

Sparking a Brainstorm: Getting Students Organized

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When was the last time you told a group of students, eager to get started researching a topic, to take a little time to brainstorm? You know the rules -- flesh out those potential keywords, step back and think of the broader topic, make no judgments, generate quantity over quality, wild ideas welcome? But even following these rules, an in-class brainstorm requires a facilitator (e.g., you), and I have found getting students to create a large quantity of useful ideas requires thoughtful organization – a word we may not typically associate with the “wild” world of brainstorming.

Given the opportunity to teach a three-credit information literacy class, I was excited most by the availability of time. Finally, there would be time to illustrate, in all of its detailed glory, the research process. Ahhh, time: the instruction librarian’s dream! A break from watching students limit to full-text and then quickly print the first five results. Time to analyze, understand, and internalize “the skills needed to find, retrieve, analyze, and use information.” Time to encourage true information literacy.

As we all well know, ACRL has developed a very useful set of Information Literacy Competency Standards for Higher Education. There are five standards: each standard has defined performance indicators, each performance indicator has defined outcomes, and each outcome has (if applicable) objectives and practices. Taken in its entirety, the collection can be quite intimidating – the five standards seem attainable at-a-glance, but those five standards are parent to 22 performance indicators and 82 outcomes. In a typical one-shot instruction session, students usually arrive with a pre-determined “nature and extent of information needed” (Standard One). For example, here’s a common conversation regarding a term paper assignment:

“What’s your topic?” “Teenage pregnancy.”
 “What information do you need?” “Five books, five journal articles, and five web sites.”

In this scenario, I’m lucky if I can even brush up against the detailed outcomes defined for Standard One. The same goes for Standards Three, Four, and Five. As a result, I have developed the habit of zeroing in on Standard Two (which focuses on the student accessing needed information effectively and efficiently) and don’t even realize it until I’m writing a semester-long information

literacy syllabus and noticing a pile of neglected outcomes for the other Standards. And it’s not as if I’m really addressing the individual outcomes of Standard Two; rather I’m doing what I can in the 50 minutes I have. Who wants to even look at Standards when planning a 50-minute session (and they might want a quick tour, too)? It can be overwhelming and discouraging.

But don’t mistake this for a prelude to a rant about overzealous standards or the ubiquitous one-shot. This is a story of what happens when there *is* time to step back and study the standards’ indicators, and the indicators’ outcomes. With this three-credit semester-long class, I’d have the equivalent of 45 one-shots! For the first time, I opened the Information Literacy Competency Standards for Higher Education without a trace of guilt or a single sigh of stress. Finally.

Once the semester started, I quickly learned that more time often means more opportunity to identify the challenges students face when confronted by the information-seeking process. I gave my students sheets of blank paper and asked them to come up with topics. In classroom-speak, this was a classic brainstorm; from a Standards point-of-view, we were somewhere between “formulating questions based on the information need” (I.1.b) and “identifying key concepts and terms that describe the information need” (I.1.e). Whatever you call it, that’s when things came screeching to a halt. My students could hardly come up with anything. In the moment, I wasn’t sure why my students weren’t able to let loose and brainstorm (questions or keywords), but I’ve since come to suspect that it has something to do with the Internet.

As my students stared at their blank sheets, I urged them on with the likes of “What do you wonder about Traumatic Brain Injury/biofuels/steroids?”, “What are some specific things that interest you about World War II/climate change/NAFTA?” and “What are some current issues in nursing/college athletics/horse racing?” A few brave souls scratched some ideas, uncertainly, onto their papers; a few faked it. I knew that if they turned their computers on, they’d click around the Web and find something, but to me, that was giving in. I was caught up in a disconnect: Why was this seemingly simple activity so complex to my students? I wanted them to deliberate their curiosity, specify their wonder, note their interest. I wanted them to be creative – show a spark!

But I gave up and let them leave early. I was stumped. I had two days to come up with a plan.

Over the weekend, I rifled through lessons and ideas and articles and felt as if I were dancing around the problem. I encountered many directives for students to brainstorm topics, list keywords, identify synonyms, arrange keywords, and formulate questions. But I never found anything that exemplified the process. I've always thought of this combination of activities collectively as brainstorming – and I've always thought of brainstorming as a process that just happens. I mean, how do you organize a brainstorm? Aside from my relatively unsuccessful planning for Monday's class, two important things happened that weekend: 1) I couldn't find Home Depot in the Yellow Pages and 2) I got a puppy.

After calling Home Depot (number obtained from a quick Google search), I still was curious why I couldn't find it in the Yellow Pages. I looked, once again, under 'Home Improvement': still not there. Nor is it listed under 'Building Materials- Retail'. It is listed under 'Hardware' and under 'Tools'. In the absence of the Web, I would have found it - and probably within 60 seconds. I would have asked myself, "What kind of store is Home Depot?" or "What do they sell at Home Depot?" And then it hit me like a ton of bricks. Questions, the type with purpose, those that lead to thought organization – that's what was missing. One could argue that the Web can take the place of brainstorming, and maybe that was the reason that my students were stumped. They were used to letting the hyperlinks lead the way. But no way can the Web organize that brainstorm. If I were going to insist that my students partake in this creative process, I needed to add purpose. I needed to model an *organized* brainstorm.

Monday morning, I arrived with the most universal of 'topics': I projected a photo of my new puppy onto all 24 computer monitors in the classroom. After some initial ooh-ing and ahh-ing, we got to business. I wrote 'dog' on the center of the whiteboard. "Find out as much as you can about this dog – you can ask me anything you want. You will all have to ask me at least one question, so come up with something." Like magic, every student had a unique question to ask. I answered each question purposefully, strategically placing the 'key' phrases on the whiteboard (see Image 1). I led the questions and answers into mini-brainstorms:

Student: What kind of dog is it?

Me: What do you mean, 'kind'?

Student: Oh, I mean breed.

I answered, writing the word 'breed' and then asking students to name a few sample breeds. They were narrowing the topic with no trouble at all.

I did the same with 'role', and my students offered plenty of roles dogs play (e.g., hunting, companionship).

We easily stumbled upon related topics (other companion animals, other animals with jobs), contemporary controversies (dog fighting, puppy factories, mandatory spay & neuter programs, leash laws), broader terms (mammals, pets, domestic animals, *Canis domesticus*).

Somewhere between formulating questions and identifying key concepts, a needed technique lies dulled, if not forgotten. This is the step that has been replaced, in many cases, by the Web. This is the wonder, the who/what/where/when/why/why not/what if/how else, of the process. Type any 'topic' into Google's search box and I'll get results. No need to wonder, the hyperlinks will take care of that. The structureless Web is fundamentally opposed to the structure-filled organization of terms that I was attempting to get my students to recognize. Ultimately, I can't value one over the other. They are different. But I can help to revive the art of and process of wondering, even if it requires structure - - and time. And yes, it requires an attentive, active facilitator, but an organized brainstorm is a decent compromise between stumped students and the overwhelming Web. And though many online brainstorming tools (Bubbl.us, ThinkGraph, DrillDown, etc.) exist as a means to a similar end, this low-tech process is simple and productive.

When students have time to think about their topics, ask themselves questions, they are then better prepared. And instead of being glued to Standard Two, I have found students intuitively use this slower process to guide themselves through parts of the other Standards. With a thorough list of questions and topics, students are more likely to consider a variety of resources (Standard One) and then to be more involved in their evaluation of those resources (Standard Three). The bottom line is that students have taken time to prepare themselves, and once that time is invested, it seems to be worth a little more.

References

Association of College and Research Libraries. (2000). *Information Literacy Competency Standards for Higher Education*. Retrieved from <http://www.ala.org/ala/mgrps/divs/acrl/acrlstandards/standards.pdf>

- See Diagram on next page for brainstorm example -

Image 1: A recreation of the organized brainstorm in process



(Engage Your Audience...Continued from page 5)

moments throughout the session to connect with your students as people. While it is certainly always good to find out what the students’ assignment/research project is (so our work is directly meaningful to them), instruction sessions still can be greatly helped by showing research tools in a way which makes it clear these resources are meaningful to **you**. Engaging students with what you want to impart can become enjoyable and fulfilling when you integrate your own experiences – whether through travel or other life lessons – into instruction. Before you know it, you’ll have new friends who see you not only as a resource to consult for future research projects, but also a kindred spirit in a previously unknown section of the library.

References

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