Simulating Issue Networks in Small Classes Using the World Wide Web*

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n this article we describe a novel approach towards conducting class simulations that combines the advantages of role-playing simulations, which mobilize student interest and involvement, with the advantages of more traditional pedagogical tools (especialy the research paper), which promote academic rigor. This synthesis, we demonstrate, is facilitated by using the World Wide Web, which can provide a level of realism to simulations that would otherwise be impossible to achieve, especially in smaller classes.

Simulations and Active Learning

Simulations are a useful pedagogical tool because of the way they uniquely engage students in active learning. Proponents of active learning insist that students do not reach their full potential for learning when they take classes taught exclusively in the standard lecture format (Bonwell and Eison 1991). They argue that students learn best when they are involved in doing things and thinking about what they are doing and why they are doing them (Stice 1987). Such activities promote learning because they dramatically increase the amount of motivation and enthusiasm that students bring to their academic work (Astin 1985).

Simulations have been shown to be particularly effective in promoting such student interest. In their article "Designing In-Class Simulations," Smith and Boyer found that classroom simulations in their political science courses were especially ef-

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fective tools for encouraging student interest and participation. They found that participating in simulations fostered more student attention and activity in the learning process; at the same time, it gave students "a deeper level of insight into the political process" (1996, 690). Smith and Boyer also found that simulations helped students retain information for longer periods of time than did traditional classroom instruction.

Simulations are so effective because they require students to engage in a variety of activities. Full participation usually requires individual research and writing as well as cooperation in group activities like organizing information, coordinating activities, and instructing peers. Engaging in different activities creates opportunities for students with different learning styles to excel (MacGregor, Shapiro, and Niemac 1988). For instance, simulations have been shown to increase the learning of students who learn best from receiving spoken information and having involvement with peers (Fraas 1982). Finally, the constant necessity for students to teach and reinforce concepts to one another creates the possibility for students to be exposed to a much greater variety of teaching styles than those employed by the instructor.

Simulations in Political Science Courses

Political scientists have recognized simulations as important pedagogical tools in political science for some time (Grafton and Permaloff 1989; Kaarbo and Lantis 1997; Koch 1991; McQuaid 1992; Reeher and Cammarano 1997; Smith and Boyer 1996; Vavrina 1995). But while all of the simulations described in the literature represent impressive efforts in innovative pedagogy, their level of sophistication may make them difficult use in to some courses or institutions. A good example of this is the U.S. Congress simulation described by Endersby and Webber (1995). Endersby and Webber conducted an impressive semester-long role-playing simulation during which they coordinated the actions of 130 students in three different classes. Each student assumed the role of either a member of Congress or an interest group. Students fleshed out these roles by preparing character profiles and policy memos that would guide their actions while participating in the role-playing portion of the simulation. The number of students involved allowed Endersby and Weber to make this role-playing very realistic, with mock committee meetings, a mock Rules Committee, and, finally, mock floor debates in both the House and Senate. It is a tribute to the design of the course that the students were able to simulate the full frustrating character of the legislative process. They introduced an impressive total of 57 bills to 3 committees, of which 13 passed the House and 4 passed the Senate.

While this simulation design is a notable model, its length and cast size make it impractical for many courses. Many instructors may think the semester-long simulation takes too much time away from traditional activities of reading, attending lectures, and writing papers. In our case, as is common in many smaller schools, the U.S. Congress course is lumped together with the topic of the U.S. presidency, making an extended simulation impossible. Second, perhaps the majority of legislative process courses do not enjoy the requisite enrollment to reproduce all the characters necessary for a fullscale role-playing simulation. In the first author's Congress and the presi-

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dency class, for instance, we had only 17 warm bodies available for duty.

The Simulation Design

The question thus becomes how to realize the advantages of role playing given constraints of time and limited personnel. The solution was to create an exercise that was designed to simulate the workings of a single congressional issue network surrounding a specific piece of environmental legislation rather than the entire legislative process. This involved students playing specific institutional roles within an issue network rather than specific actors. considerably reducing the number of actors needed. We chose the reauthorization of the Endangered Species Act as the topic for the role play.

I divided the class into seven groups: two representing coalitions of interest groups for and against the reauthorization, four representing these coalitions' respective allies in the House and Senate, and a final group representing the president and offices of the Department of the Interior. During the simulation, students bargained to achieve their group's desired outcomes instead of engaging in committee and floor debates. The resulting simulation was not as realistic (or perhaps as fun) as the Endersby and Weber exercise, but, since students did not have to focus on polished acting and speech making, they could focus more on bargaining within and between issue networks and working out how to use their groups' resources and congressional rules to further their positions. Most of class time was spent in this bargaining, with students debating with each other and the instructor about whether the parties involved were making the right deals given the rules and interests involved.

To structure the simulation, each group created a Legislative Strategy Brief (LSB) detailing the policy stands and legislative strategy their group would follow during the simulation. The LSB had five basic parts that varied a little between groups. In the first part of the LSB, students

described the bills for reauthorizing the Endangered Species Act that were before the House and Senate at the time of the simulation and presented their group's detailed evaluation of the different provisions of the bills. In the next section of the paper, students detailed the character of the institutions they represented and described the core members of the group and why they were involved. For interest group coalition groups, completing this section could entail describing the groups that made up their issue network. Students in the congressional groups could use this section to detail the group's core members or bill co-sponsors and offer reasons for why these members supported or opposed the bill. In the third section of the LSB, students had to explain their group's interest group liaison strategy. This meant they had to describe how they would keep their issue network unified and coordinated and especially what steps they would take together to mobilize media and grassroots support for their version of the bill. The fourth section of the LSB was to contain a description of each group's strategy for winning at the committee level. This was where students were expected to begin to demonstrate their knowledge of congressional rules and parliamentary procedure. For instance, a group might describe how and why they would get a committee or subcommittee chair to sponsor their bill in order to increase the chances of the bill getting out of committee. Strategic concerns were also the subject of the final section of the LSB, in which students detailed their strategies for getting their bill to a floor vote. In this section, for instance, students in the Senate group favoring the bill might describe how they would get the other side to agree to a unanimous consent resolution so the bill could be voted on.

While students in the simulation did not enjoy the fun of spending several evenings acting out individual congressional personalities in their Sunday best, a considerable amount of realism was built into the simulation. This was made possible primarily by the World Wide Web.

The web has the potential to be a very important tool for teaching political science. It gives students access to a great variety and quantity of political information with unparalleled ease. The accessibility of the technology also makes the web, potentially, a forum that democratizes information, exposing students to a much wider variety of perspectives than they could find in a university library (Ball 1995). But these same qualities also lead to pedagogical pitfalls. Untutored, students will not be adept at filtering good information from bad, and they will have a hard time applying a critical eye to the myriad of perspectives that characterize the democratic anarchy of the web (Luna and McKenzie 1997). Using the web as a principle source of information for the simulation, therefore, presented the opportunity to teach students to be more sophisticated consumers of electronic information.

The partisan and fragmented character of the political information on the web also dramatically increased the degree of realism it was possible to achieve with a small group in a short period of time. This was due partly to the fact that students dealt with a bill active before Congress. They could, therefore, research accounts of the bill in Congressional Quarterly Weekly Report or The Washington Post online and incorporate what was actually happening in Congress into their LSB. A greater benefit of using the web, however, was that doing so allowed students to see how the web itself has become a communications vehicle for members of issue networks. Ever-increasing numbers of interest groups use the web to disseminate information to members and mobilize political support. As a result, there was an extensive interest group presence on the web dealing with the Endangered Species Act. These sites included lists of interest group members, detailed analyses of the pending legislation, and even descriptions of members of Congress with whom a group was working. Most of the sites the students visited also bore evidence of issue networks members' attempts to mobilize public opinion for their position. This

TABLE 1 WWW Sites for Use in U.S. Congress Simulations

Votenet	www.votenet.com
Voter Information Services	www.vis.org
THOMAS: U.S. Congress on the Internet	thomas.loc.gov
Government Printing Office	www.access.gpo.gov
U.S. Senate	www.senate.gov
U.S. House of Representatives	www.house.gov
CNN/TIME/CQ: AllPolitics	cnn.com/ALLPOLITICS
Congressional Quarterly's American Voter	voter96.cqalert.com
Congressional Quarterly	www.cq.com
Roll Call	www.washington
The Washington Post	www.washingtonpost.com

took the form of the sites themselves, press releases that were often posted on the sites, and descriptions of organized grassroots lobbying efforts. Some of the most interesting sites students used were those maintained by Washington lobbying firms that detailed all of the services these organizations can provide, from traditional lobbying to mass mailings designed to generate "astro-turf" political support.

Several groups "hired" such firms to work for them in the simulation. Several government sites were also especially useful. THOMAS: Legislative Information on the Internet, a site maintained by the Library of Congress, contained the text of bills, amendments, cosponsors, and descriptions of the parliamentary procedure bills had gone through. Students could, therefore, look at what was actually happening with their bill from day to day and get a record of the congressional rules or possible bargains that were shaping the legislation. Sites maintained by the House and Senate also provided biographical and district information about members of Congress students could use to pick out potential cosponsors or allies. A list of the sites students found especially useful appears in Table 1.

The realism engendered by all this web-based information was aug-

mented by the requirement that students' LSBs include a description of several bargains worked out with other groups to move (or block) the reauthorization of the Endangered Species Act at each stage of the process. Thus, for instance, the proponents of the bill in the House (which was co-sponsred mainly by liberal Democrats) had to make bargains with their opponents in the House leadership to get the bill a rule and time on the House floor. This bargain, in turn, needed to be signed off on by the group representing the supporting interest group coalition. Thus, the students did quite a bit of role-playing, just in a less formal setting than a mock Rules Committee meeting. This bargaining took place during three regular class periods in a setting in which the instructor could go from group to group and help facilitate the process. Our experience with this simulation supports Laurillard's (1993) finding that such teacher involvement in simulations is a key to their success.

The realism of the simulation was also increased by the requirement that students use a book the class read together, *Tell Newt to Shut Up!* (Maraniss and Weisskopf 1996), as a model for the kinds of bargains and strategies they could employ. For instance, they could cite the book's description of the importance of informal caucuses to explain how they were able to corral cosponsors in their LSB. The book also provide a level of detail that fascinated students and engaged their creativity. Our students were especially fond of writing scenes into their LSBs that emulated Manraniss and Weisskopf's descriptions of the importance of informal meetings in the backrooms of bars and restaurants. The publication of new "insider" books on the legislative process provides a timely stream of such stories; however, we have found older books to work well, also (see, esp., Broder and Johnson 1996; Cohen 1992; Elving 1995).

Conclusions

One of the most significant contributions of this simulation design is that it allows instructors to enjoy the benefits of simulations without biting off more than they can chew. This is of value not only for classes without the time and personnel to do a fullblown simulation, but also for classes with content that is even more difficult to simulate than operation of the U.S. Congress. For instance, it would be very difficult to simulate a presidential or congressional election in an elections course, but a simulation like the one described here works very well. In the first author's recent campaign analysis course, he simply divided students into pairs to contest congressional elections in districts of their choosing, with each student playing the role of a political consultant. As a consultant, each student had to prepare a "Campaign Strategy Brief" (CSB) for his or her race that was very similar to the LSB. Students did not enjoy the fun of staging parades, GOTV drives, and telemarketing fundraisers, but they could simulate these activities (in a way) through class exercises and their CSB.

Note

* Jim Josefson was the instructor for the simulation described in this article, and Kelly

Casey was a student in the course. The coauthors thank Nicole Fish and Sarah Peterson of Hartwick College for their help in writing this article.

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