

# NO LECTURES, NO DEMOS, NO TESTS!

## HOW TO SUCCEED IN THE CLASSROOM WITHOUT EVEN (DOING WHAT YOU THOUGHT WAS) TEACHING

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This paper reveals lessons learned by a librarian prone to cramming every new instructional trick into her 1-credit information literacy course. A look at cognitive development studies explained why this flurry of IL activities merely frustrates undergraduates without producing the desired outcomes. Experience has taught me to encourage deeper learning and make a class more meaningful by replacing lectures, demos and tests with fewer activities and abundant feedback. Backwards course development and authentic assessment successfully re-focused and strengthened this instructor's overstuffed course.

### THE SETTING

Woodbury is a small private non-denominational university with a student body of around 1500. Students who begin at Woodbury as freshmen or sophomores fulfill the university's information literacy requirement by taking the one-credit course, "Information Theory and Practice."

Woodbury's non-competitive admissions policy often results in underprepared students who may lack strong time management skills. Many are first generation college students. In addition, students enrolled in one of Woodbury's many studio programs, such as architecture or animation, tend to focus on studio projects to the exclusion of all else. In short, a one-credit library class falls to the bottom of many priority lists.

### THE DISCONNECT

With information literacy, the best measure of

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student learning is how it is applied once the course is over. Even without a formal study, anecdotally it was clear that the outcomes were lacking.

My students learned that you are not *supposed* to plagiarize, professors *want* students to use scholarly resources, doing library research *is* complex and difficult, and that librarians are *really* nice. But they weren't able to actually use the library. It was not unusual for former "A" students to come up to the reference desk and ask how to look up a book or where the photocopiers are located.

Unnerving discrepancies appeared in my grade book. Students who did well on the final test – multiple choice and short answer – did not always do well on their annotated bibliography. Students rarely defined their topics properly. In addition to this, the resources selected for the bibliography lacked coherence; students seemingly grabbed anything just to be done. The bibliographic citations were also problematic. The annotations sometimes parroted back platitudes and evaluation criteria discussed in class without any attention to actual nuances an individual source may have.

### WHY WAS THIS HAPPENING?

While desperately trying to update myself about Net Generation characteristics, I came across an article aptly titled, "Cognitive Development: the Missing Link in Teaching Information Literacy Skills." In it, Jackson (2007) wrote, "Differences in cognitive development levels may help to explain many of the situations librarians experience with students, both in classes and at the reference desk"(p. 28). This and other articles described my students to a T.

The four categories of cognitive development that college students move through are: dualism, multiplicity, relativity and commitment (Battaglini and Schenkat, 1987; Gatten, 2004; and Jackson, 2007). Dualistic freshmen believe there is a “right” answer to every question, only seek information that already confirms their position, and don’t feel the need to provide justification (Battaglini and Schenkat, 1987; and Jackson, 2007). Other studies revealed that students focus more on fulfilling assignment requirements (e.g., use database X) than on the appropriateness of their sources (Holliday and Fagerheim, 2006). If students couldn’t find anything quickly, or if they found too many sources, they would simply change topics (Fidel et al., 1999). Internet reliability for them is determined by how many web sites say the same thing (Seamans, 2002).

In short, beginning college students want to complete assignments quickly and correctly, but may judge relevancy by familiarity and convenience. Freshmen in particular may be cognitively challenged by higher order thinking skills. Some are unaware of a library’s potential. They simply do not have a reference point with which to connect and apply new learning about information finding. Students move slowly through these cognitive stages and if they are to grow, students need “sustained interventions” (Gatten, 2004, p.158) to challenge their dualism and move into multiplicity and beyond.

It dawned on me that I needed to change what I do. To make the ease of Google lose its influence, I must help my students learn to manage the complexity of library research and break an old habit by creating a new one. The key, providing “sustained intervention”, requires time for students to learn and practice. In order to create time for a more meaningful experience, portions of my syllabus would have to go, even some of my favorites.

## HOW I CHANGED

I used to plan my syllabus by putting everything I wanted to teach in a logical order and then presenting it. To restructure my course, I used backwards course development -- a method that focuses on just the essentials. Backwards course development starts with the end result, the student learning outcomes. First, decide what your students must be able to do by the end of the course. Next, determine what activities will enable your students to successfully learn these outcomes. Finally, determine how you will know if a student has learned or achieved each of the learning outcomes. These will become your assessments and determine the student’s grade.

What must my students be able to do by the end of the course? Since we currently have no other library orientation at our university, our faculty depend upon this course to get students familiar with the library. Outcome 1: Ability to use the library, the library’s catalog and library services to meet students’ needs.

Academic honesty and plagiarism are big issues on our campus, as they are almost everywhere. How can our course contribute to this discussion in a meaningful way to our students? Outcome 2: Increased awareness about and ability to maintain academic honesty.

Our Net Gen/Millennial students live and breathe the Internet. It behooves us to help them make the most of it. Outcome 3: Ability to effectively use Internet information.

My students exhibited significant problems with finding and using appropriate periodical literature. While the whole concept of periodicals as research material was new to them, distinguishing between the different sources was the most glaring problem. Outcome 4: Ability to find and use published periodical literature.

Four outcomes in a 10-session course are enough. Each outcome has several sub-outcomes. In the syllabus, they appear as follows:

<p><b>#1 How to use the Woodbury Library</b></p> <ul style="list-style-type: none"> <li>• Students will learn what library services are available;</li> <li>• How to locate library materials;</li> <li>• Understand how the library is organized;</li> <li>• Where to get help</li> </ul>	<p><b>#2 How to Maintain Academic Honesty</b></p> <ul style="list-style-type: none"> <li>• Students will better understand what is plagiarism;</li> <li>• Learn to avoid even accidental plagiarism;</li> <li>• Why academic honesty matters;</li> <li>• How to format accurate citations.</li> </ul>
<p><b>#3 How to effectively use Internet information</b></p> <ul style="list-style-type: none"> <li>• Students will learn when it is appropriate to use Internet information;</li> <li>• When it is not;</li> <li>• How to evaluate web pages;</li> <li>• How to construct effective Internet searches</li> </ul>	<p><b>#4 How to find and use published periodical literature</b></p> <ul style="list-style-type: none"> <li>• Students will learn the value of periodical literature to our society;</li> <li>• What are the different types;</li> <li>• How and why to use different periodical articles;</li> <li>• How to search effectively for periodical literature</li> </ul>

Everything must be tied to one of these outcomes, or it is eliminated. Activities are strategically placed in the 10 week allotment so that students receive effective feedback. In-class exercises are not graded, but receive lengthy comments and feedback. There is no test, exam or final. The “final” is comprised of a group presentation on one of the four outcomes above as well as students’ evaluations of the other groups’ presentations. My intent is to challenge students and create situations requiring more than just yes / no responses. Abundant feedback and guidance helps students transition beyond “dualism.”

**What was left out?** Some of my perennial favorites were omitted including LC subject headings and classification, the library tour, detailed or lengthy database demos, the “search strategy” process, and Boolean logic. Students do experience

these, but not with these labels and certainly not preemptively. Instead of me launching into a “telling” mode, students get to discover what they do and don’t understand about searching, research and information. No lectures.

**What does take place in my classroom?** Because it presented the most challenges for my students, the outcome “how to find and use periodical literature” required the most radical changes in my syllabus. To allow essential time for practice, feedback and growth, three entire sessions are devoted to periodical literature.

In session 1, students are introduced to the types of periodical literature. While dualistic freshmen can easily grasp the differences between whole issues of popular magazines and scholarly journals, my students need more rationale and context. In a variation of the classic magazines vs. journals exercise, student groups examine printouts of articles from newspapers, magazines and journals -- all on the same broad topic. Students are directed to examine the language, tone, length and references of the articles as well as any visual clues. They must consider what types of projects these articles could be used for. Finally, they are asked to ponder why professors often require a variety of periodicals as sources as opposed to just one type. Students get to discover not only how periodical formats are different – glossy, textual, ‘black or white’ -- but also content.

The second session focuses on differentiating sources in a library database. While I assign a broad topic, like sustainability, the objective is not relevancy but correctly identifying results by periodical type. I show students how to access ProQuest, and then set them loose. A worksheet directs students to find one article each from a newspaper, a popular magazine and an academic journal. They write down identifying information such as author, article title, periodical title, date, and so forth. Students also answer reflective questions. What search terms were successful? What clues helped identify and distinguish the article types. How are the articles similar and different? Did this search provide any ideas for focusing their topic? Again, this helps them to move beyond the yes/no mode. The exercise is turned in at the end of class. But before they leave, students write a “one-minute paper” telling me what they learned and what is still unclear.

The following week, I use the results of the exercise and student comments on the one-minute paper to provide the opening for the third class session. I address and clarify common searching problems. Now when I demonstrate a database feature during this third session students eagerly pay attention because it is relevant to problems they have already experienced.

The third session in the unit on periodical literature is to refine their topics and then help students to find useful articles. Students do a “pair and share” activity where they help each other brainstorm ways to focus the topic they searched the previous week. With this more focused topic, students search again. Now the objective is to find three articles that can potentially be included in their Annotated Bibliography project. Having practiced in the database the previous week, students are better prepared to revise their searches, evaluate results, and

look for genuine connections between their refined topic and individual articles.

Students must provide two reasons supporting each of their choices and create an MLA or APA citation for each article. I circulate through the classroom assisting students. If I come across a question or problem the entire class should know about, I’ll do a quick demo or explanation to the class. With this method the course content feels more student-needs driven than pompous-instructor driven.

My feedback comments on this exercise not only assess their searching and citation formatting, but the choice of articles selected. I want students to get beyond just grabbing any ol’ thing related to their topic. I tell students whether or not they have found articles appropriate for their bibliography. If not, they must search again.

The other three learning outcomes, using the Woodbury library, academic honesty and effectively using the Internet, similarly challenge students. Students explore and practice, receive feedback and then finalize. There are multiple sustained interventions. No lectures, no demos.

## ASSESSMENT

Instead of tests, I use three projects to assess student ability and comprehension. One is the classic annotated bibliography on students’ topics. The other two reinforce my principle to challenge dualism through multiple interventions: 1) students give a group oral presentation on one of the four course learning outcomes, and 2) each student critiques the other groups’ presentations to show their own comprehension.

The annotated bibliography provides evidence of their ability to find, evaluate and use information to solve a problem or answer a research question and counts for 35% of the course grade – the largest component. The annotated bibliographies turned in since changing the structure of my course are notably superior to those from previous semesters. Students select more appropriate resources; they write better annotations; the citations are in much better shape, and are often perfect – unheard of before I changed my course.

The group presentation makes students revisit and restate course content. The group environment allows students to share and bounce ideas off each other, solidifying the importance of the topic and enhancing their own understanding. Most groups will also incorporate information that was not covered in class; in other words, they are inspired to go out and research. Ten minutes is not enough time to “cover everything” on the topics, so students must choose wisely. However, each presentation must include how the outcome can help students both in college and out in the real world.

To alleviate some problems associated with group projects, students are given some class time to work on their presentations. They must also turn in an anonymous evaluation of their team assessing cooperation and fairness. The group presentation is 15% of the final grade.

The last piece of learning assessment is the evaluation and critique of the other presentations. Students come to the final class prepared to review the other presentations. The purpose is to assess topic comprehension of the evaluator and is not part of any group's grade. Students provide four types of comments on each group's presentation: positive comments, friendly criticism, errors noticed, and finally, they must name something the group did not include. Once again, not yes/no questions, but "why".

These student evaluations comprise 15% of their grade. Most evaluations clearly show topic comprehension as well as context. As an instructor, this makes it much more obvious to me who understands what and to what degree.

In fact, that is the most important benefit to my restructured class: clearer and more well-defined student outcomes – I know what they have and have not learned in my course. The other benefit is that my course now allows more and better feedback and my comments are relevant and timely, not punitive. However, on the down side, it takes more instructor time to provide the required feedback and assess student progress.

Before I restructured my class, my final grades would be either high or low: As, Cs, and Fs. Now grades are much more evenly distributed: a full range of As, Bs and Cs and the only Fs are the no-shows. I am more confident that my grades reflect an accurate assessment of my students' overall information literacy, as defined for a beginning level, one-credit course. I also feel that my students come away from the class with a greater understanding of the courses' purpose, and are more likely to transfer skills as needed in other courses. I no longer have that sinking feeling that the students who pass still don't know anything.

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