Teaching Graduate Students

Though graduate students are often treated as a completely separate species from undergraduate students, in reality they learn the same way that all students learn: through the successful retention and transfer of knowledge (Cassuto, 2013). Where graduate and undergraduate students can differ is in their age, motivation, and knowledge (Berkeley). Some best practices to keep in mind when teaching graduate courses are as follows:

1. **Establish learning goals for a seminar.** “Faculty often do this for undergraduates, but mistakenly think that a graduate seminar should be more free-flowing or organic.” When possible, work with the students to set the direction of the class (Berkeley).

2. **Provide students with a context for the course.** “Surveys have indicated that graduate students, even those who have been in a program for several years, do not understand the processes involved in a Ph.D. program” (Berkeley).

3. **Ask students to write a short ‘intellectual autobiography.’** “The best predictor of what is learned at the completion of any lesson, course, or program of study is what the learner thinks and knows at the start of the experience” (Halpern & Hakel, 2003). This is especially important when dealing with adult learners, who have more time to develop set ideas and assumptions about the world. Barbara Kutz Rothman asks students to write a couple of pages about who they are. She then shares her own autobiography, mixing up the personal, professional, and the academic so that students will feel comfortable doing the same. She keeps copies of these autobiographies to use as “crib sheets for going back and figuring out what a student is doing when they go off on some odd tangent in class, or as I read their later work for the course” (Katz Rothman, 2004).

4. **Less is more.** It can be tempting to pile on the material in graduate level courses. Hakel and Halpern suggest that professors think about exactly how much information their students will need to recall when they attempt to transfer what they’ve learned to a new situation. By imagining the future use of the course content, professors can more effectively guide their decisions about how deeply to probe a particular area or what level of detail is necessary (Hakel & Halpern, 2003).

5. **The importance of feedback.** The idea that learning should be “authentic,” “that is, nearly identical in content and context to the situation in which the information is to be learned will be used,” is often held up as an ideal in higher education. However, “what is missing from most authentic situations—and from most real-life situations as well—is systematic and corrective feedback about the consequences of various actions.” Without this built-in feedback, students may learn exactly the wrong thing from any authentic learning task. Activities like simulations, case studies, and role-playing can be integrated into graduate-level courses, including the built-in, systematic feedback necessary to ensure students learn what they need to know (Hakel & Halpern, 2003).

6. **Even if the material is new to most students, don’t lecture in a seminar.** The lecture method is ineffective for graduate level learning. It doesn’t foster deep understanding of the material, or include them in the academic discourse (Steen, Bader, & Kubrin). “Learners need cues that trigger interpretation and force them to engage the material actively”—lectures fail to provide opportunities for either of these things (Hakel & Halpern, 2003).
The Graduate Seminar

Typically, graduate courses are taught in a research seminar format, in which students write research papers and deliver critiques of selected readings. As described by Neal, “the syllabus, if one is provided, usually consists of a term calendar that specifies the deadlines for assignments. Class meetings are taken up with discussions of these readings, and it is not unusual for class to be dismissed for the last third of the term in order to provide more time for students to research and write their papers” (Neal).

Is this an effective way to teach graduate students? In their influential paper on “Rethinking the Graduate Seminar,” Steen, Bader, and Kubrin analyzed the four basic models for graduate seminars: the lecture format, the professor-led discussion format, the student-led discussion format, and the read-and-present format (Steen, Bader, & Kubrin, 1999).

The Lecture Format

In this format, the professor is responsible for the dissemination of the course content, with interaction from students coming largely in the form of questions or comments about what has been presented. These lecture courses “teach a body of knowledge to students rather than enabling them to assess or critique the material.” Here the professor is relied upon to define or explain the important aspects of the material. This format “does not train graduate students to engage in academic discourse” and “encourages students to blindly accept the ideas that are presented to them” (Steen, Bader, & Kubrin, 1999).

The Professor-Led Discussion Format

In this format, “the professor raises provocative questions about the readings and manages the ensuing interchanges.” It requires students to “discuss ideas and develop reactions to the readings.” While this is a preferable method to the lecture format, it has its own set of problems. Discussions can be unfocused or poorly managed, and questions can be too general or too specific. Without being given any way to draw connections between the questions, students may perceive the material to be disorganized or fragmented.

For this method to be effective, the professor must “plan an agenda of questions to reach explicit goals for the discussion.” These questions must be focused enough to lead to meaningful and constructive discussion. Finally, the professor must provide a “meaningful conclusion or reiteration of the main points of the discussion” when ending each session.

The Student-Led Discussion Format

In this format, the professor assigns students to lead class sessions. This can be done in a variety of ways. For instance, it could involve students bringing prepared questions to class and the professor managing the discussion, the professor providing an overview before allowing the student to take over, or the student leading the discussion itself with the professor taking a passive role.

This format suffers from problems similar to the professor-led discussion format, though these problems can be exacerbated even further by student inexperience with both leading a discussion and with the course content. Students may not be able to “determine the pivotal points in the
readings and connect them together into a meaningful framework” or ensure that a class discussion “covers not only the main points of the material, but also places the material within an academic context.” This format actually requires a good amount of involvement and guidance on the part of the professor in order to be successful.

The Read-and-Present Format
This format leaves the professor with the most passive role of all the seminar formats. In this format, the professor provides a list of articles, and students select individual articles to read and give a brief, in-class presentation summarizing the content. Steen, Bader, and Kubrin consider this method to be the least beneficial for learning. Because everyone must be given time to present, there is often little time for discussion or comments, and while material covered at the beginning of class gets covered in great detail, those students presenting at the end of class regularly get cut off. Finally, this format “fragments the material by placing one student in charge of each reading and does not form connections between readings.”

Building an Effective Seminar
Having analyzed these formats and their respective pros and cons, Steen, Bader, and Kubrin provide a framework for creating an effective seminar. They believe that to be successful, professors of graduate seminars must “take an active role in organizing and managing seminar discussion.” The professor “should have clear goals for the session and be willing to bring a discussion back to the task at hand if it veers too far off course.”

They suggest providing students with guidelines for their readings, drawing their attention to key points or areas on which to focus. At the start of each class, professors should provide a short summary of the readings, raising potential issues for discussion, and reminding students of the relevant issues in the text. Having clear goals makes it easier to write pointed rather than general questions, and communicating a clear outline to students will make it easier to stop tangential discussions from derailing the class. Finally, these goals and outlines make it easier to provide a summary at the end of class, drawing connections between the readings and class discussion.

Steen, Bader, and Kubrin believe that the lecture and read-and-present formats are ineffective, as the “the former does not train students to engage in academic discourse, and the latter provides graduate students with a fragmented picture of a substantive field.” They recommend the discussion format, and they believe that the best way to “create a meaningful discussion is to build it from the ground up” with the development of questions following the levels of learning laid out in Bloom’s Taxonomy. “By moving methodically through the levels of learning, a professor can ensure that he or she gets the maximum number of students involved in the conversation.” This form of “carefully crafted discussion provides students with an excellent model of argumentation and encourages thoughtful and complete academic work” (Steen, Bader, & Kubrin, 1999).

They provide a sample framework to demonstrate this method,excerpted below:
1. “Begin with questions that ask students to simply recall the substance of the material they have read. Such questions involve laying out the basic argument, or identifying the basic issues addressed by the author(s). By laying out the substance of the material at the beginning of the discussion, the professor ensures that students have a foundation and can then move to higher levels of discussion. Questions at this level are typically of the who, what, when, and where variety.

2. Once the substantive groundwork has been laid, the discussion can turn to questions that explore students’ comprehension of the material. Comprehension questions ask students to generalize from the material, or to explore the material on a slightly higher level of abstractions. These are typically how and why questions.

3. The third stage in the discussion develops questions of analysis, which encourage students to explore the assumptions in an author’s arguments and to think about the implications of the argument for other substantive topics. These questions address assumptions and implications of the material.

4. Finally, the discussion can move to evaluation and synthesis of the material encouraging students to explore the validity of the argument and its effects. These questions address ramifications of the material” (Steen, Bader, & Kubrin, 1999).

Learning Activities for Graduate Courses

Integrating Academic Publishing Into Graduate Courses

In her article “Combining Professional Development with Academic Learning in Graduate Seminars” (2006), Angela Garcia describes a course she developed in which students work together to write a “review of the literature” paper.

Rather than having students follow the standard graduate seminar format—reading and presenting on articles, culminating in a research paper at the end of the course—Garcia had the students assemble, read and summarize “a wide range of articles,” debate “the strengths, weaknesses, gaps, needs and applications of the field,” and come up “with a focus for a review of the literature article.” In addition to giving students a complete overview of the current thinking in their field, these activities taught students how to put a literature review together from beginning to end, how to submit an article to a journal, and how to go through a peer review process. This approach “made the tasks one would normally do (such as reading, critiquing, discussing and writing about the area) much more interesting to the students because we were doing real work, not just assignments for a class” and resulted in a “co-authored publication to help them build their vitas,” something crucial for graduate students seeking to enter academia.
Garcia believes that while many graduate courses prepare students to be scholars in an “intellectual sense,” they don’t always “prepare them to participate professionally as an academic: teaching, presenting papers at conferences, publishing, working collaboratively and doing committee and service work.” By integrating this collective journal article writing exercise into the course, Garcia used experiential learning to give students ownership of their learning, to provide them with motivation to complete the given task, and to provide them with skills that go beyond just the course content.

Garcia cites Morris, who believed that publishing in journals is “the best way to find out where the famous ‘cutting edge’ of your discipline really is, and to begin to have a say in defining it” (Morris, 1998, as cited in Garcia, 2006). Giving students an in-depth knowledge of what is being done now and what hasn’t yet been done “helps the students learn how to create ideas that are novel, innovative, and cutting edge” (Garcia, 2006).

Finally, she believes that graduate curriculum should work to “initiate students progressively into independent research” (Sullivan, 1991, as cited in Garcia, 2006). Graduate programs should not merely expect students to “sink or swim,” but should “take specific steps to move students along the path of becoming independent scholars, capable of conceiving, designing, conducting, and communicating their own research” (Garcia, 2006).

Incorporating Teaching Skills Into Graduate Courses

Similarly to Garcia, Mary Nell Trautner believes that it is the responsibility of graduate courses to provide not just insight into the content, but to provide students with necessary professional skills as well. In her article “Teaching-infused Graduate Seminars: Incorporating Pedagogy into Substantive Courses” (2014), she describes the process of integrating training in teaching pedagogy into her sociology seminars.

Trautner cites research that shows that imparting students with teaching skills will not only make them more effective in the classroom, but will increase their success in non-academic jobs as well. As such, she integrates a “teaching application” for every meeting of her course. These exercises “convey to students that there are many different ways they will have to synthesize and share research and theory with others” and encourage students to “think continually of ways in which they might convey to others the substantive material being covered” (Trautner, 2014).

Trautner has students each choose a teaching application that they are responsible for presenting to the rest of the class. To prevent issues with time management, she sets aside a full half hour at the end of each class to allow enough time for the student to present and for discussion of the pedagogical strategy that was presented. Each student must also summarize the pedagogical exercise they’ve developed in a two-page handout for the class. Through these discussions, students are “not only exposed to great articles about teaching, they are learning important lessons about how to teach. Our discussions about modifications of the exercises, for example, encourage students to think about learning outcomes when designing a teaching activity” (Trautner, 2014).
In her evaluation of this method, students reported that they not only felt more prepared to teach, but that they had gained a better understanding of the course material. One student said: “I feel like even if you are not interested in pursuing an academic career, you still present something in public or explain and clarify something. The teaching materials give an idea of how you can explain subjects and train people.” Another said that being required to present their teaching application also required them to “truly understand the core concepts of the substantive material in order to successfully understand/complete the activity” (Trautner, 2014).

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