Models of Innovation & Best Practices in Teaching & Learning at UND

October 2009
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Unannounced Peer Reviews

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ABSTRACT: Unannounced Peer Reviews involve having students bring what they believe will be their final draft to class, having students review that draft, and giving them one week to make revisions. By refraining from announcing the peer review ahead of time, students come to class with their best work; and in reviewing each other’s papers, students see how their classmates approached the paper topic, receive constructive criticism of their own work, learn how to assess such criticism, and ultimately submit better papers.

Teaching and Learning Strategy:

On the day that term papers are due, my students bring their papers to class, fully expecting to turn in what they believe will be their final draft. Instead, I ask them to exchange their papers with another student. I then distribute a peer-review sheet. After going over the paper, the reviewer and the author discuss its strengths and weaknesses. The final drafts are due one week later. Students have consistently expressed positive attitudes towards Unannounced Peer Reviews.

Benefits of the Strategy:

- In refraining from announcing the exercise ahead of time, students come to class with their best possible work.
- Students see how their classmates approach the paper topic, benefit from a review of their own work, and interact with their colleagues in a direct, face-to-face way.
- Students learn how to assess constructive criticism, deciding for themselves which advice they will heed and which they will ignore.
- Students have nothing to lose: if they feel their paper is perfect, they can simply print another copy and turn it in.
- This method can be used repeatedly—some semesters I will do Unannounced Peer Reviews; in others, I won’t. Even students who have taken a class with me previously can never know whether we will be doing peer reviews.
- There are ways to insure that the reviewer takes the assignment seriously: The peer-review sheets become a part of the reviewer’s record; in fact, I inform students that, if they have a borderline grade at the end of the semester, their performance on the peer review will greatly determine which grade they will ultimately receive.
**A Sample Assignment:**

**DIRECTIONS**

Exchange your paper with another student. Review each other’s essay, using this sheet as a guide. You may mark on the student’s paper as well. I strongly urge you to take this assignment seriously for two reasons:

1) **Helping a Fellow Student:** A good review always offers constructive criticism. You are not doing someone a favor by writing, “This is fine,” when, in fact, the paper needs work. If you don’t point out mistakes, I will—in the form of a low (or even failing) grade.

2) **Helping Yourself:** If you shirk this assignment, your grade will suffer. I will collect both the original essay and the peer review sheet, noting the quality of your critique. If you have a borderline grade at the end of the semester—and you’d be surprised at how many students find themselves in this situation—this assignment will play a significant role in determining whether you receive the higher or lower mark.

**Your Final Draft is due TUESDAY, MARCH 20, 2007 IN CLASS.**

I will collect today’s draft, the peer review, and your final draft.

Hist. 406: Civil War and Reconstruction  
Author’s Name: ________________________

Peer Review  
Reviewer’s Name: ________________________

**ARGUMENT**

1. Find the author’s thesis statement. Underline it and copy it here. Is this a strong thesis statement? Does it tell the reader exactly what the author will argue? Explain why or why not.
2. How well does the paper support the thesis statement? Is the author even-handed when picking his or her sources, or does s/he seem to be selecting only information sources will support his or her argument (while ignoring contrary evidence)? Are you absolutely convinced that the author’s claims are true? Explain, using examples from the essay.
3. Many groups joined the dispute over black labor in Union-occupied areas. Which groups does the author discuss well, and why? Which groups need to be examined further, and why? Also, to what extent does the author discuss how those disputes shaped the nature of freedom?

**HISTORIOGRAPHY / SECONDARY SOURCES**

4. How extensive is the historiographic analysis? How could the author expand the historiographic scope to make his or her findings more relevant?

**STRUCTURE**

5. Is the paper well-organized? At any point, did the author lose you? How could the essay be re-organized to present a more lucid argument?
6. Does each paragraph include a topic sentence that tells the reader what to expect in that paragraph? Find and label examples of strong and weak paragraphs. What makes these paragraphs work or fail?

**GENERAL**

7. Put a “+” by three things you liked; put a “-” by three things you think had problems. Explain your decisions.
8. Put a “*” by things you would like to hear more about.
9. Final comments and suggestions:
ABSTRACT: Service-learning literature puts forward four stages of successful service-learning: Prepare, Act, Reflect, Evaluate/Advocate. These steps are much easier to implement in a classroom setting, but it can be done successfully with extra-curricular service. As more and more academic departments and programs begin instituting service requirements for their students, they can ensure learning outcomes by implementing PARE/A as a department-level pedagogy. This can be done with a part-time commitment for a faculty service learning coordinator and cultivation of student leadership to coordinate separate projects.

Teaching and Learning Strategy:
The Honors Program has developed a service-learning program that enhances student learning through the implementation of the four stages of service learning (Prepare, Act, Reflect, Evaluate/Advocate) even in extra-curricular service. Administration of this program does require a significant amount of work, but much of the work is carried out by students who take on leadership roles.

Each project is coordinated by a student who volunteers to take on this role, and earns service hours for their effort. The project coordinator makes arrangements with the service agency, recruits volunteers within the program, develops a preparation activity (stage 1) that might include a guest speaker, film, or article, and a reflection activity (stage 3) that often involves a group discussion session or forum on Blackboard, and keeps track of volunteer hours and turns those in the program. (See attached Student Coordinator Guidelines.)

The final stage of service learning, Evaluate/Advocate, is coordinated at the program level. At the end of each semester, students must submit a written critical analysis to the program. This paper asks the student to contemplate various issues brought up by their service as they critique its effectiveness. These papers are then read by Faculty and Peer Service Mentors who meet with students individually to discuss their service and set goals for the upcoming semester. Each mentor fills out an assessment sheet which is used both to encourage the student to think about their development in service-learning across their academic career as well as to provide the program valuable assessment data. (See attached Service Assessment Sheet.)

Development of the Strategy:
Service-learning is a growing field, and with President Obama’s recent signing of the Serve America Act, this teaching technique is likely to become more prevalent. However, simply requiring students to submit volunteer hours to a department does not constitute actual service-learning. Through both practice and research, four stages of successful service-learning have emerged in service-learning literature; these stages are promoted by such authoritative organizations as Learn and Serve America and the National Youth Leadership Council. When implemented, these stages significantly enhance the educational experience of service for students:

Prepare
Act
Reflect
Evaluate/Advocate

Students first must learn about the issues they will be exposed to in their service, and gain any technical training they need to complete their work. Students next perform the service. Following action, students are led through guided reflection activities to process their experience and connect it to their more traditional classroom education. Finally, student critique the issues brought up by their service, make recommendations for further work, and perhaps attempt to bring about those changes.

Without the PARE/A stages, programs risk

Students having a negative impact on the agency they serve due to lack of preparation. (Stoecker and Tryon)

Students not learning from their service experience.

Students “mislearning,” including perhaps having negative stereotypes reinforced due to lack of understanding of broader issues at play. (Eby)

Clearly, inadequate implementation of service-learning pedagogy can not just reduce positive outcomes, but can actually produce negative ones. With the rush to grow service-learning programs nationwide, administrators must be thoughtful about how to implement such programs. Including PARE/A is a wise first step.

These stages are easy to implement within a course, when an instructor has the students several hours a week for an entire semester. These stages are much more challenging when students are doing their volunteering independently. One of the six Honors Program Goals is Civic Engagement, so when we began offering some students partial tuition waivers in 2003, we implemented a service requirement. In the first year, this consisted of telling waiver recipients to go out and do 15 hours of service and report their hours at the end of the semester. We soon realized the limited learning potential of some of their activities, and set about to make their service more educational. We developed standards for service projects and a proposal process to have a new project approved by a student committee. (See attached Service Guidelines and Service Project Proposal Form.) We began requiring students to submit a critical analysis at the end of each semester. (See attached Personal Service Hour Log and Critical Analysis.) And at the suggestion of a student, we developed a Peer Service Mentoring program so that each student would have a peer or faculty mentor who could help them progress in their service from more superficial work as first-year students to leadership roles and advocacy as seniors. An assessment form was worked into this mentoring process as much to help the students understand service goals as to gather data for the program. (See attached Service Assessment Sheet.)

As our assessment shows our program is mostly doing what we want it to, changes in recent years have been more minor. To diffuse the negativity expressed by some of the students regarding their service requirements, we began implementing celebratory elements. (The predecessor of the PARE/A model was PARC: Prepare, Act, Reflect, Celebrate. The Celebrate stage was determined to trivialize the significant work students were attempting to do in their communities, although some degree of encouragement is deemed useful. Celebration is sometimes added as a fifth stage of service-learning.) To that end, we put on a Service Kick-Off event (a mini-service conference with speakers, discussion sessions, activities, and door prizes) in the fall, a Service Retreat (a campus-wide Night Life event featuring on-site service activities, a speaker, and snacks) mid-year, and a Service Celebration (a social with cake, games, and visual representations of students’ service hours) at the end of the year.

To increase students’ understanding of and critical thinking about service-learning, we also began requiring students to read an assigned article each year. Students attend discussions of it at the Service Kick-Off, study it in their first-semester Honors Course, and write about it in their end-of-the-semester critical analysis. These articles have included John Eby’s “Why Service-Learning is Bad,” Arthur Chickering’s “Maximizing Civic Learning and Social Responsibility,” and the Universal Declaration of Human Rights.
Intended Student Learning Outcomes:

Arthur Chickering identifies six desired outcomes from a civic education: Knowledge, Intellectual Competence, Interpersonal Competence, Emotional Intelligence, Integrity, and Motivation. Service-learning is one method to provide a civic education. In a service-learning setting, students gain more factual information about the world, learn how to process information, develop relational skills, learn how to handle themselves in various situations, become better equipped to make good choices, and increase their likelihood of continuing and expanding their civic engagement. We hope all students participating in our service-learning program advance in these areas, and their self-assessment suggests they do.

Our critical analysis assignment last year asked students to assess the affect their service experience had on these skills, and students on the whole concluded they did indeed grow in at least some of these areas; specific outcomes varied by project. Significantly, most identified their service-learning experience in Honors as being either the most significant or even sole source of development of their civic education. Many expressed frustration with that their other departments were not connected enough to the “real world.” This is reflective of a national trend of students “demanding that higher education take seriously its public mission to support student civic engagement and not simply focus on professional skills and workforce preparation” (Zlotkowski 5).

While all participants in the service-learning program can develop in these areas, those who take on a leadership role advance even further. First of all, students take more ownership of their service. Service-learning literature and organizations such as Campus Compact and the National Youth Leadership Council reiterate the importance of student ownership of service in enabling their civic engagement. Second, we want our students to develop leadership skills, and this gives them the opportunity to do so, while working under the guidance of our faculty service coordinator. Each leadership opportunity helps students develop different skills. Coordinating a service project promotes

- **Awareness of community needs and agencies** in deciding what projects with which to involve themselves,
- **Problem-solving skills** on the occasions when they develop their own project rather than participating in an already-existing service opportunity,
- **Communication skills** in being a liaison between the agency and student volunteers,
- **Organizational skills** to develop a schedule and take care of arrangements, and
- **Pedagogical skills** in developing preparation activities to educate students on the issue and reflection activities to help them process their experience.

Serving on the Service Learning Committee promotes

- **Critical thinking** about the field of service-learning in deliberating which projects to approve on the grounds of their value to both the students’ education as well as to the community itself, and
- **Organizational skills** in planning service events, including a Service Retreat and Service Celebration each year.

Serving as a Peer Service Mentor promotes

- **An awareness of community needs and agencies** in advising students with a broad array of service background and goals,
- **Pedagogical skills** in orienting their assigned Honors 101/2/3 course to service-learning, leading discussion sessions, and helping their class develop a service project, and encouraging their mentees to grow in their own civic engagement,
Assessment skills in completing service assessments for their mentees each semester, reviewing composite assessment data, and discussing the direction of the service-learning program based on the reports, and

Organizational skills in developing and running the Service Kick-Off event each fall.

Assessment of Student Learning:

At the end of each semester, tuition waiver students are required to submit a service log documenting at least 12 hours of service, as well as a 3-page critical analysis of their service. (See attached Personal Service Hour Log and Critical Analysis.) The assignment for the critical analysis changes every year to correspond with the year’s service article. This analysis is read by the student’s Faculty or Peer Service Mentor, who completes the attached Service Assessment Sheet and goes through it with the student to discuss the student’s growth and set service goals for the next semester. The sheet gathers information about both students’ service as well as their service analyses. These results are then compiled into a report that is used to advise our program’s direction.

This assessment process has been in place for two years now. Results have consistently shown that our first-year and second-year students are performing at or beyond our expectations for their level, while students begin to plateau after that. In contemplating these results, our faculty Service-Learning Coordinator and Peer Service Mentors have surmised that our program serves younger students well by having all introductory Honors courses implement a service-learning component. However, not enough upper-level Honors courses include service-learning; many students are doing solely extra-curricular service as juniors and seniors. As we expect students to be moving into an advocacy capacity by their graduation, we are beginning to encourage more project coordinators to develop an advocacy component for their projects. We are also forming a general advocacy group (student-led) which will help students involved with any kind of project begin advocating on their issues. In addition, we are encouraging more upper-level courses to implement service-learning approaches to their topics.

The Strategy’s Applicability:

Implementing PARE/A outside of the classroom does require a significant contribution of resources at the administrative level, including a ¼- to ½-time faculty coordinator. (At Honors, dedicating approximately this much of the Associate Director’s contract has allowed her to oversee about 150 students doing 5000-7000 hours of service each year.) As Zlotkowski attests, “[S]ervice-learning rarely achieves any broad currency at an institution unwilling to invest in supportive infrastructure” (4). Given the budget shortfalls that confront many departments, dedicating additional resources to service program might be a challenge. However, to enable genuine learning to grow out of students’ volunteering—which is presumably why it is required—this commitment is essential. And even with a real commitment at the administrative level, relying on student leadership is critical to the success of the program. Managing and carrying out every element of the service-learning program for 150 students in Honors would require multiple faculty positions. Having students take on a significant portion of the workload allows us to have a much more developed service-learning program which provides one-on-one attention to the students doing service.

Some departments might be hesitant to give students so much responsibility, especially as they assume a part-pedagogical role. However, our experience has shown students can be quite reliable and creative when granted such ownership of the projects, as long as they are supported by faculty supervision and mentorship. Student leadership in service can be cultivated by personally inviting select students, holding discussion sessions or meetings with them, and enabling them to attend service-related sessions put on by UND’s Center for Community Engagement or Office of Instructional Development. Honors has even brought a few students to the National Service-Learning Conference put on by the National Youth Leadership Council twice, with plans to bring students (and possibly present with them) again. These kinds of professional development opportunities go a long way in both energizing student service leaders as well as increasing their understanding of service-learning. Indeed,
several of our student service leaders have a deeper comprehension of service-learning issues than many UND faculty.

Other departments should be encouraged to develop their own model for implementing PARE/A, but both administrative support and student leadership need to be present for a successful program. A service program run by faculty alone will likely be both anemic due to limited time to commit to it as well as unpopular because students see service as an external requirement being forced on them. On the other hand, a service program that relies too heavily on students is likely to be irregular due to inadequate guidance and suffer from quick burnout of its student leaders who are being overworked and under-supported. But together, faculty and student leaders can develop and run a service-learning program in which students both make real contributions to their communities and enhance their education.

Works Cited:


Stoeckner, Randy, and Elizabeth Tryon. Interview. Inside Higher Education. 4 August 2009.


Supporting Documents:
Service Project Guidelines

- All Honors students are encouraged to participate in service projects as part of the Honors community. Students who complete 30 hours of service per year and a critical analysis will be awarded an Honors Program Service Certificate that documents their participation. You may earn an Honors Service Certificate every year, if you choose. Recipients of an Honors Tuition Waiver are required to participate in at least 12 hours of Honors service projects and a critical analysis each semester.

- For service projects to count for Honors, projects must be approved by the Service Learning Committee. Any Honors student may propose a project. Students wishing to suggest a new project should submit a Service Project Proposal to the Honors Program office at least a month prior to the event for a group project, and at least two weeks before the event for an individual project. See Service Project Proposal Guidelines and Form for more information.

- To have the hours count, the student must participate in at least one approved educational component that accompanies the project. This might include speakers, readings, discussion sessions, or films.

- Each project must have a designated student coordinator. That coordinator is responsible for recruiting volunteers, posting information on the activities, developing educational components and turning in a roster of participants. Students may count time spent in planning and coordinating as part of their total service hours.

- If a student wishes to work alone on individual service projects, the student must submit a proposal to have the project counted to the Honors Program office at least two weeks prior to the event. See Service Project Proposal Guidelines and Form for more information. This student may serve as his or her own student coordinator, but must have the hours documented by an agency representative.

- Time spent in planning and coordinating HPSO events (trips, the formal, etc.) may also count as service hours.

- The Honors Program Office will maintain records of service hours completed for each member of the Program. These record are compiled in this way:
  - Within one week of the completion of each service project and after verifying the hour totals with each participant, student coordinators must submit a record of the participants, including the number of hours worked for each.
Each student must submit a record of her/his own hours completed at the end of each semester. Please document your hours on your Personal Service Hour Log as you finish each project rather than trying to fill it out from memory at the end of the semester. Students wishing to earn a Service Certificate must also submit a 3-page critical analysis on the experience at the end of the year. Tuition Waiver recipients must include a 3-page critical analysis with their log each semester. See Service Learning Critical Analysis Guidelines for more information.

- Sign-up sheets for service projects are kept in the red binder in the Honors Office (Room 7).

- Students who are not members of the Honors Program may participate in service projects.

How to participate in a service project:

- Check your Honors listserv messages for announcements about upcoming projects. Signs will sometimes be posted around the Honors building, as well.

- Sign up for a project in the red binder kept in the Honors Office (Robertson 7).

- Use the contact information from the email and the signup sheet to contact the student coordinator with any questions you have about the project.

- At the project site, sign in on the Honors Service Project Sign-in Form and document the hours you worked.

- Participate in any required educational components before and/or after the event.

- Record your work on your Personal Service Hour Log.

- If you are a tuition waiver recipient, submit this log and a 3-page critical analysis to the Honors Office no later than Reading and Review Day at the end of the semester.

- If you wish to earn an Honors Service Certificate, submit this log and a 3-page critical analysis to the Honors Office no later than Reading and Review Day at the end of the year.
The Honors Program believes it is important for students to be engaged, active members of their communities, and that service to those communities provides valuable learning experience. As such, Civic Engagement is part of the educational mission of the Program. Here are the six Honors Program goals in detail:

- **Thinking**: Student demonstrates an ability to think critically and creatively.
- **Scholarly Inquiry**: Student shows a growing understanding of how scholarship is conducted and knowledge created.
- **Writing**: Student writes effectively in a variety of contexts.
- **Perspective**: Student demonstrates a growing understanding of a range of individual, cultural, international, and artistic perspectives.
- **Civic Engagement**: Student demonstrates a sense of efficacy as a citizen.
- **Speaking**: Student communicates effectively with individuals and groups.

For a service project to count toward an Honors Service Certificate or toward the requirements of an Honors Program Tuition Waiver, it must contribute to the goals of the Honors Program.

In addition, the nature of the project should foster respect and exchange of ideas rather than polarization, and should not exclude other students in the Honors Program due to differences in race, creed, sexual orientation, or political affiliation. For example, religious activities involving proselytizing or lobbying or campaigning on behalf of a political organization would not count.

Also, students cannot earn Honors service hours for projects for which they are otherwise compensated. Service performed for course credit, money, or to fulfill the requirement of a non-Honors organization cannot count for Honors service hours.

If you would like to suggest a project for consideration, please complete the Service Project Proposal Form and return it to the Honors Office (Robertson 7). **Proposals must be submitted at least one month prior for group projects, and at least two weeks prior for individual projects.**
Student Name ____________________________ Date Submitted __________
Email Address ____________________________ Date of Event __________
Name of Event __________________________________________
Sponsoring Organization __________________________________________
Is the Organization a Non-Profit? __________________________________
Organization Contact Person _______________________________________
Describe the Proposed Service ______________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
Describe the Proposed Learning Component (preparation and/or reflection activities)
____________________________________________________________________
____________________________________________________________________
Project Type: GROUP or INDIVIDUAL   Approx. # of Participants Needed ______
Anticipated Number of Hours Needed From Each Participant ______________
Are you in any way being compensated for this project? (including, but not limited to, course
credit, finances, fulfillment of requirement for non-Honors organization) ______
____________________________________________________________________
____________________________________________________________________

On a separate sheet, address the following issues:
What learning comes out of the project? Specifically, how does this project advance the goals
of the Honors Program?

Proposals must be submitted to the Honors Office at least one month prior for group
projects, and at least two weeks prior for individual projects.

TO BE COMPLETED BY HPSO SERVICE LEARNING SUBCOMMITTEE
Interested in coordinating an Honors Service Project? Here are the steps:

- All projects must be approved by the Honors Program. If your project has not already been approved, you will need to follow this process. First you may discuss your idea with Robin David, who coordinates service projects for Honors. Next, propose your project to the Service Learning Committee of Honors Program Student Organization (HPSO). The Committee meets twice a month to review proposals. To propose a project, submit the Service Project Proposal Form to the Honors Office at least a month before the event for a group project, and at least two weeks before the event for an individual project. See Service Project Proposal Guidelines and Form for details.

- Develop the educational component. Each project must include preparation and/or reflection. Consider any training or education students might benefit from before participating in a project. This might include bringing in a guest speaker or showing a film. You can work with Robin on developing some preparation activities for students.

- Once the project is approved, fill out a signup sheet and put it in the red binder in the Honors Office (Room 7). Be sure to include all information participants will need to know.

- Your next step is to recruit volunteers. Draft a detailed email about the project and submit it to honors@und.edu. Be sure to include your email address in the text of the message. We will then send the message out over the Honors listserv. You might also want to post signs at Honors and personally encourage students to participate.

- Serve as a contact person about the project for interested students. Include good contact information on the signup sheet, and respond quickly to students’ questions.

- Contact volunteers shortly before the event to remind them of all essential information.

- Have a sign-in sheet at the event. Please use the Honors Service Project Sign-In Sheet, available in the Honors Office or online. If you are not able to monitor sign-in, make arrangements to ensure that a responsible party will be doing so.

- After the event, lead a reflection session for the volunteers, possibly drawing upon the Reflection Session sample questions (see back) and/or a Peer Service Mentor for ideas.

- Total the hours and email each participant to confirm that her/his totals are correct.

- Submit the hour totals to the Honors Office within one week of the event. Be sure to include your own hours spent planning and coordinating the event.
In order to make meaning out of their service, students need some context through which to process their service experience. A reflection session following the project is one way to do that. You can use some of these questions to generate critical discussion amongst the participants.

REFLECT:
Why did you decide to get involved with this project? Why does the issue matter to you?

What were your pre-service assumptions about this issue? How was this experience similar to or different from your assumptions?

What questions did this experience generate for you? What would you like to learn more about regarding this topic?

How does this project relate to issues you’re exploring in a classroom setting? Does it reinforce those ideas or complicate them?

EVALUATE:
What are the root causes of this situation? How should those causes be addressed? Did this project address them?

How much good do you feel this project accomplished for the people you are serving? What are the project’s limitations?

What further work needs to be done on this issue? Do you have any ideas for solutions?

Did this project advance the Honors Program Goals? (Thinking, Scholarly Inquiry, Perspective, Civic Engagement, Writing, and Speaking) How? In what was could it have done better?

Do you think this project advance human rights? Which ones, and in what ways?
**Personal Service Hour Log**

Name

---

Semester __________  Year _______  Major/s __________________________

All projects should involve at least one preparation or reflection activity. Remember to attach official verification of your hours for all individual projects.

<table>
<thead>
<tr>
<th>Stage of Service</th>
<th>Date</th>
<th>Total Hours</th>
<th>Organization Name</th>
<th>Project/Event Name</th>
<th>Description of Work Performed</th>
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Attach a 3-page critical analysis of your work. See Service Learning Critical Analysis Guidelines for more information.

Submit to the Honors Program Office by noon on Reading and Review Day.
Providing service to others is commendable, but the action alone is incomplete. To genuinely learn from an experience, to derive meaning from it, one must also reflect on it. As service learning is part of our educational mission at the Honors Program, we ask you to ponder the issues brought up by your involvement through the process of critical analysis.

In our assigned service reading for the year, the United Nations presents the Universal Declaration of Human Rights as “a common standard of achievement for all peoples and all nations, to the end that every individual and every organ of society, keeping this Declaration constantly in mind, shall strive by teaching and education to promote respect for these rights and freedoms and by progressive measures, national and international, to secure their universal and effective recognition and observance.” With this in mind, ponder some of the following questions:

- Did your projects this semester advance human rights? Which articles of the declaration did they address? What further work needs to be done on the issues your project tackled?
- If your projects didn’t really promote human rights, were they still valuable? How important is it that our work be human rights work?
- How would you define human rights? What issues regarding human rights are you struggling with because of your service experience? Would you add or remove anything from the declaration? Do you find the document useful?

Please use direct quotes from the declaration. You can access it on the web by entering the title into a search engine, or you can download it from the Honors website. Your paper can concentrate on the most significant projects, but be sure you do touch on all of the projects you were involved with.

Your critical analysis should be at least 3 pages in length, and must be attached to the Personal Service Hour Log. Submit the log and critical analysis to the Honors Program Office no later than noon on Reading and Review Day.

Students wishing to earn an Honors Service Certificate must complete 30 service hours and turn in a critical analysis at the end of the academic year. Honors Tuition Waiver recipients must complete 12 service hours and turn in a critical analysis at the end of each semester.
No single project (or service analysis) is going to demonstrate each of the following qualities. Instead, we hope to see students making general progress in their service over their four years in Honors. The data on this sheet is not used to track students individually, but to compile assessment data on our service learning program in the aggregate.

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<th>Semester in Honors</th>
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**SERVICE**

- **Draws upon specialized skills.**
  - Comments:

- **Addresses social concerns at structural level.**
  - Comments:

- **Serves in a leadership capacity.**
  - Comments:

- **Breadth, depth approp. for grade level.**
  - (Service is indicative of what year?)
  - Comments:

**SERVICE ANALYSIS**

- **Learned from the experience.**
  - Comments:

- **Connects service to trad. education.**
  - Comments:

- **Critiques project’s effectiveness.**
  - Comments:

- **Struggles with larger social issues.**
  - Comments:

- **Considers better ways to serve in the future.**
  - Comments:

**Overall Comments/Recommendations:**

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ABSTRACT: Online content quizzes were developed to encourage students to keep up with reading, to learn basic facts on their own, and thereby freeing up class time for active learning and encouraging higher-order thinking. Content quizzes were administered over Blackboard BEFORE the material tested in the quiz was covered in class. This rewarded students for reading their textbooks, encouraged students to not fall behind on their reading, and provided me with timely feedback on what students did or didn’t understand from their textbook. This feedback ultimately allowed me to spend less time on material that the class had learned from their textbooks and more time on active learning. Additionally, the content quizzes provided a pre-test, post-test type assessment tool.

Teaching and Learning Strategy:

I use weekly on-line content quizzes administered through Blackboard both to encourage and to reward students for reading the assigned reading from the course textbook. In my course, Biology 332 General Ecology, students take weekly on-line quizzes on material that has NOT yet been covered in class. To be able to answer these questions students must keep up with the assigned reading in the text-book. Indeed, since the material has not been covered in class the students can only answer the questions if they have kept up with their reading.

There is a content quiz every week and they are available for the students to take when it fits their schedule over a three to four day period. All content quizzes are announced in class and announcements are posted on Blackboard. Students have an unlimited amount of time to take the quiz but can only take the quiz once. Quizzes consisted of seven to fifteen multiple-choice questions.

To prepare students for the content quizzes, they are described in the syllabus and discussed during the first class meeting. I stress to them that the content quizzes cover material from their assigned readings BEFORE the material is covered in class, that the quizzes are only available for a three to four day window of time and after that they won’t be able to take the quiz and that they will have to take the quizzes through Blackboard. I then provided the opportunity for students to ask questions about the content quizzes.

To support the students taking the quizzes throughout the semester I post the schedule of assigned readings on Blackboard and in the syllabus. This gives students a clear idea of what they should be reading and, hence, what will be covered on each content quiz. Since my assigned readings are full chapters, of which some information may be less important, I also post reading questions that help students see what they should be learning from the assigned reading.

The content quiz questions are all multiple-choice and based directly on the assigned reading in the textbook. The content quiz questions focus on basic knowledge (sensu Bloom 1956) such as
definitions, simple ideas, and basic relationships. Typical questions ask students to choose the appropriate definition for a key term in the chapter, choose the best description of an important idea in the chapter, choose the correct relationship between two basic terms or put a sequence of events in the correct order.

Since the quizzes are offered on-line no class time is used. Additionally, the on-line quizzes are machine graded allowing for instant feed-back. I’ve set up Blackboard to provide the students with the number of questions correct at the end of the quiz and I then post the correct answers later. Though instant feedback would be beneficial to the students I want to avoid answers being shared with students who have yet to take the quiz. To encourage students to take the content quizzes seriously they are worth a portion of the grade (I have varied this between 10 and 15% of the course grade).

**Development of the Strategy:**

BIOL 332 *General Ecology* is a large, lecture based course required of all Biology majors. In many ways it is like an upper level survey course, in that this is the first course in Ecology that students will take after the Biology introductory sequence. For many students this is the only Ecology course that they take, since 90-95% of the Biology majors in the course at any one time are hoping to go into a medical or allied health profession. Due to these circumstances *General Ecology* needs to cover a large amount of material.

When I first started teaching *General Ecology* this situation was problematic for two reasons. 1) I wanted to have the course address higher-level understanding (Bissel & Lemmons 2006, Zohar et al 2006) and use active learning approaches (Ebert-May et al 1997). Adopting these pedagogical approaches leaves less time for covering material in lecture. 2) Due to the amount of material covered, students were asked to read a fair amount from the text book (1-2 chapters per week). Left to schedule their own reading many would read after class instead of before, eventually would fall behind and never catch up with the reading. Such a pattern has been reported in other large, introductory classes (Physics – Podolefsky & Finkelstein 2006, Psychology – Clump et al 2004). In *General Ecology*, as more and more students fell behind in their reading more and more students were less and less prepared for class and therefore less and less able to meaningfully participate in active learning activities or engage higher level learning in the course. I was finding that my pedagogical goals were being undercut by my students approach to assigned readings.

I needed a way to encourage timely student reading and preparation for lecture. At the same time, I was interested in using Blackboard for conducting quizzes outside of class time. This led me to the idea of a content quiz – a weekly, electronic quiz that asks questions about basic facts and definitions from the assigned reading for the upcoming week. The content quizzes would address a number of my concerns stemming from students not keeping up with the assigned reading. First, the weekly quizzes would break up the task of reading the textbook into smaller, weekly goals (1 or 2 chapters read before doing the quiz) – which can help motivate college students (Davis 1993). Second, the students are motivated to read carefully as they know they will be assessed on how well they learned the content in the chapter. Third, since the quizzes are graded by the Blackboard software I had continual feedback on what material the students had learned from their reading and what they had misunderstood. This meant I could focus any lecturing I did in class on those topics the students needed me to clarify and not waste time on material most of the class had grasped from the readings. This freed up class time for active learning activities and discussions that used higher order thinking.
Finally, I needed to motivate students to take the quizzes. I reasoned that students tended to expect some sort of grade for the “important” things in a class so I made the quizzes were worth a small part of the course grade (10-15%). So if a student kept up with their reading, read well and carefully and did well on the quiz then they could be rewarded with a good grade in that portion of the course grade.

**Intended Student Learning Outcomes and Assessment:**

The primary learning outcome I was hoping for from the content quizzes was for students to learn course content from the assigned reading. As the content quizzes were graded in Blackboard I had instant feedback on how well the students had learned the content from the assigned readings. Students generally learned content successfully from the assigned readings – for most questions >85% of students would chose the correct answer. For those questions that students did not do well on I could use the feedback from Blackboard to focus classroom time on correcting misunderstandings or clarifying confusions.

The secondary goal of using the content quizzes was to teach students how to keep up with reading. I am convinced that content quizzes encouraged timely student reading because many, many students commented on the quizzes in their student course evaluations, often expressing how the quizzes helped them keep up with the assigned reading. Furthermore, students identified the content quizzes as helpful during a mid-term, second party course evaluation the year that content quizzes were first implemented. I have followed up on this with a number of anonymous Blackboard surveys asking students specifically to provide feedback on content quizzes. Students were generally enthusiastic about the quizzes, identified them as being helpful with keeping up with reading assignments, and suggested they should be offered in subsequent years.

Another secondary goal was to free up more class time for active learning and higher-order thinking. This has been the case since I initiated the content quizzes. By lecturing only on topics that the class did not do well on in the content quiz for that week I have more time for the active learning that I have been incorporating into General Ecology. Since the addition of the content quizzes I have been able to increase the amount of active learning exercises by about 20%.

An unexpected benefit of adding content quizzes to General Ecology is they provide a new avenue for assessment of student learning. I can use some of the questions that were poorly done on the content quizzes on the regular in-class exams to assess student learning in a pre-test, post-test design. This has proven valuable for considering the impact of the more active learning approaches that I have brought into the classroom.

**The Strategy’s Applicability:**

I believe this could be a very robust approach to encouraging student reading and preparation for class. Furthermore, modern pedagogical best practices often require class time that was traditionally devoted to transmitting facts and hence the learning of content is shifted to students outside of class. Content quizzes seem to be a way to ensure that the facts are acquired before class or if not acquired can be addressed in a focused, efficient way in class.
Content quizzes are quite flexible as the level of question can be adjusted to the level of student (freshman vs. graduate) or the goals of the instructor (basic facts vs. synthesis). I think this robustness of the strategy makes content quizzes potentially useful in different classes across the university. As long as an instructor can write a weekly quiz of appropriate multiple choice questions for the course level and goals and administer it over Blackboard the content quiz tool should be adaptable to that particular course.

There were two main challenges that I faced that those considering adopting content quizzes should be aware of. First, they work best if conducted in a course delivery system like Blackboard that allows for asynchronous test taking and machine grading of student answers. This allows students to take the quizzes outside of class and for the instructor to receive timely feedback from the quizzes. This will require both the instructor and the students to get comfortable giving or taking, respectively, on-line quizzes. Furthermore, you should have a back-up system for students that start the quiz but have an issue with Blackboard (lost internet connection etc.) that can cause the quiz to lock-up through no fault of the student. I simply provided a paper version of the quiz to students and asked them to return it by the next class. In my experience there were usually no more than 1 or 2 occurrences per quiz. Second, the content quizzes require multiple choice questions which can be difficult to write well (Walvoord & Anderson 1998). My suggestions would be to leave plenty of time to write questions based off the assigned reading, avoid using multiple choice questions provided by the textbook publisher as they tend to be poorly written and focus on minutia instead of important content and revisit your questions continually to see how they can be improved. Over time I have developed a pool of well written multiple choice questions from which I construct my content quizzes.

Despite these concerns, I have found using content quizzes to be a highly successful way to encourage student reading and preparation for class thus freeing up more class time for active-learning exercises.

References:


How to Manage Interactive and Feedback Strategies in “Mass” Classes

Wendelin Hume
Department of Criminal Justice

ABSTRACT: These strategies are a collection of techniques to use in larger classes to encourage interaction and feedback with students despite the large number of them. Often instructors feel they are forced to "lecture and test" only (and maybe use clickers) because to do anything else would be an overwhelming amount of work. While it is work to do more it is not "overwhelming" or "impossible" and I will share my strategies concerning how this can be done. One such strategy is the use of graduate and undergraduate teaching assistants. I will share outlines of my contracts that I have developed to guide working with the different levels of TA's. I will also share strategies of how work can be divided and still appropriately monitored. I will share suggestions of shortcuts that can be used when grading writing assignments and essay answers and offering feedback to hundreds of students at multiple times throughout the semester. I also will outline how creative thinking, technological competence, and cultural awareness activities can be encouraged, monitored and even reflected in the grades of students if desired. It is even possible to have limited group discussions in class with hundreds of people at once if certain guidelines are followed by the instructor. Overall, the theme is how one can encourage interaction with and between students in large classes - interaction which encourages a deeper engagement with and learning of material and skills.

Teaching and Learning Strategies:

GTA/UTA Contracts

One useful strategy to be able to do more than “lecture and test” in mass classes is to divide the work. While Graduate Teaching Assistants can be very helpful, Undergraduate Teaching Assistants can be just as helpful and they are often seemingly more approachable and better able to relate to their peers. While GTA’s work for their stipend and other intrinsic motivations, the undergraduates typically are not paid but they are instead allowed to earn credit for their efforts. Without the implied contractual obligation of a paycheck I think it is important to be able to control the actions of the UTA’s with oversight of a pending grade. I also write up contracts for all of my TA’s whether graduate or undergraduate so expectations are clear and there is an important layer of acknowledged and signed accountability. A sample of my contract which the student and I sign is below:
To: Name of Student TA
From: Name of Instructor
Re: UTA Responsibilities – name and semester of class (ex: CJS 201 Summer 2008)
Date:

Welcome! I look forward to working with you this semester. I assume that you may have questions regarding your role and responsibilities as an undergraduate TA, so I will attempt to outline your role in this memo. If you have any further questions at any time, do not hesitate to ask. Making any class run smoothly and well takes a team effort. Welcome to the team!

UTA Responsibilities:

We will meet at least twice a week in my office or after class to discuss the class and any related issues. (time to be arranged). We will also meet briefly before each class to address immediate class concerns.

You should attend the class itself as often as possible. This is a good time to make announcements or clarifications to the class as a whole, help with the distribution and collection of assignments, keep abreast of class progress, and formulate relevant test questions.

You are encouraged to set personal office hours and keep those office hours as well as any other appointments set with students.

You need to dress and act in a professional manner when interacting with students.

Your primary duty in relation to this class relates to (insert their duties – ex: the social awareness activities). After clearance from me you should post relevant activities on the BlackBoard site and announce/explain the activities in class. After guidance from me, you should grade and record the grade of all social awareness activities. You should routinely provide me with a record of student grades. You should be uniform in the grading method and you should store the documentation in an orderly and timely fashion.

You will help me prepare and monitor all exams. You should also assist with the sorting of tests and the recording of grades if needed.

You may also be asked to proctor make-up exams.

You should be prepared to collect assignments and cancel class in an orderly fashion if my absence due to illness or professional travel requires it.

My Responsibilities: I will be available to provide direction and answer questions that arise regarding grading and other class issues. I will help you with your professional development.

I will provide you with feedback regarding your UTA performance at least twice during the semester. I will accept full responsibility for class lectures. I will accept full responsibility for test grading. I will accept primary responsibility for syllabus, assignment, and test preparation. I will provide you with the required text for class if needed. I will assist with other class related matters that may arise.

Using Blackboard

Another useful technique in dealing with the organization of communications and feedback to the students desired in any class but often particularly difficult and time consuming in a mass class is the use of the BlackBoard (BB) program available at UND for no charge to the students or the faculty. There are excellent trainings available on campus about how to use the program so I would like to share which elements of the program I have found to be most useful.

- Announcements – The BB program is able to show any announcement you wish on its home page so as soon as students log in they can be informed about a change in due date, a class cancellation, a guest speaker or whatever else you wish to inform them about. This
announcement is not only posted for all to read but it can be e-mail to all students (or only the ones you select) enrolled in the course at the same time without you having to enter any e-mail addresses. Using this function helps the students feel involved and they know what to expect. It also eliminates the need for sending individual e-mails and being bombarded by phone calls from confused students.

- Gradebook – This component of the BB program is the one most valued by the students themselves. Whether you give student work back to them or not they are able to track the progress of their points at any time. Students are often understandably concerned about their grades and this function allows them to see when things are done being graded, what their grade was and how they compared to the class average. For the instructor it is a nice spreadsheet which allows you to enter class grades quickly and to perform some limited statistical analysis on any component as well as see running totals by component or by student. Again this eliminates a lot of phone calls or confusion by students about where they stand in class in regard to their grade as they can check it 24/7.

The BB program also allows me to post assignments, share links to websites, create wiki definitions of key terms and even allow students to blog on thought questions, among other things. However, communicating with the students through the posting of useful class content and important announcements as well as having clear grade expectations which the students can track and monitor themselves are probably the most important and most student accessed (which can be monitored by the instructor if you are curious) functions of the program. It is not unusual for students to access the program in the middle of the night or on weekends when it is most convenient for them.

**Simultaneous Assessment of ES Goals and Student Work**

In conjunction with the Gradebook function of BB mentioned above it is possible to record direct assessment outcomes in relation to an Essential Studies goal for your course while grading student work. Progress toward this goal can then be monitored by the faculty and the students both in terms of their scores and the class averages. The key is to have an assignment or activity (or a repeated set of these) directly designed to measure progress toward the stated goal. The grading rubric used both assesses progress toward the goal as well as assigns any associated point values toward the class grade. For instance, I have the students read an article then write a short paper summarizing the main points of the article and creatively tying it back into something covered in lecture and something they read in their text. Each time this exercise is done it is worth a maximum of 2 points. One point for summarizing the article, .5 for creatively tying it to lecture and .5 for creatively tying it to the text. Anything over the first point is an assessment of creative thinking as well as a grade for the class.
I Don’t Care *What You Think, I Care How You Think*: Facilitating Dialogue on Difficult Issues

Steven Andrew Light
Department of Political Science & Public Administration

ABSTRACT: Fostering constructive dialogue on difficult subjects is more art than science. In my political science courses, I seek to use strategies that involve creating a comfortable, respectful, and structured classroom environment in which students, through multiple forms of learning and discussion, are asked to become well-informed and articulate their arguments based on evidence and appropriate modes of thought and discourse.

Development of the Strategies:

Inspired by the invitation to serve as a panelist at the April 24th Session of On Teaching Lunch Series as well as my experiences in assisting the General Education Task Force in developing the new Social-Cultural Diversity requirement for Essential Studies, I began to think through how it is that I encourage student dialogue in the classroom concerning very difficult, often controversial subjects, including abortion rights and the rights of women or LGBT people; Jim Crow racial segregation; minority voting rights and representation; federal Indian law and policy; limits of police discretion; U.S.-led conflicts in Iraq/Afghanistan; limits on executive power, such as executive orders on domestic wiretapping, the rights of “enemy combatants,” and the authorization of waterboarding and other extreme forms of interrogation.

The title of this project—“I Don’t Care *What You Think, I Care How You Think*”—comes from a statement that I have made many times to my classes. It sounds shocking, and contrary to the critically important goal of respecting student opinion, but the shock value is designed to get students’ attention. After doing that, I explain that although I really do care what each student thinks about these difficult issues, one of our main intellectual projects in the course will be to learn how to think about different perspectives in an informed way, and to communicate that understanding through respectful and structured dialogue.

Intended Student Learning Outcomes:

Students should come away from courses that deal with difficult topics with understanding of how to engage in constructive dialogue informed by modes of thought and discourse that allow them to make sound arguments and judgments. The idea is to help students learn across fields of study, synthesize knowledge, and ultimately, to become informed and engaged citizens.

Assessment of Student Learning:

After having been asked to articulate viewpoints and perspectives that differ from their own, and to engage with a wide range of viewpoints in multiple forms (e.g., lecture, readings, group exercises, Socratic Method, role playing, advocacy papers, hypotheticals) students have honed their critical thinking, communication, and information literacy skills, often while working with concepts of
social-cultural diversity. With clear goals and anticipated learning outcomes articulated in the syllabus and in course exercises, I am able to measure outcomes in part through the process that has occurred (i.e., the fact of student dialogue) and the substance of responses (i.e., through indirect assessment of content as well as direct assessment via UND-generated rubrics for, e.g., critical thinking, written and oral communication, and social-cultural diversity).

**The Strategies’ Applicability:**

The strategies are broadly applicable in the social sciences and humanities, and generally in courses that emphasize social-cultural diversity. They also are somewhat rooted in understanding how institutions and individuals interact. I have developed and used these strategies with all of my students, from first-year students to graduate students, with an emphasis on guiding students new to engaging with “difficult” and/or “controversial” topics. This ranges from lecture courses on American Government (100-230 students) to upper-level courses on Minority Voting Rights and Representation (24 students) and Constitutional Law and Civil Rights and Civil Liberties (40 students), to graduate-level courses on Administrative Law (20 students) and Public Personnel Administration (20 students).

**The Strategies and Concrete Examples:**

1. **Foster an Informed Perspective**
   - **Concept:** Validation of reasoned, well-supported arguments & perspectives within frameworks
   - **Example:** Readings, discussion, and group exercise on Indian gaming designed to integrate into “mainstream” courses knowledge of American Indian tribes and people
   - **Example of Critical/Radical Approach:** Power of government and law to define social-cultural identity through interdisciplinary examination of “separate but equal” doctrine

2. **Encourage Ability to Articulate Alternative Viewpoints**
   - **Concept:** “On one hand, on other hand” approach in classroom. Neither black nor white may be wholly satisfactory or clearly right or wrong. Better informs students’ own perspective
   - **Example:** Framing of issues shapes public discourse and public opinion. For instance, “pro-life” & “pro-choice” or “anti-choice” and “pro-abortion.” Or this type of question from survey research: “Are you in favor or are you opposed to….?” Equal opportunity? Policies or programs to guarantee equal opportunity? Affirmative action? Racial preferences? Racial quotas?

3. **Create Comfortable and Respectful—But Structured—Classroom Environment**
   - **Concept:** List learning goals & ground rules for course, and desired learning outcomes for each individual learning exercise; be sensitive to different constituencies, whether present in classroom or not
   - **Examples:** Sample guidelines for course and specific exercises: Will be controversial topics; don’t leave opinions at door, but must be informed opinions; tolerance & respect

4. **Mix It Up to Provide Different Environments in Which Student Opinions Can Be Heard**
   - **Concept:** Teach to involve students through range of techniques. Student discussion and learning through discussion with me, whole class, each other, online, outside of class
• **Examples:** Even in big lecture class, ask for discussion; use small-group exercises; provide wide range of role-playing opportunities; Socratic Method in constitutional law; small-group exercises with student “reporters” who e-mail report to me, which I then post online; ask students to come to office to view peer-written “model answers”

5. **Be Transparent**

• **Concept:** Transparency fosters student buy-in, the key to dialogue and learning outcomes; goals and learning outcomes in syllabus, daily, group exercises, etc.; consistently demonstrate connections to course & discipline so students see they are learning methodologies and analysis rooted in their field of study

• **Example:** Group Exercise on Voting Rights Act and Representation

  Exercise Objectives: Develop your understanding of (1) the logic of minority political representation post-VRA; (2) institutional or structural discrimination; (3) the method of case study research to inform understanding of how social scientists approach description and explanation of social phenomena (and also help you to write your capstone paper)
Students Helping Students: Experiential and Service Learning

Leslie Martin & Elizabeth Bjerke
Department of Aviation

ABSTRACT: The strategies involved include both experiential and service learning. Students enrolled in the capstone courses are required to manage the Aerospace Learning Center which is staffed by volunteer instructor students and serves as a tutor lab for students enrolled in earlier flight courses. Through the management functions of running a successful learning center, the students learn how to effectively communicate, organize materials and manage people. Since this entire learning center is staffed and managed by volunteers, the students also learn the valuable lesson of giving back to their community of aspiring aviation professionals.

Teaching and Learning Strategy:

The main pedagogical strategy being implemented successfully in this course is experiential learning, coupled with service learning. In this year long capstone course senior students in our Flight Education (FE) major experience the elements related to managing and leading the Aerospace Learning Center. The Aerospace Learning Center is a drop in tutoring area for students in aviation classes. Students in the beginning flight courses can utilize the learning center by getting free one on one tutoring from upperclassman students enrolled in the flight instructor courses. The learning center is staffed by an average of 70 volunteer tutors, and open for nearly 60 hours a week. The learning center has served as a valuable asset to our students in our aviation community. Since all the tutors and managers are strictly volunteer, it serves as a good example of service learning.

Development of the Strategy:

The inspiration behind creating the experiential learning component of these FE capstone courses came through assessment data generated from all levels of our aviation program. The benefits of peer to peer tutoring are two fold. Through assessment it was found that students in our beginning flight courses struggle to understand all of the technical subject matter required to be learned. It was also found that students in our instructor courses were also weak on how to teach technical subject areas to others. We felt that by creating an Aerospace Learning Center where instructor students could gain the experience and confidence in teaching real students with real questions, and students in the beginning flight courses could benefit by getting free one on one tutoring on these technical subject areas all of the students would benefit.

Initially the lab was managed by ourselves. However, in the process of rewriting our curriculum for the B.S in Flight Education we felt that the experience of managing an aviation related learning center would greatly enhance our student’s experiences.

In Aviation 490 and 491, the FE students are empowered to manage and lead the learning center. In the beginning of each semester the FE students are responsible for recruiting volunteer tutors by going to each of the flight instructor classes and giving a presentation about the benefits of tutoring.
Once the volunteers are identified the FE students make the schedule, train the tutors on the flight training device and market the learning center to students in earlier flight courses.

To aid in the logistics behind managing the lab, each FE student chooses a specific job for the semester that they will be their responsibility. As instructors for the capstone courses we assure that there is equal number of job assignments as per student enrolled in the class. The following are the job titles and descriptions used:

- **Resource Material Manager:** Helps develop and update stage check evaluation binders. Ensures that books and materials are current and present in the lab. Helps develop new resources to be used by the tutors with the students.
- **Website Manager:** Creates and maintain both the Aerospace learning Center website, as well as the CFI and CFII tutor site. Keeps both websites up to date with hours of operations, schedules and contact information. Monitors and corrects postings to the ‘Ask a CFI’ forum to assure that accurate information is displayed.
- **Scheduler:** Creates and maintains the schedule of tutors to assure that adequate lab coverage exists. Place the weekly sign up sheets in the tutor lab binder for tracking purposes. Fill open slots so that the tour lab can remain open throughout the whole day.
- **Information Tracker:** Keep track of the most current list of CFI tutors and share that list the appropriate persons. Track the hours worked, students tutored and flights conducted in the Mentor weekly. Keep an updated status sheet available for reference. Work with the scheduler to determine inactive tutors.
- **Frasca Mentor Manager:** Develop the standardization protocol to be followed for all Mentor stand rides with tours. Schedule and assign mentor stand rides with all tutors. Help promote the use of the Mentor device to all ground schools. Oversee the scheduling and invoicing of the device.
- **Marketer:** Market the learning center to all aviation students. Create brochures and signs to place throughout Odegard Hall that emphasizes the benefits of the learning center. Send out emails to faculty members emphasizing the importance of the center.

Along with having a specific job in which they are responsible for, the FE students also have to devote at least one hour a week in the learning center as their posted office hour.

We feel this is also a valuable service to our aviation community in that students can receive free one on one tutoring, as well as free time flying an excellent flight training device. The center is staffed and managed by 100% student volunteers. This is a great example of instilling citizenship among our students.

**Intended Student Learning Outcomes:**

Through this experience of running a learning center, the students are exposed to many real-life situations that cannot be learned in a classroom setting. First and foremost they learn how to effectively manage others. This is done through both face to face scheduled meetings with the volunteer tutors, as well as electronically through email and online forums. There are two websites in which the FE students must maintain. One is for all aviation students and serves as a marketing mechanism for the learning center, and the other is just for the volunteer tutors. The website used for the tutors is how a lot of information is disseminated from the FE students to the tutors.
The FE students also are gain invaluable experience on how to train individuals. The Aerospace Learning Center recently acquired a flight training device (computer operated mock aircraft) that students can use with a tutor for no cost. It is the responsibility of the FE students to train and standardize all tutors on how to operate and effectively teach in this device. As a result of this experiential and service learning our students are learning what it takes to manage and lead others. They should also be able to improve on their organizational and communication skills throughout this experience. All of the students in these two capstone courses, regardless of what job responsibility they have, should be able to share in these experiences.

- **Manage people:** Oversee schedules – their own and others, have to communicate clearly, need to assign tasks.
- **Organizational skills:** Schedule standardization rides, classroom visits throughout the semester, make good use of their office hour, schedule semester evaluations with each of the tutors.
- **Communication skills:** Written skills to include numerous emails: to students about the learning center, to instructor students about the work in the center, to professors about new things in the center and emails to the other FE students about the goings on in the learning center, articles written for the aviation newsletter the Takeoff. Oral skills – go into the classrooms and promote the learning center, going into the instructor courses and recruiting tutors, holding semester evaluations discussing the tutors work for the semester, discussing issues with us the FE professors.

**Assessment of Student Learning:**

We are able to measure this learning through numerous methods. Some of the more tangible measurements are the marketing products, schedules and tracking sheets. The marketing products include posters promoting various aspects of the center spread throughout the aviation classrooms and Aerospace Learning Center as well as articles being submitted to the Takeoff. The schedule is a continuous project for a task such as this. Students schedules change throughout the semester and the center needs to be staffed so it takes a lot of coordination to make the schedule for so many people work. By having the center staffed and tutor shifts being covered, shows that both the scheduler and the other FE students are doing their jobs. Weekly updates about the use of the center shows that both the Information Tracker and Frasco Mentor Manager are also working effectively. Also by getting updates on the materials that the center needs and seeing changes to the website are sources of managerial growth.

The less tangible measurement tools are classroom discussions, mid-semester evaluation, reflection papers, and the implementation of new ideas. We hold class twice a week for 50 minutes since Aviation 490 and 491 are both 2 credit classes. It is not uncommon for us to discuss the issues of the Aerospace Learning Center for 20-30 minutes. Throughout these discussions they are not only bringing forth issues/concerns that they are seeing but they are often bringing possible solutions. If we all agree to the solution we discuss how to implement it giving various duties to whose ever job responsibility it falls under. They are normally very quick to rectify the situation that has been identified. We will use the next class session to discuss how the situation was handled and bring up any new issues facing the center.

Mid-semester evaluations are conducted with the Aerospace Learning Center tutors. During these evaluations the FE students are discovering how the tutors perceive the happenings in the learning
center on a daily basis. This gives the FE students insights into how to make improvements in the learning center. The FE students then share the information with the class and we discuss the tutors comments and implement suggestions for improvements.

The last requirement for Aviation 490 and 491 is to write up a reflection paper on what they learned throughout the semester and to relate it to how it will better them in their future endeavors. Due to the class sizes we get to know our students very well, so the information shared through these papers is very truthful. Because of this honesty we feel comfortable using this information for future ideas in the courses.

Here are some comments from this semesters students on their experiences in managing the Aerospace Learning Center:

- After managing the tutor lab for the last two semesters I have witnessed the benefit of a free educational service. It has been my responsibility to help track student attendance and simulator usage. Since the last semester I have noticed that attendance has increased and the tutor lab is being utilized more often. I believe that this free service is a valuable asset to the students as well as the aspiring instructors that volunteer their time.
- I will take with me a better understanding for the amount of work required to operate something that to the outside observer seems to be a small operation.
- I am glad to work in the Aerospace Learning Center it gives me a great satisfaction that I have helped another student to do better at what they enjoy.
- This did strengthen my leadership abilities as in making sure the tutors were there when scheduled as well as filling in to tutor students when no one was available.
- Working as the scheduling manager in the tutor lab has taught me a lot about people management. Email is definitely an efficient way to contact a lot of people all at once, but people don't always necessarily feel the need to respond. I found that if I emailed somebody specifically instead of the mailing list, I got much better responses. It was a good experience to learn various ways to contact people and the best way to get responses in a timely manner.

As you can see from their comments they learned how to adapt to the needs of the learning center. These needs often fell outside of their specific job responsibility but they dealt with things as a manager should and got the issues resolved.

The Strategy’s Applicability:

We feel that this strategy could be used in all disciplines. Since the Learning Center is staffed by volunteer tutors and managed by senior FE students there is no departmental fiscal responsibility to assure its success. Underclassmen benefit by having knowledgeable tutors to go to with questions, and the upperclassmen students benefit by gaining practical experience in teaching. Most importantly, the FE students learn how to manage and lead a group through real life situations.

Although we feel that this learning experience is tremendous for our students, if must be stated that there are a few difficult issues to deal with. As the faculty advisor for the learning center, and the professor of the capstone course we have to often remember our role as just that ‘the advisor’. Part of the learning for the student managers comes with the experience of dealing with conflicts, or no-shows in the learning center. We often have the urge to do perhaps more than we should in situations. Sometimes external pressures placed on the center forget that the learning center is staffed by
volunteer students. There will be times when tutors fail to show up for their scheduled time slot, and the lab remains closed.

We encourage every discipline to think outside of the box, and outside of your classes to develop and implement strategies that help connect students and give them valuable experience in and out of the classroom. Our Aerospace Learning Center has been successfully running for over seven years, and has operated without using departmental funds.
ABSTRACT: Auto-referentiality in art occurs when the work of art chooses itself as its central subject. Common examples of auto-referential art forms include a painting within a painting, a play within a play, a film within a film, or a novel about writing a novel, etc. Auto-referential task-based learning occurs when students are given assignments in which they are asked to create and / or reproduce one or more of the art forms or cultural objects studied during the course. In order to better understand autobiography, fiction, and films of the French-speaking world, students in French 372 were asked to complete four auto-referential writing assignments. These four assignments included writing: 1. a fragment of their own autobiography, 2. the biography of another individual, 3. a short work of autobiographical fiction, and 4. the description of a film they would like to produce and direct. In order to complete these four assignments, students temporarily assume and play the role of an author, writer, journalist, autobiographer, biographer, and filmmaker. Assignments 1 and 3 have a double-layer of auto-referentiality since the Self (the student) is the central subject of the art form or the finished product.

Teaching and Learning Strategy:

French 372 is a course that focuses on both fictional and autobiographical novels and films created by French-speaking artists from Algeria, Cameroon, Guadeloupe, Martinique, France, and the former French Indochina. The new approach to autobiography and film asks students to complete four writing assignments throughout the semester:

Assignment 1: Write an autobiographical fragment
Assignment 2: Write the short biography of another person (interview(s) required)
Assignment 3: Write a short work of autobiographical fiction
Assignment 4: Create a scenario for a film

The ultimate goal is to help students better understand the key differences between the many sub-genres of life-writing.

Origins and Inspiration

My primary area of research is the study of autobiographical texts and films created by women throughout the French-speaking (Francophone) world. I am particularly concerned with the limits and boundaries of autobiographies and documentaries produced by women who speak French. The
genre referred to as "life-writing" is vast and includes many different forms such as travel literature, letters, diaries, memoirs, fictional autobiographies, etc. Several of the literature and film courses that I have developed over the past five years have focused on the nature, characteristics, and limits of life-narratives, fiction, as well as texts and films that share characteristics of both modes.

When I first began teaching courses on autobiography and film, I asked students to write "traditional" papers in which they would develop a thoughtful argument and analysis of one or more of the texts or films from the syllabus. However, I was not entirely satisfied with the content of these papers. Furthermore, I found that it was difficult to teach students the difference between a traditional autobiography and a work of autobiographical fiction. As a result, I wanted to develop a more innovative, meaningful, and dynamic approach to teaching students about the diversity and complexity of autobiographical expression. This need to find a more effective approach to autobiography and film resulted in the genesis of this new series of writing assignments.

**Staged Implementation**

As outlined in section I, this new approach does have a staged implementation. The assignments require students to create three genres of life-writing which include the "traditional" autobiography, a biography, and a work of autobiographical fiction. In the fourth and last stage, students are asked to imagine a scenario for a film. For this last task, the camera and the screen replace pen and paper as life narratives shift from page to screen.

**Anticipated Results**

After completing all four assignments, students have a much better understanding of the differences between an autobiography, a biography, and a work of autobiographical fiction. As a result they have an "insider's point of view" in relation to each sub-genre of life-writing. In addition, they are better equipped to read autobiographies from a critical standpoint. By putting the students "in the driver's seat" they ultimately become much more aware of the thought process and decisions that autobiographers must consider when writing their life narratives. In order to accomplish this task, students are faced with many of the same difficult questions and decisions: (Where do I start? What do I include? Should I tell everything or should some information be censored? Am I remembering events accurately? Should I write about my inner, emotional world or should I focus on the more public, visual, and outward aspects of my life? Who will be my target audience? Will I be embarrassed or will I embarrass or hurt anyone else through my writing? What about the form: should the narrative be chronological and linear or would some other narrative form be more appropriate?)

Similarly, when writing the biography of another individual, students must answer many of the same questions listed above. In addition, the student, in a journalistic fashion, has to interview another individual in order to obtain information. When writing the work of autobiographical fiction, students must identify the differences between this writing assignment and the first assignment. The fourth paper asks students to role-play as a cinematographer. In order to complete this final assignment they must consider the many decisions that a filmmaker makes when creating a film: What are the
differences and similarities between autobiographical writing and autobiographical cinema. What is the relationship between the filmmaker and the central subject(s) of the film? Who is the target audience? What is the relationship between film, autobiography, and literacy?

Unanticipated Results and Outcomes

After reading and grading all of the papers from assignment one, I wanted to find a way for the students to read the autobiographies of their peers. In addition, as a scholar of autobiography, I was curious to see if the aggregate of these twelve autobiographies could give insight into the culture, heritage, mentality, and daily lives of students at the University of North Dakota. With the permission of all students in the class, the twelve autobiographies were "published" for use within our class. As the volume's "editor", it was my task to merge the twelve individual narratives into one collective work. The title of the volume is *Nodak Memoirs and True Tales: A Collection of Autobiographical Writings from The University of North Dakota*. Each student was given a copy of the collective work and asked to read it in its entirety. We discussed the outcome of the project as a group. The students very much enjoyed reading the narratives of their classmates. In the future, I would like to find a way to share the collective writings with other members of our campus community.

I would also like to add that this is perhaps the only instance when students have started the paper days / weeks in advance of the actual due date and turned in final papers much longer than the required length! Students also reported that they "had fun" completing the assignments. In addition, they reported that they learned a great deal about the individual interviewed for the biography assignment. Many students shared their final papers with friends and family members.

Learning and Assessment

Assessment is a key component of the work that we perform as educators. Successful assessment has several characteristics: Assessment should be valid, reliable, actionable, efficient, and engaging. With this in mind, I used both direct and indirect assessment methods in order to measure how much learning occurred as a result of these four assignments.

Methods of Direct Assessment:

- Each assignment was evaluated with a detailed rubric tailored to the assignment goals and guidelines

Methods of Indirect Assessment:

- Students completed the standard UND course evaluations
- Students evaluated the usefulness of the assignments based on a survey that I wrote in order to assess learning (see Appendix)
Applicability

Although this strategy was developed for a literature and film course within the Humanities, the core elements of the approach could be adapted and applied across other disciplines such as journalism, psychology, sociology, music, and history to name just a few. The key to this approach is the active role that the student plays in relation to the specific object of study. In the case of French 372, the students became autobiographers in order to learn about the genre first hand. Rather than passively studying a variety of primary and secondary texts, they created their own autobiographical narrative.

Campus Resources

The following offices and resources may be helpful to other scholars who wish to duplicate this assignment:

Office of Research Development and Compliance

Chester Fritz Library

CILT

Duplication Services

Blackboard
# Nodak Memoirs and True Tales

*A Collection of Autobiographical Writings from*

*The University of North Dakota*

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French 372 Course Survey

1 = not at all, lowest rating        5 = average rating        10 = exceptional, highest rating

**Question 1:** Please rate how well the course achieved its goal of teaching students about the autobiographical genre and life-narratives:

1  2  3  4  5  6  7  8  9  10

Comments:

**Question 2:** Please rate how well the course achieved its goal of teaching students about the colonial and postcolonial periods especially within the context of the French colonial empire:

1  2  3  4  5  6  7  8  9  10

Comments:

**Question 3:** Please rate how well the course achieved its goal of teaching students about the literatures and films of the French-speaking (Francophone) world:

1  2  3  4  5  6  7  8  9  10

Comments:

**Question 4:** Please rate the degree to which the task of writing your own autobiography aided in your understanding of a "standard" autobiography:
Question 5: Please rate the degree to which the task of writing the biography of another individual aided in your understanding of the genre itself:

1  2  3  4  5  6  7  8  9  10

Comments:

Question 6: Please rate the degree to which the task of writing a short work of autobiographical fiction helped you understand the difference between a "traditional" autobiography and autobiographical fiction:

1  2  3  4  5  6  7  8  9  10

Comments:

Question 7: Please rate the degree to which the task of keeping a semester-long, weekly journal helped with your overall understanding of and interaction with the films and novels studied during the course:

1  2  3  4  5  6  7  8  9  10

Comments:

_____________________________________________________________________________

Please use the space below to write any additional comments about the material studied and presented throughout the semester in French 372.
FRENCH 372 Paper 1 Guidelines

For your first paper you will write your own autobiographical narrative! As we have already seen in the novels that we have studied thus far, autobiographical writing exists in many forms and styles.

Some things to consider:

- Who is the target audience or the intended reader?
- Do you have an obligation to entertain or please the reader?
- Keeping in mind the role of memory and forgetting, how will you piece together events from your past? (will you talk with others, look at family photo albums, read a diary, etc).
- Where will you start? Will you give an overview of your life or will you focus on one specific event, day, or moment in time? What will you include?
- Are there some things not worth writing about? Are there events or moments that are too painful to write about?
- Are there events that you will leave out because they are embarrassing, private, graphic, or perhaps hurtful to friends or people in your family?
- Will you employ first, second, or third person narration or a combination?
- Will you change some of the names of individuals in your narrative?
- Will the narration be linear and chronological, circular, or in flashbacks?
- How truthful will you be? What is the role of fiction in this autobiographical text?
- Will you use humor in order to relate the events of your life?
- What language(s) will you write in?

Format:

Your paper will be typed in 12-point Times New Roman and double-spaced. The paper will have a 3-page minimum. If your paper is more than double-spaced, points will be deducted. Your margins should be one inch on all sides—not one and a half, etc. Please note: most computers are set at 1.25 so you must go in and change the margins manually. Please make a separate title page with the title of your paper (your paper needs to have a title) as well as your name, the class and the date. Please put this information on the title page and not on the first page of the paper. Finally, please justify the right-hand margin and do a spell check either on your computer at home or in one of the labs on campus.

Your paper will constitute 10% of your final grade for the semester. You will be graded on the following: content, creativity, autobiographical voice, use of language, spelling, grammar and accuracy, appearance and formatting of the paper, and how well you followed the directions for the assignment. You are encouraged to edit, proof read, and revise your paper several times.
FRENCH 372 Paper 2 Guidelines

For the second paper, you will write a biography. This project will require some research and advanced planning. Your biography needs to focus on someone who is living and who has never been the subject of a biography. This could be a friend, roommate, neighbor, parent, relative, professor, etc. You must interview the person at least once in order to collect the necessary information. I strongly suggest that you go to the library to look at some biographies to get an idea of different stylistic approaches to the genre.

Some things to consider:

- What is your own role as the author of this biography?
- How will you present / represent this individual's life?
- Will you tape record the interview or will you take notes?
- How is this second writing assignment different from paper #1?
- What will you focus on? The person's character, events in his / her life, the every-day common life experiences?
- Will you be critical, favorable, comic, sarcastic, etc?
- Did you play a significant role in this person's life? If yes, will you write about yourself as well?
- Will you write in first, second, and / or third person?
- What other individuals played a significant role in this person's life?
- What will your biographical style be like? Will it be chronological, straight-forward, cyclical, enigmatic, poetic, scholarly, etc.
- How will you refer to the person when you write: will you say "Smith" or "John"
- How do you know whether or not this person is relating / describing accurate information? Thus, what is the relationship between this person's history and his / her memory? Is accuracy important? Why or why not?
- Will you write about national or global events such as the Vietnam War (for example)?
- Who will read this biographical text once it is completed?

Your paper will be typed in 12-point Times New Roman and double-spaced. The paper will be a minimum of three pages in length. If your paper is more than double-spaced, points will be deducted. Your margins should be one inch on all sides--not one and a half, etc. Please note: most computers are set at 1.25 so you must go in and change the margins manually. Please make a separate title page with the title of your paper (your paper needs to have a title) as well as your name, the class and the date. Finally, please justify the right-hand margin and conduct a spell check either on your computer at home or in one of the labs on campus.

*Please make a separate title page for your paper and please include page numbers--page 1 will be the first page of the biography.
Your paper will constitute 10% of your final grade for the semester. You will be graded on the following: content, creativity, biographical voice, use of language, spelling, grammar and accuracy, appearance and style of the paper, following the directions, meeting the minimum length requirement.
FRENCH 372 Paper 3 Guidelines

For your third paper, you will write a short work of autobiographical fiction. Autobiographical fiction (called autofiction in French) is defined by Sedonie Smith and Julia Watson in their book Reading Autobiography (2001) as an "unstable fiction." In a work of autobiographical fiction, the boundary between what is fictional and what is autobiographic remains illusory. Autobiographical fiction uses textual markers that signal a deliberate, often ironic, interplay between the two modes that we refer to as "fictional" and "autobiographic" to such an extent that it may be difficult to distinguish between the two modes.

Question: Given the above definition, how will this third paper differ from paper #1?

Format:

Your paper will be typed in 12-point Times New Roman and double-spaced. The paper will have a 3-page minimum. If your paper is more than double-spaced, points will be deducted. Your margins should be one inch on all sides--not one and a half, etc. Please note: most computers are set at 1.25 so you must go in and change the margins manually. Please make a separate title page with the title of your paper (your paper needs to have a title) as well as your name, the class and the date. Please put this information on the title page and not on the first page of the paper. Finally, please justify the right-hand margin and do a spell check either on your computer at home or in one of the labs on campus.

Your paper will constitute 10% of your final grade for the semester. You will be graded on the following: content, creativity, autobiographical voice, use of language, spelling, grammar and accuracy, appearance and formatting of the paper, and how well you followed the directions for the assignment. You are encouraged to edit, proof read, and revise your paper several times.

*Students with a background in French have the option of writing the paper in French.
FRENCH 372: Paper 4 Guidelines

For the last paper, you will write your own proposal for a film that you will make!

Congratulations! You have just received an international grant from the United Nations to make a film that deals with (auto)biographical of the non-Western French-speaking world! After taking FRENCH 372 at The University of North Dakota, you decided that you wanted to use your knowledge and education to make a difference in the world. As a result, you have agreed to make your own film. After applying for several national and international research grants to help fund your project, you were delighted to receive a grant from the UN. The UN grant includes a $30,000 budget, a film crew, and all of the technical equipment that you will need. All of your travel and lodging expenses will also be included.

You are so excited about this opportunity that you have decided to write an article for the North Dakota Student in order to share your project with other students and faculty at UND. Keeping in mind the themes of our course, your article will include the following: Film genre (documentary, drama, comedy, etc) subject matter, the problem(s) to be addressed, / plot, how the film will contribute to a better understanding of the French-speaking world, length, music, artistic / cinematographic techniques employed, where the film will be made (country or countries) language or languages, film title, when the film opens world-wide, who will be featured in the film, how long will it take to make this film, and anything else that you think is important.

Format:

Your paper will be typed in 12-point Times New Roman and double-spaced. The paper will have a 3-page minimum. If your paper is more than double-spaced, points will be deducted. Your margins should be one inch on all sides—not one and a half, etc. Please note: most computers are set at 1.25 so you must go in and change the margins manually. Please make a separate title page with the title of your paper (your paper needs to have a title) as well as your name, the class and the date. Please put this information on the title page and not on the first page of the paper. Finally, please justify the right-hand margin and do a spell check either on your computer at home or in one of the labs on campus.

Your paper will constitute 10% of your final grade for the semester. You will be graded on the following: content, creativity, use of language, spelling, grammar and accuracy, appearance and style of the paper, and how well you followed the directions for the assignment. You are encouraged to edit, proof read, and revise your paper several times.
Flexible Grading

Dexter Perkins
Department of Geology and Geological Engineering

ABSTRACT: I have developed a method I call flexible grading. Students decide what they are going to do to earn credit. They select from exams, papers, essay assignments, etc. So, they are responsible - not me - for how much effort they put in and the kinds of learning activities they undertake. They must make decisions and decide how hard they wish to work, and what grade they wish to receive. Flexible grading is different from contract grading, because students do not have to commit ahead of time to doing certain things.

Teaching and Learning Strategy:

Our classrooms should be learning communities where students, helped by the instructors, work together to learn. More important, they should be places where students develop holistic skills that will aid them after they leave college. We can teach them to appreciate Chaucer or name the planets in our solar system. Such things are not, in themselves, of great value. If we are clever, however, we design our classes so students learn to think and reason - improve their intellectual skills - as they read the Knight's Tale or debate whether Pluto is indeed a planet. Still, we may not be giving our students all they need.

Many recent studies have shown the overarching importance of student commitment, effort and involvement during their college academic experience. These are, perhaps, the most important keys to positive student outcomes. Yet, most of us do not plan our classes, or teach in ways designed to promote these attributes. Rather, we decide, often arbitrarily, what students will learn or do to be successful in our classes. We decide how hard they are going to work and how they will be evaluated. In essence, we make what are, perhaps, the most important decisions instead of making students decide for themselves.

It would be good if institutional policies and practices were aimed at promoting student commitment, effort, responsibility, motivation, involvement, etc. Unfortunately, that is not usually the case at the University, College or Departmental level. Making significant changes in these institutions is difficult. However, individual instructors do have the power to make changes in their classrooms. Flexible grading is one option, open to all of us, that can make a big difference.

Development of the Strategy:

There are a number of different approaches to "flexible grading" used by different instructors. In my classes, flexible grading means that students select from among different options, how they are going to be evaluated. Some instructors use a variant on flexible grading called "contract grading." Using this scheme, students decide at the beginning of the class how they wish to be graded. That is their commitment, and they are expected to follow through. In my classes, they do not have to make a commitment ahead of time. They can do whatever they wish and can change their mind about what to do as the semester goes on.
In my *Environmental Issues* class, the only class where I have gone 100% to flexible grading, options include:

- Four hour exams
- A final exam
- In-class quizzes
- Weekly essays
- One or more book reviews
- Journaling and life-styles projects

Students are free to select to do all, or some subset, of the above. For example, in principle, they can skip all the exams if they wish. (In practice no one has ever done this.) Of course, if they do little or nothing, they will fail the class. At the other extreme, students who only do mediocre work may elect to do more, so that their grade improves. So, students decide what they are going to do, when they are going to do it, what grade they wish to receive, and how hard they are going to work.

To aid students, I give them an overview and describe what my minimal expectations are if they wish to receive an A in the class, but I also tell them that they are free to substitute different activities as they wish. It is up to them. On purpose, I keep the grading scheme a bit vague because I do not want students to count points. Instead, I want them to feel that they can always do more and work harder, and that they will be rewarded if they do.

**Intended Student Learning Outcomes & Assessment of Student Learning:**

Students cite many reasons for liking flexible grading. For example:

- Students say they learn to identify the most important activities in the course
- Students come to a better understanding of their own learning styles
- Students feel that they are in control and are being treated as responsible adults
- Students may opt to "take a break" when necessary
- Students feel they are collaborating with the instructor
- Students are not competing with each other for grades

From my perspective, some benefits of flexible grading include:

- I am not responsible for making students do work; I simply offer opportunities
- Students are forced to make decisions for themselves
- Students become "excited" about what they are doing
- If students have out-of-town commitments, they can skip assignments, so I don't have to deal with any make-ups, etc.
- Students are happy and appreciate having options

Besides the things listed above, there is one other huge benefit of using flexible grading:

- Students do much more work and work harder than they would in a class that is graded in a more conventional way

The list of exams, papers, etc. that I offer my *Environmental Issues* students is quite lengthy. I am not sure just how much work we can ask students to do for a class, but the list of options I offer in *Environmental Issues* is much greater than students would consider reasonable. If all the activities were required, all the students would drop the class. Yet, because everything is optional, many
students complete nearly all of the assignments. There is no question that the quantity of student work increases. The quality, too, is better. In large part, I think this is because students do lots of work and get lots of quick feedback, thus helping them make changes and improvements. The improved quality is especially evident in their weekly essays - after writing 10 or more essays their writing and thinking are always much improved.

The Strategy’s Applicability:

I am now into my fifth year of flexible grading. Things were a bit chaotic during the initial years but now I have a model that works quite well. I have found several things to be key:

- It is absolutely necessary to discuss "why" I use flexible grading with the students, and to make it clear just how much responsibility they have for their learning
- As the semester goes on, I must remind students that they have choices, but one choice they don't have (if they wish to succeed), is to do nothing
- All assignments/activities must have absolute due dates; no late assignments are accepted
- Grading and providing students with feedback must be rapid
- Students need to know where they stand at all times so they don't get to the end of the semester and find themselves unhappy

Because communicating expectations and grades is so important, I have a "living" syllabus on the web. I modify it and update it weekly, sometimes more often. It helps students keep track of all the different assignments and provides them access to their class grade as the semester progresses. So, they know what deadlines are coming up, and they can see where they sit at any time.

Summary:

Flexible grading is a powerful way to motivate students and to help them develop skills that will serve them for the rest of their lives. I believe all classes should be graded this way, but there are some problems with implementation that must be overcome.
The Writing Process as a Means to Deeper Learning

Cynthia Prescott
Department of History

Teaching and Learning Strategy

Too often, students struggle to draw connections across the information and ideas contained in class lectures, assigned readings, and other assignments – connections that might seem obvious to the instructor who designed the course, wrote the lectures, and selected the readings. Guiding students to focus on broader themes and concepts, rather than discrete tidbits of knowledge to memorize, can be challenging. Meanwhile, faculty consistently bemoan the poor quality of student writing. Utilizing a series of informal and formal writing assignments can guide students to greater understanding of course concepts, while simultaneously refining their writing skills.

Throughout the semester, students complete weekly or semiweekly informal writing assignments that encourage them to engage with the assigned readings and course materials. These informal writings can be completed outside of class as students complete their reading assignments in a course journal (either a bound notebook or an electronic document), or as brief in-class writing assignments. The instructor should provide specific guidance orally and in writing about their expectations for these writing assignments at the beginning of the semester regarding length and content. Students can either be asked to provide an outline of each reading’s core arguments and evidence, or can be given one or two thought-provoking questions that guide them to analyze those readings.

Students also complete a series of more formal graded writing assignments that build on one another. These writing assignments can take the place of traditional in-class examinations. I developed three writing projects, each culminating in a formal essay, that focused on the three primary content areas within the course. Students also completed a comprehensive take-home final essay that required them to integrate knowledge gained throughout the semester. For each of the three projects, students were required to complete one or more brief (one- to three-page) formal writing assignments that helped prepare them for the culminating essay, and to submit a rough draft for peer review before completing the final draft of that formal essay.

For the first essay project, students were responsible for integrating material from the assigned readings, lectures, and other class activities. At first they turned in only the introductory paragraph of their essay (culminating in a thesis statement). I provided written feedback on this intro paragraph. Students then incorporated that feedback as they wrote a rough draft of their formal essay. They exchanged rough drafts in a graded peer review process, guided by handouts that asked specific questions of each peer reviewer and the paper’s author. This feedback helped them to revise their essay before submitting a final draft for formal grading by the instructor.

The second and third projects required independent online research in addition to the assigned readings, lectures and course materials. In the second project, students completed fairly limited
research guided by the instructor. In the third project, students were responsible for more extensive independent research and analysis of primary sources. In each case, a brief written report or analysis was submitted for grading by the instructor. Students then proceeded to integrate that independent research with course materials, submitting a rough draft for peer review and a final draft for formal grading as above.

In place of a final examination, students completed a take-home comprehensive essay that required them to integrate their independent research from the second and third projects with all course readings, lectures, and course materials. Each student selected one of four essay prompts. Class time devoted to informal pre-writing and brainstorming in small groups encouraged students to think more deeply and to incorporate more elements of course material into these essays. Requiring students to complete the peer review process during class time in the final week of the semester likewise held students accountable for thoughtful writing, and discouraged procrastination.

**Development of This Strategy**

I have long been frustrated by my students’ apparent unwillingness to think deeply about assigned readings, to revise their writing, or to complete independent research. To alleviate these shortcomings, I have gradually added steps to the research and writing process. I experimented with requiring students to submit a proposal and annotated bibliography en route to longer research papers. Yet it was not until I embraced the concept of Writing Across the Curriculum (WAC) that I discovered effective ways to engage my students in every step of the reading and writing processes. An extended faculty workshop sponsored by the University of North Dakota’s WAC program in summer 2008, and the workshop’s companion reading (John C. Bean, *Engaging Ideas: The Professor’s Guide to Integrating Writing, Critical Thinking, and Active Learning in the Classroom* (Jossey-Bass, 1996)), inspired me to rethink the assignments that I give in my upper-division history courses. Utilizing integrated course design (L. Dee Fink, *Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses* (Jossey-Bass, 2003)), I began by thinking about the key themes and concepts that I wanted my students to take away from the course, and then built writing assignments and selected readings that focused their attention on those themes and concepts. Fellow workshop participants repeatedly provided feedback on the design of these assignments, helping me to clarify my expectations and arrange them so that the required knowledge and skills would build on one another. Informal writing assignments hold students accountable for completing course readings on time, and allow the students time and intellectual space to engage with the materials before class discussions – as suggested by Eric Burin in his Innovation and Best Practices in Teaching and Learning project described elsewhere in this booklet.

I am still experimenting with the informal writing assignments for these courses. The first time that I used course journals, I gave students a lot of latitude in how to maintain them. I quickly discovered that the strongest students made extensive (or even excessive) use of their course journals to take detailed notes on the assigned readings, but that less-motivated students had difficulty developing effective note-taking techniques. The next semester, I asked students to (1) record the argument(s) and three key points from each article or book chapter, and (2) to free-write on each week’s reading
assignments as a whole, focusing on a comparison/contrast of that week’s readings. While this encouraged more effective outlining from weaker note-takers, students still struggled with the free-writing portion of the assignment. Students either provided only surface-level discussions, or focused on their emotional response to the readings, rather than on their content. I therefore chose to incorporate a greater number of in-class writing assignments with specific writing prompts that guided students to the big questions raised by key reading assignments. In general, I found that responses to these specific questions yielded more effective analysis than did more open-ended requests for free-writing. I am still experimenting with the most effective balance between at-home and in-class informal writing assignments.

One particularly effective in-class writing assignment for a history class is to ask students to create their own fictional first-hand account of a historical event or experience. For example, I ask students to write their own letter to loved ones “back home,” describing their experiences in the gold rush. I encourage students to incorporate authentic experiences drawn from their reading of other primary and secondary sources. This assignment encourages students to engage with the readings on a more personal level, imagining what it actually felt like to live through the events about which they are learning. Requiring them to write in the style of the time period they are studying not only encourages students to avoid contemporary slang or text-speak, but also to examine more carefully the primary documents for nuances of writing style, and hopefully to make them more conscious of their own writing style.

In the future, I plan to focus more on in-class writing assignments in response to specific questions. I have found that students respond more effectively to a single question than to a compound prompt (i.e. a series of related questions). When providing a single question as a free-writing prompt, it is important to develop questions that are thought-provoking (as opposed to requiring simple recall). The instructor must also remind students of the necessity to integrate concrete evidence from the assigned readings, rather than simply give their emotional response to the prompt. It would also be possible to combine this kind of focused writing prompt with basic outlining of the assigned readings within a course journal. Alternately, it would also be possible to assign two or three questions designed to elicit one-paragraph essay responses – something that would require too much time for regular use in class. To provide thought-provoking questions for informal writing assignments at home, it would be necessary to distribute the writing prompts in advance (either in a handout or via the class Blackboard page).

**Intended Student Learning Outcomes**

I utilize the writing process to achieve several goals. First, I want my students to actually read, understand, and think about the assigned readings and other course materials, and to integrate these various forms of information into a greater understanding and appreciation of the subject matter. Second, I want my students to improve their writing skills, and to understand that effective written communication is a valuable life skill. Third, I want my students to learn to read, write and think critically – tools that will help them to become lifelong learners.
This teaching strategy encourages students to read assigned materials and helps them to integrate those materials with other course content. At the most basic level, this teaching strategy holds students accountable for completing the assigned readings each week. Without mechanisms in place to require students to keep up with assigned readings, they will tend to procrastinate on the readings and focus their study time on other classes. This, in turn, prevents them from benefitting fully from class discussions and lectures, and leads to less effective classroom discussions because students are unprepared. Requiring frequent informal writing assignments also encourages students to become active readers, identifying the core concepts and ideas within those assigned readings, rather than simply skimming the readings without retaining any of the content. On a deeper level, students who have actively read and thought about each reading assignment when it is assigned are better able to recognize connections across various readings, lectures, and other class activities. The instructor can therefore devote less class time to lecturing or reviewing content that appears in the readings, and more time to helping students to integrate the various class materials.

Utilizing writing as a means to deeper understanding also helps to develop skills and habits that will be valuable to students throughout their lives. The first of these life skills is clear and persuasive written communication. Faculty often wrongfully assume that someone else has already taught students how to write (whether they assume that that responsibility lies with other faculty within their department, freshman Composition instructors, high school English teachers, or elementary grammar teachers). Instead, all instructors must recognize that developing writing skills is a lifelong process that requires consistent practice and regular guidance. When assigning writing, I am responsible for expressing clearly the specific expectations associated with writing within my academic discipline. But even if a student never takes another history class – and no matter what career path they choose – they will need to be able to write clearly and persuasively. Consistent practice writing and revising helps students to hone their written communication skills, and also helps them to recognize that writing is a process that requires clear thinking and careful revision.

Critical thinking is one of the central goals of a liberal arts education, and yet it is one of the most difficult learning goals to define and assess. Carefully revised writing assignments provide valuable opportunities to assess not only students’ understanding of complex materials but also the ways in which they are able to analyze those materials. Informal and formal writing assignments provide students with opportunities to practice critical thinking, with frequent opportunities for feedback from the instructor. The peer review process guides students to think critically about their own writing and that of their classmates, and enables them to practice the art of constructive criticism. The various steps of the writing process (both informal and formal) within this teaching strategy thus enable students to develop – and faculty to assess – communication and critical thinking skills that will be invaluable to students in their future careers.

**Assessment of Student Learning**

The variety of writing assignments produced by this learning strategy offer ample opportunities to assess student learning. Because students turn in a series of written assignments, and these assignments build toward a comprehensive final paper, I am able to watch students’ writing and
critical thinking improve over the course of the semester – and sometimes over several semesters. Their formal writing projects and final essays demonstrate a deeper level of engagement with course materials than is possible on timed in-class examinations. Requiring students to resubmit all graded writing assignments in a final writing portfolio eases this assessment process, and also reinforces for students the importance of learning from past mistakes.

Informal writing assignments reveal how effectively students are reading, comprehending, and thinking about the assigned readings. By quickly glancing through each writing assignment (I allow approximately one minute per assignment), it is possible to determine whether students read and understood the reading assignment. Somewhat more careful reading will reveal the depth of their understanding, and the extent to which they are able to integrate each individual reading with other course materials and broader course themes.

Formal writing projects reveal students’ grasp of relevant materials, their understanding of broader course themes, and their ability to integrate those materials and themes. These projects also enable assessment of students’ research and writing skills development. Breaking down the research and critical thinking elements of these projects into several shorter assignments en route to a completed essay enables me to correct deficiencies in these individual pieces (thesis statement, research content, analysis of primary sources, etc.). Students are then able to correct these deficiencies and benefit from feedback prior to completing the formal essay.

My methods of feedback and formal assessment vary according to the type of writing assignment. I typically provide brief comments or simply a check/check plus/check minus on informal writing assignments. For the small building blocks of larger writing projects, I provide formative comments as well as a numerical grade. For each final essay or writing project, I provide a grading rubric that indicates the quality of their work in critical thinking, argumentation, and form (see sample rubric below). I then provide written comments and a numerical grade below the rubric grid. These comments are focused on their ideas and use of evidence. I only comment on the student’s writing form if it significantly impacts my ability to understand their argument and evidence. These rubrics make it easier to trace improvements in an individual student’s writing and critical thinking over the course of the semester. It is also possible to aggregate this data to assess the effectiveness of the class as a whole. Stapling this grading form to the end of their completed assignment will emphasize the importance of your feedback. Photocopying these rubrics before returning the graded assignments to students makes it easier to collect this data at the end of the term. I also require students to turn in all of their graded writing along with their final essay assignment as part of their course writing portfolio. To further emphasize the writing process, students could also be required to complete a brief self-reflection on their completed writing assignments as part of their writing portfolio.

Student feedback on the writing components of these courses has been overwhelmingly positive. In addition to the UND Student Assessment of Teaching (USAT) forms, I also ask students to complete an informal survey at the midpoint and end of each semester, in which I ask them to evaluate how effectively the writing assignments and other class activities have helped them to improve their understanding of course materials and their writing skills. Students have consistently reported that
their writing skills have improved as a result of these courses. The only complaints that I have received have been from students who did not value this attention to their writing skills, and would have preferred to have devoted that class time to more content delivery. Yet most students appreciate that, while this system requires them to put more effort into their writing, it also provides them with feedback along the way so that they can improve. I have been particularly pleased with how well students have responded to the graduated formal writing projects. They welcome feedback on elements of their research and writing prior to submitting a completed essay. Comments on their introductory paragraph, online research, or primary source analysis enable them to correct errors and strengthen their analysis prior to completing the formal essay assignment. Particularly beneficial from some students’ perspectives is that they are less likely to be surprised by an extremely low essay grade. Students also appreciate the opportunity to pursue research topics of their own choosing; doing so encourages them to relate core course readings and lecture material to issues that they find interesting and relevant.

Fittingly (given my interest in the writing process), I am still revising the writing assignments for these courses. I am particularly dissatisfied with my reliance on course reading journals for most informal writing assignments. While these journals do require the students to write regularly, and encourage them to read more closely, I find that students get as much or as little out of these course journals as they put into them. I am currently seeking ways to engage students more effectively through the journals – perhaps by providing more guidance in the content each week. I am also contemplating replacing the course journals altogether with an increased emphasis on in-class writing assignments.

The Strategy’s Applicability

This learning strategy is applicable to a wide range of course levels and academic disciplines in which ideas, reading and writing are central to learning. The greatest constraint on its applicability is the quantity of time required to provide effective feedback on student writing. While the peer review process is valuable for students to practice and can correct some flaws in student writing, it cannot take the place of careful reading and thoughtful feedback from the professor or an experienced graduate teaching assistant (GTA). It also requires a significant time commitment when designing the various writing assignments to ensure that they build on one another effectively, and that all of the required reading and writing can be completed within a reasonable amount of student study time.

I have used this teaching strategy most extensively in two 300-level courses on the history of the American West. Each course enrolled approximately thirty-five students, the majority of whom were non-majors. In these courses, I replaced all in-class examinations with three major writing projects and a take-home final essay. The first and final essays focused on comprehension of assigned course materials, while the second and third projects also required the integration of independent research with common course materials. I devoted approximately one-third of all class time to teaching writing skills, completing informal writing assignments, and the peer review process.

I have also utilized this teaching strategy in more limited ways within most of my other history courses. In a 100-level survey class with up to 150 students, I asked students to complete a variety of
brief in-class writing assignments. To reduce the grading load for myself and my GTAs, I assigned a combination of individual and small-group writing assignments. When completing an essay or essay outline in small groups of three to five students, I require the students to each member of the group to hand-write at least one paragraph of the essay, so that they are encouraged to work cooperatively. While these individual and small-group in-class assignments constituted only a small portion of their overall course grade, they encouraged students to think more critically about assigned readings and to practice outlining and writing analytical essays that would be required on the midterm and final examinations.

I have also adapted this model for use in other upper-division history courses with significant independent research elements. For the History capstone research seminar, I ask my advisees to complete a series of specific tasks that guide them through the research process, from a research proposal and bibliography through a rough draft and final draft. For 300-level courses in American women’s history (also enrolling thirty-five students, including many non-majors), I have retained the traditional essay-based midterm and final examinations. However, students also complete a semester-long research project on a topic of their choice. For many of these students, this is the longest essay they have ever written; many have never completed independent library research before taking the course. Adapting the step-by-step approach to writing outlined above guides students to research more thoroughly, to develop more complex analysis, and to better integrate their individual research with shared course materials. Students complete a research proposal, annotated bibliography, primary source analysis, and introductory paragraph before attempting a complete draft of the research paper. In addition to these written assignments, I have designed a series of active learning classroom assignments to guide students in developing the information literacy skills that they need to complete the research project. Through these classroom activities, students will gain experience identifying primary and secondary sources, accessing library materials, and analyzing primary documents, as well as working on writing skills in class. In the future, I also intend to incorporate more informal in-class writing assignments into these courses to guide students in integrating assigned readings with other class materials.

While this step-by-step approach to academic writing is designed primarily for undergraduates, I also adapted this teaching strategy to a graduate seminar on material culture methodology. Students completed three brief “source reports,” each of which required them to utilize a different material culture research method that was modeled for them in the assigned readings (archaeology, architecture, and decorative arts). They then completed a longer independent research project in which they incorporated one or more material culture methods into research on their own thesis topics.

**Implementation and Supporting Materials**

As the above examples indicate, this learning strategy can be adapted to a wide range of course levels and academic disciplines. Writing can become the primary means by which students engage with course material, as in my western history courses. For other courses, a more limited focus on writing will be more appropriate. The number of steps in a writing project can easily be adjusted to fit the
level of students’ writing skill and the time available for grading these assignments. Either the step-by-step approach to essay writing or the informal writing assignments can be utilized independently, depending on the needs of the individual course.

Instructors should adapt the number and nature of intermediate steps within the writing process to their course goals and their students’ needs. Students in introductory courses will benefit from significant attention to outlining an essay and developing a workable thesis statement. More advanced students will benefit more from guidance and feedback on independent research and integrating disparate sources of information. Develop your series of assignments so that they build on one another – both within a single writing project, and across the semester as a whole. Pay careful attention to the pacing of writing assignments. A well-designed series of writing assignments will engage students with the writing process on a weekly basis, making writing a regular part of their learning process while discouraging procrastination. Point values for each assignment should be carefully calibrated to indicate its relative importance to the larger project of which it is a part and to the course as whole.

Devoting class time to explaining the assignments, modeling required research and writing skills, and completing the peer review process will reinforce for students the importance of the writing process on their learning in this course. My 300-level writing-intensive courses meet twice each week for 75 minutes, usually on Tuesdays and Thursdays. I typically devote the first class meeting of each week to lecture, discussing assigned readings, or other content-oriented activities. Assigned readings and any course journal entries should be completed prior to these Tuesday class meetings. Informal free-writing assignments can be used to synthesize that week’s assigned readings and also serve as a warm-up to Tuesday class discussions. Students who are hesitant to speak in class will benefit from having their ideas already developed in writing, and can even be asked to read their free-write out loud. I then devote most Thursday class meetings to writing-related activities. This might include anything from instruction in proper use of citations to practice distinguishing between primary and secondary sources, or from brainstorming essay ideas to peer review of essay drafts.

Students should receive thoughtful feedback on every formal writing assignment – from the instructor, their peers, or both. This can be in the form of written comments, a grading rubric, or both. For final essay drafts I utilize a grading rubric that indicates the level of achievement in content, argumentation, and form. At the bottom of this rubric, I write comments focused on the author’s ideas and argument. I prefer not to assign specific point values to each category addressed in the rubric. Instead, I utilize the comment space to indicate the essay’s greatest strengths and weaknesses (i.e. those that most affected the assignment grade). Because assignments’ point values vary (generally escalating over the course of the semester), I provide the assignment score as a ratio out of the total possible points, and also convert this to a letter grade or percentage for the student. This enables them to quickly assess their grade on the assignment, and encourages them to study the rubric and my comments to learn why they received the grade that they did.

Informal writing assignments must be collected and marked regularly to keep students accountable for completing them and the reading assignments on which they are based. These assignments should be marked for completeness and (at least occasionally) for depth of insight, but should not be
heavily penalized for grammatical or spelling errors. To save time in grading, you can choose to only grade these assignments closely at irregular intervals, or to read only half or one-third of the class’s assignments closely each time. Students should not be able to predict which of their informal writing assignments you will grade most closely. This will motivate them maintain a consistent level of effort throughout the semester.

Below, I have included examples of writing assignments that I have developed for four different courses:

1) History 326: History of the United States West Since 1890

   This course enrolls approximately thirty-five sophomores, juniors, and seniors, approximately 60% are non-majors. These assignments (the primary focus for this teaching model) focus on the writing process through three writing projects and a take-home final essay.

2) History 104: United States Since 1877

   The majority of the 100-150 students in this course are first-year Essential Studies students, but 5-10% are upper-division history majors. With 1 or 2 GTAs and no separate discussion sections, I utilize only brief writing assignments, sometimes completed cooperatively in small groups of three to five students.

3) History 332: American Women to 1865

   Like History 326, approximately thirty-five upper-classmen enroll in this course, of whom approximately 60% are non-majors. Students complete an independent research project in addition to in-class midterm and final exams.

4) History 593: Material Culture

   This graduate seminar introduces approximately ten students to Material Culture Studies methodology. In addition to weekly discussion of common readings, students complete three brief source reports and an independent research project that utilize a variety of material culture methods.

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**Writing Assignments for History 326 (Spring 2009)**

In lieu of in-class examinations for History 326, you will maintain a course journal and will complete a series of formal written assignments that will guide you to read the assigned readings critically, and to analyze them in a thoughtful and clearly written form. The first essay assignment will focus on required readings and class lectures. In subsequent assignments, you will be responsible for independent research to gather your own primary and secondary materials, which you will then integrate with course materials. Each written assignment will involve guided revision, utilizing peer review as well as input from the professor. At the end of the semester, you will submit a writing portfolio that contains all of your graded final drafts, your course journal, and the rough draft, review
worksheets, and final draft of your final essay. Failure to submit work on time and/or to follow these instructions will result in a grade deduction.

**Course Journal**

Maintain a separate bound notebook or electronic file for your course journal throughout the semester. Informal in-class writing assignments and pre-writing for your formal essay assignments should also be completed in your course journal. Submit your complete and up-to-date course journal on each of the three due dates. (100 points total)

For each week’s assigned readings:

- For each article or book chapter, briefly summarize the author’s argument, and list the 2 or 3 most important pieces of information from that article or chapter.
- Then free-write on that week’s reading assignments as a whole, highlighting similarities and differences among the readings.

**About the Author**

Write a personal letter to the professor, describing yourself, your background, and any other information that you think I might find useful. This might include why you chose to take this class, where you are from, your hobbies and interests, strengths and weaknesses as a student, and anything else that you would like to share. (5 points)

**Race Relations Essay**

Write a thoughtful and well-supported essay in response to one of the following prompts. Introductory paragraph due January 29 (5 points). Rough draft due February 5 (10 points). Final draft due February 19 (20 points).

*Prompt A:* How did the closing of the frontier contribute to a shift in race relations on the borderlands of the American Southwest?

*Prompt B:* How did Anglo-American Progressive Era reform efforts influence the lives of non-whites living in the American West?

**Environment Essay**

*Environment History:* Utilizing at least one scholarly article and three reliable websites, write a 2-3 page encyclopedia article on the history of environmental change in a western location of your choice. Due February 26 (10 points).
**Environment Essay:** In a 4-6 page essay, trace environmental change in your chosen location, and assess its representativeness for the West as a whole. Be sure to incorporate feedback from your Environment History. Rough Draft due March 5 (10 points). Final Draft due March 26 (25 points).

**Urban West Essay**

**Urban West History:** Utilizing at least one scholarly article and three reliable websites, write a 2-3 page history of race, class, and/or environmental issues in a western city or tourist destination of your choice. Due April 2 (10 points).

**Primary Source Analysis:** Find at least two primary sources related to your chosen western city or tourist destination in the twentieth century. Write a 1-2 page analysis of what these documents or objects reveals about race, class, and/or environmental issues in that city. Due Thursday, April 9 (15 points)

**Urban West Essay:** Write a 5-7 page essay that examines twentieth-century race, class, and/or environmental issues in western cities or tourist destinations. Be sure to incorporate evidence from your primary source, scholarly and popular secondary sources, and the relevant assigned readings. Rough draft due April 16 (10 points). Final draft due April 30 (35 points).

**Final Essay and Writing Portfolio**

Respond to one of the following prompts in a carefully revised essay of 7-10 pages. Because this assignment serves as your final exam, you should consider this essay your opportunity to demonstrate all that you have learned this semester, both about the history of the American West and about writing. Your essay should respond to all parts of the selected prompt within the format of a cohesive, formal essay. Be sure to incorporate specific evidence (including appropriate quotations, paraphrases, and citations) from all relevant assigned readings and class materials, and to revise your essay carefully.

This writing portfolio is worth a total of 100 points:

- Rough Draft (due May 7): 20 points
- Final Draft (due May 14): 60 points
- Overall Improvement of Writing Skills: 20 points

**Prompt A:** The West has long been seen as a backward, uncivilized place. Yet throughout much of the twentieth century the West led the nation in areas as diverse as popular culture, environmentalism and ethnic relations. Trace the region’s transformation from backwater to trendsetter, and assess its importance to the nation as a whole since 1890.

**Prompt B:** To what extent can twentieth-century American history be effectively summarized as a process of Californication?

**Prompt C:** “Conditions for peoples of color in the American West have consistently improved since 1890.” Agree, disagree, or equivocate.
Prompt D: The American West is often thought of as a place of covered wagons, cowboys and Indians. Yet these images arguably have little to do with the West in the twentieth century (except possibly in Hollywood). How useful is it to define the West as a separate region in the years since 1890? What traits (if any) should be used to designate the region?
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COMMENTS:
In-Class Writing Assignments for History 104

Western Conquest

1) Imagine that you are a Sioux man or woman living in Dakota Territory in the 1880s. Describe your daily life, and how it has changed since the arrival of white settlers. (For the purpose of this assignment, assume that you have learned to speak and write in English.)

2) Imagine that you are a white settler living in Dakota Territory in the 1880s. Write a letter to your family and friends back home in the eastern United States or Europe, describing your daily life on the frontier.

3) Formulate a thesis statement and outline for a formal essay in response to the following prompt:

*Compare and contrast the lives of native peoples and newcomers in Dakota Territory in the 1880s.*

Hollywood and Racial Identity

Read the document “Movie Dreams and Movie Injustices” [http://historymatters.gmu.edu/d/23](http://historymatters.gmu.edu/d/23). Then, write your own film-viewing autobiography modeled on this one written by a 17-year-old African-American in the 1920s. How have movies influenced your identity and future goals?

Vietnam War

Utilizing the provided primary document excerpts and other course materials as evidence, work together as a small group to outline and then write an essay that answers the question below. Each group member should contribute to the discussion and should write at least one paragraph of the essay. Be sure to incorporate all five primary documents into your analysis.

*To what extent did the attitudes and policies of the United States government regarding the war in Vietnam (1965-1975) reflect the attitudes of the American people during that time?*
Independent Research Project for History 332

One of the primary goals for History 332 is for you to learn to think and write historically. Assigned readings, lectures, and other classroom activities will introduce you to a variety of themes in American women’s history from approximately 1600 to 1865. This independent research project will enable you to engage in more deeply with a topic of particular interest to you. In the process, you will gain experience developing a historical argument, and utilizing both primary and secondary sources to support that argument.

You will select a research topic of interest to you with guidance from the professor. You will then complete a series of brief written assignments that will build toward the writing of an independent research paper of approximately 10-15 (typed, double-spaced) pages that draws on relevant assigned class readings as well as appropriate primary and secondary sources. Upon completion of this research paper, you will share your findings with your classmates by creating and presenting a research poster. I encourage you to meet with me individually throughout the semester as you develop this research project.

**Step 1: Research Topic** (due September 17)

With guidance from the professor, you will select a research topic no later than Week 4.

**Step 2: Research Proposal** (due October 1)

This assignment need not be in essay form, but you should utilize proper Chicago Manual of Style (or Kate Turabian) bibliographic style, and include all of the following:

- Specific research question in question form (*not* a broad research topic).
- List, including full bibliographic information, of at least five relevant scholarly secondary sources (monographs or journal articles) that you will utilize to answer your research question.
- List, including full bibliographic information, of at least five primary sources that you will utilize to answer your research question.

Points possible: 10.

**Step 3: Annotated Bibliography** (due October 22)

For each of your secondary sources, provide a 3-5 sentence summary of the author’s argument and how this book or article helps you to answer your research question. Points possible: 15.

**Step 4: Primary Source Analysis** (due October 29)

In a carefully revised 3-5 page essay, analyze the ways in which your primary sources help you to answer your research question. Be sure to compare and contrast any differing perspectives revealed in your primary sources. Points possible: 40.

**Step 5: Research Paper Introductory Paragraph and Outline** (due November 5)
Compose a carefully revised introductory paragraph for your research paper. Underline your thesis statement in this intro paragraph. On a separate sheet of paper, provide a detailed outline of your research paper. Points possible: 15.

**Step 6: Research Paper (due November 19)**

Compose a carefully revised 10-15 page essay that utilizes both your primary and secondary sources to answer your research question. Cite your sources using Chicago-style footnotes. Include a title page and a bibliography that provides separate listings for primary and secondary sources. Points possible: 100.

**Step 7: Research Poster (due December 8) – 20 points**

Using PowerPoint or scissors and glue, create a poster of approximately 2 by 3 feet that contains the following:

- Research question
- Thesis
- Summary of Evidence
- Conclusions
- Optional: visual images

Come to class on December 8, prepared to discuss your poster. Points possible: 20.
Writing Assignments for History 593

Source Reports

You will write a series of source reports, each of which will require you to analyze a physical object. In approximately 3-7 pages, you will describe the object and where it was found, and will interpret what scholars could learn from this object. Be sure to indicate what type(s) of studies could benefit from studying this particular object or type of object.

Source Report #1: Imagine that you are an archaeologist in either the year 2109 or 2509 working on a dig investigating the city dump for Grand Forks, ND, circa 2009. Your current sample focuses on the contents of 20 gallon plastic bag. Your (current 2009) home trash receptacle has become a midden. Dig through that midden, and select one object or group of objects that will survive (in some form or other) until your chosen future date. Then analyze that object(s), exploring what it can reveal about urban (or rural) life in the Red River Valley in the early 21st century.

Source Report #2: Select one historical artifact to study. This might come from your own basement or attic, that of a family member or friend, or be owned by a historical museum or antique shop (but be sure to get staff permission to examine the object, and abide by all restrictions imposed on handling the object). Collect all available history of the object in written and oral form. Then, use that history as well as your observations of the physical object to analyze its historical significance.

Source Report #3: Select a historic structure. Collect physical observations of the structure and changes that have been made to its structure and use over time, utilizing appropriate architectural terminology. Then, explore what this structure reveals about the family or business that occupied it, and the broader region.

Final Paper

With guidance from the instructor, produce an original research paper (or thesis chapter) of at least 10-15 pages that utilizes material culture primary sources and methods. Utilize relevant assigned (common) readings and other secondary sources as appropriate.
Teaching Race Without a “Critical Mass”*

A Teaching Module on Affirmative Action
and
Some Lessons Learned in Teaching Race in a Homogeneous Classroom

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ABSTRACT: Teaching subjects related to race at a school like UND presents particular challenges. Most UND students are from North Dakota, a state whose population is over 92% white, and many white students come to UND with little or no contact with people of color. As a result, few have given much thought to or see the inherent value of student-body diversity along racial or ethnic lines.

In my Constitutional Law II course at the School of Law, I use affirmative action in university admissions as a case study of the interrelationship of constitutional interpretation and public policy implementation. My affirmative action teaching module draws on individual and group activities, PBS’s *Frontline* documentary *Secrets of the SAT* and its companion web page, an overview of the history of affirmative action and university admissions, and, of course, the case law. The module, which I “tweak” each year, is adaptable to other settings and also has informed my teaching of race issues in other classes.

Teaching and Learning Strategy: The Teaching Module on Affirmative Action

Background

In constitutional law, the U.S. Supreme Court’s interpretation of the Fourteenth Amendment’s Equal Protection Clause (“No State shall . . . deny to any person within its jurisdiction the equal protection of the laws”) requires the government to justify treating people differently under the law. Some distinctions, such as different tax brackets for people earning different incomes, require only that the distinction be a reasonable one. Distinctions based on race, though, require the strongest justification under constitutional law: the government must show that treating people differently based on their race is “narrowly tailored” to serve the government’s “compelling interest.” The Court has used this legal standard to strike down nearly all race-based classifications, including state-sanctioned racial segregation and anti-miscegenation laws. Every race classification employed by government, including affirmative action policies that take race into account and other so-called “benign” or “beneficial” race classifications, triggers this “strict scrutiny” by the Court.

The Supreme Court has twice examined affirmative action in university admissions: first in 1978 in *Regents of the University of California v. Bakke*, and twenty-five years later in *Grutter v. Bollinger* and *Gratz v. Bollinger*, both arising out of affirmative action policies at the University of Michigan.

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* Thanks to Dr. Steven Andrew Light, UND Department of Political Science and Public Administration, for granting me permission to draw upon our co-authored article, “Teaching Race Without A Critical Mass: Reflections on Affirmative Action and the Diversity Rationale,” *Journal of Legal Education* 54(3): 316-335 (2004).
In *Bakke*, the Court struck down an affirmative action policy that had reserved a number of seats in the UC-Davis medical school for members of specified racial groups. Allan Bakke, a white student whose application to medical school was denied, challenged the policy. Bakke argued that students of color admitted under the policy had lesser qualifications than he, and that while applicants of color could compete for all seats (the non-reserved seats as well as the seats reserved for minorities), Bakke was able to compete only for the non-reserved seats. The Court struck down the UC-Davis policy as unconstitutional. The Court appeared to accept that achieving classroom diversity could be a compelling government interest, but held that the rigid “quota” of reserved seats, as well as the dominance of race as a factor in admitting students to fill those seats, meant that the policy was not narrowly tailored to meet the compelling interest. Justice Powell’s opinion set forth an example of a narrowly tailored affirmative action policy: the so-called “Harvard Plan,” in which “race or ethnic background may be deemed a ‘plus’ in a particular applicant’s file” without “insulant[ing] the individual from comparison with all other candidates for the available seats.”

After *Bakke*, the Court decided several affirmative action cases in the context of public contracting. This line of cases rejected achieving diversity in the awarding of federal contracts as a compelling government interest. These legal developments, along with growing opposition to affirmative action as “reverse racism,” fueled efforts to prohibit race-based affirmative action at the state level. California, Florida, and Washington all enacted laws prohibiting race-based affirmative action in public employment, contracting, and education. Several states adopted “affirmative access” or “top percent” plans, meant to increase access to higher education without employing race classifications. In Texas, for example, the state legislature enacted the “Texas Ten Percent Plan,” which ensures that the top ten percent of students at all high schools in Texas have guaranteed admission to the University of Texas and Texas A&M system, including the two flagship schools: UT-Austin and A&M College Station. (This spring, a white student denied admission at UT-Austin filed suit challenging the university’s continued use of race-based affirmative action for students not admitted through the Top Percent Plan. At the same time, UT-Austin’s president expressed concerns that the Top Percent Plan was dominating the university’s admissions process, as the university was required to admit 9,100 Texas students under the Plan for its Fall 2008 freshman class – which had a target total enrollment of 7,200.)

When the Court next took up affirmative action in university admissions in 2003, many commentators expected the Court to disavow *Bakke*’s implication that classroom diversity could be a compelling interest. The Court’s decision in *Grutter* came as a surprise. (The Court’s decision in *Gratz* was less surprising: the Court struck down the University of Michigan’s policy of assigning a certain number of points based on racial diversity in its undergraduate admissions. Relying on Justice Powell’s opinion in *Bakke*, the Court held that the point-based system was too rigid and placed too much weight on race as compared to other factors.)

In short, the *Grutter* Court held that the University of Michigan Law School’s affirmative action policy survived strict scrutiny. A key component of the Court’s reasoning was its endorsement of the diversity rationale set forth twenty-five years earlier by Justice Powell in *Bakke*: student-body
diversity is a compelling interest that may support an appropriately tailored university affirmative action policy under even the most exacting scrutiny.

In accepting classroom diversity as a compelling government interest, the Court recognized that several benefits accrued through a racially diverse student body, to both white students and students of color. On campus, a diverse group of students promotes social equality through increased “cross-racial understanding” and decreased acceptance of stereotypes; diversity also enriches classroom discussion through the “robust exchange of ideas” by students with wide-ranging views and experiences. The benefits of a diverse student body continue to accrue outside the university, as graduates educated in a diverse environment are better workers, leaders, and citizens. As the Court put it, “nothing less than the ‘nation’s future depends on’” civic leaders who understand and appreciate a multitude of perspectives and whose own experiences represent the range of American life.

The Court accepted the Law School’s argument that such benefits derive from a campus with a “critical mass” of students of color. “By enrolling a ‘critical mass of [underrepresented] minority students,’ the Law School seeks to ‘ensur[e] their ability to make unique contributions to the character of the Law School.’ A critical mass “means ‘meaningful numbers’ or ‘meaningful representation,’ . . . . numbers such that underrepresented minority students do not feel isolated or like spokespersons for their race.” Importantly, a critical mass of students of color is necessary to break down racial stereotypes, “because nonminority students learn there is no ‘minority viewpoint’ but rather a variety of viewpoints among minority students.”

Michigan Law School’s affirmative action policy, designed to enroll a critical mass of underrepresented students of color, was narrowly tailored to achieve the educational benefits of diversity, the Court found. As the Court explained, the contributions of diversity to the classroom, the campus, and society are not limited to those related to race, but do depend in significant part on the participation of more than token numbers of students of color in higher education: “[b]y virtue of our Nation’s struggle with racial inequality, such students are both likely to have experiences of particular importance to the Law School’s mission, and less likely to be admitted in meaningful numbers on criteria that ignore those experiences.” Thus, the Court distinguished the Law School’s target critical mass of underrepresented minority students from the rigid quotas struck down in *Bakke* and *Gratz*.

**The Teaching Module**

In my Constitutional Law II course at the School of Law, I use affirmative action in university admissions following *Bakke* as a case study of the interrelationship of constitutional interpretation and public policy implementation and innovation. I have developed an integrated teaching module, drawing on individual and group activities, PBS’ *Frontline* documentary *Secrets of the SAT* and its companion web page, an overview of the history of affirmative action and university admissions, and, of course, the case law. I described the original exercises used in the teaching module in an article I co-authored with Steve Light (Political Science & Public Administration) in the *Journal of Legal Education*:

The exercise begins with a simple question for students to consider individually: What factors should a university admissions committee take into account in evaluating an applicant? Students are instructed to reflect on their own experiences
with undergraduate or law school admissions in generating their own list of relevant
criteria. We then assign students to mock admissions committees. After creating a
“master list” of possible relevant admissions criteria based on the lists students
generated on their own, the committees discuss each factor and decide which to use in
evaluating the admissions files of five undergraduate applicants [provided on the
companion website to Secrets of the SAT]. After recording a brief explanation of how
the committee decided which factors to consider and which to jettison, each committee
assesses the available file on each applicant and decides by majority vote whether to
admit or reject. After dissolving the groups, we conclude the exercise with a class-wide
debriefing session, in which each committee’s results are compared and contrasted.
Students are asked to discuss the rationales for their admissions decisions in light of the
factors they chose for consideration, and to think about the extent to which different
committees used similar or differing evaluation criteria.

We then show Secrets of the SAT in class. The documentary follows seven high
school students of diverse backgrounds, races, and gender as they prepare for the SAT
and apply for admission to the University of California at Berkeley – entrance to which
is discussed as “opening doors” for each student. The narrative vignettes are
compelling, promoting sympathy (or empathy) with these students as they navigate the
world of standardized testing and university admissions. In its closing segments, the
video shifts perspective, as the Berkeley admissions committee grapples with its legal
duty to comply with the mandates of Proposition 209, the 1996 California voter
initiative banning the use of race [classifications] in state-administered programs and
institutions. Committee members frankly discuss the importance of diversity and the
impossibility of discounting the tell-tale “clues” to the race and gender of applicants.
The outcome is informative and in some cases surprising, as one African-American
male applicant with relatively low SATs is admitted; a Latino male applicant with
relatively strong scores is denied admission; a second-generation Asian-American
female with moderate scores is admitted while a similarly situated male applicant is
denied admission; a white female applicant with high scores is denied admission
(although she gets into several Ivy League schools); and a white male applicant with
high SATs is denied admission – but appeals and subsequently is admitted.

The stories of the students and the admissions committee members who hold
their futures in the balance in Secrets of the SAT complete our group exercise on
affirmative action law and policy by matching real faces and voices to what otherwise
might seem to be a purely academic exercise. The documentary also speaks to the role
of standardized testing in reinforcing conceptions of “merit.”

The group exercise and documentary set the stage for students to assess more
critically the relevant case law. We continue the module with a lecture on affirmative
action law and policy by matching real faces and voices to what otherwise
might seem to be a purely academic exercise. The documentary also speaks to the role
of standardized testing in reinforcing conceptions of “merit.”

The group exercise and documentary set the stage for students to assess more
critically the relevant case law. We continue the module with a lecture on affirmative
action that includes the broad definition promulgated by the U.S. Commission on Civil
Rights and historical background on public higher education and “selective”
universities, as well as the circumstances giving rise to affirmative action programs in
higher education. The lecture uses as a case study California’s public university system
and the evolution of “elite” (and selective) campuses within the state system. Against
this background, we then turn to the U.S. Supreme Court case law, covering Bakke,
Adarand, and Grutter as key cases. Finally, we explore policy distinctions between
public education and other areas of public life, such as public contracting, and policy
alternatives to affirmative action, including California’s Proposition 209 and “affirmative access” programs in states such as California, Texas, and Florida.

Since that time, I’ve continued to use versions of the individual and group exercise in my Constitutional Law II course, “tweaking” the exercises each year.

Development of the Strategy: The Challenges of Teaching Race

In my Constitutional Law II course (a first-year course required for all law students), I cover three main topics – substantive due process (which includes so-called “privacy rights,” such as those related to reproductive rights, sexual conduct, and marriage and family), free expression (which includes aspects of free speech, such as regulation of obscenity), and equal protection. I’ve selected each topic not only as a key area of constitutional law, but also because each is very much in the current public debate. Affirmative action comes at the end of the segment on equal protection law, after students have learned about the Court’s approach to race classifications through Strauder v. West Virginia (striking down state laws limiting jury service to whites), Plessy v. Ferguson (upholding the legal principle of “separate but equal” in racially segregated train compartments), Korematsu v. United States (upholding internment of Japanese-Americans during WWII), Brown v. Board of Education (overruling Plessy to hold racially segregated public schools unconstitutional), and Loving v. Virginia (striking down state anti-miscegenation laws).

Here at UND, as across the country, affirmative action is a contentious and controversial issue, even after the U.S. Supreme Court’s 2003 decision upholding the use of race-conscious university admissions policies in Grutter. Teaching subjects related to race at a school like UND presents particular challenges and sheds light on the varying practicalities of the Court’s diversity rationale in Grutter. Most UND students are from North Dakota, a state whose population is over 92% white, and many white students come to UND with little or no contact with people of color. As a result, few have given much thought to or see the inherent value of student-body diversity along racial or ethnic lines.

There are pedagogical challenges in teaching topics that are at the forefront of public debate, particularly those related to race. Students do not necessarily come to a first-year law course with a firm grasp of the fundamentals of American history and government, let alone the role that race has played in shaping each. Students also bring with them ideological predispositions and the baggage of political socialization by parents, peers, schooling, and the media. The instructor’s job is to orchestrate a dialogue that encourages the free exchange of informed opinions; however, in my experience, students tend to discount the information imparted by the instructor on topics related to race and instead import their own preexisting viewpoints directly into their interpretations of the Constitution and the case law at hand. In our Journal of Legal Education article, Light and I observed that students have a strong tendency to devalue diversity, that their predispositions color their ability to acquire and process new information, and that they personalize the issues at hand:

1. Devaluing Diversity. In the course of the group exercise, it is fairly common for white students to start from the premise that admissions decisions should be based solely on GPAs and test scores. Invariably, however, the group discussion leads students to agree that other factors may be relevant. Although students overwhelmingly oppose taking race into consideration at this point, they tend to see socioeconomic class, overcoming personal hardship, difficulty of coursework, and
extracurricular activities as important factors. The lists generated by students vary little in their expansiveness and generally follow the same basic order . . . :

- GPA
- Standardized test scores
- Coursework (type and degree of difficulty)
- Extracurricular activities
- Community service
- Leadership roles
- Awards/honors
- Application essay
- Work experience
- Quality of school
- Letters of recommendation
- Urban/rural school (no distinction between central city and suburban)
- Alumni legacies
- Parental income and/or educational background
- Athletic ability
- Artistic/musical talents

Generated by prompting – and met with student skepticism – is gender. With the absolute final factor – again met with student discomfort and, almost invariably, disagreement – being race or ethnicity.

As the results of this first part of the group exercise indicate, students begin to see beyond conventional measures of academic merit but resist seeing race as relevant to university admissions or to the educational benefits of class discussion. Students collectively reach the opinions that admissions committees should take into account a wide range of factors, although standardized tests and GPA by far are the best measures of merit, and should not take into account race and ethnicity. Both implicitly and explicitly in the group discussions, students conclude that one’s experiences are relevant to both an accurate assessment of merit (for example, having to work one’s way through college is relevant to assessing one’s undergraduate GPA) and to classroom diversity (one common thread at UND is the diversity value of students who are from rural parts of the state). Yet, white students almost uniformly reject the idea (having considered it usually only with instructor prompting) that one’s race might shape one’s experiences.

2. Predispositions. Cognitive psychologists have found that when presented with information that is dissonant from their understanding of events or processes, individuals erect “conceptual blocks” that make it difficult for them to acquire and process new information – in lay terms, to learn. When teaching about race, one must be especially aware of this tendency, and compensate for it through creative pedagogy. Even following active-learning exercises like the one we describe here, the obstacles to informed understanding often carry over from students’ learned predispositions toward race, which are linked to misperceptions about people of color. . . . Student perceptions of people of color are circumscribed by their
upbringing in racially homogenous communities, and by their subsequent lack of exposure to diversity in the classroom. . . .

Linked to their firmly held predisposition toward race neutrality is students’ perception that any law or policy that takes race into account can result in “reverse racism” against whites. Students tend to emphasize what they see as the contemporary prevalence of reverse racism and the “disadvantages” of being white. Exposure to equal protection analysis does not always mitigate these predispositions; indeed, in our experience, it may reinforce them. Students largely cannot articulate an equal protection argument concerning reverse racism beyond Justice Harlan’s famous dissent in *Plessy*, in which he stated that the Constitution is “color-blind.” This becomes the defining standard for many students, minus historical or subsequent interpretive context. . . .

Students often [also] cite a decreasing prevalence of racism in America in support of race-neutral university admissions. In framing this argument, students do not distinguish between the theoretical argument that as a result of the “color-blind” Constitution, race “shouldn’t matter,” and the empirically driven proposition that today, race “doesn’t matter,” either in how they, as white students, experience the world around them, or how people of color – in the eyes of white students – do the same. As to the question of whether, in practice, race actually does matter today, the distinction between individual race prejudice and institutionalized race discrimination is a difficult concept for students to grasp and acknowledge.

3. Personalization. When we teach about race, our students demonstrate an intense desire to personalize and anecdotalize experiences that they also see as generalizable. For white students, such personal anecdotes connect the storyteller to a larger context of prevalent inequities. It is common for white students to share their own experiences with discrimination, for instance, even if such discrimination is not overtly race-based. Students who have traveled abroad tell stories of the discrimination they experienced as Americans, and students who have suffered disparate treatment based on socioeconomic class, age, or physical appearance relate those experiences as similar to racism.

**Intended Student Learning Outcomes: Teaching Race in a Homogeneous Classroom**

The teaching module is designed to help students begin to question common assumptions about race and affirmative action through both peer-led and instructor-led discussion in a structured context. As I point out to students numerous times over the course of the semester, my goal is not to change students’ opinions about affirmative action as good or bad public policy, but to develop their ability to take different perspectives into account, even – or perhaps especially – those with which they disagree, in assessing the legal arguments that may be made to support or oppose affirmative action policies. (This is an important aspect of teaching students to “think like lawyers” – meaning to engage in legal analysis, or the categorization, articulation, and assessment of a set of facts in terms of principles, doctrines, and rules of law.)

At the end of our *Journal of Legal Education* article, we connected our experiences in teaching issues related to race at UND with the Court’s decision in *Grutter*. Usually, my classes are largely racially
homogenous, lacking the “critical mass” sought by the Michigan Law School affirmative action policy and endorsed by the Court as crucial to achieving the benefits of a diverse classroom. According to the Court, diversity, in the form of a “critical mass” of students of color, helps to break down stereotypes, improves classroom discussion, prepares students to be productive citizens and members of the workforce, and permits universities to “cultivate a set of leaders with legitimacy in the eyes of the citizenry.”

From the instructor’s perspective, in the words of Kimberlé Williams Crenshaw, “[t]eaching to a racially and culturally diverse student body . . . [is like] conducting a full philharmonic orchestra – each discussion unfold[s] like a symphony, the music . . . like cutting edge jazz, sometimes discordant, sometimes soulfully melodious, and often surprisingly complex.” After Proposition 209, Williams found herself in a very different classroom at UCLA School of Law: “[T]he music we make in our classrooms today is often flat and monotonous. When I step up to the podium today and pick up my baton, I see that my entire string section is gone – just gone – forget about playing anything that sounds remotely the way it should; the brass section is decimated, and the percussion can barely kick out a beat that can push us along. Surely I try to compensate by playing some of the missing instruments myself; I’ll jump in the string section to play a few measures, run over to the horns to blow a note or two, try to kick at the timpani on the way back to the podium, but there is no denying it – what we are creating in our classrooms today is simply subpar.”

The Court’s decision in *Grutter* led me to think about whether the benefits of a diverse student body could be achieved in a more homogeneous environment. At a university like UND, the question is how to teach race effectively in classrooms without a “critical mass” of students of color? Is an instructor simply left with “flat and monotonous” class discussion or, even short of “cutting edge jazz,” is it possible to achieve some of the benefits of classroom diversity? How can the instructor diminish isolation experienced by students of color, and protect them from being perceived as spokespersons for their race? How can the instructor’s approaches help to break down stereotypes, improve classroom discussion, prepare students to be productive citizens and members of the workforce, and assist UND in cultivating a set of leaders with legitimacy in the eyes of the citizenry? I don’t pretend to have all the answers, but these questions have guided me in continuing to re-work the teaching module in my course.

**Assessment of Student Learning:**

I’ll be frank: I’m not certain that my teaching strategy accomplishes all of my intended learning outcomes, particularly those focused on ensuring an effective learning experience for students of color. I have attempted to assess the success of the teaching module in a number of ways, and I believe that it is largely, if not fully, successful. Each year, several students mention the value of the affirmative action teaching module in their comments on the USAT forms. After the Court decided *Grutter* and *Gratz*, I wondered whether the teaching module had become moot – after all, the Court had spoken on the issue. I had students complete a two-page evaluation, in which I asked them to comment on the exercise in the context of my goals as well as their own goals and expectations for the course. The response was overwhelmingly positive. (And, given recent legal challenges to race-based affirmative action, the issue continues to be legally relevant as well.) As a result, I’ve continued to employ the module.

The main way that I’ve assessed student learning is by comparing the content of the initial student small-group discussions to subsequent class discussions and students’ analysis on the final exam. I
“eavesdrop” on each admission committee’s discussion at the start of the teaching module. (Students are assured that I am not grading them on the content of their discussions.) I take notes, without identifying individual students, on the general content of the discussions. Almost without fail, I observe many of the same perceptions Light and I described in our *Journal of Legal Education* article. In subsequent class discussions, I try to gauge students’ ability to incorporate the case law and other course materials in their answers and comments in class. At the end of the teaching module, I include a “no wrong answer” discussion of the “top percent” plans and the future of affirmative action policies. Generally speaking, this discussion is markedly improved from the initial small group discussions in terms of informed debate and respect for and understanding of differing opinions. At the end of the semester, I typically include some kind of affirmative action scenario in the final exam. The exam question requires students to apply the case law to a factual situation designed to be neither clearly unconstitutional nor clearly constitutional. Students are directed to articulate and support the most persuasive arguments on both sides of the issue. As I grade (anonymously) the exams, I take note of whether, as a class, students have included in their analysis legal and policy arguments on both sides, with appropriate support, and have omitted from their analysis those perceptions without support in the case law (for example, that affirmative action policies necessarily employ “quotas”). Invariably, as a class, students show improvement in their ability to structure a legal analysis of the issue, including assessment and articulation of arguments in terms of legal doctrines and rules.

**The Strategy’s Applicability: Some Lessons Learned**

In the generally racially homogeneous setting of my classes, I’ve observed two fundamental challenges: first, regardless of ideological bias, students come to the discussion with firmly held, if ill-informed, opinions on race and affirmative action and these opinions simply may be reinforced in a homogeneous classroom, and second, while beneficial in theory, a spirited debate over affirmative action may detrimentally affect the educational environment for the few students of color in the classroom. In the context of affirmative action, students often reveal predispositions to the topic (for example, the common insistence that affirmative action is “reverse racism” or “quotas”), a tendency to personalize the issues (for example, it seems that many white students have “friends” who are African American or, in North Dakota, Native American, and who automatically received admission and “free rides” based solely on their race), and conceptual blocks (for example, the inability of white students to recognize the impact of their own race on their daily experiences).

My overriding goal in teaching race issues in my law school courses is to introduce all students to legal theories related to race and appropriate critiques of the same in a way that avoids the “shut down” of spirited and informed debate, while maintaining a safe, welcoming, and effective learning environment, with particular regard for students of color. Here, I offer some suggestions based on my own successes and failures in teaching race at UND:

- **Provide an informational foundation for student discussion.** In the teaching module, the content and timing of class lectures are designed to provide some basic information and to correct some common misapprehensions, so that students have some tools to counter typical, if ill-informed, arguments (e.g., that all universities use race-based admissions, that universities employ quotas, that affirmative action is mandated by federal law, etc.), as well as some ideas for appropriate topics for debate (e.g., how much emphasis should be placed on
standardized test scores, what factors predict academic success, is classroom diversity an important goal for public universities, etc.).

- **Use multiple teaching techniques to refract the central issue to reach more students.** In the module, the combination of lecture, individual and group exercises, documentary video, class discussions, and working through case law provide different opportunities to “see” the issues, and to capture visual vs. auditory learners.

- **Situate race within multiple contexts.** In the initial exercise, students brainstorm a range of factors that could be used in admissions, so it is easier to see race as one of those factors – which in turn ties to the legal standard of “race as a plus.” I also cover affirmative action after students have learned about the historical-legal context of race in the U.S.

- **Allow and encourage students to bring their own experiences to bear.** To avoid the kind of personalization by white students that may minimize or even trivialize the experiences of students of color, I’ve incorporated structured opportunities for all students to engage in personalization of the issue, including through thinking about what their experience with standardized tests was like, what they would like to see from an admissions committee, and how UND’s admissions policies operate.

- **Put a human face on the abstract and controversial.** The admissions exercise and then the video documentary ask students to think about applicants as individuals, and the stories of the high school students trying to get into Berkeley show intelligent, racially and ethnically diverse people facing real challenges both similar and dissimilar to those faced by UND students.

- **Anticipate and work to minimize potential negative impacts on the few students of color in the classroom.** I have experimented with a number of different ways to minimize potential negative impacts, such employing anonymous polls (to avoid putting students of color in the position of being a “spokesperson” for their race) and discussing UND’s admissions policies and practices (to address any assumptions about how students of color were admitted to UND).

- **“Walk the talk” of classroom diversity.** Here, I mean appreciating the contributions of all people in the great American experiment, including in my own classroom. In the lecture, for example, I discuss the work of African-American attorneys, including Thurgood Marshall and Charles Hamilton Houston, to overturn *Plessy* and change how Americans conceived of equal protection under the law. Class discussion generally demonstrates that different experiences lead to different perceptions and opinions, and that there is value in understanding perspectives that differ from one’s own. I also choose lecture content to illustrate the point that not all people of color share the same opinion on issues related to race (i.e., Ward Connerly’s influential opposition to affirmative action).
Employing the Learning Community Model in the Graduate Classroom to Strengthen Ties between Teaching, Research, and Learning

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ABSTRACT: In an effort to bridge the gap between graduate coursework and research, we developed a collaborative research project between two core courses. We utilize values and strategies from the undergraduate learning community model, including: discourse learning, in-depth understanding, individual and group work, collective knowledge, and tangible products. As a team, the two faculty and five students, developed a research abstract, conference poster, and manuscript for journal submission. The collaborative project provides a unique forum to help strengthen ties between our roles as teachers, learners, and researchers.

Teaching and Learning Strategy:

Students in the Earth System Science & Policy (ESSP) graduate program come from diverse backgrounds and education levels. To facilitate a baseline understanding of ESSP concepts, students are required to take six sequential core courses during their first year; each course is taught in a six-week block of time. Collaborative learning activities which link courses in the same semester are key components in the undergraduate learning community model of teaching and learning (Bielaczyc and Collins, 1999; Smith, et al. 2004; Smith, 1991); we wanted to transfer this to the graduate classroom.

Graduate education too often emphasizes research competency over classroom learning and this unbalanced focus results in students and faculty neglecting their roles as teachers and learners. One of our objectives in linking a research project between two core courses is to develop more balance between teaching, research, and learning. Through the collaborative project we aim to provide students with an opportunity to be teachers and learners by studying a regional environmental topic in-depth and exploring it from different perspectives. A second objective is to help students build necessary skills for their post-graduate school success. The collaborative project provides opportunities for students to build their team-work and research skills by applying these to a complex issue. Building strong skill-sets in these areas has been shown by our alumni to be very valuable in
environmental job markets. To accomplish these goals, we utilize the following learning community skills and strategies:

- **cohort identity** - students develop group cohesion through the required sequential courses so, we emphasize team efforts and a supportive learning community;
- **discourse learning** - faculty and students take turns leading seminar discussions;
- **in-depth understanding and complex problem solving** - the collaboration needed for the research project provides a forum to help students build competency in these skills;
- **individual and group work** - we utilize both because students need to develop in both these skills;
- **collective knowledge** - a collaborative project builds this by necessity and students begin to recognize its value in the second course;
- **collaborative learning** - everyone is a teacher, learner, and researcher in the project;
- **public presentations of results** - helps students build self-confidence in public speaking; and
- **tangible products** - help promote active learning and students realize the value of their work.

**Development of the Strategy:**

We developed the collaborative research project to fit with the biodiversity conservation theme of a national conference; it is a perfect topic to bridge our two courses. The collaborative research project encompasses:

- **team contract** - (see attached example) students develop, and sign their agreement to follow, a consensus document that spells out rules, or a list of potential challenges, they might encounter in teamwork, along with strategies to cope with these or consequences for failing to work together;
- **individual research papers** - faculty develop a list of research topics needed for the team project (this strategy is employed to save time because the courses run in 6-week blocks), students choose their individual topic that contributes to the overall project and research the topic from a different perspective in each course- first science, then policy / law;
- **team reports and presentations** - in each course, students aggregate their individual research into a consensus report which is given as a formal presentation at the end of the course;
- **team conference poster** - (see attached guidelines and grading matrix for team project) building from their individual research, in the second course, the students develop a draft poster, which the faculty revise and add further data;
- **manuscript** - the reports and poster data are also being developed into a paper for submission to a peer-review journal.

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1 For the first year we presented at the 9th National Conference on Science, Policy, and the Environment: Biodiversity in a Rapidly Changing World. For the second year we will submit to the Society for Conservation Biology, 2010 annual meeting.
When possible, additional assignments in both courses are oriented toward building collective knowledge for the project, examples include: relevant lectures and seminar discussion, a formal debate on a related issue, or gathering and analyzing field data on local species biodiversity. Because the timing of the first conference conflicted with finals week, students were not able to present the poster. So, in the second year, due to the timing of the conference in July, the poster will be developed in a 1-credit required summer session course, which, if accepted, will culminate with the team presenting the poster at the Society for Conservation Biology conference. The team poster will also be submitted to the next UND Graduate Forum. A conference strategy provides an opportunity to develop tangible products, i.e. an abstract submission and conference poster, and is an excellent way to utilize the interdisciplinary backgrounds of the two instructors involved, engage the students in active learning, and meet the goals of our multidisciplinary foundation in the ESSP graduate program (Smith, et al. 2004).

**Intended Student Learning Outcomes and Assessment:**

In developing the collaborative project, we believed that incorporating aspects of the learning community model would help our students develop teamwork skills and improve their research, writing, critical thinking, problem solving, and presentation skills. In addition to these beneficial skill-sets, utilizing the learning community model would help students; 1) develop a deeper understanding of course concepts, and more specifically, 2) make connections between the biodiversity science and the socioeconomic policy issues by using collaborative learning that linked the related courses through a common theme and tangible products.

We observe and accomplish the project objectives as a team- graduate students plus faculty guidance (Umbach and Wawrzynski, 2005). We develop a research question, write the conference abstract, and organize the conference poster. The faculty provide guidance as the students conduct individual research papers and collaborate to form a consensus report and final public presentation on their findings (Hansen, 2006). The students receive feedback throughout the process and are assessed at draft stages and final products for class credit. Students are assessed individually for their independent work and collectively for the teamwork. To help ensure accountability, they also assess each other’s individual efforts in the teamwork by an anonymous survey, which accounts for a small percentage of class credit. At the end of the semester, students provide feedback on their learning and on the benefits and challenges involved in the collaborative project through an anonymous survey. Through these means, we observe and discuss our roles as teachers, learners and researchers in accomplishing the project objectives and in the graduate education process.

**Benefits and Challenges of the Strategy:**

I believe that adopting learning community skills and strategies can benefit any course by building stronger ties between teaching, learning, and research. Utilizing a collaborative research project is an easy means for bringing parts of the learning community model into your classroom regardless of cooperation with other faculty; I have utilized team research projects with undergraduate students in various class sizes. If you teach a large class and it is not feasible to have your team(s) submit to a regional/national conference, you can hold a mini-conference of the class posters within your
department as a culminating showcase at the end of a semester; I have used this mini-conference strategy in large freshmen courses with ideal team sizes of 3-5 students. ESSP faculty and students have identified the following benefits and challenges, through end-of-course reflection and anonymous feedback.

Benefits:

- Improved team-work and research skills
- Reinforcement and linkage of course concepts
- Active learning through tangible products (Smith, 2004) (this is a first experience in developing a research poster for most of the students)
- Deeper understanding of complex issues

Challenges:

- Team contract development cannot imagine every possible situation, so faculty intervention may be needed at times
- An ideal conference theme and/or timing may not be possible every year
- Class size varies by department, year, etc., which may require dividing students into multiple teams and may limit faculty involvement to guidance
- Active learning through such a collaborative research project requires a great deal of preparation by the faculty and active involvement from all team members, which can be difficult to maintain throughout the process

References


Guidelines for Team Project: Poster and Presentation

Due Dates:
- Nov. 10- Team contract
- Nov. 14- Research paper issue statement
- Nov. 26- Draft research paper and draft poster
- Dec. 5- Final poster
- Dec. 11- Team presentation and annotated bibliography
- Dec. 12- Final research paper

Objectives
- Acting as a collaborative group of “regional stakeholders,” educate each other and critically evaluate the challenges facing biodiversity conservation in the NGP in order to negotiate and develop 2-3 policy recommendations to present to “regional NGP decision-makers.”
- Develop and present a talk and a poster that combines your biodiversity background information from Block 1 and the policy recommendation(s) you develop in this Block. The talk will be appropriate for an audience of “regional decision-makers” (ESSP faculty, staff, and students acting as representatives of the region-county commissioners, citizens, etc.). Using your combined research and concepts learned this fall semester, your team goal is to convince the “decision-makers” that your policy recommendations are the most effective way to improve biodiversity conservation on the NGP.

Points to Consider:
- What is the most practical strategy to address biodiversity conservation in the NGP; how does that compare to an ideal solution; and how do you negotiate between the two?
- You each represent a set of stakeholders (topic area); you must become the expert on their concerns and negotiate how these can be addressed.
- What are the “costs and benefits” of each alternative; how did you choose the preferred recommendations based on these?
- Can your group develop policy recommendations by consensus or do you need to develop multiple options in order to gain support and satisfy all stakeholders in the group?
- What are the value conflicts associated with NGP biodiversity conservation and how do your recommendations address these conflicts?
- What incentives can be used to encourage the most support for your recommendations?

Required Components:
- Develop and type-up a Team Contract of group expectations, goals, and consequences
- Conduct research to learn about biodiversity management issues/policies in your category from Block I
- Critically analyze each other’s proposals and develop the team’s preferred policy recommendation(s)
- Develop a PowerPoint presentation to communicate your policy recommendations; all team members must play a significant role in the oral presentation
- In collaboration with the faculty, develop a team poster, to be presented at the NCSE conference
- Type-up an annotated bibliography of sources used to support your recommendation(s)

Grading Criteria:
- See the grading matrix for criteria in the oral presentation
  - The team grade will be determined by how effectively the poster represents the submitted abstract in a professional manner that is also aesthetically pleasing
- Annotated bibliography-
- Follow the reference style format of *Conservation Biology*.
  [http://www.conbio.org/Publications/ConsBio/Instructions/Style.cfm](http://www.conbio.org/Publications/ConsBio/Instructions/Style.cfm)
- Minimum of 25 scholarly sources (no more than 10 Internet sites)
- Annotations need to summarize the source (in one or two sentences) by stating why the source was used or how it was helpful
## Grading Matrix for Team Presentation

20% of Block grade

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quality of Analysis</strong></td>
<td>40%</td>
</tr>
<tr>
<td>- Does the presentation include a strong introduction to management issues in NGP biodiversity conservation and an overview of the main points to be covered?</td>
<td></td>
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<tr>
<td>- Does the team identify the “costs and benefits” of their recommendation(s)?</td>
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<tr>
<td>- Does the proposal address stakeholder interests?</td>
<td></td>
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<tr>
<td>- Does the proposal address value conflicts?</td>
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<tr>
<td>- Does the proposal provide a practical solution to the issue?</td>
<td></td>
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<tr>
<td><strong>Comments</strong></td>
<td></td>
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<tr>
<td><strong>Use of Evidence</strong></td>
<td>35%</td>
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<tr>
<td>- Is the recommendation(s) supported by scholarly evidence?</td>
<td></td>
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<tr>
<td>- Does the presentation conclude with a strong reasoning to support the team proposal?</td>
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<tr>
<td><strong>Comments</strong></td>
<td></td>
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<tr>
<td><strong>Organization</strong></td>
<td>10%</td>
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<tr>
<td>- Is the presentation well organized?</td>
<td></td>
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<tr>
<td>- Do all team members play a vital role in presenting the proposal?</td>
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<tr>
<td>- Does the presentation demonstrate an overall quality of professionalism?</td>
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<tr>
<td><strong>Comments</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Appropriate use of time, and relevance to Audience</strong></td>
<td>15%</td>
</tr>
<tr>
<td>- Do the presenters make arguments appropriate for a &quot;regional&quot; audience?</td>
<td></td>
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<tr>
<td>- Is time allocated for audience questions? (10-15 mins.)</td>
<td></td>
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<tr>
<td>- Is the team able to respond intelligently to questions from the “regional” audience?</td>
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<tr>
<td></td>
<td>Does the team manage its presentation time effectively? (40 mins. present.)</td>
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<td>---</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Comments</td>
<td></td>
</tr>
<tr>
<td>Total Grade</td>
<td>100% max</td>
</tr>
</tbody>
</table>
Group Contract for Team I
ESSP 501:

Names/Contact Information:

Group Objectives:
To act as a collaborative group
To develop ideas and implement them to achieve the group target
To write the final group report

Procedures:

Require attendance at team meetings.

Grant each team member an equal voice and vote in all team decisions, including editing.

Make decisions by majority vote - after ideas are presented, justified, and discussed.

Solve old issues in meetings before moving on to new issues

Set procedures for resolving disagreements: If the old issues remained unsolved, take group meeting to Rebecca for resolution.

Decide on procedures for allocating work: Once framework finds work, then volunteer for sections.
Protocol:

1. Check if everyone understands what is happening. Rework ideas that seem to be unclear or misunderstood. Summarize key facts, problem issues, decision choices, and advantages and disadvantages affecting decisions.

2. Ask questions to determine if the meetings are satisfying the needs of team members. If not, seek suggestions for improvement.

3. Show concern for any persons not being heard from or hesitant to speak out on issues. Directly ask for their viewpoints. Many quiet people have excellent ideas. Different personality types have different talents to contribute.

4. Take prompt corrective action when a problem develops in team relationships. If any person is dominating meetings, unprepared at meetings, or skipping meetings, discuss what corrective action should be taken. Then, make a decision and act on it.

By signing below, I pledge:

- I will show up to all meetings ready to work. If something important comes up that forces me to miss a meeting after I’ve agreed to it, I will email or phone at least one group member who will be at that meeting to let them know I will miss it. I will catch up on what was discussed BEFORE the next meeting; I will not take up time during the next meeting to catch up.

- I will explicitly (either verbally with group members or through email) agree to task deadlines and I will complete my individual assignments by those deadlines. If I can’t complete my task by the deadline because of schedule disruptions, I will call at least one group member to explain the problem and will commit to a new deadline with that person. If I can’t complete my task because it proves to be more difficult or complex than I originally thought, I will call at least one group member to ask for help. At the next meeting I will explain why I couldn’t finish the task and, with the group’s help, reorganize the task and set a new deadline.

- I will listen sympathetically to the problems my group members have with completing tasks, and will always think to offer solutions or “work arounds” to help work get done.

- I will volunteer for task assignments rather than avoid them. I do this because I realize that the more work I get to do properly, the more I will learn about the subject, and the better off I’ll be.

- I will not take on more than my fair share of work thus keeping others from getting involved, nor will I be unnecessarily dictatorial in telling others what to do.

- I will do my best to make every contribution that I can to the content and the organization of both the paper and the presentation.
Simulating Negotiated Problem Solving

Brian Urlacher
Political Science and Public Administration

ABSTRACT: Simulations of negotiations can be effective in helping students to understand both the process of negotiation and the options available to solve complex political problems. The approach to negotiation simulations discussed here involves simulations that 1) are self contained, requiring no background knowledge on the part of the student, 2) can be carried out in a single class period and 3) can produce concrete learning outcomes.

Teaching and Learning Strategy

Simulating negotiated problem solving begins with the belief that if students are put in a competitive environment in which they need to solve a complex social problem, they will actively seek out and process information needed to solve the problem. There are many ways in which this type of environment could be created. I have developed an approach that runs in a single class period and delivers a large amount of information.

When simulating negotiated problem solving, I begin by breaking students up into groups of 2-3 students. I find that small groups tend to minimize confusion. Using small groups also creates opportunities for discussion both within and between groups. Each group is given a packet of information about the problem to be solved, the options available for resolving different aspects of the problem, and how their particular group values each of these options. Options are assigned numeric values to reflect how beneficial the option is to a group. I have used this approach to simulate the drafting of an Iraqi constitution, the development of a Hurricane Katrina disaster relief bill, and the crafting of a civil war peace agreement. In each of these problems there are multiple issues to be resolved and multiple options for resolving each issue.

After groups have reviewed the options I ask them to prepare an “initial proposal” for how they would prefer to see the problem solved. Armed with these initial proposals groups are then paired together with a rival group and charged with developing a solution that is mutually acceptable. The simple act of negotiating introduces a degree of competition into the situation that tends to elicit an additional level of interest from students. Although students are instructed to find a solution that is mutually beneficial, they tend to work toward solutions that maximize their own score. This conversion of “positive-sum” negotiations into competitive “zero-sum” negotiations is both a common and tragic pattern in negotiation behavior (Raiffa 2002).

Negotiations are complicated by the fact that each group has incomplete information. Individuals know how their group values each option, but they do not know how other groups value each option. For negotiations to be successful, groups will need to return to the options and think through how
each option would impact the rival group. Groups cannot simply cast about blindly because a problem with 5 issues to be resolved and 4 possible options for each issue would have 1024 possible solutions of which only a handful might be mutually acceptable.

When the simulation ends, I conduct a “de-briefing.” Students are invariably excited to describe their experience. I begin the discussion by asking groups to describe the “solutions” they found to the problem, or the area that proved intractable. After students describe their experiences, I steer the conversation to how the simulation succeeded and failed in depicting reality. I press students to think about other options or aspects of the problem that were not explored. I have, also, found that the debriefing period creates opportunities to re-visit themes from past classes or preview future topics.

The basic process for developing a simulation of negotiated problem solving discussed above can be modified in any number of ways. For example, I have used the simulation with larger groups that used different voting rules to make decisions (majority, supra-majority, unanimity) and I have added mediators to the process. Regardless of how the simulations are run, the instructor will need to develop materials in advance to ensure that the simulation runs smoothly and is self-contained, i.e. no external information is required.

**Problem sheet** – A 1-2 page set of instructions that describes the process and provides background on the problem.

**Option sheets** – each side in the negotiations should receive a packet of information describing different options for addressing issues to be resolved. Each side will have different values associated with the options.

*Note: When assigning values, it is important to ensure that a mutually acceptable solution can be obtained. It may be necessary to tweak the values of different policy options to achieve a negotiation problem of appropriate difficulty.*

An example of both the problem sheet and the option sheet is provided in the appendix.

**Development of This Strategy**

I developed simulations of negotiated problem solving out of frustration with the life-draining boredom of my own lectures. Politics is the struggle for “who gets what, when. and how” (Lasswell 1935). That struggle is what I find exciting about the study of politics, but to understand the struggle you first need to understand who are the players, what are the issues, and how different policies will affect different players (Starkey et. al 2005). The process of explaining policy options through a never ending march of PowerPoint slides bleeds problems of the struggle and the excitement.

I wanted a way to deliver information in a way that placed the political battle at the center of the learning experience. I knew that this was possible because while doing my graduate work at the University of Connecticut, I worked as a facilitator for an on-line simulation of international negotiations for middle and high school students known as GlobalEd. Seeing middle-school students
speak articulately and intelligently about why their “country” supported or opposed a particular policy related to global warming, human rights promotion, or poverty alleviation convinced me that simulated negotiations could be a powerful catalyst for learning.

The challenge was to create situations compact enough to be carried out in a single class period. This required stripping down the GlobalEd approach. Often in simulations participants research the position of the entity they are representing and understand how it would view different options. This is how both GlobalEd and Model United Nations simulations operate, but this is a very time consuming process. I removed the role-playing element and replaced it with a numeric representation of preferences. Similarly, most educational simulations of negotiations encourage participants to develop their own proposals, identifying what issues to address and what options to advance. This is ideal if time is not a factor and if the facilitator is actually willing to give up control. By providing the options to students I remove some of the creativity from the process, save a lot of time, and preserve control over the content of the policy options.

**Intended Student Learning Outcomes and Assessment**

The learning outcome depends on the goal of the instructor and the structure of the simulation. I frequently use negotiated problem solving to deliver large amounts of factual information. In this case the goal of the simulation is knowledge and comprehension of the material on the option sheets. In other situations, I have used the experience of negotiations to increase understanding of negotiations. In these simulations, I am less focused on the specific content learning, and more interested in helping students gain experiences that can serve as a foundation for understanding course content.

In general, educational simulations have repeatedly been found to be effective tools in advancing student learning (Klassen and Willoughby 2003; Gremmen and Potters 1997). In terms of the effectiveness of negotiated problem solving, I have conducted only a limited assessment. I have delivered course content through traditional lecture and through the simulation approach and found no statistically significant difference in student scores on an identical test question. I have also noticed that students seem much more engaged and interested during the simulation and are far more active in the debriefing than they are during normal class discussions. I frequently have students stay after class to continue discussing the simulation while others request copies of all group packets so they can find the optimum solution.

**Broader Applicability**

I have used this approach with introductory courses in American government and international politics as well as in an upper division class I teach on modern civil wars. I have found that providing all of the information students might need helps to level the playing field for students from different academic backgrounds. Often when I run case studies or more open ended simulations, I find that students majoring in Political Science or History tend to have more relevant background

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2 As a note of caution this is a very informal assessment involving a comparison of two small, non-random samples with no controls for differences across groups.
knowledge that they are able to draw upon, which can be potentially undesirable in a competitive situation.

The simulations work ideally in classes between 15-30 students. Scaling the simulation up for larger classes would probably require the assistance of additional facilitators. Students often have questions about the simulation. Having an additional individual able to answer questions would be essential for groups larger than 45.

This approach is potentially adaptable for on-line classes. If course communication is synchronous, negotiations unfold rapidly (sometimes too rapidly given the medium). If class communication is asynchronous the process is much slower because of the lag between messages. In a traditional (not on-line) course, I have used asynchronous on-line communication to help facilitate a particularly complex simulation of negotiations. Groups developed their initial proposals in an on-line environment. The negotiations between groups were then carried out in the class room environment. Students were able to come to class having reviewed the options and with a plan for what they wanted to see in the final solution.

**Literature Cited**


Example: Crafting Democracy in Deeply Divided Societies

Short Background on Sri Lanka

Sri Lanka is an island off the south eastern coast of India. For the last 28 years Sri Lanka has been in a state of near perpetual civil war between its two main ethnic groups. The Sinhalese, who are largely Buddhist, and the Tamils, who are largely Hindu. There is also a sizeable Muslim population. The Tamils are divided between those in the north who have lived in Sri Lanka for hundreds of years and those in the west who came to the island over the last 100 years.

Under the British colonial rule, the Tamils were the favored ethnic group and had better access to government jobs and to higher education. Shortly after independence the majority group set off a spiral of ethnic outbidding. Politicians began pushing a Sinhalese first policy in terms of jobs, language, and placement at universities. The result was the radicalization of the Tamils who formed militant organizations to achieve independence. This position is fiercely opposed by the Buddhist clergy who have advocated for extremist pro-Sinhalese parties that refuse to compromise with the Tamils.

Instructions

It is now 2009 and the Sri Lankan government has just won a near total victory over the leading Tamil resistance group the “Tamil Tigers.” With the group destroyed and its hardline leader dead, other more moderate Tamil leaders have taken up the mantle of leadership seeking a political compromise with the Sri Lankan government.

The Sri Lankan government has decided that for the victory to last a plan needs to be developed to manage tensions between groups and prevent further chaos. Your job is to represent either the Tamil leaders or the Sri Lankan government at the negotiating table, crafting a plan in five different areas. While there are many possible ways to deal with tensions between groups, some of these strategies are deal breakers for one group or the other. Craft a plan that will be effective (Net Effectiveness score of 12 or greater) and politically acceptable (zero or greater) to both sides. Groups are forbidden to explicitly discuss the numbers associated with policies.

Work for 5-10 minutes with members of your group to draft an initial proposal. The proposal must be both effective and score at least 4 on the political acceptability dimension. Once both groups have initial proposals, negotiations between groups can begin. Your task is to find a way to reconcile the two proposals in a way that both sides can accept, while achieving the needed effectiveness.
Policy Sheet

Note: these policy sheets contain values for both groups. For the actual simulation separate policy sheets are needed for each group.

Civil Society (Select up to 2)

Building links between groups is critical for cooperation. Fostering this can be very difficult especially when people have sorted themselves into relatively homogenous communities.

**Grassroots Peace Clubs** – Funding will be provided to NGOs to host workshops to get people talking about differences, fears, hopes, and problems. While this can produce tangible results, participants self select and are already open to inter-group cooperation.

*Sinhalese = 0, Tamils = 0 **Effectiveness** = 1

**Leadership Conferences** – A series of local and national conferences bringing together community leaders in both the Tamil and Sinhalese communities. The goal is to establish contacts between these individuals.

*Sinhalese = 0, Tamils = 0 **Effectiveness** = 2

**Sponsored Athletic programs** – This program would create an armature Cricket league. Communities can form their own cricket teams and the best teams can compete nationally. This will get people engaged, but it might produce tensions between groups

*Sinhalese = 2, Tamils = 2 **Effectiveness** = -1

**Government contracts** – The government will require that all businesses that receive government contracts or grants provide documentation that their organizations are diverse at all levels. Workplace interactions have been shown to be the most effective ways to link people together in a positive way; however, this may be difficult to implement in ethnically homogenous regions.

*Sinhalese = -1, Tamils = -1 **Effectiveness** = 3

Civil Service and Education (Select 1 Method)

One of the most contentious issues in Sinhalese-Tamil relations has been over access to government jobs and access to the Universities. No agreement can work unless these issues are dealt with. All of the following options are related to government positions or university entrance and do not apply to the private sector (although they could).

**Pure Merit Based System** – In a pure merit based system people are hired and promoted without reference to background. While this type of system intuitively seems fair, it creates
a lot of space for unconscious ethnic bias to influence the process. It also might favor the Tamils who have historically had greater access to higher education.

**Sinhalese = -1, Tamils = 2  Effectiveness = 1**

**Quotas** – A quota system requires that university admissions, government hiring and government promotion produce outcomes that are proportionally similar to the general population. This kind of system can unintentionally create different standards for different groups and is often seen as unfair, even if it achieves the desired outcome.

**Sinhalese = -1, Tamils = -2  Effectiveness = 4**

**Affirmative Action** – An affirmative action system attempts to merge merit with the goal of diversity. Employers are required to make good faith efforts to make their workforce (or university population) reflect the larger population. In practice this means that if two candidates are equally qualified for a position, then the deciding factor should be based on the need to fix any imbalances in the existing workforce. This preserves the fairness of a merit based system but also forces employers and admissions officers to be conscious of ethnic issues.

**Sinhalese = 0, Tamils = 1  Effectiveness = 3**

**Reorganization of the state (Select 1 Option)**

Another contentious issue has been over political decentralization. The Sinhalese maintain that the island is theirs in its entirety and cannot tolerate its division in any way. The Tamils maintain that they should be able to control their own personal affairs.

**Federal System** – A federal system would divide up the island into smaller states. These state governments would be responsible for setting policy in a limited number of areas and administering the territory in their state (chartering towns, operating schools, establishing police forces). The creation of a northern Tamil state and a western Tamil state could be a middle ground between the two extreme positions.

**Sinhalese = -1, Tamils = 1  Effectiveness = 3**

**Autonomous Region** – The creation of an autonomous region for the Tamils in both the north and the west, would create a nearly independent state. The autonomous state would control all internal affairs but would not be able to set its own foreign policy, maintain a military, or print currency.

**Sinhalese = -3, Tamils = 3  Effectiveness = 5**
**Unitary System** – A unitary system would preserve the state as a single political unit. All decisions would be made at the national level and all areas of the country would be treated the same. This is the preferred option of the Sinhalese.

*Sinhalese = 3, Tamils = -3   Effectiveness = 1*

**Electoral System (Select 1 Option)**

One of the fears of the Tamils is that they will be trampled in a democratic system that favors the Sinhalese. The Sinhalese argue that democracy means that the majority group gets to rule. Electoral institutions might be able to reconcile this issue.

**Proportional Representation** – Under this system a single national election would be held. Parties would be assigned seats in parliament based on the percent of the vote they receive. This ensures that Tamil political parties can earn at least some seats in Parliament, but the Sinhalese vastly outnumber the Tamils.

*Sinhalese = 3, Tamils = -3   Effectiveness = 2*

**Plurality (districts based on population)** – A plurality system assigns a seat to the winner of a district (in a winner take all, single member district variant). Districts are to be drawn up by an independent coalition so that districts are equal in terms of the number of people living in each district. Given the concentration of groups this would create strong Tamil districts but many more strong Sinhalese districts.

*Sinhalese = 3, Tamils = -2   Effectiveness = 2*

**Plurality (districts balanced)** – Under this system districts are created not based on population. Rather 60% of the seats are allocated to “Sinhalese” areas and 40% of the seats are allocated to “Tamil Areas.” These areas can then draw up districts however they wish to elect representatives to those seats. This system will strongly favor the Tamils giving them almost double the influence they would normally have. It would give the Tamils a veto over constitutional changes (requiring 2/3rds majority) but not over everyday legislation.

*Sinhalese = -2, Tamils = 3   Effectiveness = 3*

**Creation of a Grand Coalition (Partially determined by electoral system)**

While electoral systems help create certain types of institutions, these outcomes can be muted by constitutional requirements that force the creation of broad based grand coalitions.

**If a Proportional System was selected one of the following MAY be selected:**

**Require Diverse Party Lists** – Political parties are required to fill the seats they win with both Tamils and Sinhalese politicians. This apportioning of seats must be within 5% of the general population distribution for Tamils and Sinhalese. Failing to achieve balance can
result in a forfeiting of seats to other parties. This makes it very hard for extremist ethnic parties to find enough supporters on the other side to fill seats in parliament.

\[ \text{Sinhalese} = -2, \quad \text{Tamils} = -2 \quad \text{Effectiveness} = 5 \]

**Require Diverse Governing Coalitions** – Any government formed in parliament must have both Tamil and Sinhalese representatives, in rough proportion to the distribution in the general population. This means that even if a Sinhalese party wins 51%, they cannot run the country unless they fill their ranks with Tamils or form a coalition with a Tamil political party.

\[ \text{Sinhalese} = -2, \quad \text{Tamils} = 3 \quad \text{Effectiveness} = 3 \]

**If a Plurality System was selected, the following MAY be selected:**

**Pledge of Unity** – As part of the swearing in ceremony, representatives are required to pledge national unity and dedicate themselves to ensuring fair treatment for all people in Sri Lanka. This may deter some of the more extreme individuals from running for Parliament, however, this kind of pledge may be unpopular and may become a point of tension.

\[ \text{Sinhalese} = -1, \text{Tamils} = -1 \quad \text{Effectiveness} = 2 \]
Supporting Critical Thinking in Online Threaded Discussion Boards

Richard Van Eck
Department of Teaching & Learning

**SUBJECT AREAS:** Any Subject

**GRADE LEVEL:** Undergraduate to Graduate

**TIME REQUIRED:** 6-15 Weeks

**STRATEGY SUMMARY**

Synchronous learning (e.g., traditional classroom instruction) allows for meaningful discussion and synthesis of ideas and concepts gleaned through the reading of textbooks and other course material. Distance learning is often asynchronous in nature (i.e., students and instructors do not interact with each other at the same time and/or place), making it difficult to promote the same level of engagement and processing of content. Threaded discussion boards theoretically allow for asynchronous discussion but without careful planning result in shallow discussion of ideas and a lack of social interaction and community that the best synchronous discussions often generate by instituting specific requirements for threaded discussion such as alternating student-led discussion questions; instructor modeling and intervention early in the process; standards for frequency, timing, and quality of posts; and synthesis of the class discussion for that week, it is possible to generate meaningful discussion and a sense of community with threaded discussion boards. This strategy has been used successfully in our hybrid (synchronous and asynchronous class sessions) blended (on-campus and distance students in the same class sessions) graduate program. One class implementation will be used as a case study to describe how to set up and manage threaded discussions and to illustrate the effect they can have on establishing a learning community in the classroom. It is as appropriate for traditional classes (face-to-face) between class sessions as it is for distance-only or hybrid courses at both the graduate and undergraduate levels.

**GOAL**

As developing experts in this domain, students will be able to engage in informed discourse with peers on the key concepts, processes, and facts, labels, and definitions of this field, and will be able to demonstrate leadership attributes with individuals and groups (e.g., interpersonal skills, group dynamics, team building) within their disciplinary practice

**OBJECTIVES**

Given access to asynchronous communication technology, articles, chapters, and other information sources from within their discipline, learners will be able to:

1. Synthesize multiple sources of information,
2. Evaluate different positions and information,
3. and relate key concepts and ideas to each other and to real world experience
   by:
   a. Responding in threaded discussion to questions by leaders
   b. Responding to peers during threaded discussion
   c. Interacting frequently and thoughtfully
   d. Relating personal anecdotes and experience to concepts under discussion in discussion board

AND

4. Generate meaningful discussion amongst peers
   by, on a daily basis:
   a. establishing and posting parameters for discussion at the beginning of the week
   b. generating and posting discussion questions in the discussion board
   c. responding to emerging issues, trends, and discussion as they arise in discussion board
   d. adopting a constructivist pedagogical stance in their interactions with peers
   e. synthesizing discussion across multiple days and viewpoints by posting to the discussion board

RESOURCES

Computer-Related:
LMS such as Blackboard, eZ, Moodle
Asynchronous Threaded Discussion Board
Adobe Acrobat Reader (for shared PDFs)
Internet Access (Broadband is Best)

Paper-Based:
Textbooks, articles, and other media as source of disciplinary information

OVERVIEW & RATIONALE

Communities of practice (CoPs) can be thought of as networks of individuals with varying levels of expertise who share common interests (e.g., Lave and Wenger, 1991; Wenger, 1998). CoPs are characterized by the sharing of ideas, question asking, and conversations about a particular area of expertise (e.g., Bielaczyc and Collins, 1999; Sherry, 1996; Voosen and Coneelly, 2002).

While the earliest CoPs predate the information revolution (e.g., quilting circles in the 1800s), they have become more relevant today, now including online communities (Palkoff and Pratt, 1999; Preece, 2000). This is due primarily to the changing nature of information and knowledge management and to the advent of distributed learning via distance technology. Content knowledge today is not static, nor is it the result of one individual working
in isolation. Information in the 21st century is distributed amongst many individuals and media sources; knowledge is generated through the interaction of individuals in communities of practice and learning communities who make meaning out of those sources of information.

In addition, the increased pace of change in virtually every domain has required that people continue to seek out formal educational opportunities, many of which are not available in the same geographical area as the learner. This has given rise to increased demand for distance learning. As educators, one of the common outcomes we seek is to ensure that students are able to engage in meaningful discussion about complex ideas within the domain of study, both to ensure the highest level of learning and to reflect the nature of knowledge generation today. It therefore becomes critical that we find ways to promote and measure this kind of learning, whether in distance or face-to-face courses. CoPs have been advocated for and studied as a means of improving college distance courses (e.g., Applebaum and Enomoto, 1995; Ross, 1996; Sherry, Billig and Tavalin, 2002; Wilson and Whitelock 1998). Of course, in distance education, classes comprise individuals who are predominantly novices in terms of the content, so it may not be possible to establish a true CoP. Nevertheless, it is possible to adopt the same approach by scaffolding expertise and promoting the same kinds of interaction that occurs in CoP so that learners process information at a deep level, share and construct knowledge, and establish a sense of community within the course, which has been shown to promote learning in distance classes.

Unfortunately, while the tools available to us in traditional distance education are capable of supporting this kind of learning and instruction, by themselves they are only half of the equation. Without appropriate instructional design and pedagogy, tools such as threaded discussion boards will generate shallow knowledge and infrequent participation that cannot meet the educational goals of the 21st century, establish a sense of community, or promote meaningful knowledge generation. Fortunately, there are strategies for using such tools that can generate meaningful learning communities that meet these goals and which can be measured and assessed. What follows is a description of one approach to doing this, including instructions for setup, management, and sustainment. Recommendations are derived from a study done by faculty and students in the IDT program in which an effective class discussion was analyzed over the period of a summer course. All postings were saved and key indicators of community and expertise from the literature were used to analyze the kinds of posts that were made. In theory, community is a prerequisite to an effective discussion of content that leads to expertise. Therefore, successful online discussion should be characterized by frequent community posts in the first part of the course, a mix of community and expertise in the middle, and high expertise markers at the end. Further, expertise markers should continually increase, while community markers should plateau or decline slowly from the middle to the end of the course. In this study, community markers included disclosure, humor, inclusion, and socialization. Expertise markers included asides, clarification, context, reference, and support. Markers that indicated an intersection of community and expertise included acknowledgment, anecdotes, help request and response, invitation for comment, and quotes. We found that community-building comments were made primarily in the first week (to build community) and last week (to concretize community). Significant indicators of expertise increased over the duration of the course. For example, the number of asides decreased, while the number of posts that referenced the text and other sources increased, and the number of attempts to clarify spiked in the middle as students made the shift from community and novice to expertise.

**DESIGN & PREPARATION**

*Note: Because threaded discussion is the most common form of asynchronous discussion, this strategy specifically addresses this technology. However, this strategy has also been used successfully using a Wiki, and you can see a sample assignment sheet using that strategy at the very end of this instruction. I recommend, however, that you begin with the threaded discussion, as it is far easier to scaffold both for yourself and for learners.*

This strategy requires that students sign up to “lead” the reading discussion on different weeks, and to participate regularly in discussions during weeks they are not leading the readings.

**Before Class Begins**
1. Determine the points for leading and participation
   
a. These should be separate activities with their own points. Leading the readings should not be worth as much as overall participation. Overall participation should be worth as much or more as anything else in the course. You want students to take it very seriously.

2. Decide on the reading list for your course

3. Divide the readings into equivalent “chunks”
   
a. Make sure to consider both the page length AND complexity of the reading when making these decisions. Twenty pages on a complex subject in your field can easily equal fifty pages of introductory material; a preface is not the same as chapter 1!

4. Assign readings to weeks for discussion
   
a. It is best to think of weekly readings as “topics” that are related. One of the goals of this strategy is to help students learn how to relate different ideas and perspectives to each other and to their real-world experience, so if you can’t think of a “theme” for the readings you have assigned, your students will have even more trouble relating the material.

5. In the discussion board, create a forum for each week’s topic
   
a. Students need a lot of support to make the kinds of connections you want them to make. The learning you want them to do will be challenging (what we call germane and intrinsic cognitive load). Asynchronous learning requires its own learning, such as how to login, how to use the discussion board, etc. (what we call extraneous cognitive load). The goal is to reduce extraneous cognitive load that results from the interface itself so that learners have the maximum resources to devote to the learning. So while it is possible to ask learners to generate their own forums, or to throw them all into one large discussion forum, doing so uses up cognitive resources better devoted to the learning outcomes. Additionally, creating individual forums helps to reinforce the relation of the topics that you have chosen. It will also GREATLY reduce the number of errors and false starts and the resulting emails you get with requests for help!

6. Type in instructions for how to use the forum inside EACH forum as its description
   
a. The same goes here as above—you want to remove as many impediments and obstacles between the student and the learning as possible. The more you do to make the interface and technology invisible (or at least, transparent), the faster your students will begin interacting meaningfully with the content.

7. Develop a “Lead the Readings” sign-up sheet
   
a. You’ll use this to get students to sign up to lead the readings each week.

8. Decide on the number of “leaders” for each week
   
a. It is recommended that at least two and no more than 5 students sign up to lead the discussion during a given week. The number of leaders is determined by the complexity or length of the given readings, and/or the number of readings. Depending on the number of students in a course, this may result in students leading the readings on more than one week.

9. Develop instructional handouts for leaders and for participation in weekly discussion
   
a. See the Assignment Sheets for Leading the Readings and for Participating in Discussion at the end of this document.

First Day of Class

(should be done live via chat or Adobe Connect, but you may be able to adapt this to asynchronous as well)

1. Start by discussing as a class how people learn best when reading about new ideas and concepts
a. Look for opportunities to bring up interacting with others, discussion, relating to real world experience

2. Explain that that is why you have created the reading structure you have

3. Point them toward the assignment sheets and discuss them as a class

4. Walk them through the discussion board forums you have created

5. Ask for questions

6. Do a “What If” scenario
   a. Pick a week at random, and ask someone what THEY would do if they were the leader for that week
   b. Ask the others what THEY would do in response
   c. Make sure to address timing type of response, etc.
   d. Make sure to include how to interact with the discussion board (e.g., creating a thread, naming subjects, etc.)

7. Give students time to look over the schedule of readings, and tell them that after the break (mid-point of class) you will ask them to sign up for times
   a. Tell them that those who go first can set the bar for others, that they in turn have nothing to be compared to, and that you are more lenient on those that go first because they have no examples to go by and because they have less time to prepare.
   b. Tell them that those who go last are expected to be more exemplary, since they will have a full term’s discussion to go by.

8. Have them sign-up for leading the readings

9. Discuss what makes a good discussion, what makes a good question, and what makes a good response
   a. Do so collaboratively, rather than solely in an instructivist manner, to promote buy-in and ownership. Resist the urge to “Tell Them The Answer”. If you are to direct (even though YOU may have a good idea about what you want to see), you run the risk of creating the impression that there is only one good way to do it, and all your students will end up writing carbon-copy clones of your structure and each other.

10. Tell them that they must ALL make a post to the forum for the next week’s class
    a. This post is NOT on the readings, but is instead an “introductory” post. The idea is to get them used to posting, to do so in a risk-free way (no points assigned), and to diagnose early on any problems that people have connecting, posting, or remembering to do so!
    b. It is a good idea to suggest elements such as their preferred name, what they do for a living, where they are in their degree program, and something about themselves that is unique and/or might surprise others to know. Students should be encouraged to respond to as many posts as they want.
    c. You can also use any of a wide variety of ice-breaker activities you’ve used elsewhere as a means of structuring the discussion posts for this first week.

**Background Information for Day One**

If students are not comfortable with each other and/or the technology, they will be reluctant to do more than the absolute minimum. To promote a more free discussion, the instructor should require that each person post an introduction to the discussion board before any official discussion occurs, and should emphasize that this is a chance to really get to know each other. Distance classes make it difficult to learn who each person is, both because it is harder to communicate and because we lack visual and auditory cues during discussion.

**Leading the Readings**

Leaders generate a summary of one paragraph (minimum) of each reading’s main ideas, concepts, and issues, etc., which they post to the discussion thread for that chapter on the date of the scheduled discussion. Because the leaders
receive a group grade, they are encouraged to generate these summaries collaboratively, or to share and revise their summaries if they work on them individually. This ensures that they have synthesized the ideas in the readings. In addition, they generate at least one and no more than two questions per chapter that encourage meaningful discussion of the content, sharing and revising these prior to posting as described above. These questions MUST be posted by a specific time and day each week.

Leaders also are responsible for monitoring, responding to, and prompting additional posts throughout that week. It should be stressed that this is a facilitated discussion, not a lecture and not a free for all, so the leaders’ job is to keep the conversation going and help the class process and think about the readings in different, meaningful ways. After the week’s discussion is complete, leaders then generate an “optimal” answer to each of the questions posed for that week by synthesizing what the class responses were and supplementing that with contributions based on their more expert reading of the text. Leading the readings should be worth at least half of what the readings and participation requirement is worth (e.g., if participation is 40% of the course grade, leading the readings should be worth 20% of the course grade).

Participating in Discussion

Students not leading the readings MUST login and check the questions soon after the day and time that questions and the summary have been posted. They are required to make initial posts (of any kind) by a certain time (e.g., midnight of the day following the posts by the leaders). In addition, they are expected to comment and respond to questions throughout the rest of the week, in an equivalent manner to a discussion during a face-to-face classroom. A minimum of one comment BEYOND their responses to the questions and a minimum of three responses to their peers are also required. These requirements themselves do NOT establish meaningful discussion nor a sense of community, but rather ensure that there are a sufficient number of posts from each student for the instructor and class to respond to and evaluate early on. It is important also to emphasize that comments and responses are expected to be substantive and thoughtful (e.g., comments such as “yes, I agree” or “me too” or “good point” are NOT substantive, or thoughtful).

Those who are not leading the readings MUST complete all required postings by a specific day and time in order to give the leaders a chance to analyze and synthesize the overall class responses to each question. For example, if a class discussion begins (i.e., when the leaders post the summaries and questions) on Monday at 4 P.M., and initial posts are due by midnight on Tuesday, all required postings might then be due by midnight on Friday.

Second Day of Class (if not live, this can be done in the discussion board as well)

(104)
1. Monitor the start of discussion  
   a. Did the leaders post on time?  
   b. Have the leaders followed the format and instruction (e.g., forum, thread, one thread per question/chapter)?  
   c. Has everyone responded within 24 hours?  
2. Send off-list messages as needed  
   a. First, BE POSITIVE! Asynchronous communication is devoid of body language and other cues, and students will be pre-disposed to take any feedback and criticism. Find something positive to say about what they’ve done, be gentle in your reminders and prompts, and use emoticons :)  
   b. Privately contact leaders to correct errors as needed, within 2 hours of initial post requirement  
3. Send broadcast messages within 24 hours  
   a. Thank the leaders, express interest in the discussion, thank those who have responded, and REMIND everyone that this is when the discussion begins  
4. Contact anyone who has not responded within 48 hours off-list  
   a. Remind them that they are required to post, that it is tied to their grades, and that you are looking forward to the perspective they will bring to the discussion.  
5. Respond positively to good posts in public (see below)  
   a. You want to indicate SUBTLY what look to be good questions and posts  
   b. Find something positive to say about each person at SOME point during the discussion (don’t overdo it, and don’t be disingenuous, however!)  
6. DO NOT interject yourself in the discussion at this point!  
   a. The instructor must NOT interject themselves too forcefully or too early in the discussion. Early participation in the discussion or corrective feedback will stifle conversation and make students more reluctant to contribute spontaneously.  

**Background and Rationale**

Once discussion begins, it is critical to establish the discussion board as a risk-free zone. Those who have not responded by the required initial post should be contacted via email to remind them of the deadline and the connection to their grade. The instructor should respond to the posts in a positive fashion—it is usually possible to find something valuable in each response, and it is important to begin responses with this. Where there is a perceived need to provide corrective feedback or additional information, instructors should consider phrases that begin with “Yes AND,” instead of “Yes BUT” (e.g., “I like how you’ve identified _____ as a key concept, and I also think that _____ is important to this issue”). Instructors should also respond with questions and probes where possible (e.g., “You make a good point about ______. I wonder how the authors would say that ______ applies here; would that change this in any way?”). Whatever the response, it is important to make sure early on that it does not sound like there was no value in what the person contributed. For especially good, thoughtful, or strong responses, instructors can respond with strong praise (e.g., “Wow—you really put a lot of thought into that! I love how you point out ________, and your point about ________ is very insightful. Great post!”). This helps to shape the responses that others make to the board as well as encourage these early performers to continue to make equivalent posts.

Those who are not making substantive or thoughtful comments, should be contacted off-list to let them know you would like to see more from them and to tell them to look at some of the better responses (to which you have replied) on the board. Make sure to assign participation points in the gradebook according to the overall discussion, deducting points for those who need to do more to participate. Doing this sends a message about expectations but does not unduly impact students’ overall grades since it is only one week’s worth of points. Finally, once the leaders have posted their synthesis of the class responses to the questions, it is important to respond publicly to what they have done so the next leaders have an idea what to do and not do. Again, it is critical to be supportive and to find the
value in what students have done while also providing guidance for the future. It can be helpful to thank early leaders for being brave enough to tackle the first discussion, since they have the least amount of time to prepare and have no models to go on. The instructor should then highlight what students did well, and how it could be “even better in the future.” Instructors should NOT deduct points for the first leaders (assuming they made a valid attempt), as they may not have lead such a discussion before and it can be difficult even for seasoned facilitators.

Second Week

(after the first discussion is over)
1. Start a New Thread About the Discussion
   a. The second week, prior to the next discussion, you should start a new thread in which you facilitate a SHORT discussion about what made this week’s discussion good, what makes a good question, what makes and good response, and how to improve the quality of the next discussion.
   b. It is a good idea to incorporate any ideas from the class, with modification if necessary, and give credit to those who contributed the ideas. This helps students feel engaged in the process and to take ownership and responsibility for ensuring a good discussion.
   c. Help THEM help YOU determine what is working and what is not. Avoid the temptation to lecture or tell them what was good or bad
   d. Be positive—the focus is on building community AND establishing guidelines here—if you are too direct before students have begun to trust that this is REALLY about ideas and not some secret agenda you have for “right” and “wrong” answers, you run the risk of killing the discussion before it really begins.

Weeks 3 and Beyond
1. Continue to monitor and respond to discussion as above
2. GRADUALLY begin to be more a part of the discussion, but DO NOT give them “the answer”
   a. Always couch your responses in terms of something you like about the post, and indicate that you wonder what ELSE might be true, or pose follow up questions that you genuinely think are interesting
   b. Be careful not to take over the leading of the readings!
   c. Watch for trends away from social posts to more substantive and expertise posts (see below)
3. Make off-list contacts as needed initially to get people to post frequently
4. Be lenient in weekly points grading initially, but make sure to grade stringently on those who do not post frequently.
   a. For non-substantive posts, contact them privately to discuss how to make their posts better, point them toward good posts, etc. HELP them initially rather than punishing them.
   b. Consider also posting specific questions to them in response to their post to try to elicit more information and participation.
   c. When you grade them at less than full points, make sure to contact them also to explain that and to offer to help them or meet with them to discuss it further. Make sure they know you believe they have the ability to contribute meaningfully, and that you want the class to benefit from their perspective.

What to Expect, in General
Based on the analysis from our implementation of this strategy, instructors should expect to find that the number of posts begins to exceed the minimum requirements, that the length and quality of those posts increases, and that the
number of “community” posts (e.g., sharing, opinion, humor) gradually becomes supplanted by expertise posts (e.g., referencing and quoting; corrective and elaborative feedback between students, help requests and responses, clarification). During those first 1/5 to 1/3 of the class, it is therefore important to look for signs that students are making comments that extend or go beyond the content, including humor, shared stories, pats on the back for good responses, questions and advice off topic, etc. This is an indicator that students are comfortable with the discussion medium. Instructors can then begin to ask more challenging questions, and watch for signs that community posts begin to be accompanied by expertise markers as well, adapting instructor interventions accordingly. The middle 1/3 should be a transition zone from community to community and expertise, and the final third should be characterized more by expertise markers along with some social and community posts. The leaders should still take the lead, however, and instructors should only where and when there’s real need or teachable moments. The instructor should find that, over time, s/he can respond less frequently as an instructor, and more as a peer or colleague.

**Challenges**

This is a time-intensive process that you CANNOT put on autopilot. Instructors need to understand that they will be frequent and regular readers, if not always responders. You also have to be sure to monitor frequency and timing of posts, especially in the beginning, to encourage full participation. There is the potential that students will see this as a way for the instructor to "get out" of reading and responding, so it is important to discuss the rationale for this approach. Another potential challenge is that students are not used to the strategy, nor to having an in-depth discussion where everyone participates. The discussion can end up being shallow and can wander off topic. Instructors have to resist the temptation to "correct" this with corrections, public chastisement, or judgement. The formula of saying something positive about a response followed up with a query for more information (e.g., "I like how you are confident about stating you don't know what this means—it is a complicated concept! What do you think it might mean if…..") almost always works. And because there is a very good chance that there will be one or two great responses or examples, you can always single those out for praise, indicating that contributions like that are what really make a great discussion. Ultimately, however, you have to be prepared for things not to work perfectly, which is why the public discussion during the second or third week should focus on what worked, what didn't and what THEY think can be done to improve.

**Final Notes**

You can adapt this strategy in many ways, including the use of a Wiki instead of a discussion board (see sample at the end of this document). You can also use this strategy even when meeting face-to-face, so that class time is more productive. You can also have students work in their own groups in Blackboard, with their own discussion boards, by requiring synthesis of group responses to the initial questions within 48 hours, and then have the GROUPS post their group response to main forum where everyone then comments and responds to those during the rest of the week. This is useful with the discussion gets to be too hard to handle due to class size or number of posts. However, it should be emphasized that in week where you do not meet face-to-face, a three-credit class should require 3 hours (to replace contact time) AND 6 hours (homework time estimates of 2 hours per contact hour), so requiring 2 hours per day devoted to discussion and reading is NOT unreasonable, even if it IS challenging.
**Sample “Leading the Readings” Sign-up Sheet**

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<thead>
<tr>
<th>Class Date</th>
<th>Topic</th>
<th>Discussion Leader(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 10</td>
<td>Topic 1: Foundations of HPT</td>
<td></td>
</tr>
<tr>
<td>September 17</td>
<td>Topic 1: Foundations of HPT</td>
<td></td>
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<tr>
<td>September 24</td>
<td>Topic 2: The HPT Process</td>
<td></td>
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<tr>
<td>October 1</td>
<td>Topic 2: The HPT Process</td>
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<tr>
<td>October 8</td>
<td>Topic 2: The HPT Process</td>
<td></td>
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<tr>
<td>October 15</td>
<td>Topic 3: Worker-Level Interventions</td>
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<tr>
<td>October 22</td>
<td>Topic 3: Worker-Level Interventions</td>
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<td></td>
<td>Workplace-Level Interventions</td>
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<td>November 5</td>
<td>Topic 5: HPT Measurement &amp; Assessment</td>
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<tr>
<td>November 12</td>
<td>Topic 5: HPT Measurement &amp; Assessment</td>
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<tr>
<td>November 19</td>
<td>Topic 6 &amp; 7: HPT In Action &amp; Future of HPT</td>
<td></td>
</tr>
<tr>
<td>December 3</td>
<td>Topic 7: Future of HPT</td>
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</tr>
</tbody>
</table>
Sample Assignment Sheet for “Leading the Readings”

Using a Discussion Board

Objective

The student will demonstrate synthesis skills by facilitating discussion of a series of readings in class and generating a summary of the major concepts and ideas for those readings and of the facilitated discussion.

Total Points

This assignment is worth 20 points.

Due Date

The week you have signed up to facilitate the readings

Assignment Details

1. You and one other person will sign up to lead a week’s discussion of the readings. During that week, you will be jointly responsible for:
   - Generating one question per chapter that will encourage meaningful discussion of the content for each chapter. If you do not feel you have a good question, or one that you think will be interesting enough to you or the class, you may choose from the Knowledge and Comprehension questions in the textbook for each chapter. You will post these questions in Blackboard under the FORUM for the current week (see syllabus and schedule). You must do this by the start of class time on the day of our scheduled class session, which in this case is Monday at 4pm.
   - Monitoring, responding to, and prompting additional posts to the main forum from Friday through the next scheduled official class day and time. You will help facilitate our discussion of these ideas and issues by calling our attention to them, posing a new or refining an additional question that extends our conversation in a meaningful way. The goal is to figure out what the whole class consensus is in response to these questions and the given topic summary. Your job is to facilitate, NOT lecture, nor should you overwhelm us with lots of questions or posts--just help us all keep focused on making something interesting out of the individual posted responses.
   - As the leader for a week’s readings (topic) you will begin a thread by clicking the New Thread button:

within the forum for that week’s readings. You will do this once for each chapter with your discussion question for that chapter, titling each reply by the chapter number and "question" (e.g., Chapter 7 Question). If there are 3 chapters for that week, you will generate 3 threads in that week’s forum, each with a discussion question for that chapter.
• Your goal, beginning on or after Friday at midnight, is to examine the summaries and responses to your questions as well as the discussion that has ensued. Look for areas of similarity, difference, and potential interest for further discussion. On the next week’s scheduled class session (in this case, Monday at 4pm), you will THEN post an overall summary of the public discussion that attempts to synthesize what the class as a whole believes regarding the questions and the topic. You will want to be inclusive, but concise, so pull in key ideas and quotes (please attribute them) as you see them, and try to shoot for the equivalent of a minimum of one typed single-space page.

**Sample Assignment Sheet for “Readings Discussion”**

**Using a Discussion Board**

**Objective**

Given one or more discussion questions for each weekly reading topic, the student will demonstrate conceptual knowledge of the topic by discussing the topic, responding to questions, posting comments, and responding to other posted comments using Blackboard according the criteria listed below.

**Total Points**

This assignment is worth 40 points.

**Due Date**

Every week EXCEPT when you are signed up to lead the readings

**Assignment Details**

Every week you will do readings in the Trends and Issues book. The posting requirements are outlined below:

• Every week that there are assigned readings in the Trends and Issues book, the leaders for that week will post one discussion question per chapter to the main forum by the scheduled date of class (the day and time according the the UND registrar, regardless of whether class meets live that week or not). Those questions may be original, from the suggested questions in the text, or both.

• You will spend the time between the scheduled time and day of class and Friday (as late as midnight if desired) discussing these questions in the discussion board thread in Blackboard. You should respond to the questions the leader has posed, to other questions and comments your peers have made, and in other ways engage in a discussion equivalent to a face-to-face discussion.

• The purpose is to extend and refine our thinking about these questions and topics. The leaders for that week’s readings (the ones who generated the questions initially) will make posts and responses as needed to help facilitate our shared conversation and understanding about the questions and readings (e.g., by posting one additional question that helps us explore
connections between group responses and/or identifying new or refining existing questions that seem to be the most interesting for further discussion).

• Minimal responses (e.g., “I agree!” or “Good Point”) are perfectly fine to post, as they are a part of any discussion. However, ALONE, they will not count for meaningful discussion. They should accompany thoughtful responses that show you have taken the time to consider the material and question carefully (as opposed to logging on one day and posting one, one-sentence answer to each question).

• You should log on regularly during the week—our discussion should be more like a bee hive than a tennis match!

In all the discussion posts you do for this class, please change the subject line to reflect the basic "essence" your post rather than preserving the exact subject line of the previous post. This will make it easier to differentiate the post topics and to find ones that we are interested in a second time.

Keep in mind that this is where we actually LEARN this material, NOT demonstrate it, necessarily, so don’t feel you have to "have the right answer" or not ask "stupid" questions. To get the most out of this class, you should ask any question you have, make whatever connections you can to your experience, etc. This is what we mean by negotiated meaning and learning as a social practice!

Finally, remember that while you can earn full credit for the participation by meeting the minimums listed above, the more you put into this class discussion, the more you AND your classmates get out of it. Also, for anyone "on the bubble" between grades (a B and an A, for instance), I will consider your level of participation in the discussion as the "tie breaker", so your participation here will not only help you learn, it may also improve your grade (nice when those things are connected, isn’t it?)
Sample Assignment Sheet for “Leading the Readings”

Using a Wiki Instead of Discussion Board

Objective

The student will demonstrate synthesis skills by facilitating discussion of a series of readings in class and generating a summary of the major concepts and ideas for those readings and of the facilitated discussion.

Total Points

This assignment is worth 30 points.

Due Date

The two different weeks that you have signed up to lead the readings

Assignment Details

All leading of discussion will occur in Blackboard using the Wiki labelled "HHPT Discussion".

You and one to three other people will sign up to lead a discussion of the readings for two separate weeks during the semester. There will be 1 or 2 chapters in general each week, which together comprise a "Topic". During these two separate weeks, you will be jointly responsible for:

- Generating a brief (one paragraph or so) summary/overview of each individual chapter
- Generating an overall synthesis of the TOPIC for that week, incorporating each of the chapters assigned and the individual summaries generated for those chapters (see above).
- Generating three questions based on the topic for the week that will encourage meaningful discussion of the content. These questions should be a logical outgrowth of the topic summary/synthesis mentioned above, and should be designed to get us to think about the overarching themes and ideas raised by the authors. The rest of the class will respond to whichever of the questions they are most interested in.

All of the above should be posted to the class Wiki site in Blackboard (online.und.edu) in a page which you create for that week’s topic (please name the page for the week’s topic, e.g., "Topic One: Chapters 1-3"). I suggest you coordinate your efforts as leaders and divide up the workload as you see fit, but be aware that you are responsible for all content for that week, and that your grade for leading the discussion will be a group grade, so review each other’s work prior to 4pm on the scheduled class day of the week that you are leading the readings to make sure you all agree that it is free from errors of content, typography, etc. You will be able to accomplish this by editing the page as a group, but I recommend that you discuss changes prior to implementing them to make sure you are in agreement.
In addition, you will be responsible for:

- Monitoring, responding to, and prompting additional comments to the questions you posted for that week, from Wednesday through Sunday at noon. You will help facilitate our discussion of these ideas and issues by calling our attention to them, posing a new or refining an additional question (note the singular, please!) that extends our conversation in a meaningful way. The goal is to figure out what the whole class consensus is in response to these questions and the given topic summary. Your job is to facilitate, NOT lecture, nor should you overwhelm us with lots of questions or posts--just help us all keep focused on making something interesting out of the individual posted responses.

- Beginning Sunday at noon, AS A GROUP you will examine the responses to your questions throughout the week, looking for areas of similarity, difference, and potential interest. Together, you will post one final Wiki entry that encapsulates the class responses to your questions in the class Wiki page. In so doing, please remember that your job is to synthesize, not list what each person said. Strive for what could be taken as the ideal answer to each question (again, you may want to divide up the work in your group for this, but remember to share and approve the work as a group before posting). This summary posting should be done by 4pm on the following Wednesday (at which point, the next week’s discussion begins).
Sample Assignment Sheet for “Readings Discussion Participation”

Using a Wiki Instead of Discussion Board

Objective

Given one or more discussion questions for each weekly reading topic, the student will demonstrate conceptual knowledge of the topic by discussing the topic, responding to questions, posting comments, and responding to other posted comments using Blackboard according the criteria listed below.

Total Points

This assignment is worth 40 points.

Due Date

Every week EXCEPT when you are signed up to lead the readings (you do NOT need to participate as outlined below during the week that you lead readings).

Assignment Details

All discussion will occur as part of the Wiki in the Blackboard portion of this class (online.und.edu).

Every week that there are assigned readings in the Handbook of Human Performance Technology book, the leaders for that week will generate a new page in the course Wiki (in Blackboard, under HHPT Discussion) by the scheduled date of class (the day and time according the the UND registrar, regardless of whether class meets live that week or not) unless otherwise indicated in the syllabus schedule or communications from me. They will post summaries and pose questions about that week’s Topic (see the assignment sheet for leading the readings for full details of that process).

You will spend the time between Wednesday at 4pm and noon on Sunday responding to these questions and commenting on your peers’ ideas and posts. Your posts should be substantive, thoughtful, and occur over the course of several times during the week.

Keep in mind that this is where we actually LEARN this material, NOT demonstrate it, necessarily, so don’t feel you have to “have the right answer” or not ask “stupid” questions. To get the most out of this class, you should ask any question you have, make whatever connections you can to your experience, etc. This is what we mean by negotiated meaning and learning as a social practice!
Finally, remember that the more you put into this class discussion, the more you AND your classmates get out of it. Also, for anyone "on the bubble" between grades (a B and an A, for instance), I will consider your level of participation in the discussion as the "tie breaker", so your participation here will not only help you learn, it may also improve your grade (nice when those things are connected, isn't it?)
An Alternative Final Oral and Written Semester Test

Dave Yearwood

Department of Technology

ABSTRACT: Throughout the semester, students enrolled in two core Electronic and Control emphasis courses are presented with fundamental concepts and theories grounded in mathematics and physics, which it is hoped, would become more real to them through application exercises, project designs, and laboratory activities. Traditional tests, the staple of many in academe, may be appropriate in some settings but to what extent could a cumulative test—a final test—showcase students knowledge, ability, and defense of a position taken? An alternative final semester test was developed as a way to provide a more authentic tool for assessing students’ cumulative understanding of course content; in essence, a way for them to apply what was learned, demonstrate critical and creative thinking, demonstrate unrehearsed oral and problem solving skills, and also a way to assess students’ design abilities in two core electronic courses. Students not only embraced the testing option, their overall scores were higher than previous classes who were given traditional tests. The class expressed some surprise at how well they felt they understood the content and the fact that they also gained additional insight from what was presented by their peers.

Teaching and Learning Strategy:

- Mini lectures
- Questioning
- Guided problem solving
- Discussions that involve some “what if” scenarios
- Creating opportunities for students to defend statements
- Group work

Development of the Strategy:

1. Create buy-in for an alternative final that would require students to only answer one question orally before their peers and in writing.
2. Design a series of complex questions that cover major concepts taught during the semester.
3. Provide a review sheet of the range of topics to be addressed by the questions.
4. Inform students of time limits for presentation preparation and presentation (there will five minutes for pre-preparation and 10 minutes presentation time for each two-person group).
5. Provide guidelines, a practice opportunity, and the rubric.

The Strategy’s Applicability & Something to Ponder:

- Alternative assessment strategy for small to medium size classes of less than 25 students.
• This strategy met and surpassed expectations, possibly due to several reasons – one of which may be peer pressure—students need their peers’ approval.
• Students appeared somewhat surprised at how well they felt they understood the content and noted that they also gained additional insight from what was presented by their peers.
• The strategy may also be useful throughout the semester and not only as a final assessment piece.

Future Changes:

1. Continue to refine guidelines and review rubric—written and oral—with students.
2. Develop a better tracking system for bonus points.
3. Questions not fully answered should be reflected first to the questioner then to the rest of the class for additional details.
4. Have two test periods instead of a single one—one for each section of the class.

Implementation Details/Sample Course Documents:

An Alternative Final Oral and Written Semester Test

Purpose

The purpose of the alternative final semester test was to develop a more authentic tool for assessing students’ cumulative understanding of course content. In essence, a way for students to: apply what was learned; demonstrate critical and creative thinking; offer defense for a position taken; demonstrate unrehearsed oral and problem solving skills; and also a way to assess students’ design abilities in two core electronic courses

Pre-Assessment Activity

Students were provided with a review sheet for the class the week preceding finals. Two days prior to the examination, each two-person group was given one question that was randomly drawn from a pool of questions. The question sheet handed out contained assessment guidelines/instructions about how the evaluation will be conducted. Students were also provided with a copy of the rubric—oral and written.

Test Instructions/Guidelines:

Consistent with information shared in a review session about the final evaluation for IT 211, you will be given five minutes to finalize preparations for your presentations i.e., attach leads, power up needed equipment run/perform final tests, etc. Your two-person group will not only be expected to provide an adequate response to the assigned question but you should also anticipate questions from peers.
Questions posed by peers will be rated on a scale from 1-5 (‘5’ being a very good question and ‘1’ being a poorly worded question—a poor question is one that results in a yes, no, or a maybe response and adds little real value to the discussion). Good questions, those that result in helping to provide some insight into the topic, are worth 3 points with no questioner receiving more than 6 points. Two bonus points will be given to anyone providing a reasoned and accurate response to a question that cannot be answered by either of the presenters. Your written response to the assigned question is due on the day of your presentation (one response for each two-person group).

A Sampling of Questions

Question:
Leakage current can sometimes occur in electronic components and in particular, circuits that utilize capacitors and inductors. What can potentially cause this condition to occur and how is it evidenced in both electronic components? What is the best repair action to pursue and why? Create a circuit in Multisim to demonstrate this phenomenon.

Question:
Develop a ladder logic program that can be used to trigger the timed shut down of a nuclear power plant in the event of an overheated condition. The circumstances of the shut down are as follows:

- High temperature in a section of the reactor followed by a low pressure indication
- A loss of cooling due to a leak, failure of the backup power system, or the sensing of under-voltage from the main building power.
- Operator error caused by an inadvertent switch activation in the control room.
**Special note:** The shut down sequence should occur in three timed stages each occurring at 20, 30 and 40 seconds respectively. Each stage should illuminate a lamp and sound horn to provide visual (lamps should stay illuminated for each shut down stage) and audio confirmation of shut down sequence.

**Question:**

Examine the circuit below carefully and respond to the following questions. Note: the value of the loads a-c are as follows: \( R_{LA} \) (motor) draws 200mA and has a voltage requirement of 10 Volts. \( R_{LB} \) (buzzer) requires 6 Volts and draws approximately 2mA. \( R_{LC} \) (LED) requires 4 Volts and draws about 3mA (NOTE: the current limiting resistor \( R_4 = 270-320\Omega \) must be considered as a part of the total resistance of load ‘C’).

Keep in mind that the Bleeder current flows through \( R_3 \)

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**Diagram:**

- **R1:** Voltage source (10V)
- **R2:** Current through load 'A'
- **R3:** Bleeder resistor
- **R4:** Current limiting resistor
- **S1:** Switch
- **S2:** Switch
- **S3:** Switch
- **Motor:** Load 'A'
- **Buzzer:** Load 'B'
- **LED:** Load 'C'

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**Questions:**

a) Provide the value of the current through \( R_2 \) and explain how this current is calculated.

b) Assume for a moment that the junction of loads ‘A’ ‘B’ and ‘C’ where it connects
with motor, buzzer, and LED were disconnected. To what extent would the voltages across R1 thru R3 remain the same or be different? Explain what would account for the similarity or differences in voltages caused as a result of opening up the circuit which effectively removes the motor, buzzer, and LED from the circuit.

Sample Final Exam Review Sheet- Concepts/Theories

Take some time to review each of the numbered items as they pertain to information covered in class and in your laboratory sessions.

1. Basic theory of operation of electronic components as used in AC circuits—coils, capacitors, diodes, transformers, inductors, resistors, etc
2. Failure patterns—how do electronic circuits fail and how can you identify failure pattern based upon some measurement of components covered this semester either through the use of a multi-meter or oscilloscope
3. Circuit analysis: Understanding circuit operation, from simple to more complex circuits involving series, parallel, or series-parallel configurations.
4. Troubleshooting questions: What to ask; where to start; what to do; how to proceed until the problem is resolved
5. Understand fundamental electronic concepts relating to:
   - Transformers
   - Resonance
   - Reactance
   - Electromagnetism
   - Relays
   - Rectifiers
   - Impedance
   - Inductance
   - Inductors
   - Production of AC voltage—magnetism and coil
   - Alternating current characteristics
   - RMS, average, peak, peak-peak, etc
   - Effects of magnetism on circuit operation
   - Induction and shielding
   - Phase angle shifts caused by the use of capacitors, inductors, and resistors in a circuit
   - Diodes—basic operational characteristics as in rectifiers; half and full-wave signals
   - AC to DC conversion
   - Filters—purpose and how to achieve a filtered signal
   - Wattage rating of resistors and their significance
   - Shorts, opens, and intermittent conditions as they relate to failure patterns and troubleshooting
6. Efficient utilization of test equipment—how to use, when to use, what to look for, etc. This involves reading and interpreting signals on an oscilloscope
7. Circuit design parameters: where to start; selecting appropriately rated components; special considerations in both the design and building phases
8. Working on intermittent problems—where do you start, what can you do, how to proceed, etc?
9. Understand when it may be most appropriate to use oscilloscope, multi-meter, function generator operation.
10. Time constants and their usefulness—what are time constants, where do they apply, what is significant about them, etc?
11. House-hold AC wiring: wire color; polarized plugs; GFCIs; wire gauges;
12. PLCs: creation of ladder logic diagrams; understand symbols used; arrangement of symbols and their operation to include timers; latch and unlatch functions; addressing; program troubleshooting; decoding PLC program to determine circuit operation
13. Lessons learned as they relate to circuit design

Suggestions for your presentation and report

Presentation
- Be very thorough in your research, take the time necessary to compose and write your report, and spend some time working on your presentation. A lack of preparedness can easily be spotted and there simply is no substitute for inadequate planning.
- You may use PowerPoint but PLEASE do not read your slides or hand written notes verbatim to us. We are all literate and capable of reading what is projected. Likewise, avoid reading your written report to us.
- Feel free to use Multisim, Utiboard, the PLC simulator or other software to provide a demonstration. You may also consider the use of graphical elements that may help get your point across.
- Things to avoid in your presentation:
  - Fillers
  - Unsupported claims
  - Failure to fully or adequately address the question

Written Report
- Your report should not include direct quotes. Rather, I would prefer that you summarize what you have learned, understand from the text, and know as a result of experiments or laboratory tests conducted. Remember, I am looking for your interpretation of what you read, what you know, understand, and can do with the information gleaned from the text.

Each person is responsible for his/her own report. The laboratory exercises, research conducted, and the class presentation effort are to be a joint activity but the report is to be an individual activity.
Oral Evaluation Rubric

Oral Evaluation = 22 Points

Students’ Names: #1 ___________________________________ #2 ___________________________________

Differential grading, albeit subjective on my part, will apply if it is perceived that one student contributed more than the other to either the presentation and/or written response(s).

Presenter’s preparedness and exhibited effort (6 points total — each bulleted item is worth 2 point)

• Evidence of preparedness, attention to details, focus i.e.,
  • The response(s) provided to the question was/were clear to follow: _____
  • Both individuals appeared to know/understand the material well, had a plan for sharing information with peers, and provided adequate responses for their assigned question: ______
  • The presenter stayed on task/subject—did not wander about nor provided fillers to the question: ______

Presenter’s understanding of subject matter content as explained to peers (12 points total—each bulleted item is worth 4 points)

• The presenter successfully conveyed knowledge about the subject matter in a manner which demonstrated that he/she understood the concepts/theory related to the question. Examples were provided to better help peers understand the point(s) being made: ______
• The presenter’s peers appeared to be challenged to think deeply about the subject matter content based upon questions asked, comments made, etc: ______
• Solutions to the problem (mathematical, measurements, explanations) were reasonable (anything involving numeric quantities accurate to within 5% of expected values): ______
• The presenter was able to satisfactorily answer questions presented to him/her as determined by the questioner: ______
  • Excellent = 12 pts  Good = 10-11 pts  Average = 8.5-9 pts  Less than adequate = 8 pt

Presenter’s use of visuals/graphics to aid presentation (4 points total—each item is worth 2)

• Presenters use of MultiSim or other simulation software, or board drawings was/were instrumental in helping peers better understand explanations provided that were related to the assigned question: ______
  • Presenters did not read their response(s) to their question but summarized what was written or knew the material well enough and thus needed little prompt or reminders from notes: ______

Other Considerations:

• The presenter’s attention factor (the ability of the presenter to hold your interest and attention) on a scale from 1-10 with 10 being excellent is rated as a: _____
Differential grading applied? Yes: ____ No: ____
If No, students’ Overall Total: ____
If Yes, student #1 total points __________ & student #2 total points __________

Comments and Observations:
Alternative Written Final Examinations Rubric: Expressing Ideas Clearly in Writing

**Levels of Achievement:**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Excellent</th>
<th>Strong/More Than Competent</th>
<th>Competent</th>
<th>Weak/Inadequate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction &amp; Purpose</strong></td>
<td></td>
<td>7</td>
<td>5-6</td>
<td>3-4</td>
</tr>
<tr>
<td>Points Possible</td>
<td></td>
<td>_writer easily gains the attention of the reader; the purpose of the work is clear; explanations and justifications are well developed and ideas are clearly articulated</td>
<td>The reader’s interest is aroused but only after reading the introductory information. The purpose of the paper is stated and explanations and justifications are adequate.</td>
<td>The purpose of the paper was not immediately evident. The introductory information is sufficient but could be further developed. The explanations and justification are not readily identifiable.</td>
</tr>
<tr>
<td><strong>Organization</strong></td>
<td>7</td>
<td>5-6</td>
<td>3-4</td>
<td>0-2</td>
</tr>
<tr>
<td>Points Possible</td>
<td></td>
<td>The paper flows smoothly from one main point to another in an attempt to answer the major questions and the information shared follow some logical sequence. The reader can clearly follow the line of reasoning.</td>
<td>The paper is generally well written and ideas presented are somewhat logically arranged. For the most part, the reader can follow the line of reasoning presented.</td>
<td>The writing is not arranged in any systematic manner. Ideas frequently are disconnected but the reader is able to figure out what the writer is attempting to communicate.</td>
</tr>
<tr>
<td>Points Possible</td>
<td>15</td>
<td>12-14</td>
<td>9-11</td>
<td>0-8</td>
</tr>
<tr>
<td>-----------------</td>
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<tr>
<td><strong>Content, creativity, design, and troubleshooting</strong></td>
<td>The writer lays the groundwork upon which to build his/her argument as evident by the research conducted about the question. The content moves beyond the basics and encourages higher levels of thinking—analysis &amp; synthesis. Elements of creativity in the design and troubleshooting exists and there is ample and clear discussion about the theory(ies) of operation. The reader is challenged and gains insights.</td>
<td>A framework for the paper is evident and helps to form a basis upon which to evaluate the research conducted. Information provided demonstrated higher level of thinking, design, and troubleshooting. The writer appears to understand the applicable theory(ies) of operation. The reader gains some insights.</td>
<td>There is some evidence to suggest that the writer has made a good attempt to establish a foundation upon which to base a response to the question. Information about the question is generally well developed and the writer has some understanding about the applicable theory(ies). Some evidence of design and troubleshooting ability exists. The reader is able to learn something about the question.</td>
<td>This paper lacks a coherent framework and does not demonstrate that the writer has any idea about how to engage the reader. There is little evidence to indicate that the writer understands what it means to critically examine a topic or issue as required for this assignment. There appears to be limited understanding of the relevant theory(ies) and very little discussion about design or troubleshooting.</td>
</tr>
<tr>
<td><strong>Points Possible</strong></td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>0-1</td>
</tr>
<tr>
<td><strong>Grammar</strong></td>
<td>The writing is generally free, or almost free, of spelling errors. There are very few grammatical or punctuation errors but these do not affect</td>
<td>There are some minor grammatical or other violations in the writing, but they do not represent a source of distraction to the</td>
<td>There are significant amounts of grammatical errors which makes it difficult to follow the author’s line of reasoning</td>
<td>It is difficult, if not impossible to follow the central theme or ideas presented in this paper. There are numerous examples of serious grammatical errors</td>
</tr>
</tbody>
</table>
| Spelling, Mechanics (i.e., Punctuation, Italics, Capitalization, etc.) | the overall effectiveness and readability of the paper. | reader nor do they obscure the intended meaning. | without a substantial amount of effort on the reader’s part. | in this paper.

*Developed by Dave Yearwood (University of North Dakota, 2009) with minor contributions from rubrics developed by: Derek Bok Center for Teaching & Learning & the Department of Educational Leadership, Ames Iowa,*
Using Peer Review to Foster Proof-Writing Skills in Mathematics

Ryan J. Zerr
Department of Mathematics

ABSTRACT: Many mathematics courses ask students to make arguments in support of their solution to a problem or as a means for verifying the truth of a mathematical fact. In many cases this type of task causes difficulty for students, and so a large amount of time is spent in such classes practicing the necessary skills. Probably the most common situation of this type occurs when students are asked to read and write mathematical proofs. Since these are just logical arguments, similar in nature to arguments that might be given in any well-reasoned essay, a peer review process, not unlike that used in a college composition course, has been utilized. This process involves students writing proofs, reading the proofs written by their peers, and then responding to the peer feedback that they receive. By having the instructor also evaluate the work produced at each step in this process, students are also given instructor feedback on their work as both authors and reviewers of proofs.

Teaching and Learning Strategy:

The Instructional Context – Understanding Mathematical Proof

A mathematical proof is an argument, utilizing the rules of logic, that is used to establish the truth of a mathematical statement. Proofs are generally written with full attention to the use of complete sentences, paragraphs, and proper grammar. In this sense a proof is an essay which combines use of, for example, the English language and the notation utilized as part of the language of mathematics.

- The ability to read, write, and understand proofs is an essential part of what it means to be mathematically educated.
- Training in these skills comprises a prominent part of many undergraduate mathematics courses.

The Strategy – Using Peer Review to Teach Proof Writing

By adapting the peer review model commonly used to teach college composition (c.f., [Crow, Melanie & Helmstetter, Allen, Editors (2003), The University of North Dakota Guide to College Composition, Third Edition, The University of North Dakota Composition Program, Department of English, Grand Forks, ND]), students learning to write proofs are asked to become involved in reading and critiquing proofs written by their peers, and in responding to the peer feedback they receive. Instructor evaluation of the work produced at each step in this process further adds to the feedback received by students as they fulfill their roles as readers and writers of proofs.

- The peer review component that has been developed adds to the usual approach to teaching proof writing by:
  o Requiring students to submit selected proofs for review by their classmates.
  o Involving students in reading and formally critiquing each other's proofs.
Requiring the author of a proof to respond to the comments they receive from their peers.

- Students are given guidance throughout this process in at least two specific ways:
  - As they read and critique their peers' work, students must complete a Peer Review Worksheet in order to help make the review as useful as possible to the proof's author.
  - Each student must then respond to the review they receive by completing an Author's Response Sheet, which helps them to articulate their reasons for responding to the review in the way that they do.

- Each student receives instructor feedback on all three aspects of their work:
  - In addition to being reviewed by a peer, a copy of each student's original proof is read and graded by the instructor.
  - Two copies of each review are submitted – one for the author and one for the instructor – so that the instructor can grade each student on their role as reviewer.
  - The final draft of each proof is also graded by the instructor.
  - Instructor feedback on each element of the complete cycle is provided after the final draft has been submitted.

**Development of the Strategy:**

**How Proof Writing is Usually Taught**

In proof-based mathematics courses, students are generally given a large number of examples of correct, well-written, proofs. These examples are encountered throughout the text, and frequently a large amount of class time is devoted to discussing the elements that comprise a well-written proof. Typically students are then asked to practice their proof-writing skills by constructing their own proofs throughout the term.

- A typical proof-based mathematics course focuses its attention on reading and discussing correct proofs.
- Student efforts are then frequently devoted to practicing and honing their ability to write proofs.

**Why Should We Add Anything to this Pedagogical Approach?**

Since proofs are used to provide verifications of mathematical facts, it is essential that students understand these proofs in order to truly understand the mathematics involved. Thus, there are content-level reasons why students should be exposed to a large number of correct, well-written proofs. The importance of this exposure is also supported by the contention that one would expect good readers generally to be good writers. Despite these reasons, it is easy to imagine students becoming too unengaged – reading the words without understanding the sentences – when exclusively reading arguments that they know in advance to be correct. They might then be inclined to use a fact or technique when writing their own proofs that, although they would have seen it used in a similar situation before, they should realize does not apply if they had only more carefully read the proof in which they first saw it used. This argues for giving students some training in reading an argument not just to learn content, but also to read it in order to determine if in fact it provides valid reasoning.
• The emphasis placed on correct proofs is, for important reasons, a cornerstone of the training of a mathematician.
• However, when writing proofs, students also need to be able to critically evaluate their own argument in order to verify its correctness.
• This suggests that giving students opportunities to critique incorrect proofs would provide valuable experience.

Adding a Critical Reading Component to the Class

The question now becomes where to find examples of proofs that students can not assume are correct. There is at least one example of a text, focused on teaching the basics of proof writing, that has these types of examples [Sibley, Thomas Q. (2009), *Foundations of Mathematics*, John Wiley & Sons]. However, most mathematics content areas do not seem to have any readily available resources that would suit the purpose at hand. However, regardless of the class, as long as students are being asked to write their own proofs, there will be a source of potentially incorrect proofs that are specifically tailored to that class's content area.

• Student-written proofs are occasionally incorrect, and therefore could serve as a source of material that other students would need to critically evaluate.
• Aside from this there are two very important additional benefits:
  o Authors of proofs receive feedback on their work that they must also critically evaluate for correctness and appropriateness.
  o Authors of proofs have an opportunity to revise their work, thereby modeling an important writing strategy that is applicable in other academic contexts.

Intended Student Learning Outcomes:

Students Must Become More Active Readers of Proofs:

It is common for mathematics instructors to advise their students to read any mathematical argument with pencil and paper at the ready, so as to be able to check the correctness of all aspects of the arguments they will encounter. However, if these arguments are known to be correct there is little motivation for taking this advice. Reading their peers' work, on the other hand, means there are no longer any assurances that the details they are reading will be correct.

Students Must Become More Critical Readers of Proofs:

In every instance where a student is reading a proposed proof of a given statement, they will have already written their own argument in support of that same statement. Thus, they will have at least two examples of arguments given to support the same statement. In some cases these arguments will be essentially the same; in others they will be different -- not just cosmetically, but also in their basic approach to the problem. As such, a student must critically evaluate each argument to see whether or not it is correct, even if that argument is completely different than their own.

Students Must Become More Refined Writers of Proofs:

Once a student has read one of their peers' proofs and also received feedback from a peer on the proof they originally wrote, they will be in possession of three different perspectives for that
problem: their original argument, the feedback received for their argument, and the argument given by one of their peers. At this stage it will be necessary for the student to evaluate the critique they have been given, and then possibly to weave the salient points from this analysis together with the two complete arguments that they would have seen.

Assessment of Student Learning:

How Have Students Responded to Doing Peer Reviews?

After one semester of implementing this strategy, when asked, most students indicated that they thought the peer review assignments were important for helping them to learn the proof-writing process, and that the process of commenting on their peers' proofs made them more aware of how to correctly write their own proofs. Not all students, however, felt that the peer review assignments were worth the time that they required to complete.

Is There Any Evidence of Student Learning?

A significant amount of student work was collected in order to assess the peer review component of the class. A brief review of this evidence reveals that in most cases students adequately fulfilled their roles as reviewers. This led to a significant number of second drafts or appropriate decisions not to revise the original proof. Furthermore, a large majority of the second drafts were improvements on the original proof. This last fact, in particular, provides strong evidence of student learning since it implies that understanding was gained as a result of having participated in the peer review process.

- There were 105 usable instances where the complete peer review cycle took place.
  - Only rarely (in 2 out of 53 instances) did a reviewer read a correct first draft and give advice that would have resulted in an incorrect revision.
  - Of the incorrect first drafts, 62% were recognized by the reviewer as being incorrect, and at least some useful advice for correcting the problem was given. In fact, in 35% of the reviews of incorrect first drafts, precisely the right advice for correcting the problem was given.
  - Of those instances where a review contained some advice for the proof's author, 52% of the time a revised second draft was submitted, and 23% of the time an appropriate justification was given for not using that advice to revise the proof.
  - In those cases where an author submitted a revision, 85% of the revised proofs were noticeable improvements on the original.
- How should we interpret this evidence in terms of the intended learning outcomes?
  - The sheer amount of feedback that students routinely gave as part of a review provides evidence that students were, at least for the peer review assignments, meeting the active readers of proofs outcome.
  - Supporting the critical readers of proofs outcome we note that:
    - When presented with a correct proof, students were fairly adept at recognizing it as such.
    - Although less consistent in recognizing an incorrect proof, students were still usually able to at least realize something about the proof was not correct.
  - There is strong evidence students were achieving the refined writers of proofs outcome:
Over 75% of the time authors responded appropriately to the advice they received in a review. This suggests that in most cases students were learning the content of the course well enough to accurately interpret the critique they had been given.

The large percentage of revisions that improved on the original strongly suggests student learning took place as a result of the peer review process.

The Strategy’s Applicability:

Implementation Considerations

In order to successfully implement this peer review process, there are at least two important considerations: the time it takes to complete each cycle of the process and the degree to which the students are dependent upon each other for timely and accurate reviews.

- Each cycle of the peer review process takes approximately one week to complete once the first draft of a proof has been submitted.
- It is difficult to manage situations where a student does not submit their review by the due date, thereby putting the author of the proof at a disadvantage for submitting a timely revision.
- An inaccurate review may mislead a student into revising their proof in inappropriate ways.
  - The burden of interpreting the review accurately is still put on the author of the proof.
  - This can be mitigated by placing a significant grade penalty on inaccurate reviews.
  - However, this is a potential pedagogical advantage since it forces students to critically evaluate the reviews they receive.
- For all of these reasons, there is a significant grading and administrative burden placed on the instructor.
  - For any work subject to the peer review process, the grading load is approximately triple what it would otherwise be.
  - Simply keeping all of the various drafts and reviews organized, as well as making sure the students submit all work on time, can lead to an unusual amount of administrative overhead.

Applicability

At its heart, this strategy is simply asking students to evaluate the work of other students, and therefore could potentially be used in any type of course and in any discipline. Although, it would certainly not lend itself to student work that can be evaluated in an automatic way, such as multiple choice questions. A key to getting the most from this strategy, at least in terms of student learning, is that each stage in the cycle involves work that can only be interpreted by being very thoughtful. Some possibilities might be:

- Any situations in which students must develop an argument to support a claim.
- Situations where students are asked to provide detailed solutions to potentially complex problems, such as in many mathematics and science courses.