until she has recognized that it is a frog. If she were presented with a cat or a worm, she would know the difference both in terms of its place in the world and in her approach to it.

The cycle of finding and evaluating is where source literacy lives; it is a cycle that, for so many of our students, is endless and dizzying. With increased fluency, that process becomes less explicit and more intuitive, freeing the intellectual and emotional space necessary for high-level analysis.

How Can We Help Students **Develop Source Literacy?**

Guide Students as They Develop a

Digital Source Bank Source illiteracy is a major obstacle to our students' success as researchers, but because source literacy is usually gained through experience and not instruction, each student's source literacy depends on factors generally outside of our control. When I consider how my own source literacy developed, I realize that it was an entirely unsystematic process. I found out what things were only as I encountered them. Short of giving students a list of source types with examples and telling them to memorize it, what do we do to take source literacy from the realm of random experience to that of deliberate instruction? We design planned learning experiences that require students to interact with the source types on that list, and, ideally, multiple examples of each type. In other words, to bombard learners, slowly, with sources. The key is taking a tacit and opportunistic approach and making it systematic and explicit.

Imagine having students create a digital source bank. We often

presume that they are creating a mental source bank as they learn new research skills, but again, making this process explicit is where students will benefit most. As they complete carefully designed assignments in different content areas, they record sources and source types they've encountered along the way. Perhaps such a source bank would resemble a Pinterest page with boards for different types of sources (or topics, academic disciplines, concepts), which, in turn, include websites, magazines, newspapers, archives, museums, or podcasts with attached annotations articulating what each is and how it is useful. Imagine this becoming a reference source (not to mention a portfolio product) that students use as a starting point for research and a guide to recalling prior knowledge. Seeing an article published by the Atlantic on a list of search results would soon become an exercise in which students consider the Atlantic itself as part of their selection process, leading them to eventually understand what kinds of content the Atlantic is likely to publish and then returning to it when they have an information need that this periodical is suited to address. This is a useful refinement of the "find and evaluate" cycle, and one that comes to source-literate researchers quite naturally.

Give Students Feedback on Their Source Banks

A digital source bank gives tangible form to something that is now, for most of our students, intangible and implied. It also gives us the opportunity to formatively assess the development of source literacy using a tool other than a bibliography, which is normally summative and represents a different set of skills than the ones described here. A bibliography tells us what items the student has selected and examined,





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but not necessarily what she knows about the actual publications or source types. Additionally, using a source bank acknowledges that every source is useful for something and that there is value in knowing those uses; evaluating a bibliography requires us to do the reverse as we explain why some sources are not useful for the defined purpose. Drawing on a pool of known sources based on a specific information need requires critical thinking that is different from sifting through a pool of sources to reject those that are not useful.

What Are the Benefits of This Approach?

By their junior or senior year, source-literate students can brainstorm possible sources of information based on keywords extracted from a reading, listing maybe six or seven good choices in just a few minutes. This fluency works in tandem with the ability to identify search terms and build a query, resulting in sophisticated searches and a meaningful, deliberate "find, evaluate, and select" cycle. This fluency removes the randomness of the pre-selection process, meaning fewer students will produce source lists laden with

material unsuited to their task or academic level, not because those publications aren't producing articles on their topics, and not because there exists a blanket rule labeling some sources unfit for academic purposes. Savvy students won't include them because these researchers have better options stored in their source banks, and if they do include sources that might, on the surface, seem inappropriate, there will be a justifiable purpose for doing so.

Students' selections for use will be made using critical-reading and thinking skills, but their preselections will depend on their source literacy. It's that fleeting moment when students' eyes hit the screen displaying the search results that interests them and how that critical moment can be stretched into a longer one so that they can begin to look closely at the choices they are making. What will they pass over and what will they click on? So much tension exists in that question!

Source literacy is one piece of a huge puzzle, and it's not something we talk about enough. No one thinks to teach the twelve-year-old what a frog is before the dissection begins because we all assume she knows.

But consider the fact that when I was teaching seventh grade in South Los Angeles, that dissection was the very first time some of my students had ever seen a frog up close and personal. They needed a minute to process what they were seeing, just to think about the fact that they were looking at a real frog. Similarly, our students need a minute just to think about what each source is-what it looks like, why it exists, how it's named, how it's constructed-before we ask them to open it up and dig in.



Nora Murphy is the library and curriculum resource specialist at Flintridge Sacred Heart Academy in La

Cañada-Flintridge, California. She designed and currently facilitates FSHA's Research Program, a four-year embedded curriculum. She is an active contributor to the FSHA blog, Voices from the Hill http:// blog.fsha.org/>, on the topic of research methodologies. She was also active in the 2011 efforts to reverse LAUSD's reduction in force in the teacher librarian community. She is a member of AASL.