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Inspired by Failure: Engaging Students with an Active Learning Exercise on Authority

Rebecca Troendle Hewitt

INSPIRED BY FAILURE: ENGAGING STUDENTS WITH AN ACTIVE LEARNING EXERCISE ON AUTHORITY

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INTRODUCTION

If you are anything like me, you have yet to teach the perfect one-shot instruction session. To the extent that our field characterizes research as an iterative process, certainly we can agree that teaching college students to conduct research is a try and try again affair. You are constantly tweaking by trying new iterations of your usual script with metaphors and relatable examples, trying new active learning exercises, mixing things up by assigning pre-class readings, trying new class assessments and new ways to “close the loop” by using assessment feedback to improve.

In his classic work of educational psychology, Edward Slavin characterized this relentless drive to improve teaching and learning as intentional teaching. “Intentional teachers are those who are constantly thinking about outcomes they want for their students and about how each decision they make moves [students] toward those outcomes” (1985, p. 7).

Despite this zeal for improvement, I sometimes face a sea of blank-faced and bored students in my classroom. This is often the case when, in my lower-level instruction sessions, I cover the topic of source authority: popular versus scholarly sources. Inspired by two presentations at last year’s LOEX conference (Brecher & Klipfel, 2014; Doyle, 2014), my own longstanding constructivist teaching philosophy, and by the new Framework for Information Literacy, which encourages librarians to present information literacy concepts as constructed and contextual (Association of College and Research Libraries, 2015), I conceived a way to present material on source authority more effectively.

The result of my struggles, the Pyramid of Evidence exercise, meets my curricular goal to help students develop a framework with which to evaluate source quality in an academic setting. It reflects my teaching style in that it is interactive, rooted in constructivist pedagogy, and evokes a positive response from students.

CLASS INSTRUCTIONS

The steps of the exercise are as follows. To begin, the students are encouraged to recall their previous research experiences in one of two ways: either a Think-Pair-Share exercise, in which I ask them to take two minutes to describe to a partner the last school research project they did, and how they found sources to use in that project, or by taking the HEDS Research Practices Survey, which my colleagues and I administer to new first year students in introductory composition classes every fall. The survey asks students about their past research experiences and library use, and tests them on information literacy concepts.

After the students are warmed up with one of these exercises, I ask them to think about the sources they used in a previous research project. I might say, “for example what was in your bibliography or works cited page. Can you name two sources that you cited? You don’t need to remember the exact titles, just the type of resource, for example a book, news article, or encyclopedia.” I then distribute two Post-it notes to each student, and tell them to write one source that they used for research on each Post-it.

The next step is for the students to use their Post-its to create a “Pyramid of Evidence”: I ask the students to think about how much authority the sources on their Post-its have, asking, “have you been taught that the information found there is reliable? Is

true?” Next I wheel over a white board which has a pyramid drawn on it and invite the students to come to the board and place their notes wherever they think they belong on the pyramid, with the most reliable, or authoritative, at the top, and the least authoritative at the bottom. I also invite them to move their classmates’ notes if they feel they’ve been misplaced.

The students’ pyramid often looks like an inverted pyramid, as first year students tend to have very optimistic views of the authority their sources! A couple of things are clear at this point. First, students are comfortable with the concept of authority. They speak fluently of “bias” and “good sources.” It’s also clear, however, that the high school understanding of authority is very different from a college-level understanding. In many cases, the students’ pyramid has Encyclopedia Britannica at the top, or the website of the NYS Department of Environmental Protection, or sometimes the word “Proquest” or “book.” The challenge then becomes how to flip that understanding and move scholarly sources to the top in a way that resonates with students.

DISCUSSION

To help students shift their understanding of authority to one that is appropriate in the context of a college or university setting, I begin by acknowledging the validity of their current understanding. I might ask about any sources that I don’t recognize, or talk about the ambiguity of a book, describing how it is difficult to know what level of authority a book has without knowing more about it.

Second, I explain more explicitly that a college-level understanding of authority is going to replace the top of their pyramid with a new layer. There will be few sources that meet the stringent criteria to make it to the top – that’s why the pyramid’s top is relatively tiny compared to its base. I describe the college-level pyramid as having roughly three levels, and use analogies to improve understanding and recall of these areas.

The top of the pyramid, by far the smallest set of resources, has information sources that have been created by subject experts, based on their research, and vetted rigorously by other experts in the same field, a process that is called peer review. In the middle of the pyramid are sources of evidence that are written and edited by professionals who may be professional writers, journalists or editors, but who are not subject experts. At the vast bottom of the pyramid are sources of information that have not been professionally or expertly written and edited (see Figure 1: The Pyramid of Evidence).

Figure 1: The Pyramid of Evidence

To increase understanding and recall of the pyramid concept, I use analogies to beer or fast food, depending on the audience. What is at the bottom of the pyramid is plentiful, inexpensive, of uneven quality (we don’t buy/eat it for the quality): Keystone Light or Ramen. Occupying the middle of the pyramid are goods that are a bit more expensive and of somewhat better quality: Budweiser, Corona or college dining hall food. At the top are the most exclusive items, those that are available in limited quantities, limited areas, and are expensive and high quality: local craft brews or a farm-to-table restaurant meal (see Figure 2: The Pyramid of Evidence Analogies).

Figure 2: The Pyramid of Evidence Analogies

One of the first analytical questions I ask students, in applying the pyramid concept, is “Where does Wikipedia belong on the pyramid?” Every class so far has been able to answer that question applying these concepts correctly.

Before moving on to other topics, I again emphasize that this pyramid is contextual; it’s relevant to college and university projects, which is why it may differ from what students were taught in high school, and it will certainly differ from real world research like buying a car or a house.

I conclude the immediate lesson by assuring students that we will continue on this theme throughout the class as we find sources of evidence and try to place them on the pyramid. In this way the students’ pyramid is slowly transformed throughout the class into one that reflects a college-level understanding of evidence authority.

REFERENCES

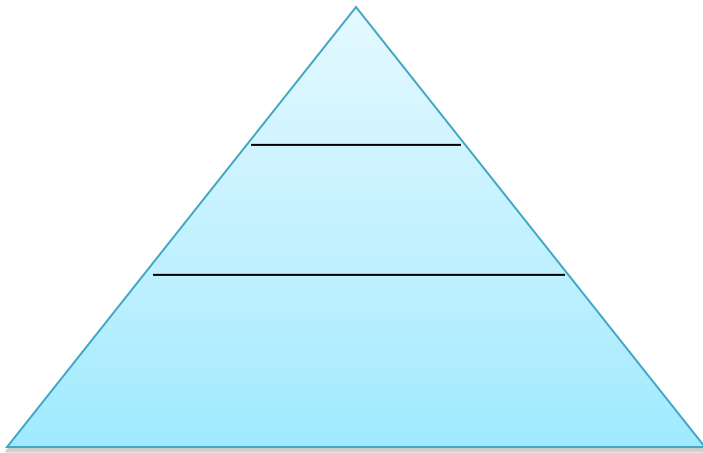
- Association of College & Research Libraries (2015). *Framework for Information Literacy in Higher Education*. Retrieved from <http://www.ala.org/acrl/standards/ilframework>
- Brecher, D., & Klipfel, K. M. (2014, May 9). *How do our students learn: A cognitive psychological model for information literacy instruction*. Paper presented at the LOEX 2014 Annual Conference: Creative Visualization: The Art of Information Literacy, Grand Rapids, MI.
- Doyle, T. (2014, May 9). The new science of learning: How to learn in harmony with your brain. Paper presented at the LOEX 2014 Annual Conference: Creative Visualization: The Art of Information Literacy, Grand Rapids, MI.
- Slavin, R. E. (1985). *Educational psychology: theory and practice*. Boston, MA: Pearson.

OTHER RESOURCES ABOUT PEDAGOGY AND ACTIVE LEARNING

- Cook, D. (2008). Why should librarians care about pedagogy? In D. Cook, & R. L. Sittler (Eds.), *Practical Pedagogy for Library Instructors: 17 Innovative Strategies to Improve Student Learning* (pp. 1-19). Chicago, IL: Association of College and Research Libraries.
- Detlor, B., Booker, L., Serenko, A., & Julien, H. (2012). Student perceptions of information literacy instruction: The importance of active learning. *Education for Information*, 29(2), 147-161. doi:10.3233/EFI-2012-0924
- Fister, B. (2013, July 18). Library babel fish blog: Welcome to the palace of ambiguity. *Inside Higher Education*. Retrieved from <https://www.insidehighered.com/blogs/library-babel-fish/welcome-palace-ambiguity>.
- Hsieh, M. L., Dawson, P. H., Hofmann, M. A., Titus, M. L., & Carlin, M. T. (2014). Four pedagogical approaches in helping students learn information literacy skills. *Journal Of Academic Librarianship*, 40(3-4), 234-246. doi:10.1016/j.acalib.2014.03.012
- Mestre, L. (1998). Structuring a Session with Questions. In G. Gradowski, L. Snavely, & J. Dempsey (Eds.), *Designs for active learning: A sourcebook of classroom strategies for information education* (pp. 50-51). Chicago, IL: Association of College and Research Libraries.
- Walker, K. W., & Pearce, M. (2014). Student engagement in one-shot library instruction. *Journal of Academic Librarianship* 40(344), 281-290. doi:10.1016/j.acalib.2014.04.004

Images for Tables and Figures (Editor will put in body of the text later)

Figure 1. The Pyramid of Evidence

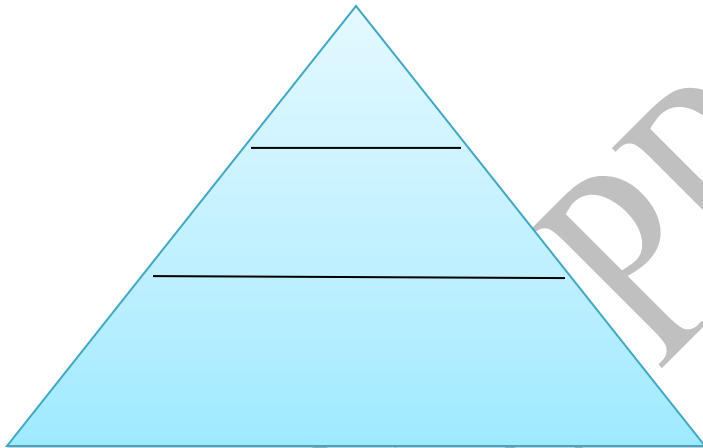


Expert created, expert vetted evidence

Professional writer/journalist created, professionally edited evidence

User created evidence, may or may not be edited

Figure 2. The Pyramid of Evidence Analogies



Local craft brew, or
Farm-to-table restaurant

National brand like Budweiser, Corona, or
College dining hall

Keystone Light, or
Ramen

Figure 3. Hartwick College First Year Students' Pyramid

