

Blind Taste Test:

Helping First-Year STEM Students Understand “Information Creation as a Process”

Adrienne Button Harmer, Instruction Coordinator, Georgia Gwinnett College, harmer@ggc.edu; Bethany Havas, Reference & Instruction Librarian, Georgia Gwinnett College, bhavas@ggc.edu; Patti Lee, Head of Research Services, Georgia Gwinnett College, plee@ggc.edu; David Minchew, Reference & Instruction Librarian, Georgia Gwinnett College, dminchew@ggc.edu

NUTRITIONAL VALUE

We are finding that our first-year Chemistry students are able to find a lot of information online, but they can’t differentiate or evaluate what they are finding. We get a lot of questions of the “how do I cite/use this website?” variety, when what they are looking at is a news article, a blog post-ing, an encyclopedia entry, a scholarly or trade or special interest group publication, a government brochure, or an actual website. What’s worse, all of these are being valued the same in terms of cognitive authority, accuracy, and relevance. That’s when we came up with our active learning in-class activity, the “Blind Taste Test.”

In this activity, students are divided into groups and each group works to define an information product by its author, audience, and purpose. The groups report out to each other so that the entire class learns about the different creation processes of various information products, and how understanding the identifying characteristics of these processes and products can help students determine which information sources to use in their first-year STEM (science, technology, engineering, and mathematics) courses.

COOKING TIME

50–75 minutes

ACRL FRAMEWORKS ADDRESSED

- Information Creation as a Process
- Authority is Constructed and Contextual

COOKING TECHNIQUES

Small group work, structured jigsaw, peer-instruction with librarian facilitation

MAIN INGREDIENTS

- Marked stations around the instructional space, each clearly labeled with a specific type of information product. We use the large post-it sheets from a self-stick easel pad with the name of a type of information product written at the top (scholarly article, trade publication, news, magazine, etc.).
- Markers
- Small numbered post-its to designate groups
- List of pre-selected web links that can be made available to students. We tend to use class LibGuides to house the specified links. The “name” for each link is the appropriate group number (e.g. Group One, Group Two, etc.) so that students walk into each website blind.

- Salt and pepper: Internet-enabled devices and internet access. Our instructional space has 30 computers, but we often find students using their own devices to examine their assigned information product. It’s also helpful if you are in a room with a projector, so that you can pull up the relevant web links as each group discusses and reports out to the entire class.

PREPARATION

You will need to spend a bit of time preparing for this activity. The most time-consuming part is selecting the information products that the students will be evaluating. It is helpful if the products are all linked to one another directly, and at the least they should be linked thematically and tied to the course content and relevant assignment or project.

Creating the marked stations and auxiliary materials is the least time-consuming aspect. Preparing a research guide for the course that includes the relevant web links and supporting material is recommended and will likely require a moderate time investment.

COOKING METHOD

1. Make introductory remarks emphasizing the context of why the students are in the library and the rationale for what they are about to do. Split the students into eight groups. Give each group a numbered post-it. Tell the groups to work together to look at the web link that corresponds to their group number (each link leads to a different type of information: scholarly, trade, news, magazine/entertainment, reference work, government, special interest group, and personal opinion/unsubstantiated). Direct students to work in their groups to discuss the typical author, audience, and purpose of their information product and to identify in which type of publication their information product is disseminated. When each group believes they know which type of information product they have, they are to stick their group post-it to the corresponding station marker. Once all groups have decided (or the allotted time is up), direct all the groups to go stand at the station they have chosen. (At this stage, typically, several groups of students may be standing in the wrong place, but we feel that's a learning opportunity for them, so we don't correct their efforts.)
2. Going in order from Group One to Group Eight, each group describes the underlying characteristics of the information product they have and the criteria they used to determine those

characteristics. When the group seems to be at the "wrong" station, the library and chemistry faculty can solicit corrections from the other students or, if that is not forthcoming, can steer the group presenting into reconsidering. If all else fails, the faculty can point out why they think the students are in error and correct any misunderstandings. This is often a negotiable process and should be presented as a collective decision of the large group, not as a pronouncement handed down by the faculty. This continues until all groups have presented.

3. At the end of the instruction session, students are invited to leave comments at the ninth station (assessment) on more large pieces of paper. They are given markers and asked to leave at least one comment in at least one of four categories (I learned..., I'm still confused about..., This was useful because..., This would be better if...). The library faculty can collect these sheets and code the data to refine the activity in the future.

ALLERGY WARNINGS

- Students will complain at having to stand up and leave their devices behind for the reporting out, but they are much more engaged and participatory than when they are allowed to remain seated. Be prepared to make exceptions for those who are ill or infirm.
- Because this activity is directed at first-year students, these students may need

to be encouraged to thoroughly skim their information products, but also need to realize they don't need to read and absorb the entire piece of information. They are looking for clues as to the author, audience, and purpose.

- Students can be hesitant to speak out during the reporting time, whether because they lack public speaking skills or because they fear being "wrong." It can be challenging to draw these students out.
- First-year students may find the activity challenging because they often want to know the "right" answer and don't realize that the usefulness of these information products is largely contextual.
- Pay attention to the pace and timing of the activity so that every group gets a chance to speak, but so that it also moves along quickly enough to keep the students engaged.

CHEF'S NOTES

We realized after our initial pilot that we needed to revise this to write the purpose of each information type on the station markers because consistently the first-year students put that the purpose of their type of information was "to inform."

The library faculty made new sheets with the type of information and its general purpose, which has helped these beginning students see that information can serve many different purposes (and also some-

times helps them figure out what type of information they have). For example, under scholarly articles, it says, "Purpose: to present (original) research that contributes to or advances knowledge in a field." If all of your selected information products are connected to one another, it can lead to a big "aha" moment for the first-year student.

For example, our unsubstantiated blog used a special interest group report as the basis for a blog post that went viral. Both our newspaper and magazine articles discussed the blog and its implications for food dye regulation and manufacturing (the topic of the chemistry course). The trade publication is about the regulation and manufacturing of the specific dye mentioned in the blog and subsequent popular press. The scholarly article presents research on the safety of that dye and the government brochure advises consumers of the results of that research. The reference source (Wikipedia) captures the debate on the safety of the dye, as well as providing factual information as to its chemical structure.

So, all eight of the information products are not only on the same topic (food dyes), but they actually are all part of the exact same conversation. It's a powerful moment in the class when those connections are made visible.

ADDITIONAL RESOURCES

Note: this activity was inspired by our reading of Troy Swanson's excellent article on

teaching students about cognitive authority: Swanson, T. (2005). Teaching students about information: Information literacy and cognitive authority. *Research strategies*, 20(4), 322–333.