

Engaging the Large (& Quiet!) First-year Class

Presented by Tricia Lantzy at the California Conference on Library Instruction, 2015

Change in Higher Education

Change is an inevitable part of working in higher education. Budgets shrink and grow, enrollment can vary from one year to the next, and new programs and courses can quickly change the makeup of a student population. Librarians working in a university setting and providing information literacy instruction must adapt quickly to the changing environment of higher education as a whole as well as the changing environment of their individual campus.

The flexibility to adjust pedagogical practices to better suit the needs of certain student groups is essential, especially in regards to class size. Any librarian who has taught a class of twenty students and a class of forty-five students will understand that these two environments are entirely distinct. Smaller class sizes have been traditionally recognized as better learning environments because instructors are able to give more personalized attention to students. However, research on the topic has been inconclusive. An early systematic review of the literature regarding the association between class size and student achievement supports a modest inverse relationship between the two (Feldman, 1984), while more recent research has shown *no* significant relationship exists between class size and student achievement (Pascarella & Terenzini, 2005).

Regardless of whether small or large classes are “better” for student learning, educators must make the best of each unique teaching opportunity. So the question arises: are there ways to adapt to growing class sizes without sacrificing student learning in information literacy instruction? I argue that the answer is a resounding “yes,” and that the path is through active learning tailored for these environments.

What is Active Learning?

Active learning can be broadly defined as any instructional technique or method that engages students as an active participant in the learning process. Students engage in the material by doing, by thinking, and by thinking about what they are doing. It is important to be strategic about implementing active learning into the classroom. Busy work and repetition are not the same as making students active participants in the learning process. For students to be actively learning, the activities should promote the use of higher-level thinking processes such as analysis, synthesis, and evaluation (Bonwell & Eison, 1991).

Benefits of Active Learning

The benefits of active learning have been well documented in higher education research, stretching back to the popularization of the idea by Bonwell & Eison in 1991. A strong foundation for the use of active learning in the classroom is supported by studies that report it leads to increased student motivation (Paxman, Nield, & Hall, 2011; Watson, Kessler, Kalla, Kam, & Ueki, 1996), increased student engagement (Holderied, 2011), and improved academic performance (Bonwell & Eison, 1991; Hatamyar & Sullivan, 2011; Yoder & Hochevar, 2005). One

area of research that remains inconclusive is students' perception of active learning. For example, April Bleske-Recheck found that undergraduate students enjoyed active learning, preferring it to traditional lecture-style teaching in a psychology class (2001). In contrast, Smith and Cardaciotto (2012) found that although active learning increases retention of and engagement with the material, students did not report that they enjoyed the activities more than traditional lectures.

Active Learning in Information Literacy Instruction

The literature on active learning in information literacy instruction supports the benefits described in the higher education literature, while also demonstrating successful active learning techniques and highlighting issues relevant to library instruction. Holderied (2011), for example, found that the use of interactive technologies in library classes increased student learning outcomes and student engagement. Several studies have explored active learning techniques in information literacy instruction and document the benefits that result from these changes (Dabbour, 1997; Hoffman & Goodwin, 2006; Krajewski & Piroli, 2002). Active learning in information literacy instruction has been tied to positive student outcomes regardless of whether the active learning portion of the class lasted less than 30 minutes or more than 30 minutes (Detlor, Booker, Serenko, & Julien, 2012). This finding is especially meaningful for instruction librarians who are often limited by time and are unable to devote an entire class period to active learning.

CSUSM and General Education Lifelong Learning (GEL) 101

At CSUSM, librarians teach a two-week information literacy module within the first year course, General Education Lifelong Learning (GEL) 101. This course fulfills the general education requirement for "Lifelong Learning and Information Literacy." The majority of our freshmen students pass through GEL, making it an important point of contact between the library and new students. During the module, librarians guide students through the research process from start to finish, using in-class activities and homework to demystify the college research process.

Over the years, GEL has grown in both the number of sections offered each fall and number of students within each section. The number of instruction librarians has increased in response to the growing number of sections, but the growing class sizes require a shift in teaching style.

A Large, Quiet Class

When I began teaching GEL, I inherited thoughtful lesson plans from my colleagues that included group discussions, quick writes, and problem-based learning activities. Students had to work together to answer questions or do activities that gave them the opportunity to reflect and think about information literacy concepts. In some classes, this approach worked wonderfully. However, I found that my biggest classes (of 42-45 students) were the hardest to get engaged. Asking a question of the class would often lead to silence and blank stares. Putting students in groups to work on a problem did not generate an energetic environment of active discussion unless I scrambled from group to group prompting the conversation. Whether these

students were intimidated by the large classroom environment, afraid of saying the wrong answer in front of their peers, or just tired, I realized that I needed to try something different.

The Internet Carousel

“The Internet Carousel” activity is a compilation of several activities I have learned from other librarians and educators. The structure of the activity resembles “station-to-station.” Students go from one spot to the next, brainstorming and answering questions as a group at each stop. It is called “The Internet Carousel” because the questions relate to evaluating information online. Some example questions I have used in the past include:

- List criteria that indicate a website is a “good” or reliable source in this class.
- What are the pros/cons of finding information online?
- How can you find out more information about the author of information on a website?
- How can you tell if information is reliable if there is no author?
- What is Google Scholar? When would you use it?
- What does the Google Scholar tagline “Stand on the Shoulders of Giants” mean?
- How does a search engine determine the sites that are listed first in a results list?
- How can you tell if information online is biased?

At the CSUSM library, we recently invested in several rolling whiteboards for the main group study floor of the library. At a workshop hosted by one of my colleagues, she used these whiteboards to get a large group of attendees moving and talking. I realized this might be a solution for my quiet GEL classes. Rather than just telling students to talk about an idea or problem, adding movement in the classroom may increase their energy and participation. After viewing the success of this activity during the workshop, I began incorporating “The Internet Carousel” into the GEL library research module.

I begin this activity in class by explaining the reasoning behind it to my students. Rather than lecturing on a topic that they have common knowledge of, students use their own understanding of online information (websites in particular) to teach one another. Before class, I set up rolling whiteboards with a station number and a question written across the top of each. Depending on the class size, I create six to eight different stations. Since students are already broken up into groups for GEL, I assign each group their starting station. When applying this activity to another class without a previous grouping structure, the facilitator can easily count off students or create groups in some other way.

Timing is an important factor in this activity. Students have only two minutes per station, and when the timer goes off, they rotate to the next station. I don’t bring a timer into class; instead, I use the Google timer feature (Google search “2 minute timer”). Each group has a unique color marker, so when groups are reporting back to the class, they are able to differentiate who contributed what to the conversation. This incorporates a helpful layer of accountability among the groups, which encourages students to carefully consider their additions. At each new

station, students brainstorm answers and add new ideas to what was previously written by other groups. If students have questions about certain answers, they can draw a question mark next to it, and if they agree with something written by another group, they can add a star next to it.

Once each group goes through the entire rotation, they return to their original starting station. I instruct students to take a few minutes to look over the board and circle the three “best” answers. Groups then report out to the rest of the class and explain why they chose these answers as the best or most useful. I wrap up the activity by adding any ideas or concepts that hadn’t been brought out during the discussion.

Why this activity works

As previously mentioned, this was not the first attempt at active learning in GEL. However, “The Internet Carousel” has been more effective than most activities in engaging my quiet classes. I hypothesize the reason behind this success is a combination of group work (collaborative learning) with three other important factors: physical activity, time constraint, and accountability. Requiring the students to move around the classroom on a strict time schedule adds a fun dimension of spontaneity and excitement that energizes students who may otherwise check out of group conversations. Students are motivated to include meaningful responses because they understand that the class will be assessing and discussing the answers at the end of the activity.

This activity works best when the questions relate to a topic that students have previous knowledge of. When discussing the pros and cons of finding information online or what makes a website “reliable,” the facilitator has the opportunity to uncover what students already know and the ability to dispel misinformation. Students are able to compare knowledge with their peers, while having a forum to teach and share ideas that not everyone may have considered. One of the most encouraging parts of facilitating this activity is hearing students engage in debates and even disagreements about the correct answers to these questions. If students are debating the best way to evaluate if information from a website is reliable, they are actively **thinking** about it.

How this activity can work for you!

Part of what made me begin using this activity in my GEL classes was my library’s investment in rolling whiteboards. While they are certainly fun to have available for library instruction, this activity can be easily modified to work with a different set of resources.

No rolling white boards?

- Large, self-stick post-it notes and colored markers.
- Large, self-stick post-it notes and regular sized post-it notes. Students can use regular sized post-it notes to add their answers. The smaller sticky notes could then be arranged in order of importance at the end of the activity.

No wall space?

- Rather than having students move along the walls, stations can be set up at desks equipped with the brainstorming question and post-its or scratch paper for students to write answers on.

Variable class size?

- Adjust the number of stations to match the number of students in the class. 4-5 students in a group works well to keep everyone involved in the discussion.
- 45 students = 9 stations/groups of 5 students
- 30 students = 6 stations/groups of 5 students or 7 stations with groups of 4-5 students.

More active learning for large classes!

“The Internet Carousel” is just one way to engage large classes of quiet students. There are many other options for getting students thinking and doing during your information literacy session, computers optional!

Think-pair-share

During instruction, I ask my students a lot of questions. Sometimes, there will be one or two dutiful students who answer and get the ball rolling in discussions, but sometimes the class will fall into dead silence. This is a great time to pull “think-pair-share” out of the toolkit. Give students two minutes to think about the question you just asked, and then tell them to discuss their answer with the person next to them and come to a consensus of what they would like to report out to the group. Working in pairs is a great way to break that initial barrier of talking during class. Once students have been discussing the answer with their neighbor for a couple minutes, they are much more likely to share with the entire class because 1) they have confirmed their answer is shared by at least one other student, and 2) they have already practiced vocalizing the answer to an audience. Even if pairs are still hesitant to share with the entire class, I am more confident that students will have *something* to say after spending time reflecting on the question.

Group tasks

Asking students to work in groups to answer a question or come up with a solution to a problem can help break the silence in most classes. In my experience, there needs to be a little planning beforehand to make sure the activity is going to contribute to student learning rather than giving them an opportunity to sit quietly or talk about the weekend. A purposeful task with an end result (something they have to turn in or report out to the class) and a time limit is often enough motivation to keep most students on task, especially when classes are too large to get around to each group.

Audience Polling Systems

Audience polling systems (including clickers, online tools such as Socrative, and others) can promote engagement, learning, and provide a means of formative and summative assessment (Kay & LeSage, 2009). I prefer online tools such as Socrative, which allow students to log in

quickly and answer questions through their phones, ipads, or personal computers. This is a great way to get immediate feedback from students who are too shy or timid to ask questions out loud. Polling in class can also be used to test difficult concepts and adjust teaching strategies on the fly.

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