

# “Simulating a Mass Election in the Classroom”

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## Abstract

This article discusses the use of election simulation software in a course on American Government taught by the author in the Fall of 2004. The use of a computer-mediated election simulation allows for the experiential learning of certain features of mass elections in general, and US presidential elections in particular, that could not be done with “live” or smaller-scale electoral simulations. While the limitations of the technology do entail some precautions, overall the use of the simulation software proved to be a valuable pedagogical exercise.

## Introduction

Teaching an American Government course at a small Canadian university, I wanted to use an election simulation that would teach students about the peculiarities of *American* elections, and American presidential elections in particular, with the complexities introduced by the electoral college system. Considerable evidence exists that simulations can be valuable exercises in political science courses. (Endersby and Webber, 1995; Kathlene and Choate, 1999; Pappas and Peadon, 2004; Princen and Stayaert, 2003; Smith and Boyer, 1996; Taylor, 2003) Simulations are valuable because they provide experiential learning (frequently characterized by participants as “realistic” or “authentic” experiences of political life) that contrast with more traditional lecture formats. (Endersby and Webber, 1995) On the other hand, however, it should be clear that simulations in and of themselves are not necessarily realistic or authentic, nor are all the lessons learned from the simulation universally generalizable to the “real world” outside the classroom.

For example, in most election simulations designed for classroom use, the dynamics are necessarily those of a relatively small-scale electoral contest.<sup>i</sup> While valuable lessons about elections are no doubt learned by the participants, it is far from clear that all of these lessons can be applied to the understanding of elections taking place on a larger scale. In order to see the qualitative differences that emerge in mass scale elections, students need to travel – at least virtually – beyond the bounds of a face-to-face community. More specifically, in teaching American Government (particularly outside the United States), there is a need to teach students how the electoral college system makes American presidential elections – with resources focused on a few hotly contested states – unlike elections in which candidates seek a majority from an undifferentiated electorate.

In order to address these issues, I decided to use a freely available presidential election simulation software – making some changes so that it could be used as a class, rather than individual exercise – to simulate the final month of a presidential election campaign. This

allowed students to learn first-hand about the effects of the electoral college system, as well as some of the features of mass elections more generally (a geographically dispersed electorate, capital-intensive campaigning), which could not be easily reproduced using smaller-scale, “live” electoral simulations.

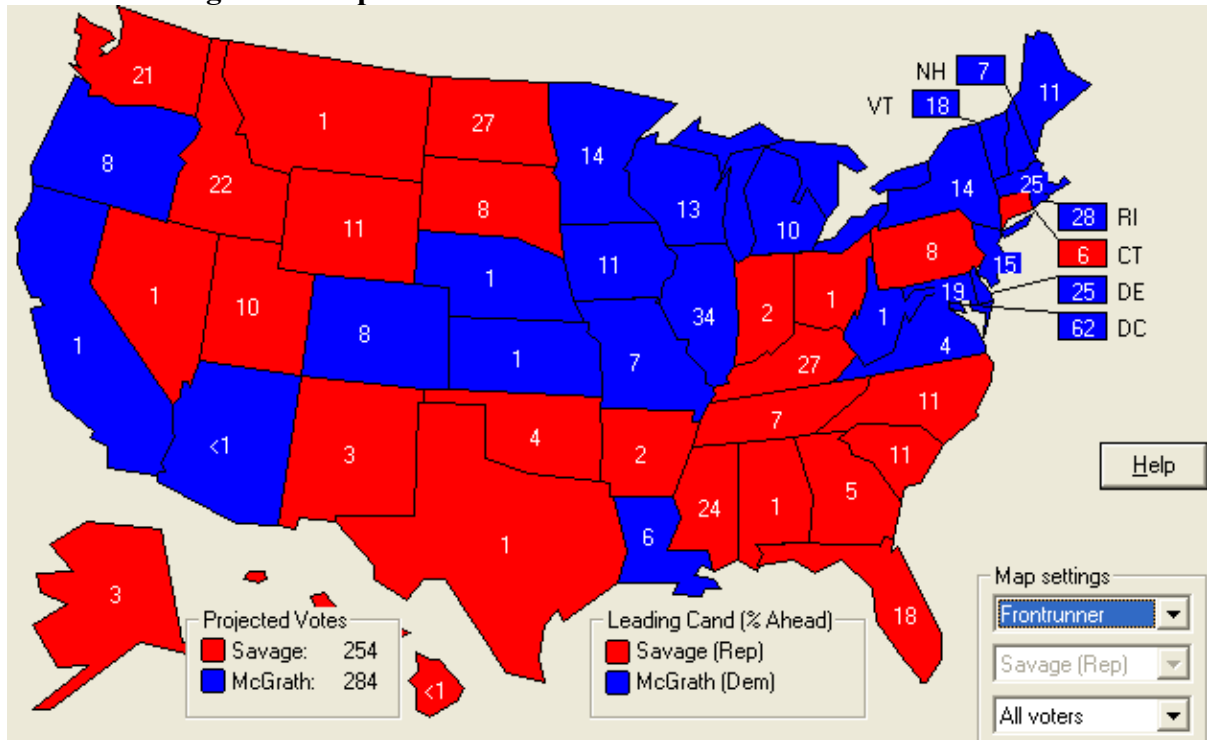
## Simulation Software

The election was run using the Election Day (version 3.02) election simulation software, developed by John Gastil, which is described as “a semi-realistic simulation based on actual campaign laws, census data, public opinion surveys, voting patterns, and historical campaign environments.”<sup>ii</sup> In the simulation undertaken in this class, players controlled a fictitious candidate in a simulated contemporary US presidential election.<sup>iii</sup>

In this simulation, the main tasks for the candidates are to set a budget and schedule for each week of the campaign. The simulation provides players with a wealth of data (information on population, racial make-up, median income and education level, and party identification, are provided by city and state; public opinion data on each of 15 campaign issues is also provided for each state. Candidate’s organizational strength in each state is also rated (1-100), and can vary throughout the campaign, being strengthened, for example, by a candidate visit.) Planning the campaign thus requires a number of decisions: how much to spend, when to spend, and on what, where to travel to, what to do there, what issues to focus on, constructive versus negative campaign messages, how much energy to invest in particular events (more high-energy events will require the candidate to take more frequent rest days), and so on. And making effective decisions requires both research into the underlying data, and strategic thinking about the campaign as it evolves.

Once the data for each candidate’s weekly budget and schedule is entered, the simulation proceeds through the week, reporting on the results of scheduled events, and also providing unscheduled events, such as endorsement offers or news stories, to which the candidates must respond. Then, at the end of the week, the simulation processes all the new information, and provides updated candidate polling data, in the form of a red vs. blue national electoral map familiar to observers of American politics (see figure 1), with electoral vote tallies for each candidate.

**Figure 1: Map of end of week election simulation results**



## Running the Simulation in a Class

Such a detailed and complex simulation can be a valuable learning tool. Inevitably there will be quibbles about the realism of certain features of the simulation (as well as, in this case, some stability issues – relatively frequent software crashes – which seem at least in part to be a function of developing a complex simulation with limited programming resources). Nevertheless, computer information-processing capacity allows a level of detail that provides players a sense of the scope of decision-making involved in planning and executing a presidential campaign. Unlike classroom simulations where local students are the electoral constituency, a computer simulation allows players to appreciate the increased complexity that comes with a national-scale campaign: managing a large budget, juggling voluminous voter data, appealing to a geographically dispersed constituency, and so on. Just as highly staffed and funded campaigns might test different campaign strategies and messages (via focus groups or polling), a computer simulation also allows users to test different electoral strategies (running the simulation multiple times with different choices). Because of the element of randomness built into the simulation, there is – again, realistically – no guarantee that strategies that users test on their own will yield the same results with the “real” campaign in the classroom.

One immediate problem with using this software package (and several others that were examined prior to the course) in a classroom setting, however, is that it is designed for use by only a small number of “players.” The simulation’s realism (its reliance on historical voter data) also means that for presidential elections, third (or fourth or fifth) players control

candidates with little chance of electoral success. While experiencing the obstacles to third-party success might be a useful lesson in itself, running a campaign with no chance of winning may also lead to disillusionment and disengagement.

Both the large volume of data that can be assimilated in this simulation and the reality of two-party dominance in the American system thus pointed toward dividing the class into two large teams (one Democrat, one Republican). While most students in the class had some previous experience with working on small group projects, few had experienced working on a project with such a large group (18 students on each team). This presented challenges both for the students (who had to coordinate the activities of a large number of people) and for the instructor (who had to devise techniques to discourage “free riders” – see below).

At the start of the simulation, one entire class period (75 minutes) was devoted to having the two teams caucus for the first time. During this time, the teams divided themselves into smaller groups, each with specific responsibilities (i.e. budget, scheduling, planning events). The following week, the campaign began. Just before each class meeting devoted to the simulation (one per week for five weeks), each team had to submit their candidate’s weekly budget and travel schedule. I entered this data into the program on my computer. Then, in class, with the program running and projected onto a screen for all to see, we went through the week’s events. Teams had to respond on the spot to unscheduled events as they occurred. After class, I posted the updated data on a course website, which students then could download and use to plot out their strategy for the next week.

Dividing the class into large teams allowed students to divide up the research (exploring the data and testing different strategies), and thus to get a handle on an amount of data that would be unmanageable for a single individual. But they also quickly learned that plotting an overall campaign strategy required the *coordination* of individuals’ research efforts: event planners had to know where events were going to take place, travel schedulers had to know which states the campaign was targeting, and so on. In order to be successful, students had to work individually, in small groups, and in larger teams.

In discussing their electoral simulation (which similarly divided students into campaign teams), Pappas and Peaden note the familiar problem of free riders: “simulations allow for varying degrees of participation so it is difficult to ensure that all group members are pulling their weight.” (2004: 862) Given the size of the groups in this case, there was some danger that a significant number of students would act as free riders, and that a few students would do all or most of the work. Accordingly, I used two techniques to attempt to maintain broad student involvement. First, in addition to their team’s goal of winning the presidential election, each student was given an individual goal to achieve. These goals were of three types. Some students were assigned a congressional or state-wide race in addition to their role on the national campaign. In this case, their goal was to try to get the candidate to visit, and more generally to try to ensure victory (preferably by a wide margin), in their particular city or state. Other students were each assigned an interest group supporting the candidate: their goal was to try to maximize the exposure of a particular issue, and to ensure that the candidate did not moderate his/her stance on this issue. A final group of students were prospective appointees for particular cabinet positions. Their goal was to maximize the exposure of two or three issues related to their portfolio, and also to refuse tied endorsement offers from related groups, so as not to jeopardize their capacity to act once in office. In having differing – and sometimes conflicting – individual goals, the aim was both to develop a mechanism to penalize free riders,<sup>iv</sup> and also to give students a sense of the conflictual dynamics that are inherent to a large-scale campaign (or indeed any large-scale organization), and which are structural rather than personality conflicts.

The second technique for maintaining broad involvement was that students individually had to submit regular reports discussing the progress of the campaign (both the team's campaign and progress towards their individual goal): three "interim" reports (after weeks two, three, and four), and one final report after the conclusion of the campaign. The reports were intended to be short (150 words for the interim reports, 300-400 words for the final report), and the interim reports were graded only on a pass/fail basis, to keep the marking load to a manageable level. But students generally seemed to take these assignments relatively seriously, and often exceeded the recommended length. Kathlene and Choate note that in their simulations, "grades are based predominantly on the ingenuity, creativity and quality of the written assignments. The exceptional students generally rise to the occasion." (1999: 71) In this case, grades were based largely on completing written assignments, and only the final report was graded in terms of quality. Nevertheless, interest in the simulation was sufficiently high that a number of students produced high quality reports, with a few also providing the sorts of extra touches (i.e. submitting reports on personalized campaign letterhead) found by Kathlene and Choate (1999: 71-2).

## Simulation Results

At the end of the term, a survey of students was done to assess the results of the simulation. An online (instead of in class) survey was chosen in order to preserve anonymity (respondents were asked, however, to identify which team they were on and their gender). Unfortunately, the medium, combined with the timing (end of term), produced a relatively low response rate (n=15). The data from this survey, however, was supplemented with data from anonymous course evaluations (n=33), a class devoted to "debriefing" at the conclusion of the campaign, and my observations of, and conversations with, various individual students during and after the simulation.

A number of students in the course evaluations listed the simulation as a highlight of the course. Colleagues also reported that discussion of the simulation was spilling over into other courses. In both the course evaluations and the online survey, a few students suggested more time should have been devoted to the simulation. Only one student (in the course evaluation) suggested that too much time was devoted to the simulation. All students who completed the online survey agreed that the simulation should be repeated in future offerings of the course (the question was not asked in the overall course evaluation).

Teams and smaller groups met or communicated frequently outside of class time. Interestingly, in spite of a campus environment that emphasizes technological connectivity, survey respondents reported relying more heavily on face-to-face meetings than on electronic or phone communication (mean = 4.14/5 vs. 3.67/5). On the other hand, both teams developed websites where campaign information was posted, and one team went so far as to have the website password protected.

While most students did participate actively in the simulation, some participated more intensively than others. On average, survey respondents reported spending 9 hours outside of class time working on the simulation (simulation participation and the written reports were worth a total 15% of the final mark). While it seems likely that students responding to the survey were those more heavily involved in the simulation, it is worth noting that, for the question "On a scale of 1 – 5 [1 = much less; 5 = much more], how much time did you spend working on the simulation compared to other members of your team?" the mean response was 3.6. And while a few students complained of free riders on their team, one survey respondent felt the problem was not free riders, but the development of party elites: "there

were a bunch of people on each team who really overshadowed the others simply with loud statements and false promises of success. "Trust me, trust me" they cried, and they were trusted without positive result."

One of the reasons for using a simulation was as a means of inducing class participation and to engage students in experiential learning. The desire to increase class participation, however, also had to be balanced against other outcomes. The incentive for winning the simulated election was fairly modest: one percent of the student's final grade in the course. In part this was because I was wary of producing a dynamic of "extraordinarily intense" competition (Kathlene and Choate 1999: 72) that might spill over into the rest of the class's activities. As well, the software appeared to provide a fairly high degree of randomized results (so that greater effort or smarter strategy would not necessarily guarantee winning the election).

As it turned out, the decisive turn in the campaign happened in week 3 (of 5 weeks), when a close race turned into a strong, across the board, lead for the Democratic candidate. There was no immediately obvious reason for this shift in party fortunes, which the Republicans overwhelmingly explained as a software glitch. Democrats, on the other hand, felt that at least part of the reason was their campaign strategy, so even this simulation "flaw" provided the means for a discussion of the operation of ideology in interpreting political events. In any case, once it became clear that the contest was effectively over (or that careful strategizing was less important than random computer variables), the intensity of student participation ebbed. Thus, while the survey respondents indicated that having to write reports was more influential than having individual goals in getting students to participate in the simulation (mean = 3.87/5 vs. 3.2/5), at least some participants may have been even more strongly motivated by competitiveness, or a desire not to be responsible for letting down their team members.

What did the students learn from this exercise? Table 1 shows the results of three survey questions, which asked respondents for their perceptions of specific learning outcomes. The average results for all three were closer to "very much" (5/5) than "very little" (1/5) – good, but not spectacular, results. On the other hand, a number of students commented that the simulation gave them an understanding of the electoral college system, and why presidential races are typically focused on a handful of battleground states, in a way that they thought reading a text or listening to a lecture would not have. In this sense, the idea of a simulation as a social science "laboratory" that provides "a deeper understanding of institutions, their successes and failures" (Smith and Boyer 1996, 690) seems to have been confirmed.

**Table 1: Survey of student learning outcomes (n=15)**

"How much do you think you learned from the simulation exercise about..."	Mean (1 = very little, 5 = very much)
The US electoral system	3.53
Election campaigns	3.87
Working in large groups	3.53

Lessons Learned: The benefits and drawbacks of the computer-simulated campaign

One of the main benefits of a computer-simulated campaign is that it provides the capacity to simulate a large (i.e. national) scale election. The most obvious benefit of this in an American Government course is that it allows students to experience first-hand the complexities and peculiarities of the electoral college system. Simulating a presidential (as opposed to local or state-wide) election thus allows students to understand the importance of “swing” or “battleground” states, and why resources in presidential contests are often highly geographically focused. Another benefit, which may be specific to teachers of American government outside of the United States, is that the Presidential race provides a more familiar frame of reference for students. The option of simulating, for example, a state-wide race that uses live local issues (Pappas and Peadar, 2004), is not available to teachers and students of American Government courses outside of the United States.

But another, perhaps more subtle, benefit of a computer simulation, is that it may more realistically simulate the experience of a *mass* election campaign, which is in its essence a mediated affair. “Live” election simulations, by contrast, necessarily rely on a relatively small electorate, whom candidates and campaign workers deal with on a face-to-face basis. Thus it is more difficult in a live simulation, for example, to demonstrate the importance of access to financial resources: an important factor in large-scale electoral contests. In Pappas and Peadar’s simulation, for example, a survey of the student electorate showed that voting choice was most strongly affected by candidate speeches and debates, rather than mediated campaign messages (commercials, campaign literature, posters, and press releases). In mass elections, however, it is not just that voters’ impressions of the candidates are largely inflected by media messages, but also that saturation advertising and news coverage may affect voters’ impressions of a candidate at an unconscious level. For obvious reasons, the media environment of a contemporary presidential campaign (particularly in intensely contested battleground states) – and hence the importance of a well-funded campaign – is impossible to simulate in a classroom.

Finally, it should be noted that the setting in which this simulation was conducted may make it more difficult to reproduce elsewhere. The simulation was conducted at a relatively small school (3700 students) in a small town. Most students live on or close to campus, and many of the students in the class already knew each other at the beginning of the term. This undoubtedly made the coordination of large group meetings much easier than it would be, for example, at a large university in a metropolitan setting. Such obstacles of scale could be overcome, but would probably necessitate devoting a larger amount of class time to the simulation.

The other local peculiarity that made running the simulation here easier is a university-wide compulsory laptop leasing program (the “Acadia Advantage”). This ensured that all students had a common computing platform, as well as institutionally embedded and relatively extensive tech support. Thus it was relatively easy to ensure that all students were able to load and run the software on their own computers, which was crucial for ensuring that all students participate in the simulation, and (if comments in the software’s user forum are any guide) is not something to be taken for granted.

More generally, there are a number of requirements for the software to be used for this simulation. Along with technical features – stability, user-friendliness – the software also should deliver the “realism” or “authenticity” that students expect of experiential learning. Election Day delivers better on some of these dimensions than others, although it is also worth noting that there are plans to upgrade this particular software, and as computer-mediated teaching becomes more common, other similar packages are likely to be developed.

If it is feasible, however, running such a simulation can be a worthwhile experience. It has the potential to engage students in a way that teaches them about the peculiarities of the American presidential election system, as well as the impact of scale on electoral processes and campaign strategies and dynamics. Given the contemporary state of communication technology, role of the media in society, and nature of mass democracy (in the United States and elsewhere), it arguably provides students with a more realistic experience of contemporary elections.



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- <sup>i</sup> For examples, see Pappas and Peardon (1999), which relies on a debate open to the campus community, and Kathlene and Choate (2004), in which a large introductory political science class constitutes the electorate.
- <sup>ii</sup> For more information on the simulation, see the Election Day website: <http://www.election-day.info/> (accessed June 28, 2005). This phrase appears to have disappeared from the current site (accessed Dec. 6, 2005), which states that “the game lacks realism in a few respects, but that will improve....” The realism of the simulation is discussed further, below.
- <sup>iii</sup> The software also allows for lower-scale elections (state-wide and local), and the use of selected actual historic candidates.
- <sup>iv</sup> Although the penalty was not particularly significant: achieving their individual goals was worth one percent of the final course grade.