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During this academic year, through several different venues, the Center for Teaching Excellence has shared with the KU community various ways that our students can represent their learning. The September 2009 issue of Teaching Matters focused on this topic, highlighting the work of four faculty members (www.cte.ku.edu/resources/teachingmatters/index.shtml). From their work and the work of other innovative faculty members, we have seen students demonstrate their learning by creating digital stories, writing op-ed pieces on international policy, designing and developing a hybrid vehicle, and using primary research sources to answer real-world questions. In this edition of Reflections from the Classroom, we present more methods—beyond the term paper—that faculty members have developed to evaluate students’ learning.

The first essay, by Gregory Rudnick, describes how he designed an assignment that engaged students, exercised their critical thinking skills, and helped them learn to synthesize information, all while allowing them to communicate their understanding in a way best suited to their strengths. Projects from Prof. Rudnick’s 150-student introductory astronomy class included a poem, a one-act play, a painting, movies, websites, and a rewritten version of the song Alice’s Restaurant. Even though the project was only 10% of their final grade, it was clear that students were excited about it, and many showed improved synthesis skills.

Kristine Bruss writes about her experiences using “Reacting to the Past,” a role-playing pedagogy, in her Honors Speaker-Audience Communication course. For five weeks, students assumed roles of various characters in The Threshold of Democracy: Athens in 403 BC. To examine understanding of persuasive strategies in RTTP, Prof. Bruss required students to submit several short reflections. In these, she found that students often used the conceptual vocabulary she introduced prior to the RTTP sessions and were able to identify a variety of strategies that were used effectively by their peers while in character.

Amy Rossomondo’s essay focuses on developing graduate students’ understanding of teaching as intellectual work. One way her department, Spanish and Portuguese, has helped its graduate students develop as instructors has been with the Acceso project, an open access, web-based curriculum that explores the Spanish-speaking world for learners of Spanish, in Spanish. The project provides a rich environment for future faculty members to discover how inquiry and evidence of learning can inform teaching, while also crafting engaging learning experiences for undergraduate students.

Ayu Saraswati discusses both the hows and the whys of her students’ digital story projects for an Honors class in women, gender, and sexuality studies. Prof. Saraswati describes step-by-step what the projects entail, along with reflections of students’ alternative learning processes at each point. Prof. Saraswati notes that “alternative does not mean that we leave, or worse, devalue the research and writing process.” She suggests that “alternative” allows other forms of learning to be represented in a course; her students’ projects illustrate this well.

In the final essay, Dan Bernstein relates what prompted him to interview each student near the end of his Conceptual Issues in Psychology courses. These 15-minute, face-to-face conversations have helped him find out if students’ understanding demonstrated in papers and homework is as well internalized as examination material. Results from five years of interviews? Improvement, but as is true for all teaching, room to grow.

Judy Eddy
Editor
Reflections 3

Encouraging Creative Expression in a Scientific Context

Gregory H. Rudnick
Physics and Astronomy

The backdrop
I am an assistant professor in the Department of Physics and Astronomy, and for my first three semesters at KU I have taught large, 150-student introductory astronomy classes. Introductory science classes at the university level provide the last opportunity for many of our students to be exposed to science, and that in a society where science plays an increasing role in public discourse and decision making. This has important implications for us as teachers. We must try our best to lead students along a road that encourages critical thinking, problem solving, and synthesis of diverse information into a coherent message. There are well-established paths, however imperfect, toward reaching these goals. Indeed, there is a large body of research demonstrating quantitatively that this is best accomplished by actively engaging students and making them the center of the learning experience. No less important, but with a much less clear road toward success, is how to engage students so they enjoy the subject matter and how to enable them to represent their knowledge when they leave the classroom. Even more challenging is to have them develop skills to explain this knowledge in such a way that non-scientists, such as friends and family, can understand it.

This latter point is a sticky one. As scientists, we often want to teach students to think like us and communicate their knowledge in the way we do. We do this because we want them to experience being a scientist, if even for a semester. But, do we not also want our students to communicate effectively what they have learned? In that case, is a research paper or lab report truly the best medium? What if students could achieve the same level of engagement, exercise their critical thinking skills, and learn to synthesize multiple pieces of information, but at the same time communicate their knowledge in a way best suited to their own strengths? This essay describes one such attempt to address these questions.

The project
I drew inspiration from work being done by Christopher Impey at the University of Arizona, by Daniel McIntosh at
the University of Missouri at Kansas City, and from discussions with Dan Bernstein at CTE and Barbara Anthony-Twarog in my own department. I implemented a project in my introductory class in Fall 2009 that would focus on understanding and communicating the recent successes that astronomers have had in discovering planets around other stars. The students were tasked with reading a set of four popular-level articles and answering a set of questions that required them to synthesize the information and draw their own conclusions, with the assistance of at least two additional articles that they had to find. As a final element, I told them that the information had to be communicated in a way that their friends or family would understand, using a medium of their choice. They were given complete freedom.

The project came in two parts. First was a one-page proposal, in which the students submitted their additional references, described what they would do, why it was suited to their personal strengths, and some obstacles that they envisioned in their implementation. My hope was that this would allow them to think about what their project would actually entail before realizing too late that it might be impractical. I graded these with a rubric, but as I have minimal grading support and no GTA, I did not give individual feedback. Rather, I tried to find common threads and spend some time in class with general suggestions and an exhortation to talk to me if students had specific questions. The second part required them to complete and hand in the projects, either with electronic or physical media. I allowed teamwork, although the teams needed prior approval and a clear description of the contributions of each member.

The results
It was challenging to take these very diverse projects and evaluate them based on content, accuracy, synthesis, and effectiveness of communication. My grading rubric was adapted from metarubrics of the American Association of Colleges and Universities (AACU), which provide a framework for how to evaluate work based on general criteria, e.g. problem solving, critical thinking, communication. Since this was at heart a science assignment, most weight was given to content, with only 25% given for effectiveness of communication. Students were given the rubric with the assignment.

I received 118 projects, of which five were team efforts. Although the quality varied, I was impressed with many projects, especially with those that used non-traditional media most effectively. Among these were a poem, an outstanding one-act play, a rewritten version of the song Alice’s Restaurant set to music and performed, a well-developed board game, two movies, a painting, a fully constructed Facebook network of friends, and two high-quality websites. In addition to these projects, I was given PowerPoint presentations, scrapbooks, brochures, children’s movies and books, short stories, term papers, and comic strips. Although some projects were quite creative, not all of these received the highest marks, mostly because they did not meet the criteria outlined in the rubric. In fact, some of the highest scores were not particularly creative but were highly effective at using their chosen medium, e.g. a research paper.

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In evaluating the projects, a common thread was that many students did not know how to properly reference their work. It was also clear that many students thought that condensing material into a set of loosely connected bullets in a PowerPoint presentation magically improved its effectiveness. In fact, PowerPoint slides are meant to accompany an oral presentation and are not a good way to convey written material. Likewise, some students were very creative and artistic but failed to use their chosen media to express necessary information in an understandable fashion.

Looking back I: Successes
Despite the modest (10%) contribution of this assignment to the
final grade, I was struck by the amount of effort some students put into their projects, presumably far more than some of them put into studying for their exams. This indicated that this assignment was indeed successful at engaging students more than was possible with normal coursework.

It also engaged a broad audience—the top performers were not limited to the best students in the class but also included those whose performance in other aspects of the course was lackluster. These same students were often very creative and obviously felt that this was their opportunity to shine. These were exactly the students I was trying to reach with the assignment, and I was pleased to see some of them putting forth so much effort, and so effectively. One goal of this class is to get people excited about science and give them the ability to communicate their excitement and knowledge to a larger audience, in effect turning them into ambassadors—albeit entry-level ones—of science. For at least some of the students, I think the assignment accomplished these objectives.

Finally, as intended, the project gave students a chance to practice their skills at synthesis, and there were indeed those who combined and interpreted the material in a way not encapsulated in the assigned articles.

Looking back II: Shortcomings
The major obstacle in the implementation of this assignment was the grading burden. I received 118 projects and grading them took five days. My undergraduate grader was not advanced enough to assist with the grading. Aside from taking too much time to be sustainable, the load also prevented me from giving individualized feedback. This directly hampered the effectiveness of the first part of the project, whose purpose was to give students a chance to think through their strategy and get comments back on their ideas before embarking on the final project.

I had expected that the degree of synthesis and effectiveness of communication—two rather high level expectations—would be the main discriminator among the students. To the contrary, the largest difference between how students performed was the degree to which they completed, in any form, the required elements of the assignment. While many projects were creative and required deliberation, there was not strong evidence that most students moved past regurgitation and onto critical evaluation of information.

Despite my best intentions, my rubric was not as effective as I would have liked. There were items that were not independent of one another, and in some cases, my abstract idea of what would be a good rubric item did not translate into an effective discriminator.

Looking back III: Future implementation & challenges
The overall quality of the projects would undoubtedly have been better if the students had been given more opportunity to practice the necessary skills. In the future, I will give short assignments early in the semester that will prepare them for synthesizing the information from multiple sources. As an example, students could read short articles and be asked to draw their own conclusions and present them in class. These would not necessitate individualized feedback, but they could provide fuel for in-class discussions, something that is possible even in a class of 150 students. I would also like to give students more concrete examples to demonstrate what I would like to see in various phases of the assignments. For example, it was clear to me that certain media were seldom effective, PowerPoint-type presentations being at the top of the list. In the future I might consider banning such presentations altogether, or giving past examples of “good” and “bad” uses of this medium.

The risk with limiting students’ expression is that it could pigeonhole them into my concept of a project and thereby limit their ability to explore their own strengths. To counter this, I am interested in exploring collaboration across disciplines, specifically with arts and communication, to determine how communication of science concepts can best be accomplished with non-traditional means.

A major obstacle to implementing this project was the grading burden. Indeed, it will not be possible to do this assignment again without significant changes. Luckily, there are remedies. A simple one will be to require group work. This approach would require some means of insuring that everyone pulls his or her own weight, but this obstacle is part of all group assignments and is not insurmountable. The most straightforward, but also the most expensive, solution would be to have a TA to assist in the grading, implementation, and feedback process.
Assessment of learner outcomes is key to measuring the effectiveness of such an assignment. While it appeared to me that the engagement of students increased, it would be more useful to have a quantitative metric that could encapsulate this information. I currently employ nationally standardized pre- and post-class diagnostic surveys. In future semesters, I envision also asking my students to answer questions that address how their attitudes toward science have changed. Comparing this against other instructors nationwide will provide some measure of how well my assignment accomplished its goals.

Final thoughts
Among the challenges in introductory science classes are how to engage students, how to inspire a long-term interest in the field, how to increase students’ long-term retention of knowledge acquired in the class, and how to enable them to communicate these new insights to their peers. This assignment was challenging, both for me and the students, but I think it addresses all of these areas. The burden, especially that of grading, is significant, but as mentioned above, these obstacles can be mitigated. By using non-traditional means of representing knowledge and of exercising critical thinking skills, it may be possible to change the way we instill in students an appreciation of science and an ability to carry out a scientific discourse on their own terms.

In general I received positive student feedback from this project. Opinions were diverse, but one student highlighted some of the strengths and weaknesses of such a project in the comments below. While enthusiastic, this student was not a spectacular achiever but wrote a wonderful poem for the project that did not get top notes only because he did not address all of the required elements.

Well, I loved the project because of how creative it is. The only thing I would change is making the project more creative by not allowing people to write papers. I understand that idea may go against your idea of everyone communicates differently; however, college students write papers all the time, so, I say, bring on the creative juices. I mean how awesome is it to be required to mix math and sciences with the arts? In my opinion, that project was one of the best requirements that has ever been asked of me in a class.

Prof. Rudnick’s work will be profiled in a portfolio on CTE’s website (www.cte.ku.edu/gallery) in Fall 2010.
“Athenian” Reflections on Learning: Using “Reacting to the Past” in Speaker-Audience Communication

Kristine S. Bruss
Communication Studies

You arrive at the Agora, the lifeblood of Athens where all roads converge. … You walk across the race track toward the monument to the Ten Tribal Heroes. A group has crowded around, but only a single message is posted: “Assembly Today.” (Carnes and Ober 4)

Thus the stage is set for “Reacting to the Past” (RTTP), an award-winning role-playing pedagogy that requires students to become actors in complex historical controversies. In RTTP games, such as The Threshold of Democracy: Athens in 403 BC, students are assigned roles (e.g., Oligarch, Retired Sailor, Fishmonger) and, while acting in character, attempt to influence the course of history through their persuasive efforts. I first learned about RTTP a couple years ago, when I was approached by the Honors Program about the possibility of adopting the pedagogy in COMS 131: Honors Speaker-Audience Communication. After hearing more about the approach, I was quite interested. The historical role-playing dimension of RTTP promised to make COMS 131 different from the standard COMS 130 course, and the Athens game, in particular, presented a perfect opportunity to use ancient rhetoric texts, including Aristotle’s Rhetoric and Cicero’s De Oratore, to teach public speaking—something that appealed strongly to my interests in classical rhetoric. What I found most compelling, however, was the strong emphasis on rhetoric in RTTP. According to RTTP promotional materials, “The heart of the game is persuasion. For nearly every role to which students are assigned, they must persuade others that ‘their’ views make more sense than those of their opponents” (“Introduction”). With its focus on persuasion, RTTP seemed ideally suited to COMS 131, a course that aims to strengthen students’ rhetorical skills.

In the spring of 2009, I offered an RTTP-based version of COMS 131, devoting roughly one third of the course to the Athens game. I approached the class as a site of inquiry with the potential to provide useful evidence of student learning in two areas, rhetorical skill and student engagement. Students and instructors who have participated in RTTP have testified to these outcomes, but the anecdotal evidence can be vague, as illustrated by the following student comment from a video on the RTTP website: “I would say that this class also improved my writing ability, and having to write ten pages per game, I mean, it’s a lot of work but it’s completely worth it” (“Henry VIII”). Furthermore, little is known about
RTTP’s use in public speaking courses. The COMS 131 course thus provided an opportunity to collect detailed evidence of RTTP’s impact on student learning in a public speaking class.

Before the course began, I identified various ways to document student learning, including speech outlines, videotapes of speeches, speech evaluations, reflection papers after major speeches, short reflections during the game, surveys at the beginning and end of the term, exams, and course evaluations. I also kept a teaching journal in which I reflected on the class throughout the semester. In this essay, I share evidence of student learning from one of those sources, the short reflections on persuasion during the game. I have chosen to focus on the in-game reflections because, of all the forms of evidence I collected, the short reflections are perhaps the most novel. I have assigned reflection papers in other public speaking classes, but those papers focused primarily on self-assessment. The in-game reflections, in contrast, focused on persuasive strategies that students found most effective in their fellow speakers as they considered competing points of view in a sustained debate, which provided a different perspective on what students were learning about persuasion.

Before turning to those reflections, I should provide a few more details about how RTTP worked in COMS 131. The Athens game, as noted earlier, accounted for five weeks of the course, which met twice a week. To prepare for the game, students read Cicero’s *De Oratore* and other ancient readings on rhetoric; delivered informative speeches on persuasive concepts such as ethos, deductive reasoning, and narrative; and read Plato’s *Republic*, which is the assigned text for the Athens game. Just before starting the game, the class reviewed the *Threshold of Democracy* gamebook, which provides historical context and identifies objectives, strategies, and suggested readings. Students were then assigned roles and divided into factions, which included Radical Democrats, Moderate Democrats, Oligarchs, and Socratics; several other students, known as Indeterminates, had no factional affiliation, making them prime targets for persuasion. The game itself lasted seven class periods. Each session of the game involved debates in the Athenian assembly over a particular agenda item, such as whether the walls of Athens should be rebuilt or whether Socrates should be condemned. The first part of the daily agenda featured prepared speeches by Citizens, after which the floor was open for debate. Each session concluded with one or more votes. The general objective for all players: be persuasive enough to swing the votes in your favor.

**Short reflections**

To investigate persuasive strategies in RTTP, I required students to submit short reflections on persuasion for four of the seven game sessions. Their instructions were as follows:

You will receive four points for submitting four comments to the gamemaster [instructor] about persuasive strategies or lines of argument that you found particularly compelling from a particular day’s debate (i.e., you need to comment on four of the seven “Reacting” sessions). These comments need not be lengthy, but they do need to make clear WHY you thought a strategy was particularly influential on your thinking (e.g., “The Oligarch’s comment about letting the poor farmers eat cake was awesome!” would not be sufficient).

During the course of the game, students submitted a total of 81 comments. Some were brief and did not indicate clearly why a particular strategy was persuasive (e.g., “The Moderate Democrat’s idea of making Socrates ‘the philosopher king of his own island’ was pretty good”), while others provided detailed analyses of persuasive high points of the day. In their comments, students often utilized the conceptual vocabulary that had been introduced prior to the game in the informative speeches on persuasion. For example, one student praised a speech of the Merchant Son, saying, “He was particularly persuasive because of his use of the common ground technique. He emphasized how we had all been touched by the war and we all knew someone who had lost their life as a result of the war. This made the war seem more personal and emotional.” The same student also commended the Merchant Son for his effective use of figured language, notably the tricolon “one people, one sword, one voice.” The use of this vocabulary, along with the specific examples, helped me identify which concepts students had grasped and which might need more attention in the future.

8 Reflections
Although students identified a variety of strategies and arguments that they found persuasive (e.g., allusions to famous speeches, strong command of history, passionate delivery, clever refutations), several strong themes emerged from the body of comments, suggesting that some strategies were particularly salient for students. These strategies, which include narrative, appeals to shared values, and novel argumentation, are well illustrated by the speeches of three characters: the Poor Farmer, the Carpenter, and one of the Moderate Democrats. The speech of the Poor Farmer, for example, given in favor of expanding the Athenian electorate to include all males, exemplifies the power of narrative. In “his” introduction (almost all of the roles in the Athens game are male), the Poor Farmer stated, “I hope to use my life and background as an example of one man who may not be wealthy or very educated but still deserves to have a say in government.” The speaker then shared details from his life story, which included working hard with his family on a small farm, only to see several children die of starvation and his property destroyed by Spartans. This character narrative was very effective, as indicated in several reflections. As one student stated, the details of the story “helped make people (well, me at least) more sympathetic.” Other students made similar links between the Poor Farmer’s story and pathos, or emotional appeal. Stories produced other effects, too. For instance, one student praised an Oligarch for his character narrative in a speech on the electorate, noting that it showed “that he understood what the commonfolk were going through.” In a different take on stories, one student singled out a speech on slavery given by a Socratic, saying that his stories “were very illustrative and really helped to back up some of his points. Plus they were entertaining!” The strong appeal of stories in RTTP speeches confirms long-standing public speaking wisdom about the power of narrative while pointing to the various ways in which stories persuade.

A second powerful strategy identified by students was appealing to shared values, a move nicely illustrated by a speech on slavery by the Carpenter. Consistent with his role, the Carpenter advocated that Athens maintain its current system of slavery, arguing that slavery is necessary to maintain stability. Early in the speech, the Carpenter stated, “Though I am not the oldest or the wisest man here, practical wisdom and life experience have given me an understanding of how important stability is to maintaining our way of life.” The Carpenter then recalled for Athenians their recent defeat at the hands of Sparta, noting, “We all want to see Athens heal and prosper.” The Carpenter’s appeal to a shared value, stability, resonated with listeners. As one student remarked, “The Carpenter’s argument based on stability was particularly appealing to my character, who ‘just wants to live out his final years in peace.’” Another student added, “The Carpenter’s point about uniting Athenians in that we all long for stability after our disastrous war with Sparta was definitely a great example of common ground that no one could argue.”

Appeals to shared values, which can be thought of in terms of common ground, resonance, and identification, were included in many of RTTP speeches. The fact that students were so clearly identified with factions in the game likely contributed to the frequent use of this strategy. One student, responding to a Radical Democrat’s views on education, appreciated the speaker’s “clarification that practically ALL speakers mentioned being an Athenian and working for the good of Athens. The current education system is merely dividing us into factions, not uniting us as Athens. This made us Oligarchs realize the need for compromise.” Students utilizing this strategy found a variety of ways to bind listeners together, using explicit statements about unity, quotations from Athenian heroes, and first-person plural pronouns, among other techniques.

A third strategy that students found effective was novelty. Like stories and appeals to shared values, novelty has also long been recognized as a powerful tool of persuasion, but the “Athenian” reflections gave me a new appreciation for creative argumentation...
and style. The effectiveness of novelty is best illustrated by a speech on social welfare given by one of the Moderate Democrats. In the speech, the Moderate Democrat argued that Athenians should be paid for attending assembly meetings. In support of that argument, the speaker used the following comparison:

“Democracy, to the poor, is like an elderly aunt. You know she is good and has your best interests at heart, but she also consumes your time and efforts. However, a gift can make you more willing to enjoy her visits.” This novel analogy clearly struck a chord with listeners, generating more comments than any other in the game. As one student explained, “[The Moderate Democrat’s] analogy of democracy and the elderly aunt was really creative and definitely helped to support her main point. It gave her speech additional credibility because she established common ground between all members of the audience. We can all relate to her story, so it made it easy for us to see her point. She took an abstract concept like democracy and tied it to a concrete example that was easy to understand and relate to.

Another student also commented on common ground in the speech, noting, astutely, “I’m not sure how much it would have held true in ancient Athens, but it made for an entertaining and endearing speech anyway.”

With the “aunt” analogy, the Moderate Democrat aptly illustrated the observation of Isocrates, an ancient teacher of rhetoric: “That man seems most artful who both speaks worthily of a subject and can discover things to say that are entirely different from what others have said” (sec. 12). The ability to say something different made speeches stand out in RTTP. In the reflections, students commented on speakers who incorporated unfamiliar historical facts (a sign of resourcefulness), used creative metaphors and visuals (e.g., drawing in the “sand”), and cleverly bolstered their arguments with references to the words and actions of other speakers in the assembly. Novel arguments got attention and provided a fresh perspective on the matters being debated. As I noted earlier, this rhetorical principle is well-established, but the student commentary on RTTP suggested that it may be advantageous to devote more explicit attention to the creation of novel arguments in my public speaking courses.

Final observations
The “Athenian” reflections provided me with an excellent snapshot of what students learned about persuasion from RTTP, and they helped me identify what concepts might be worth more attention in the future. As for the students, they gave RTTP a strong endorsement, as attested by survey responses and their post-game self-reflections. The following comment, taken from a self-reflection, neatly summarizes the effects of RTTP on student engagement and rhetorical skills in COMS 131:

RTTP seems the best way to get students speaking without even realizing we’re doing so; it practically tricks us into being passionate about a subject and wanting to defend it. Although the prepared speeches felt like acting, the impromptu ones definitely did not. Other than this game, I can’t imagine any way to propose a topic for debate in which nearly everyone in the class has a zealous opinion. RTTP has definitely helped me hone my arguing skills, which will be useful in the future: in other classes, at social gatherings, anywhere.

Works Cited


For information about more of Prof. Bruss’ work, see her course portfolio at www.cte.ku.edu/gallery/visibleknowledge/bruss
When I was invited to share my experiences with designing alternative ways of representing students’ learning, my mind immediately went to learning projects aimed at undergraduates as part of our Spanish Basic Language program’s new digital curriculum for second-year study. Then a series of seemingly unrelated experiences inspired me to focus instead on alternative ways of not only representing but also conceptualizing learning at the graduate level, as it relates to students’ development as teachers.

The first source of inspiration came from the February 2010 Teaching Matters, in which history professors Tony Rosenthal and Leslie Tuttle discussed Derek Bok’s Our Underachieving Colleges: A Candid Look at How Much Students Learn and Why They Should Be Learning More, the book chosen for CTE’s November 2009 Reading Circle. In a written dialogue, both colleagues responded to a section of the book focused on the perception that faculty members tend not to approach their teaching in the same spirit of intellectual inquiry with which they approach their research.

Leslie: Teaching is the labor that already occupies most of our time, even if it isn’t highly rewarded. Assessing teaching in new ways is likely to require even more labor and is inherently risky. The best chance for change, in [Bok’s] mind, comes from the way that we train graduate students. If we expose today’s Ph.D. students to the scholarship of teaching and learning, there’s a good chance a slow revolution that is already in process will eventually transform the situation on the ground.

Tony: …But as to your comment that assessing teaching in new ways is risky, isn’t that what universities are all about, taking intellectual risks and constantly experimenting? In some ways I’ve never felt more inventive than when I’ve put myself in uncomfortable teaching situations. If we don’t try new methods, we will become irrelevant as a social institution in no time.

Subsequently, while attending one of the public forums for the candidates for our next CLAS
Dean this spring, a question by a faculty member in attendance prodded me further towards approaching this essay from the perspective of graduate student learning. In the context of discussing the College’s support of graduate students, she inquired as to approaches the candidate might suggest for alleviating our GTAs’ burdens of teaching multiple sections of basic courses while pursuing their graduate studies. While I found the question identified a valid concern—graduate students are asked to juggle many different balls under extreme time constraints—I also took exception to the divide between graduate students’ learning and their pedagogic development that the question implied (at least to my own sometimes oversensitive ears).

Finally, I received an email from a graduate teaching assistant, whom I have the privilege to mentor and supervise, that compelled me to shift the focus of this essay to a discussion of alternative approaches to graduate students’ learning and alternative avenues for demonstrating this learning as they relate to their development as teachers. While I will return to the email later, let me say now that I agree with both of my colleagues from history: Tuttle points out that graduate students are the future of our profession and that the training they receive as scholars and as teachers can “transform the situation on the ground.” Rosenthal highlights the challenge to take “intellectual risks” while experimenting with our approaches to teaching in order to achieve results and relevancy. I will build on these observations to make the argument that teaching can and should be a stimulating intellectual undertaking for graduate students, as central to their preparation as future faculty members as their coursework and research interests. In fact, I hope to demonstrate that curricular design and classroom interactions can be approached as inquiry even in the “basic” courses that most of our graduate students teach.

According to the Council of Graduate Schools/Association of American Colleges and Universities’ 2003 report on Preparing Future Faculty in the Humanities and Social Sciences, “Although a significant fraction of graduate students have teaching assignments sometime during their doctoral program, too often these are not structured experiences that prepare graduates to deal with the assessment and different types of student learning, the pedagogy of the discipline, curricular innovations, the impact of technology on education, or the variety of teaching styles that may be helpful with students from different racial, ethnic, or cultural backgrounds” (3). The website of Duke University’s Graduate School, a participating institution in the Preparing Future Faculty initiative, calls attention to their commitment to providing “relevant training that will prepare graduate students for the realities they will encounter as TAs and/or future faculty—realities such as classroom management, student learning styles, active learning, new expectations of junior faculty, appropriate uses of instructional technology, peer evaluation of teaching, and attention to student learning outcomes in higher education.” Finally, and specifically directed at my own academic discipline, the Modern Language Association (MLA) 2007 report, “Foreign Languages and Higher Education: New Structures for a Changed World,” posits that to “meet the needs of undergraduate language programs (which is where the majority of Ph.D. candidates will find employment),

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The Acceso project

In response to the widespread push toward integrating pedagogic training and inquiry into the graduate student experience summarized above, the Department of Spanish and Portuguese’s Spanish Basic Language program undertook an initiative to redesign our second-year curriculum while simultaneously providing our graduate students with training and opportunities to develop as instructors. The result is the Acceso project, an open access, web-based curriculum that structures critical
exploration of the Spanish-speaking world in all of its cultural diversity so that it is accessible to intermediate-level learners of Spanish, *in Spanish*. The project has afforded our graduate students opportunities to gain experience with innovative curricular design, explicit goal setting, and measurement of student learning outcomes, promoting student interaction through careful classroom management, thinking creatively about applications of technology to the 21st-century college classroom, and collaborating with fellow instructors and faculty mentors as we work together to achieve the overarching goal of taking the “basic” out of our Basic Language sequence.

Our department has the distinct advantage of being able to offer a course on approaches to teaching college Spanish that is mandatory for all GTAs. Since its inception, the *Acceso* project has been integrated into the content and methods of the course. GTAs learn about innovative and effective curricular design through scholarly readings (e.g., *Understanding by Design*, Wiggins and McTighe, 2005) and by applying them to the development of their activities for the project. Each graduate student begins a semester-long project by identifying the activity’s desired learning outcomes and how to measure their successful achievement, which is much easier to understand intellectually than to actually put into practice. This step requires the GTA to identify the topic of the activity. For example, last semester one GTA picked the Argentine economic crisis of 2001. She determined (through collaboration with the class) that students should be able to compare the effects of the US economic crisis of 2007 with those of the Argentine crisis from the perspective of an undergraduate college student here at KU and one at the University of Buenos Aires. Ultimately, the evidence of student learning was developed to take the form of two narrated, semester-long budgets for an American and again for an Argentine student—one budget each for before and after each respective crisis. A student who could correctly represent the Argentine hyperinflation would have effectively learned about the magnitude of that crisis (yet another way of representing student learning, but for a different essay). The final step in the conceptualization of the activity involved the actual learning experience and instruction that would enable this understanding. The GTA chose to present a brief reading that introduced key vocabulary, a YouTube video providing background on the events leading up to the crisis and images from the protests, a chart demonstrating the devaluation of the currency in comparison with the US dollar, and then finally an in-class experiential learning activity. She designed the activity to simulate hyperinflation by providing students with certain amounts of Argentine pesos and lists of goods to purchase in a shopping setting and then decreasing the value of the currency at random intervals without changing students’ shopping lists.

As part of the course, GTAs are asked to keep a reflective teaching blog (housed in Blackboard) as yet another method of demonstrating their learning as it relates to the skills they are developing in the classroom. The blog provides a space for them to report on inquiry-related classroom management and the structuring of student interaction. For one assignment they consciously make a classroom management decision, such as purposefully assigning students to groups for class activities based on their abilities instead of allowing students to choose their own groups, or rearranging the seats in the class from rows into a circle, and then observing and interpreting the results in their blog. For another assignment, they observe an experienced instructor and note how classroom practices promote or inhibit student interaction. Yet another assignment calls for the new GTAs to surreptitiously audio-record one of their own class sessions to analyze how much they talk versus how many opportunities they provide for their students’ language use. They then use the reflections that they record in their semester-long blog to inform their Teaching Statement, which is eventually submitted to their academic advisor for feedback.

Another critical component of our training of new GTAs involves the application of new technologies to enhance student learning. We kick this unit off with a workshop led by the staff at the Ermal Garinger Academic Resource Center (EGARC), which is available to all of the humanities units in the College. (Under the direction of Dr. Jonathan Perkins, EGARC has collaborated with us and provided resources without which the *Acceso* project could not have become a reality.) The staff offers...
a workshop on free, web-based tools to promote student interaction both inside the classroom and out of it, with which all GTAs should be familiar as part of their training. These include tools such as Snip’d (snip’d.com), which enables students to cut and paste materials from the Web (videos, images, text) into a common wiki space to prepare for group presentations in class without having to meet. Our instructors have repeatedly used this application to successfully structure web-based group project activities, such as one that asks students to explore various manifestations of Chicano art and then share their discoveries with the rest of the class. Each new GTA creates a digital teaching portfolio using weebly.com or wix.com, both user-friendly (read: drag-and-drop) tools for creating web pages that can later be exported into HTML. The GTAs include their activities, a CV and teaching statement, and a brief video of their teaching in the portfolio, which can be updated and refined throughout their tenure at KU. (Actually, KU is currently piloting Digication, a new web-based tool that would serve the same purpose, allowing students to have multiple portfolios serving as alternative forums for representing their academic development. EGARC can tell you all about this, too!)

As we have seen, Acceso provides a vehicle for structuring our graduate seminar on teaching, but its true value for graduate student pedagogic development stems from the collaboration that it promotes both in its continued development and its implementation in the classroom. For instance, less than a week ago four GTAs asked to meet with me about an exciting activity that they are working in concert to develop. Each instructor brought his or her own interests to the project. The result will be more than 300 fourth-semester Basic Language students simultaneously performing selections from two Chilean plays in 12 separate classrooms in Wescoe on the evening of May 3. The works were chosen by a GTA whose research focuses on contemporary South American drama; another GTA with research interests in performance is organizing the staging and training of the rest of the instructors to implement the activity. Yet another GTA is creating an activity to provide the historical background necessary for understanding the plays (both of which examine the cultural trauma and recovery from military dictatorship), and a final GTA from Paraguay is serving as the activity’s “sensitivity meter” as it engages difficult issues, such as whether it is better to forget and move on or acknowledge the trauma to ensure that it will not happen again, that are still not discussed openly in Chile.

For more advanced graduate students, the project serves the additional purpose of providing alternative avenues for demonstrating their pedagogic development. At the end of each GTA-authored activity in Acceso is a link to her picture and bio on the project staff page. Additionally, M.A. students applying to doctoral programs and Ph.D. students applying to faculty positions include hyperlinks to their activities in their teaching statements. In this way, they are able to demonstrate their ability to apply new technology to the creation of innovative materials that reveal their research interests and their unique approach to engaging lower-level students in those interests. For example, Regan Postma, a Ph.D. candidate in Latin American literature, created an activity that explores the linguistic identity of Spanish-speaking Americans by using an excerpt (with permission) of Junot Díaz’s novel, The Brief and Wondrous Life of Oscar Wao. She introduces students to the author before they read the excerpt through a clip of an interview on “The Colbert Report” and, after exploring the themes of the reading in class, asks students to reflect on whether they have felt like they had more than one identity and the tension this may have caused.

The role of inquiry
By embracing the role of inquiry in successful pedagogy both inside and outside the classroom, the project encourages graduate student participants to explore how informal and formal inquiry can and should inform their teaching. Through group discussions focused on which activities the instructors believe are working and which ones are not (and what evidence they can offer to support their opinions), they learn about the role that reflection plays in teaching.

Additionally, the instructors participate in the formal internal and external validation that informs curricular decisions, such as descriptive statistical reports (class average, spread, distribution of grades) for major common assignments (written and oral exams, compositions, etc.).
With respect to external validation, instructors participate in data collection in the form of student work and surveys. We also plan to track several intact sections longitudinally across the two-course sequence to measure development as it relates to both linguistic abilities and intercultural sensitivity by administering recognized assessment tools (pending funding). GTA collaboration is integral to this process.

As you can see, our GTAs are creating learning activities for Acceso that are exciting, ambitious, and anything but “basic.” By providing a means for integrating their academic interests with their pedagogic development, graduate students can make full use of their teaching apprenticeship while at the same time crafting engaging and innovative learning experiences for undergraduate students. We as faculty can serve to structure and inspire this development by taking pedagogic risks ourselves (as Tony Rosenthal encouraged) and by making sure that we include our graduate apprentices in these endeavors. I conclude with the email from the GTA that I mentioned at the outset of this essay:

Hi Amy,
I’ve been working hard on this and wanted to share with you what I have so far… I’m still working on Day 3 ideas and will wait for further instruction as we get that designed… Thanks for everything! This has been an incredible process of self-discovery and reflection. I’m not sure I’ve enjoyed working on a project in grad school as much as I’ve enjoyed this, even if it is one of the hardest things that I’ve ever done.

I believe that I can make a strong argument that this future faculty member is already working to “transform the situation on the ground.”

Web references
Acceso: http://www2.ku.edu/~spanish/acceso

Reflections 15
Everywhere around campus, I often see students’ eyes glued to the screen of their notebooks (the digital kind, of course) and their ears to the tiny earphones that digitally transmit some hip, if not hip-shaking, songs. Digital technology seeps into our every-day lives, whether or not we embrace its presence inside our classroom. Indeed, digital technology has become a mode of experiencing the world and expressing ourselves in it. It is time, then, that we take digital technology more seriously and use it to represent and accommodate the different ways in which our students learn in our classroom. To this end, I developed an assignment called “Digital Gender Story Project” for my Honors class WGSS 202: Introduction to Women, Gender, and Sexuality Studies in Fall 2008. This assignment is a multimedia project (a five- to six-minute film) that pushes students to be active participants and creative knowledge producers in this digital age.

The Digital Gender Story Project, as the name suggests, focuses on personal stories about gender as it intersects with other categories of identity such as race, sexuality, class, nationality, ability, and age. Although these stories are personal, they are necessarily contextualized within larger institutional structures of sexism, racism, and heterosexism. Students worked on this project for the entire semester. I divided the project into smaller steps. In what follows, I will explain what these steps are, how I prepared them to complete these steps, and how each step represents a different way of learning.

**Step 1: Visual narratives of gender**

For the first step, students had to submit five images that they would use for their final project. Students could submit images that they took with a digital camera or images of themselves. These images needed to show how they learn, do, and perform gender in their lives. Each photo had to be accompanied by one or two sentences that explained what the image was about.

*Preparing students for this step:* For this assignment, students had to attend a visual literacy workshop that I teach. During this workshop, students learned how specific images convey certain meanings, what visual metaphors are, and how to read and write visual narratives. I also found Lauren Greenfield’s book *Girl Culture* (some parts of which are also available online http://laurengreenfield.com) very useful in providing students with specific examples.
Alternative learning process:
This step represents an alternative learning process in that students write a visual, rather than a textual, narrative of gender. Moreover, students had to compose this narrative digitally. Most students used a PowerPoint application, but a few students might be more comfortable with the Word application.

Step 2: Critical narratives of gender
For the second step, students submitted a five to seven-page paper that provided a critical analysis of the images submitted for step 1. This paper was a critical paper that required them to do research. For this paper, students needed to make an argument and use not only research materials to support their argument but also the images they submitted in step 1.

Preparing students for this step:
For this assignment, students had to attend a library research workshop and visit the Spencer Research Library. The library research workshop was taught by Tami Albin. During the workshop, Albin showed students how to conduct a library research and what resources are available for students. Additionally, students also visited the Spencer Library. During this second library workshop, Sherry Williams introduced students to some available materials hosted in this library. Finally, we also discussed what makes a good argument and what counts as good evidence in class.

Alternative learning process:
This paper is indeed a research paper in its traditional sense. Students incorporated images and research materials in making an argument for their paper. However, students could write it in the personal narrative form. They could even use, or were encouraged to use, this step to write the narrative of their digital story project. In this step, students honed their writing and research skills.

Step 3: Meeting with the professor
I required students to meet with me. This allowed me to give them personal feedback and allowed students to express any concerns they had. During this meeting, students had to bring a storyboard that consisted of a minimum of ten “panels” or “frames” to illustrate what the final project would look like. Students also had to bring a timeline that indicated when each step of the project would be completed. For this step, students fine-tuned their organization skills, both in terms of time and of the project itself.

Preparing students for this step:
My class is mostly discussion-based. These discussions function to hone students’ communication skills. Moreover, before doing their presentation on their project, students had to do a class presentation, showing an image
that was related to the reading material for that day.

**Alternative learning process:**
Unlike previous steps that focus on students’ visual literacy, writing, research, and organization skills, this step honed communication and presentation skills.

**Step 5: The Gender Story Project**
This was the final step for which students pulled together everything that they had done from step 1-4 and created the short film. Thus, students were asked to examine these previous assignments critically, reflecting on class materials and various theories they had learned in class. Like their critical paper, this project needed to articulate an argument and be supported by theories they’d read in class, as well as additional theories. Moreover, it needed to tell a story about gender as it intersects with other categories of identity such as race, sexuality, nationality, and ability. Most importantly, this project had to embody how personal storytelling can be a medium for social change. In other words, in telling their stories, I do not encourage mindless narcissism or indulging in the grandiosity of the self. Rather, I asked them to be mindful about the ways in which they learned, performed, and socialized gender in their lives, how institutions help structure these processes, and to clearly articulate what changes they would like to see happening.

**Preparing students for this step:**
Because for this step students had to make a movie, I provided an i-Movie workshop. During this workshop they learned how to create a movie with the i-Movie application. I also provided students with several examples they could follow for the project:

- [http://www.storycenter.org/stories](http://www.storycenter.org/stories)
- [http://www.thestoryproject.ca/Jen_Camille/Video/Camille_small.mov](http://www.thestoryproject.ca/Jen_Camille/Video/Camille_small.mov)
- [http://www.thestoryproject.ca/DWAVE/index.html](http://www.thestoryproject.ca/DWAVE/index.html)

**Alternative learning process:**
This project incorporates various digital technology. This allowed students to feel comfortable with these various computer applications and boost their confidence in their engaging with technology. This project therefore embodies an alternative way to represent students’ learning process in two ways: its form and content. First, the form of this project is a digital movie. Hence, this form is different from exams or the usual research paper. As a digital movie, students were able to post their project on public websites such as YouTube.com and invite their friends to view their project. This process then functions to engage others beyond the classroom or academic circle. Second, the content of this project also provides an alternative way of representing student’s learning in that it values research processes, visual narrative, and personal storytelling as a form of social change.

**Conclusion**
In sum, I have provided one way of incorporating technology in our classroom and representing alternative ways in which students could learn differently. Certainly, alternative does not mean that we leave, or worse, devalue the research and writing process. For me, at least, alternative means allowing for other forms of learning to be well incorporated and represented in the classroom. In the process, students learned not only different but also more varied skills, which enriched their learning process. True, some students are better writers than others; some are better at using visual materials and technology. This indeed could create a certain level of anxiety in students, a normal reaction when we are entering an unknown territory. Nonetheless, if students are being well-prepared for each step, this move toward incorporating more digital technology in our classroom is a worthwhile if not an inevitable endeavor in this digital age.

Two videos from Prof. Saraswati’s class can be seen on YouTube:
1. [http://www.youtube.com/watch?v=T8DqzMMIrhM](http://www.youtube.com/watch?v=T8DqzMMIrhM)
2. The other is divided into two parts. Part I can be found at: [http://www.youtube.com/watch?v=x79V0-mTZo](http://www.youtube.com/watch?v=x79V0-mTZo)
   Part II can be found at: [http://www.youtube.com/watch?v=ytzi-6m1nIU=related](http://www.youtube.com/watch?v=ytzi-6m1nIU=related)
Many years ago I taught a large introductory psychology class, with many hundreds of students every semester. It was organized as a self-paced mastery course, and students spent much of their time taking (and re-taking) short-answer quizzes graded by student assistants. I kept data from the course showing that students learned a lot in the process, and I also published data showing that intense preparation and monitoring of student assistants resulted in high levels of their performance as graders and discussants. In this class, everything a student needed to know was available in writing, so attendance in face-to-face class times was optional. As a result I got to know only a small percentage of the students enrolled, albeit an interested and dedicated bunch, and my role was largely as the instructional designer and quality control manager.

One day while having lunch at a friend’s home, a young guest introduced himself to me and then added, “Five years ago I took Psychology 181 from you.” Of course I failed the first test since I did not recognize him by face or by name; I appeared to be the stereotype of the research university professor, distant from undergraduates. Over lunch, however, the conversation returned to my course, and the young man described many of the topics from the course that he found most interesting. I was immediately struck with how well he remembered the ideas and how his rendering of them was astonishingly accurate and nicely articulated. He then went on to describe several ways that he had found the lessons from the course to be useful and helpful to him in dealing with everyday matters, and again I felt he had generalized the book learning quite well to the particulars of a variety of situations. In the end, the lunch encounter went from dismal flop to grand success, as I allowed others present to imagine that every student in my class would be able to do the same.

We all hope that, in principle, our instruction generates such a rich understanding and affinity for material we teach, but this event
### Table 1. Prompts and rubric for conversation categories

<table>
<thead>
<tr>
<th>Topic &amp; rating</th>
<th>Prompt</th>
<th>Threshold understanding (5-9 pts)</th>
<th>Good understanding (10-15 pts)</th>
<th>Advanced understanding (16-20 pts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-control and global warming</td>
<td>Based on your reading of the column on global warming, how do the four dimensions/features of self-control choices show up in a situation like this one? Identify the general choice issues and give an example of each from this particular context. Describe an approach to changing choices that people make based on specific characteristics of the situation we confront. Describe an approach to changing choices that people make based on changing the people who make the choices.</td>
<td>Identifies at least one self-control variable in the account (amount, delay, certainty, effort); uses any change in actual or perceived value of that same variable or gives an example from improving tolerance</td>
<td>Uses two or more of the self-control variables in explicit analysis; uses both actual and perceived changes in an example of an intervention; uses either exhortation or effort tolerance as a tool</td>
<td>Identifies all four features of self-control dilemmas in this context; uses original examples of two classes of interventions; demonstrates understanding the difference between changing tolerance and changing parameters of the situation to be tolerated</td>
</tr>
<tr>
<td>Free-will and determinism in decision to attend KU</td>
<td>Can you give an example of a value held by someone you know who appears to have been externally influenced or determined? What is an example of an instance of free choice of a value for someone you know? To what degree do you feel you have made a choice about your decision to attend KU? What evidence can you think of that would (in principle) support your view of those choices and what evidence would support a contrasting view?</td>
<td>Acknowledges that people can take position of free will and position of determinism; provides an example of someone’s beliefs that are influenced; takes either free will or determinism stance on decision to attend KU</td>
<td>Identifies some form of evidence that supports determinants of beliefs; identifies a form of evidence that supports free will in values; likely takes soft determinism view (that both are true) on decision to attend KU</td>
<td>Provides strong evidence related to conventional criteria for free will and determinism; identifies and uses more than one criterion for either view; articulates criteria in reference to own decision to attend KU</td>
</tr>
<tr>
<td>Scientific and non-scientific questions in psychology</td>
<td>When is psychology a science? Can you give an example? In what areas of psychology do you think a scientific approach is the best way to get answers and make decisions? Why? As suggested by Rogers, in what ways does psychology not operate as a scientific community? Why is that not scientific? Can you give an example? What would be the characteristics of an analysis done within a scientific community?</td>
<td>Recognizes the distinction between empirical claims and assertions of value; can give an example of a scientific analysis of a specific topic; thinks of psychology in broad ways of knowing</td>
<td>Can provide an example of a scientific question and a non-scientific question; describes a procedure characteristic of an empirical analysis; thinks of psychology as an empirical enterprise</td>
<td>Recognizes that psychology involves value assertions as well as empirical questions; provides an original example of a scientific and non-scientific question and describes criteria for each approach; describes at least one analytic tool with understanding of its interpretation</td>
</tr>
</tbody>
</table>
made me realize how little I knew about the depth and resilience of my students’ understanding of basic psychology. In particular, I would not have known at the end of the semester whether any students could participate in a coherent conversation about the course topics and how they relate to novel actions and circumstances. I knew even less about their understanding as the years go by and the course fades into the dim past. The profound importance of this chance encounter came flooding back to me a few years ago while participating in a teaching session at Georgetown University. Randy Bass, director of the teaching center, casually mentioned that he had recently used an end of course interview with every student as one of the ways he evaluated their learning, and by inference, his success as an instructor. He videotaped the interviews, graded the tapes, and placed each student into a category for each of the five topics. To him, it was just like giving back a term paper.

When I began to teach a new course on conceptual issues in psychology, I decided to include a 15-minute interview with each student toward the end of the semester, mostly as a way to see how well my course was accomplishing its goals. I wrote prompts for five topics from the course, each intended to elicit summary statements about an understanding that emerged from the reading, writing, and thinking that had been done. Students knew the five topics ahead of time, but not the specific prompting questions. The goal was pretty simple, just to see if the work that had been done on paper could also be performed in a fluent oral manner without reference to notes. At another level, the face-to-face conversation complemented the private work done away from class and online, so I could find out if the understanding in term papers and homework assignments was as well internalized as the material from examinations taken in class.

I realized ahead of time that I would not be able to guide a conversation and evaluate its quality at the same time, so I used a small table-top video camera to record the interviews. I also created a rubric for each topic that would help me categorize a student’s understanding into one of three categories, ranging from threshold to advanced. These rubrics described the characteristics of observations that met varying levels of the goals I had set, and I placed each student into a category for each of the five topics.

Table 1 (page 20) provides samples of the conversation prompts and gives descriptions of levels of answers for several topics; for certain purposes I assigned points to the performances, as well. For the first two years, I gave each student a DVD copy of the interview, along with comments; for another two years I offered students the option of requesting a DVD, but since very few requested them, I discontinued asking.

The results of the first year of interviews were fairly discouraging. I identified in advance three levels of understanding (threshold, good, and advanced), and I expected a fairly typical distribution of performance. Instead there were virtually no students whose oral accounts met the criteria I set for advanced understanding, and there were a good number of people whose conversation on more than one topic did not reach the threshold criteria for understanding. I added a fourth category of performance that informally I named “clueless,” and I spent several years experimenting with my teaching to see how much I could shift the distribution of performance toward meeting the criteria for more advanced categories.

There have been many changes in how the course works, each added as time and resources have allowed, and overall performance in the interviews is now much better. Most importantly to me, there are no more discussions of any topic that fall into the clueless category. I have added a number of features to the course, including collaborative writing projects, a portfolio reflecting on learning, blogs relating readings to personal experiences, and oral discussion in small learning teams during class time. In fact, small group conversation now typically fills more than a third of each class period. Since the changes have not been done in proper experimental form, I cannot identify the separate contribution of each change to the overall improvement in oral fluency, but the improvements have been replicated and hold steady across years. I am confident that some combination of the procedures I now use has helped all students improve their understanding and ability to transfer skills to new settings.

Figure 1 (page 22) shows a change in the distribution of oral performance from the first offering of the course to a later one; the shift in understanding gives reason to continue with the
revised course practices, even though I am not certain how much each feature contributed.

Over the five years that I have had these interviews, the prompts and conversations have gradually evolved beyond simply asking for a remembered summary of findings or ideas. The first change came when I began to ask students to use the constructs of free will and determinism to examine their own choices; I wanted their replies to be connected with something personal, in which the subject of their sentences could be “I.” Then I intentionally asked them to use course constructs in new ways, for example asking them to apply the self-control analysis we had developed to a newspaper story on global warming, even though global warming had never been discussed in class. One of my goals for understanding is that ideas can be used in ways that are not specifically taught, so this new context for self-control offered an indication of their skill in generalization and transfer of knowledge. Currently I use the interview to teach generalization and transfer as well as measure it; a new context introduced into the interview (a professional policy developed by psychiatrists) serves as practice for yet another context (a documentary film about education and social class) that appears later on the final exam. This allows me both to see what generalization has occurred and to enhance the transfer in students’ performance on the final.

My class typically has about 35 students by the end of the semester, so there is substantial time and energy devoted to the interviews themselves and to the categorization of their understanding. I am not sure that I learn something new about teaching from the interviews every time I teach this course, but I am certain that I have a strong sense of what we have collectively accomplished in a given term. I pick up a good sense of which ideas and concepts spring easily and frequently to mind for my students, and I can see clearly which intellectual tools are used well to analyze a situation or solve a problem. Having the oral measure of student fluency does provide one powerful insight into learning. I typically assume that writing papers, essays, and examinations measures some kind of deep understanding that will also be manifest when a student is in conversation about relevant material. Overall it is true that students with high scores on written work tend also to do better in the interview, but every semester I can count on finding a few people who seem brilliant in one mode and unskilled in the other. It is an important reminder to me that these two forms of communication can be learned in different ways, despite their obvious overlap in form and substance. I remain unsure what to make of that observation, or what to do about it, if anything.

Finally, I am slightly unhappy to say that even at the prime moment for learning, just at the peak of the work in the class and before major forgetting has begun, only about a third of my students appear to be viable candidates for a brilliant lunch visit five years out. There is still plenty of room for many of them to grow into better learners, taking full advantage of the materials and interactions to construct a richer understanding of the course concepts and ideas. There is also plenty of room for me to continue to grow as a teacher, finding additional ways to engage and motivate students while refining the methods I have in place for those students who take the time and energy to work on the course. The good news is that I have not yet encountered a combination of coursework and students that does not give me an interesting target for improvement. And I can always let those interview questions continue to evolve if I need them to.