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Engaging Students Through Extended Simulations

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This article describes a simulation that fulfills many of the goals of a scholar/apprentice model—one that requires a sustained period of time during which an apprentice practices a set of discipline-specific skills under the guidance of his or her mentor. Such an extended simulation differs from shorter exercises in several ways, such as the necessity of including numerous checkpoints for monitoring student progress and of utilizing objective and systematic assessment tools. In particular, students must know that they will be assessed on the basis of both group results and their individual contributions. The simulation discussed in this article pays explicit attention to these two issues—the importance of "deliverables" and the need for dual-pronged, objective assessment instruments—as well as to the desirability of coordinated college-wide instructional support.

Keywords assessment, comparative politics, cooperative learning, instructional support, simulation

In our increasingly interactive world, active learning models are receiving a fair share of attention. While active learning strategies range the gamut from very simple to highly complex, many of them are complicated instructional designs that incorporate service-learning opportunities, in-depth online interactions, or simulations, among other things. Despite their diversity in form, these models all demand a greater level of commitment from and interaction with students than solely lecture-based courses. Active learning can promote greater understanding of concepts (Baranowski 2006), higher retention of information (Stice 1987), and the opportunity to apply the knowledge one gains through action (Bray and Chappell 2005).

One practical goal is to have students master core concepts while simultaneously practicing some discipline-related skills. This is essentially a scholar/apprentice model—one that requires a sustained period of time during which an apprentice practices a set of discipline-specific skills under the guidance of his or her mentor. Although this model is typical of graduate studies and might also be used in upper level undergraduate seminars, it does not seem readily adaptable to large introductory undergraduate courses or to interactions between professors and students

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lasting only a single semester. Yet these introductory courses are precisely the ones that can generate interest among students who have yet to declare a major and can instill a sense of disciplinary understanding in a large number of students; thus, the scholar/apprentice model can be a valuable tool even at this level.

One might even make the case that engaging students as apprentices is particularly important in the field of political science. Presumably the major should equip students to think critically about political issues and to explore political questions on their own initiative. In this regard, a recent article on critical thinking in introductory comparative politics courses contends that "the most important aspects of critical thinking in Political Science are that of analytical and methodological skills that foster the independence of our students to do their own research, to analyze others' research, and to come to their own conclusions about political questions" (Olsen and Statham 2005, 325). In addition, ideally the major should prepare students to become engaged in political or associational life as global citizens—or at least to understand the complexities involved in political issues. At a recent roundtable on teaching and learning in political science, one participant phrased it this way:

> Political science and the study of politics is somewhat unique: while the facts are very important . . . we also want our students to be able to appreciate the conflicts that are inherent in politics and to think in an "out of the box" way about how to make choices in a democratic society. (Clarke et al. 2002, 225)

If these are our goals, then we need to craft teaching methods that will enable educators to communicate all of the foundational information, will help students turn information into knowledge, and will encourage them to convert that knowledge into action. As Bray and Chappell argue, "Converting 'knowledge about' into 'how to' knowledge is central to civic competency." Moreover, they contend, we need to aim beyond mere competence—encouraging our students not only to act upon knowledge but to do it well, for "[k]nowing how to do something is not the same as doing it well" (Bray and Chappell 2005, 87).

To fulfill these purposes, educators in political science have found simulations to be a useful learning tool (for a few examples, see Kaarbo and Lantis 1997; Kathlene and Choate 1999; Mariani 2007; Newmann and Twigg 2000; Pappas and Peaden 2004; Shellman 2001; Stover 2005; Switky 2004; and the review essay by Wheeler 2006). However, some might be reticent to incorporate simulations in their courses because such exercises can be time-consuming, difficult to coordinate, and fraught with difficulty. In this article, we make the case that some of the most common problems associated with intensive group work—the "free rider" problem and the difficulty of assessing student projects—can be overcome with careful planning.

We first discuss the pros and cons of using simulations in an introductory comparative politics course. Next, we describe the format of the simulation and ways in which the delivery of coordinated college-wide instructional support can facilitate the project's development. We then stress the need for tangible "deliverables" throughout the process—junctures that provide the opportunity for assessment and intervention—to limit the extent of free-riding by group members. Finally, we call for a dual-pronged evaluation of student work, in which students are graded

by the professor and by their peers, as a means of assessing their performance in an objective and systematic manner.

The Use of Simulations: Pros and Cons

Simulations can be beneficial for several reasons. First, simulations can bring to life and facilitate mastery of topics central to a given course. In the case of an introductory comparative politics course, these concepts might include the differences among electoral systems, the formation and sustainability of coalition governments, and the purposes and types of political parties. Students who participated in the simulation described in this article seemed to have found the exercise a useful way of mastering key concepts. One student comments: "I think that the simulation is an excellent learning tool. Having actively participated in the replication of a European political campaign I don't think there's one person who will leave the class without some idea of how politics works in England, Germany, etc. It's certainly a more interesting way to explain than a lecture." Another says the following: "Suddenly a large lecture class became an interactive multi-media learning experience [with] hands on learning. Also a simulation is very practical and realistic in a politics class because we can compare ourselves to real-world politics."

Beyond such anecdotal evidence from my class, Baranowski (2006, 41) demonstrates empirically that even a brief, one-class simulation of the U.S. Congress "did have a measurable impact on student understanding of the legislative process." Likewise, student evaluations of an international relations simulation suggest that the exercise increased their knowledge of the substantive course material, enhanced their critical thinking and analytical skills, and stimulated their interest in international relations (Shellman and Turan 2006, 28–29). Finally, a quasi-experimental research design allowed Frederking (2005, 391) to conclude that American government courses that included a simulation of the U.S. Senate produced higher exam scores than very similar courses without the simulation.

Second, simulations can force students to see the world from new and various perspectives, both by encouraging them to work with students whom they may not already know and by allowing them to assume alternative identities for the simulation. In one role-playing assignment in an introductory American government course, Larson argues that in this exercise, "students learn about government actors, policies, and people with lives different from their own" (Larson 2004, 306). This can also teach empathy. In a simulation focusing on conflict and diplomacy in the Middle East, participation seemed to positively affect the students' "development of empathy with ethnonational groups in the region" (Stover 2005, 216). Even in the case of the fictitious West Europa, one student remarked that he/she learned to "respect even those you disagree with because they stand behind their beliefs and put so much work into their election campaigns."

Third, through simulations, students can engage in cooperative learning and problem solving. Simulations can promote an understanding that the resolution of political problems involves analysis of all dimensions of the issue, effective communication (including attentive listening), and negotiation. In some simulations, such as the one we crafted, students must work in small groups throughout the semester. This appeared to heighten the need for cooperation, communication, and compromise. Indeed, when asked what they learned from our simulation, one student said,

"to work in a group and communicate," while another answered, "to cooperate (with my group and with other groups in forming a coalition government)."

Fourth, simulations can equip students with practical skills that might be useful in future jobs or internships. Opportunities for students to acquaint themselves with policy research, political advertising, speechwriting, and media relations are built into our simulation. As a recent survey of graduates from Hamilton College shows, a year after graduation, one-fifth of all government majors were working in the government or nonprofit organizations, where such skills will serve them well (Ruth 2005). Moreover, the cooperative skills developed through group work will benefit them in their future careers. One author believes that many graduates in their first jobs have "distinctly underdeveloped" interactive skills. The "interactive vacuum" in which most undergraduate education occurs does not prepare students for the workplace, where "[m]ost of what students will accomplish as employees will be collaboratively based, in team projects and in interactions with peers and all layers of an organizational hierarchy" (Wilsford 1995, 224). In addition, although simulations certainly are not the only way that students can hone their communications skills, they can be effective vehicles for developing written and oral proficiencies.

Although there are numerous benefits to using simulations in the classroom, concerns can arise about their pedagogical value and practical implementation. First, there is the issue of curricular tradeoffs. In the introductory comparative politics course, for example, there is the perennial dilemma of finding an appropriate balance between comparative theory, on the one hand, and country case studies, on the other.[1] Regardless of the mix one selects, the insertion of a simulation into the course—particularly a multifaceted, semester-long exercise such as the one described in this article—necessitates reducing coverage of more traditional material. Second, group-focused activity can promote a free-rider problem, in which a few students do the bulk of the work while the others benefit from their labors without expending the same effort. Third, since much of the work (at least for this simulation) is completed independently outside of class time, the instructor may be only marginally aware of what is transpiring in the groups. As a result, groups can potentially misunderstand assignments and/or develop dysfunctional operating styles.

Simulation Design

This is a semester-long simulation designed to introduce students to the concepts of campaigning, party competition, and government formation in a parliamentary democracy. Many of the ideas and handouts for this simulation were adapted from exercises developed by other scholars.[2] The simulation is based on a fictitious country located in Europe named West Europa and is designed to reinforce concepts and theories in the introductory comparative politics course that typically enrolls 60–80 students per semester (30–40 per section).[3] Building on the distinction used by Shaw (2006, 53) in her description of simulation learning objectives, I designed the simulation to advance students' understanding of both the *processes* involved in electoral campaigns and coalition formation, and the potential substantive *outcomes* that could emerge from the exercise—most notably in terms of various electoral results and possible coalition governments.[4]

The simulation itself is typically worth 20% of the overall course grade, with the remaining 80% distributed among a midterm, final, essay, class participation,

and submission of discussion questions.[5] The simulation activities are integrated closely into the course material, so that a certain theoretical concept is discussed in class first and then work on the simulation component that relates to this topic is initiated. After completion of each simulation activity, there is a debriefing session that illuminates lessons and concepts to be learned from the exercise. These are intended to, in the words of Asal and Blake (2006, 3), "give students the chance to internalize the lessons of the simulation," as well as to reinforce the substantive course material.

This simulation differs from the valuable contributions of others in that assignments are structured to include numerous checkpoints in the form of "deliverables," assessment is based on both group results and individual efforts, and services from other academic support units on campus are closely integrated into the simulation. It is also designed to allow students to participate in the way that best suits their abilities and interests—whether through public speaking, policy analysis, or videography. In addition, the activities span an entire semester, while many other simulations typically require only a few class sessions to complete. In such shorter simulations, student performance may not hinge dramatically on that of other class members; in a semester-long project, however, both individual and group outcomes depend greatly on the efforts of other group members and on the dynamics of each group as a whole. Such repeated interactions within stable groups over a prolonged period of time are helpful in promoting cooperative learning.

Throughout the semester, students work in groups to develop party platforms, to produce campaign advertisements, to compete in an election, to stage a public debate, and, ultimately, to form a coalition government. In an attempt to both encourage students to move beyond their comfort zones and to foster more heterogeneity within groups, students are randomly assigned to party groups. Yet they are allowed to select the roles that they would like to assume within their given party. This is intended to create positive group dynamics, to generate enthusiasm for the project, and to foster self-confidence in the participants. Since there are different workloads and learning potentials associated with each role, students seem to appreciate the opportunity to select the roles that best fit into their schedules. In our experience, this self-selection process has proceeded quite smoothly; in the three years of running the simulation, there have been few—if any—complaints from disgruntled students who had not received their preferred role assignments.[6]

In this simulation, there are four roles per party, each with its own specific responsibilities as outlined below:

1. *Party Leader* (one person) serves as the party's main spokesperson, coordinates the general work of the party, presents the party platform to the class, debates other party leaders in a public debate and communicates with the professor on general organizational questions. To encourage this person to be more engaged in the preparatory phases of the party's work, he/she is required to appear in the campaign video and review its raw footage.
2. *Party Secretary* (one person) keeps a running log of all party decisions and activities, posts a weekly report of party decisions and activities to Blackboard for review by the professor and other party members, coordinates the drafting of the party platform with the policy expert(s) and communicates with the professor on the development of the party platform and general organizational questions.

To ensure that this role has a substantive—rather than solely administrative—component, he/she is encouraged to write highly reflective weekly summaries that describe not only the group's activities but also the group's decision-making processes (including any intragroup conflicts and how they were resolved).[7]

3. *Press Secretaries* (two people) develop a party name and logo, prepare and submit a script and storyboard for an original campaign ad, shoot and edit a campaign ad, write press releases as needed and communicate with the professor on press-related activities.
4. *Policy Experts* (one-two people) research economic, social, and foreign policy issues in European countries similar in profile to West Europa, research party platforms in similar European countries, write a party platform for submission to the party secretary, assist the party leader in preparing for the public debate and communicate with the professor on policy-related issues.

Although each person has a clearly defined role to play, the group members must work as an interdependent unit and engage in collaborative problem-based learning in order for the simulation to work well. Thus, the groups that meet frequently or at least are in regular e-mail contact tend to perform the best and report the most satisfying experiences for group members.

After the individual and group preparatory work is completed, the entire class stages a public debate where party leaders debate each other on several questions that are communicated to them beforehand.[8] In addition, the debate includes an impromptu question-and-answer period when questions from the audience are encouraged (and which could be expanded to mirror reality more closely, should the instructor so desire). To keep the debate moving, opening and closing statements as well as answers to questions are generally limited to one minute each. We attempt to increase the professionalism of the debate (and raise the stakes for the students) by extensively publicizing the event on campus beforehand (e.g., by airing the finished campaign ads on the college's cable television channel), using a realistic venue that resembles debates for U.S. Presidential primary elections, and distributing professional, full-color brochures to the audience at the debate. These pamphlets include background information about West Europa and its party system, profiles of each party (including party logos and descriptions of what the logos represent), and lists of all party members. The campaign ads are also aired prior to the commencement of each debate.[9]

An important determinant of the project's success was the level of preparation done prior to including the simulation in the course. One crucial aspect consisted of the professor learning the technical skills that her students would use to produce their campaign ads and logos. She did this by conceptualizing and filming an original campaign ad to use as an example for the class and by working with instructional technologists to design a country flag for West Europa.[10] This process gave the professor insight into both the learning potential and the limitations of a complicated multimedia assignment. It made her aware of the potentially large time commitment and possible complications associated with the responsibilities of the press secretaries. As a result, she was in a much better position to hold students accountable for their work and to assess whether any delay in task completion was the result of a technology malfunction or, alternatively, poor time management on the part of her students. In addition, modeling effective practice gave students a yardstick

against which to measure their own efforts and established a baseline for grading their projects.

During the design phase of the simulation, the professor also met with individuals in various academic support units (reference librarians, instructional technologists, and oral communication specialists) for consultation. Known as the Hamilton Information and Learning Liaisons (HILLgroup), this body is a collaborative organization that provides support to faculty using multimedia assignments in their courses. The academic support personnel working in this group then provide resources and services for students throughout all phases of a multimedia project.[11] In addition to drafting a master plan and timetable, the group coordinated and made the following resources and support services available to students:

1. Print materials, such as a dictionary of European political parties (Day 2000) to assist students in creating a name for their own party.
2. Access to still-image archives such as ARTstor and AccuNet/AP Multimedia Archive, for use in preparing campaign ads and campaign materials.
3. Sample campaign ads to assist the press secretaries in designing their own ads, such as a tape of 40 party political broadcasts from the United Kingdom entitled *Party Political Broadcasts: The Greatest Hits* (1998).
4. Examples of public debates (such as a tape of the 2004 U.S. Presidential debates) to assist the party leaders in honing their debate styles and techniques.
5. Library instruction sessions with the reference librarians to assist the policy experts in researching and drafting their party platforms.
6. Instructional technology sessions for the press secretaries to assist them in filming their campaign videos. These included a basic videography skills workshop, a video-editing workshop, an in-class presentation on videography techniques, an in-class presentation on still visual imagery, and individual consultations on logo design.
7. Oral communication sessions for the party leaders to prepare them for the public debate, which included an in-class presentation on political rhetoric and public speaking as well as individual consultations with the Oral Communication Lab.

In addition, the professor posted to Blackboard detailed instructions regarding every task required of the students during the simulation. Collaborative group spaces were also set up to facilitate interactions among the students, as recommended by Newmann and Twigg (2000, 837). Finally, a comprehensive timeline was prepared for use in coordinating the simulation (see Appendix A).

Although the level of multimedia support for faculty and students varies across institutions, we can obtain a general estimate of the resources and expertise available to support multimedia course assignments nationwide by exploring the instructional technology services available at U.S. colleges and universities. These can be readily assessed by examining the nationwide yearly surveys conducted by the EDUCAUSE association. These surveys include all categories of educational institutions: baccalaureate colleges, master's colleges and universities, doctoral/research universities, and associate's colleges. In its 2005 survey of 933 colleges and universities, 69.7% of all institutions reported having a "designated instructional technology center" on campus. Over half (55.8%) offer "intensive support for faculty using technology"; a similar percentage (56.7%) has "instructional designers who work with technologists." Nearly all reporting institutions (94.6%) provide "faculty training on request" (Hawkins and Rudy 2006, 32).

However, if a given institution does not have the requisite instructional support or technical resources (e.g., video cameras, multimedia and video storage capacity), the following alternative assignment ideas might be useful:

- *Enhanced Podcasts* could be used in place of the campaign ads. Party leaders within the group could record audio speeches based on their party platforms and still images could be added to visually reinforce the speech. This option would retain some of the skill development in visual literacy and dynamic composition emphasized in the original video assignment.
- *A wiki* could be used instead of or in conjunction with the Blackboard discussion space to facilitate group collaboration, instantly "publish" each group's activities near the end of the simulation, and to provide a link to the enhanced podcasts.[12]
- *Storyboards and scripts* could be conceptualized and presented without translating them into videos. This would retain the emphasis in the original video assignment on maintaining consistency between party platforms and campaign materials.
- *A traditional print media campaign*, with campaign flyers, newspaper articles, and/or press releases, could be designed by the press secretaries.

Other options for the simulation might include adapting some of the processes described above to American politics courses. Although the content is specific to countries with parliamentary systems and mixed electoral systems, the process itself (minus the coalition formation exercise) might be adaptable to other courses. In short, students are required to form parties, to write platforms, to select leaders, to produce a media campaign, and to organize a public debate. This structure—in addition to the peer assessment tools—could be used as a general organizing schema for an introductory course in American politics.

The Importance of "Deliverables"

Since much of the work in this simulation is done independently and/or in small groups outside of class time, it is frequently difficult to gauge the experiential learning that is (or is not) occurring and to evaluate each student's contributions to their group's effort fairly. In fact, at the beginning of one semester several students expressed reluctance to work collaboratively because their previous experiences with small group work had been unproductive. To alleviate such concerns, the simulation is designed to move away from traditional group work and toward cooperative learning, in which the use of groups "is well planned and employed on a long-term basis, rather than in a limited or *ad hoc* way." Cooperative learning is also distinguished by its stability of group membership, use of role assignments for all students, and close monitoring of group progress by the instructor (Occhipinti 2003, 69–70).

In an effort to minimize the free-rider problem and to monitor the progress of each group, the assignments in the simulation are structured so as to include periodic checkpoints at which both individual and group progress can be evaluated. One such checkpoint focuses on the party secretaries, whose weekly summaries of group activities serve as an initial screening opportunity. They allow the professor to identify potential problems early on, such as misunderstanding a given assignment, or to intervene and redirect the students if necessary.[13] In addition to making the professor aware of any internal group problems, these reports serve the following

purposes. First, as students review the week's activities and summarize them, reflection on the process and content of the simulation is formally incorporated into the learning process. Second, since all group members are expected to contribute to these reports, collaborative decision making and negotiation are fostered. Third, at the end of the semester, the information contained in the weekly reports can serve as a supplement to the group dynamics survey (see below) in the determination of individual simulation grades.

Another set of checkpoints consists of the specific deadlines for all roles that are incorporated into the simulation and communicated to the class via the syllabus. This course timeline is also incorporated by the instructional technology coordinator into the overall, college-wide technology resources schedule for the semester. In addition, students are given a project management rubric that details the specific responsibilities of each role in relation to each simulation task (see Appendix B). Like Austin, McDowell, and Sacko (2006, 100–101), we believe that it is important to distribute a rubric communicating basic expectations ahead of time, so that the students have a clear understanding of what is required of them and of the criteria used to grade their work. This project management rubric also functions as a way for students to monitor their own progress and to keep other group members on track.[14] This rubric was also meant to encourage the groups to work as a whole on each individual component of the simulation, though anecdotal evidence suggests that it may not have achieved this goal. In some groups, individuals worked quite independently on their own assignments, without much input from other members of their group. This tendency might be lessened by including an overall "collective" grade for each group member, in addition to the individual assessment techniques described in the next section.

Assessment Techniques

Depending on the role assumed by the student, this semester-long simulation can require a substantial effort on the part of the participants. Therefore, it is important to use systematic and objective assessment instruments when evaluating individual contributions to the collective effort. As such, each student's simulation grade consists of two components. The first is the grade given by the professor, which is determined on the basis of the following criteria:

- *Party leaders* are graded mainly on their performance in the public debate. There are four expert judges from the college present at the debate—the director of the Oral Communication Lab (OCL), a student tutor from the OCL, a government professor, and a senior majoring in government—whose presence increases the professionalism of the event and the impartiality of the evaluation process. During the speeches, which follow a clearly-specified format communicated to the party leaders in advance, the judges complete a speech evaluation form specifically designed for this exercise. Each speaker is rated on the basis of a rubric that includes audience appeal, organization of the speech, development of the argument, responses to impromptu questions, preparedness, and presentation. On the basis of the numerical scores each party leader receives, the debate judges determine which party has won each of the two debates.[15] All members of the winning parties receive extra credit. The judges' scores are also used by the professor

to compute individual grades for each party leader. The earlier in-class presentations of party platforms by the party leaders also factor into their individual grades.

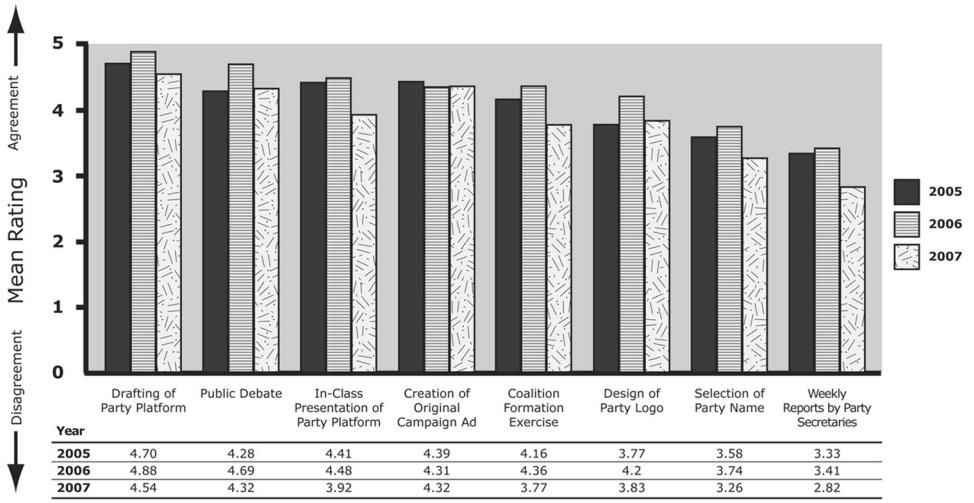
- *Party secretaries* are graded on the quality and timeliness of their weekly reports. In particular, the reports are assessed on the basis of *comprehensiveness* (e.g., important details of group meetings, accounts of individual group members' meetings with academic support units, and descriptions of the participation levels of group members); *reflection* (e.g., discussion of the processes by which decisions are reached: alternatives discussed, internal group debates, rationale for decisions, and resolution of group disputes); and *application* of the theories learned in class to the simulation activities.
- *Press secretaries* are graded on the basis of the quality and complexity of their campaign ads (e.g., use of live camera footage, integration of voiceovers and visual text with visual images, creativity and imagination, and congruence between the ads and the parties' messages). They are also assessed on the basis of the quality and creativity of their party logos, and the extent to which they are accurate graphic representations of their parties' identities.
- *Policy experts* are graded on the quality of their party platforms (e.g., clarity, creativity, and practicality of policy proposals; the extent to which the policy planks reflect the general orientations of their parties; the comprehensiveness of their work; and their use of outside materials). They are also assessed on their efforts to advise the press secretaries on the campaign ads and to prepare the party leaders for the debate.

All instructor grades are adjusted according to whether students attended the required meetings with academic support personnel and met the deadlines for task completion as outlined in the role job descriptions.

The second component of each individual's grade consists of peer evaluation. All students are required to complete an online small group dynamics survey at the conclusion of the simulation, which is designed to elicit specific feedback on the contributions of their peers to the group process. The survey (reprinted in Appendix C) requires students to use specific criteria as they rate the performance of other group members on multiple dimensions. It also allows for open-ended commentary on their peers, and it offers students the opportunity to comment on the overall group experience as well as their own performance.[16] All of this provides a confidential means of communicating with the professor on issues related to internal group dynamics. Although this instrument is designed to be administered only at the end of the semester, it might be used as a midterm peer evaluation tool with the goal of increasing student accountability at the midpoint of the simulation.

Student Reactions

At the end of the semester, a second survey is conducted to ascertain which components of the simulation produced the greatest educational benefit. On a scale of 1–5 (with 1 indicating complete disagreement and 5 complete agreement), students are asked to rate the extent to which they agree with the following statement: "This activity was very useful in helping me understand how political parties operate



Year	Drafting of Party Platform	Public Debate	In-Class Presentation of Party Platform	Creation of Original Campaign Ad	Coalition Formation Exercise	Design of Party Logo	Selection of Party Name	Weekly Reports by Party Secretaries
2005	4.70	4.28	4.41	4.39	4.16	3.77	3.58	3.33
2006	4.88	4.69	4.48	4.31	4.36	4.2	3.74	3.41
2007	4.54	4.32	3.92	4.32	3.77	3.83	3.26	2.82

Source: Authors' Simulation Resources and Services Survey.

Note: On a scale of 1-5 (with 1 indicating complete disagreement and 5 complete agreement), students were asked to rate the extent to which they agreed with the following statement: "This activity was very useful in helping me understand how political parties operate before, during and after a campaign."

Figure 1. Mean rating of simulation components by students in introduction to comparative politics course at Hamilton College.

before, during, and after a campaign." They are instructed to rate all of the simulation activities even if they did not participate in them directly.

As Figure 1 shows, the four most highly rated components tend to be the drafting of the party platform, public debate, in-class presentation of the party platform, and creation of the original campaign ad. The coalition formation exercise and design of the party logo are also rated highly. Selecting the party name is judged to be less helpful, and the utility of the weekly reports is ranked the lowest each year—suggesting that even with much prodding from the instructor, they did not provide the intended opportunity for reflection.

The pedagogical benefits of the simulation can also be assessed via the qualitative sections of the surveys. When asked what they learned from the simulation, students reported—among other things—that they learned about: the tension between pragmatism and ideology in political campaigns ("how different parties interact and the difficulty of maintaining a strong ideology when you obviously want votes"; "the delicate balance between sticking to your group's ideals but also trying to get enough votes to make an impact"); the difficulty of appealing to voters ("that writing a speech is very different from writing a party platform"; "how much effort goes into making a strong campaign front"; "how hard it is to make a campaign video"); the need for compromise, teamwork, and consensus-building in politics ("[that] elections are very much a team effort"; "a lot about compromise in forming coalitions"; "how to construct a party platform and that it is harder to balance the issues than I had thought"); and how to work effectively as a team ("how to organize a group and the assignments that need to be done"; "the importance within a party of delegating duties"; "what it's like to be a leader of a group and how demanding that can be").[17]

When asked to describe the most enjoyable aspect of the simulation, students repeatedly emphasize the satisfaction they experience when all of their hard work culminates in the public debate and airing of their campaign ads. One student remarked he/she "really enjoyed the debate; seeing everyone's hard work come together like that does not happen in many classes." Similarly, another student enjoyed the "debate because it was very formal and exhibited the great amount of work done in the project." Several appreciated the opportunity to be creative; one enjoyed "making the video and logo because we had the freedom to be creative and use cool computer programs," while another liked "making the advertisement. This is because I was able to be creative and learn a new skill." Finally, one commented that the most enjoyable aspect of the project was "watching our completed video after the hard work the three of us put into it. [This] was the most rewarding thing I experienced all year in any class. It really made me proud." Other comments ranged from appreciation of the independent nature of the project ("working on our own without close supervision; the freedom to test out ideas on our own") to the postdebate coalition formation assignment ("the coalition government exercise because everyone had to be involved and it clarified a lot of my confusion from just reading the articles alone").

While aggregate data from the end-of-the-year surveys were on the whole positive, we thought it would be illuminating to see if any subgroup differences emerged in the ways that students experienced the simulation. For instance, would students who planned to major in government report more satisfaction from engaging in the exercise, as it might be perceived by them as being a more integral part of their future academic studies? To test this, we averaged the ratings for the eight simulation components displayed in Figure 1 and computed a difference of means for likely government majors v. nongovernment majors (including those who were undecided).[18] Displayed in Table 1, the data show that for 2005 and 2006, the mean perception of the overall effectiveness of the simulation for government majors was indeed higher (.5 point or less), though this difference did not manifest itself again in 2007.

A slightly larger difference—and one that was present in both 2006 and 2007 (the question was not asked in 2005)—did not have to do with the students' long-term academic objectives, but rather with the type of small group of which they were a part. We asked how they would describe the behavior of their group over the course of the semester—as highly cooperative, somewhat cooperative, somewhat uncooperative, or highly uncooperative. Although no one chose the latter two options, there was a difference between the experience of those students who believed

Table 1. Mean perception of overall effectiveness of simulation by likely major

	Government majors	All other majors/undecided	Difference
2005	4.25	3.74	.51*
2006	4.47	4.14	.33*
2007	3.85	3.79	.06

*$p < .10$; **$p < .05$; ***$p < .001$.
Source: Authors' Simulation Resources and Services Survey.

Table 2. Mean perception of overall effectiveness of simulation by group dynamic

	"Highly Cooperative" Groups	"Somewhat Cooperative" Groups	Difference
2006	4.35	3.71	.64***
2007	4.03	3.51	.52***

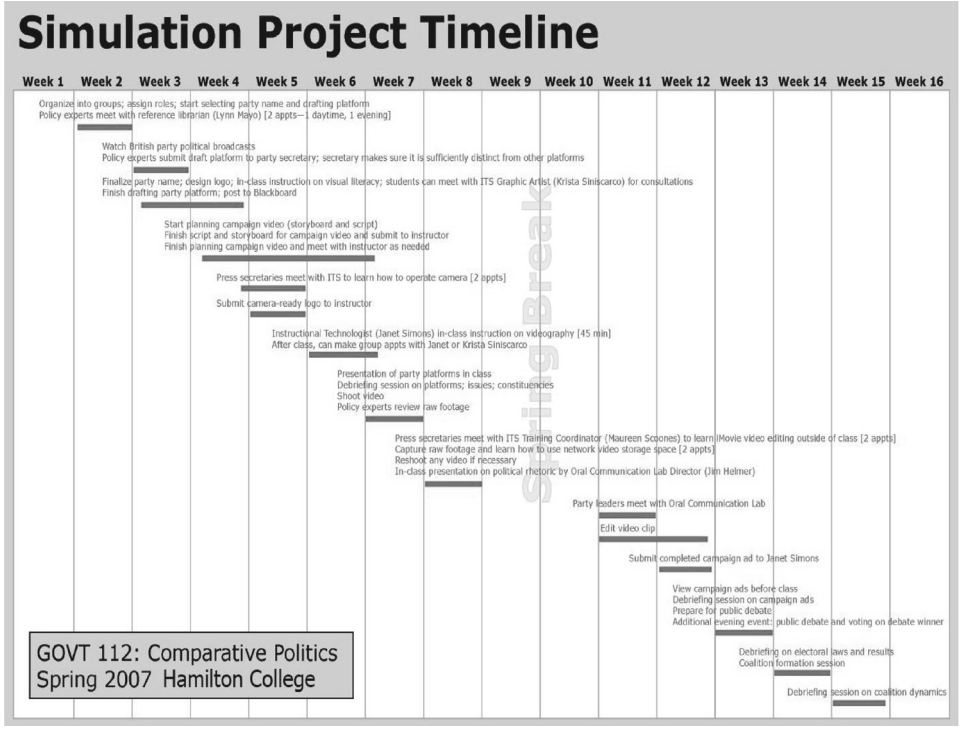
*$p < .10$; **$p < .05$; ***$p < .001$.
Source: Authors' Simulation Resources and Services Survey.

that the majority of their group members behaved in a "highly cooperative" manner and those who ranked their group as only "somewhat cooperative." As Table 2 shows, the difference of means for 2006 was .64 and is statistically significant at the .001 level. In 2007, the gap was slightly smaller—with a difference of .52 that is statistically significant at the .05 level. These data suggest that the benefit to students of an extended simulation is more strongly related to small group dynamics than to academic major, with the more cooperative groups producing a greater educational benefit. As such, attention and care should be devoted to ensuring that the small groups in the simulation work cooperatively and productively.

Conclusion

In this article, we make the case for designing assignments that incorporate principles of active learning and discuss an extended simulation that fulfills the goals of a scholar/apprentice model. We note that although such simulations have the potential for free-riding and unproductive group work and usually involve a tradeoff in terms of traditional course material, they are beneficial for cultivating critical thinking, cooperative learning behavior, and empathy in students. They are also helpful in bringing complex themes to life in the classroom. Finally, they can impart to students some of the skills they will need in their future coursework and/or careers—such as the ability to communicate effectively in both oral and written forms and to effectively "sell" one's ideas to fellow group members and to the public at large.

In order for simulations to accomplish these goals, however, they must be designed so that tangible "deliverables" are required throughout the exercise. Rubrics are helpful for communicating the deadlines, individual and group responsibilities, and assessment criteria that are associated with such deliverables. In extended simulations that span the entire semester, attention must also be paid to developing objective and systematic grading criteria. In particular, students must know that they will be assessed on the basis of both their group results and their individual contributions to the collective effort. Finally, complex simulation designs benefit from the delivery of coordinated college-wide instructional support. If these components are in place, extended simulations such as the one described in this article can meet the pedagogical goals of a scholar/apprentice model while at the same time being manageable in terms of the time and energy required to organize and to conduct the simulation.


Simulation Project Timeline
Week 1
Week 2
Week 3
Week 4
Week 5
Week 6
Week 7
Week 8
Week 9
Week 10
Week 11
Week 12
Week 13
Week 14
Week 15
Week 16
Organize into groups; assign roles; start selecting party name and drafting platform
Policy experts meet with reference librarian (Lynn Mayo) [2 appts—1 daytime, 1 evening]
Watch British party political broadcasts
Policy experts submit draft platform to party secretary; secretary makes sure it is sufficiently distinct from other platforms
Finalize party name; design logo; in-class instruction on visual literacy; students can meet with ITS Graphic Artist (Krista Siniscarco) for consultations
Finish drafting party platform; post to Blackboard
Start planning campaign video (storyboard and script)
Finish script and storyboard for campaign video and submit to instructor
Finish planning campaign video and meet with instructor as needed
Press secretaries meet with ITS to learn how to operate camera [2 appts]
Submit camera-ready logo to instructor
Instructional Technologist (Janet Simons) in-class instruction on videography [45 min]
After class, can make group appts with Janet or Krista Siniscarco
Presentation of party platforms in class
Debriefing session on platforms; issues; constituencies
Shoot video
Policy experts review raw footage
Spring Break
Press secretaries meet with ITS Training Coordinator (Maureen Scopnes) to learn Movie video editing outside of class [2 appts]
Capture raw footage and learn how to use network video storage space [2 appts]
Reshoot any video if necessary
In-class presentation on political rhetoric by Oral Communication Lab Director (Jim Helmer)
Party leaders meet with Oral Communication Lab
Edit video clip
Submit completed campaign ad to Janet Simons
View campaign ads before class
Debriefing session on campaign ads
Prepare for public debate
Additional evening event: public debate and voting on debate winner
Debriefing on electoral laws and results
Coalition formation session
Debriefing session on coalition dynamics
GOVT 112: Comparative Politics
Spring 2007 Hamilton College

APPENDIX A

Project Management Rubric for Comparative Politics Simulation Spring 2007

	Party Leader	Points	Party Secretary	Points	Press Secretary	Points	Policy Expert	Points		
Platform	Communicate party platform on behalf of group during in-class presentation		Coordinate formulation of party platform		Translate party platform into media communication tools		Research issues and party platforms of similar European parties			Hamilton College
			Prevent overlap with other party platforms		Meet with instructional technologists to design and create media		Write draft party platform and submit to party secretary			
			Secure group agreement on party platform		Communicate with professor on development of media messages		Meet with reference librarian			
			Communicate with professor on platform development				Communicate with professor on policy issues			
Logo	Evaluate logo design in terms of party platform and goals		Coordinate evaluation of logo design in terms of party platform and goals		Create a graphic identity for the party based on the party platform		Assist press secretaries in finding graphic identity resources			
					Submit draft graphic logo to party secretary		Evaluate logo design in terms of party platform & goals			
					Attend logo appointment with ITS					
Campaign Ad	Act as main spokesperson for party in ad		Assist press secretaries with content of draft storyboards for ad		Submit draft storyboard to party secretary		Evaluate campaign ad in terms of party platform and goals			
	Evaluate campaign ad in terms of party platform and goals				Attend a basic videography and a video editing workshop					
			Coordinate evaluation of campaign ad in terms of party platform and goals		Create a 1 min or less campaign ad that effectively communicates party platform					
Debate	Represent party in public debate		Maintain complete records for party leader		Submit HQ file of ad to ITSST before debate		Assist party leader in preparation for public debate			
	Meet with Oral Comm. Lab to prepare for debate				Print party logo on 11 x 13 paper for debate podium					
Group	Coordinate group activities		Serve as Blackboard group discussion administrator		Solicit ideas and feedback from group during logo and ad creation		Solicit ideas and feedback from group during platform development			
	Ensure group sign-off on all simulation activities		Solicit feedback from group for weekly reports							
	Communicate with professor on group organization		Submit weekly report of group activities/decisions to Blackboard							
Points Total										

APPENDIX B

Appendix C[19]

Small Group Dynamics Survey

Please provide your name. _____

Please select the party to which you belong:

A. West Europan Fellowship
B. Liberal Workers' Alliance
C. People's Democratic Party
D. Greenlight Amity
E. Workers' Socialist Party
F. National Republican Front

Using the scale below, please rate the *Party Leader's* behavior on the following characteristics:

1 = Completely disagree
2 = Somewhat disagree
3 = Neither agree nor disagree
4 = Somewhat agree
5 = Completely agree
99 = No basis to judge

_____ S/he was present for group meetings.
_____ S/he was prepared for group meetings.
_____ S/he fulfilled assigned responsibilities.
_____ S/he responded to requests for information.
_____ S/he did more than was expected of him/her.
_____ S/he kept the group focused and on task.
_____ S/he took leadership responsibility for the group.
_____ S/he helped foster group morale.
_____ S/he worked cooperatively with others.
_____ S/he helped the group improve its functioning.
_____ S/he brought energy and enthusiasm to the group.
_____ S/he helped the group resolve disagreements.

Please provide the name of the person you have just rated: _____

Is there anything else you wish to tell the instructor about this person or their role in the group?_____
_____

[Survey questions are repeated for the party secretary, press secretaries, and policy expert.]

Do you have any other comments that you would like to share with the professor—either about your own performance or about your group? For example, if you are a press secretary—would you like to be graded on the basis of the party logo, the campaign ad, or both? If you fulfilled two roles, what was the approximate division of your time between the two responsibilities?

_____

Notes

1. For a review of comparative politics instruction at the undergraduate and graduate levels, see Kurzer 2003.

2. The coalition formation exercise was adapted from Kaarbo and Lantis 1997; Shellman 2001; and Switky 2004; the party platform development assignment, general party descriptions, role assignments, and country background information were modeled after Kaarbo and Lantis 1997; and the campaign ad assignment and public debate were designed on the basis of Kathlene and Choate 1999. I used some of the debriefing questions from Smith and Boyer 1996; and Kaarbo and Lantis 1997.

3. The name of the fictitious country is a variation on Switky's "Europa" (Switky 2004). The complete simulation, "Elections in West Europa," will be available through CQ Press in the fall of 2008.

4. Similarly, Asal and Blake (2006, 4) stress that when designing simulations that emphasize teaching concepts, one must decide "whether learning about process (e.g., decision making, negotiation, economic or power relations, the impact of constraints, interpersonal relations involved) or the content (the facts, history, or science that provides the context for the simulation) is more important."

5. A copy of the course syllabus can be found at http://www.hamilton.edu/academics/government/srivera.html.

6. Interestingly, one of the roles that at first glance might appear to be less substantive actually seems to offer students the greatest learning potential. In a follow-up survey of the perceived utility of the simulation (described in the "Student Reactions" section below), the press secretaries consistently report learning the most from the simulation overall.

7. In cases where the party secretary is unable to produce the proper reports due to lack of cooperation on the part of his/her group, he/she is encouraged to interview group members individually about the processes involved in developing each separate component of the simulation.

8. Since the course typically has two sections, two separate debates are held—both on the same night.

9. For examples of the campaign ads and logos, as well as additional information on the simulation, see http://www.hamilton.edu/academics/showcase/cpaction.cfm?ProjectGroupID=12.

10. The flag then served as a resource for students to use when creating their party logos.

11. For more on Hamilton College's innovations in multimedia technology, see "Campus Technology Innovators 2005" (2005). Although many institutions may not offer coordinated support services in the same way that Hamilton College does, it is likely that many of the services described in this article can be obtained from the appropriate institutional departments.

12. Wikis are collaboratively constructed Web-based documents organized around the development of linked pages.

13. In the case of dysfunctional groups or recalcitrant group members, private communication with the instructor is also helpful.

14. Although this form does not fulfill one of the central functions of a rubric by defining quality work (Goodrich 1996–1997, 14), such criteria are communicated to the students in other handouts.

15. The audience also votes on which party won the debate, but this result does not affect the students' grades. During one semester, we used personal response systems for voting at the debate, as well as for providing instant feedback on party leaders' in-class presentations and other simulation-related events. On the benefits of interactive voting technology, see Damron and Mott 2005.

16. Since research has shown that students rate their academic performance more highly than that of their peers (Omelicheva 2005, 199–200), the numerical self-ratings are excluded from the calculations that constitute this portion of the simulation grade. However, relevant qualitative comments—such as an individual's comment that he/she fulfilled the responsibilities of an additional role—are given careful consideration.

17. In their evaluations of the simulation, students frequently comment that they desire more context, such as detailed histories of the parties, biographies of the party leaders, party voting records, public opinion data on the citizens of West Europa, economic trends, and recent legislation. In their view, this would increase interparty dialogue, empathy for West Europan citizens, their ability to write more in-depth party platforms, etc. While the lack of specificity is certainly one drawback to using a fictitious country, an advantage is that students are less constrained in their parties' stances than if they were simulating an election campaign in an existing country.

18. The very few students who answered "don't know" when asked to rate any of the eight simulation components were eliminated from the calculation.

19. Some of these questions were adapted from a Small Group Feedback Form modified by Julie C. Dunsmore, now in the Psychology Department at Virginia Tech, from materials presented by Tracey Manning, then at the College of Notre Dame of Maryland, at the August 1999 Psychology of Women Institute in Boston, MA, sponsored by Division 35 of the American Psychological Association and the Association for Women in Psychology.

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