Short duration campaign simulation increases high school students' civic engagement skills and knowledge

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Campaign Simulation to Increase High School Students’ Skills for Civic Engagement

Abstract

Research on campaign simulations usually involves long-term collegiate activities. Adapting materials from American Association of University Women and Running Start's "Elect Her" college workshops, our research created a short-term campaign simulation for use in secondary-level social studies classrooms. Sixty-six students in three Advanced Placement US Government classes engaged in a two-day communications-focused elections simulation workshop. Differences in civic engagement knowledge between pre- and post-surveys reached statistical significance. Students' qualitative responses revealed comprehension gains regarding student government's role in allocating money, low-cost advertising, and using "surrogates" to disseminate campaign positions. Student's knowledge of elevator speeches improved substantially. Results indicate short-duration simulations can improve students' civic engagement knowledge when the knowledge is actively used during the simulation exercise.
Campaign Simulation to Increase High School Students’ Skills for Civic Engagement

**Perspectives/Theoretical Framework**

Despite the major role of young voters in Barack Obama’s 2008 and 2012 electoral victories, turnout for voters ages 18-24 only reached 44.3% and 38%, respectively, lower than other demographics (United State Census Bureau, 2012). The turnout of young voters pales in comparison to the 25-44 voting age population, which typically exceeds 50% in contemporary presidential elections. Although controversy exists regarding long-term trends related to civic engagement (McDonald, 2001; Putnam, 1995; Stolle & Hooghe, 2005), few researchers dispute the relatively low levels of involvement within young voters and disengagement of young voters. Relative lack of young, civically-active voters is a cause for concern because of the underrepresentation of a large demographic in the US representative democracy.

Enrollment of many active or soon-to-be active young voters in secondary and post-secondary institutions offers a venue for political socialization on a large scale. In a world dominated by electronics and social media, simulations in the classroom represent a way of accessing young voters and engaging youth in the political process. At the secondary level, civics education has an influence on future civic engagement (Niemi & Junn, 1998). High school students learn about their nation and its governmental processes mainly through traditional lecture, service learning, some interactive simulations, and other pedagogical approaches. In this study, we investigate the impact of a two-day, communications-oriented election simulation in a social studies classroom to improve the civic knowledge and provide tools for civic engagement to high school youth.

Modern educational simulation gaming evolved from war games of the 19th century (Roberts, 1976) to a method to simulate political-military situations for training purposes in the late 1950s (Gredler, 1996). Early models included the “Beer game” developed by the MIT Sloan School of Management and simulations such as Harold Guetzkow’s Inter-Nation Simulation (Mayer, 2009). Games and simulations once were used interchangeably (Shaw, 2010), but now terminologically are distinct within the literature (Sauvé, Renaud, Kaufman, & Marquis, 2007). Games involve situations where players engage and compete in conflict with fellow participants or against common foes (Sauvé, Renaud, Kaufman, & Marquis, 2007) who attempt to
achieve established “termination (win) criteria” (Crookall, Oxford, & Saunders, 1987, p.161). Although simulations may designate a winner, victory conditions are not a requirement for simulation structure.

Absence of clear winners and losers is further reflected in the nonlinear structure of simulations compared to the linear progression of games (Gredler, 1996). Many games attempt to represent reality (Garris, 2002), but simulations inherently depend on external systems for purpose and structure. Fundamental characteristics also exist regarding the low “error cost[s]” (Crookall, Oxford, & Saunders, 1987, p.163) of simulations, thereby enabling mistakes to occur in low-penalty environments (Gredler, 2004).

Reception of gaming and simulation in classroom environments is generally positive and exposure to simulations has increased student interest (Cherryholmes, 1966) and improved knowledge retention (Pierfy, 1977). A current meta-analysis determined a strong majority of empirical studies on educational gaming (95.5%) produced results equal to or more effective than learning outcomes of convention classroom learning techniques (Randel, Morris, Wetzel, & Whitehill, 1992). Debates on the effectiveness of simulations on student learning have centered on the lack of consensus for simulations evaluation criteria and desired goals (Bredemeier & Greenblat, 1981). Despite the early enthusiasm of educators to apply simulations to almost any situation (Ruben & Lederman, 1982), lectures and simulations are now regarded as a largely compatible with differing learning objectives (Gredler, 1996).

Evaluations of simulations have included efforts to quantify intangible benefits of interactive learning (Boocock, 1970; Bredemeier & Greenblat, 1981; Kornfield, 1988). Some simulations have contained both quantitative and impressionistic evidence, such as Jackson’s “Antipodean Evaluation of Simulation in Teaching” (1979), which questioned the correlation between positive student reviews and successful learning outcomes. The early simulation literature has a dearth of quality empirical studies (Robinson, Anderson, Hermann, & Snyder, 1966), which contributed to confusion over basic simulation lexicon, thereby increasing the difficulty of creating robust research designs (Fienstien & Cannon, 2001). The basic confusion of simulation literature is reflected further in underlying disagreements over the importance of such basic concepts as fidelity or the resemblance of simulations to external factors (Fienstien & Cannon, 2002,

The campaign simulation of our research uses role playing with “elevator speeches” that requires students to imagine themselves as political candidates. Although terminology of simulation and gaming is articulated in the research literature, “elevator speeches” lacks similar peer-reviewed literature to define their traits. Using definitions beyond the field of education, we define “elevator speeches” as pitches aimed at describing an organization or product’s value within 60 seconds (Pagana, 2013). Born during the competitive early Internet boom, elevator speeches were named for the efforts of entrepreneurs to concisely promote fledgling proposals to investors within the span of an elevator ride. Due to their quick timeframe, elevator speeches must immediately grab to listener’s attention and adjust for specific audiences (Pincus, 2007). Elevator speeches must also emphasize clarity by avoiding jargon and excessive details.

Often used to address audiences with desired resources (Friar & Eddleston, 2007), elevator speech skills are transferable to non-political areas, such as seeking employment (Sharone, 2007). Within politics, elevator speeches and direct communication form an essential means for politicians to connect with voters. Although politicians typically are not selling products, politicians ultimately must “sell” themselves and their brand to the voting public. Due to this final distinction, we define an “elevator speech” to include any pitch less than 60 seconds aimed at promoting a person or quantity to an audience.

In common with elevator speeches is the brevity of short-term educational simulations. A majority of the literature deals with long term activities (Bernstein & Meizlich, 2003; Endersby & Webber, 1995; Pappas & Peaden, 2004; Swansborough, 2003), but short term simulations do exist. Finding reliable literature relating to simulations lasting a few days or less is difficult, especially when searching for simulations with an elections focus or in-class components without extensive outside work (Loggins, 2009). Developing compact simulations is a requirement for easing interactive simulations into the already bulging social studies curricula. Long-term group work provides certain benefits (Occhipinti, 2003), but short simulations can be effective for increasing student knowledge of theoretical frameworks and content (Wakelee, 2008) and is a necessity for today’s fast-paced high school social studies curricula.
The need to promote high school students’ skills for civic engagement and a review of the research literature prompted our research on the effects of a short-term campaign simulation on high school students’ knowledge and skills for civic engagement. The relative lack of empirical studies in the simulation field (Silvia, 2012) is a call for additional data to help determine simulation effectiveness in meeting learning objectives. Few quantitative research articles are available on the effects of short-term (less than weeklong) simulations on student learning. The current study represents an opportunity to evaluate the effects of communications-focused election simulations on content knowledge of high school students and to incorporate the Elect Her curriculum (currently implemented on 38 college campuses nationally (Lindberg, 2013).

Objectives/Purposes

Due to the aforementioned lack of quantitative simulation studies, this study will evaluate the effects of exposure to a short-term elections simulation within three high school classes. By testing the content and evaluating feedback, this study will offer secondary educators a better view of how to effectively design and implement classroom simulations. Increasing the understanding of simulations will hopefully lead to a long-term goal of having more effective content relating to short-term interactive learning.

Methods

The methods section includes information on the participants, materials, research design, procedure, data collection and analysis, validity of the study, and a brief summary.

Participants

Participants were 58 high school aged students in three Advanced Placement (AP) Government classes at a rural Midwestern public high school. Students were at the end of their senior year and high absenteeism was a factor in student attendance. The campaign simulation was facilitated by the researcher, who told student of research nature of the simulation. IRB permission was obtained (HS13-525).

Materials
Students received numbered packets containing ballots, agendas, and identical pre- and post-surveys (see Appendix A). Surveys contained five free-response items and 15 four-option multiple-choice items. A laptop and projector were used to remotely connect a guest speaker with the class.

**Research Design**

The identical pre- and post-surveys included both quantitative items and open-ended qualitative interview items, which offered a mixed methods approach to the research methodology (see McDonald & Hannafin, 2003). The research designed used a repeated measures framework with exposure to the campaign workshop as the independent variable and student survey performance as the dependent variable. Due to assignment of students to preexisting classes, testing conditions were quasi-experimental.

**Procedure**

Each student received a packet of materials and began the two-day campaign simulation workshop by completing a pre-survey to measure existing knowledge of student government, elections, and elevator speeches. Upon survey completion, students received an introduction to the workshop and then segued into a discussion of “elevator speeches” and the importance of communication for campaigns. In four-person groups, each student was instructed to develop a one-minute elevator speech explaining her or his qualifications to represent peers in a hypothetical election. As selected by team members, each group’s best speech was invited to present to the overall class. After listening to classmate presentations, the class discussed the effectiveness and content of speech attempts. Two of the three classes included a guest presentation (via Skype) about student campaigns and campaign advertising. In the third class, the researcher presented similar content on low cost student campaign advertising and the value of campaign skills.

The second day included a review of elevator speeches and student campaigns and an introduction to the rules of the campaign simulation. Students were encouraged to present elevator speeches to peers in designated classrooms over a 20-minute period to encourage peers to “vote” for their campaign. Votes were collected by signing ballots. Each student could only vote once. Students were permitted to run solo or serve as surrogates collecting votes or delivering elevator speeches classmates’ campaigns. When the vote gathering period ended, students returned to the classroom and tabulated the results of each campaign. A
winner was announced, students debriefed the election experience, and reflected on the importance of
reflection in the simulation process (Switky, 2004).

Simulation concluded by students completing an untimed post-survey individually to measure
knowledge acquisition during the campaign simulation workshop. A selection of bagels, donuts, and ice
cream followed the post-survey as a “victory party” for a successful workshop.

Data Sources

Data was collected through 20-item pre- and post-survey was similar to surveys administered by
Baranowski and Weir (2010). Data from the surveys were analyzed similarly to Pierfy (1977). Five items
required short responses and the remaining 15 items were four-option multiple choice format that required a
single choice. Items 11 and 20 were not scored due to incorrect sources and irrelevant content respectively.
The remaining 18 items were split into four primary categories: student government elections (seven items),
general elections (six items), and general student government information (four items), and elevator speeches
(one item). Surveys were constructed to reflect an understanding of student government campaigns.
Participants were required to complete surveys individually without time limits. An optional free-response
item invited additional feedback regarding the structure and content of the simulation.

Each correct response earned one point on free-response items. For example, if a student provided
two correct responses and one incorrect response to a three-part item, he or she would receive two points.
Item 4 used a slightly modified rubric that awarded 2 points for satisfactory answer. Partial credit was not
assigned. Instructions did not require complete sentences or proper grammar. Students received credit for a
response of any length as long as the response correctly addressed the item. The surveys appeared to have
face validity and the instruments were received well by students. The survey data supported the intended
interpretation of the survey the proposed purpose of the study (see Mertler, 2006, p. 112).

Student names were not used in data collection. Each participant was assigned a code in an effort to
protect participant confidentiality. Data were compiled with an Excel spreadsheet and analyzed using SPSS
software. Repeated Measures ANOVA was the statistical test used to determine outcomes of the quantitative
survey research. The general linear model was a 2 x 3 (Time x Category of Knowledge) mixed analysis. The
State of Michigan High School Social Studies Standards for “Participating in Civic Life” (Civics 6.2) and “Structure and Functions of State and Local Governments” (Civics 3.1) were addressed with classroom discussions and the campaign simulation during the research period.

This section concludes information on survey design, participants, materials, procedure, data analysis, and validity of the study. The next section has results of statistical and qualitative analyses of the campaign simulation pre- and post-survey data.

**Results**

The results section includes results from participants’ pre- and post-survey ratings and qualitative reflections on mastery learning. No statistical differences in survey results between the three classes were found, so data from the three classes were combined and analyzed together.

**Participants**

Forty-nine of 66 students completed both pre- and post-surveys and 9 students completed the pre-survey only.

**Pre-survey and Post-survey Differences**

Use of the SPSS repeated measures statistic was validated with Mauchly’s Sphericity Test. Repeated measures ANOVA was used on pretest and posttest scores of the workshop surveys. Sphericity requires equal variances for each set of difference scores. Violations of this assumption of equal variances can invalidate the conclusions of a repeated measures analysis. The hypothesis of sphericity was rejected ($p < .05$). Because the assumption of sphericity was not met, Greenhouse-Geisser was used to correct the degrees of freedom for violations of the sphericity assumption.

The resulting $F$-value from the repeated measures statistical analysis revealed statistical differences between the pre- and post-survey responses over the two-day simulation with degrees of freedom adjusted ($F(1,48.0) = 5.135, p = .028$). The students’ scores on the post-survey rose to statistical significance over the two-day campaign simulation, but gains were a modest 6.0% overall (pre-survey = 61.7% [SE .027]; post-survey = 67.7% [SE 0.023]).
The percentages of students’ correct responses on items in the categories of student government elections, general elections, general student government information, and elevator speeches are shown in Table 1. Post-survey scores rose modestly in knowledge about student government elections (4.8%), general elections (4.6%), and general student government (2.4%), but had impressive gains in knowledge of elevator speeches (13.0%).

Table 1

*High school students’ responses to pre-survey and post-survey items by category*

<table>
<thead>
<tr>
<th>Category</th>
<th>Pre-survey Means (SD)</th>
<th>Post-survey Means (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Government Elections</td>
<td>49.0% (16.50)</td>
<td>53.8% (18.79)</td>
</tr>
<tr>
<td>General Elections</td>
<td>66.4% (21.93)</td>
<td>71.0% (18.54)</td>
</tr>
<tr>
<td>General Student Government</td>
<td>58.0% (25.25)</td>
<td>60.4% (30.14)</td>
</tr>
<tr>
<td>Elevator Speeches</td>
<td>73.0% (44.60)</td>
<td>86.0% (35.40)</td>
</tr>
</tbody>
</table>

*Note.* N = 49. Standard deviation is abbreviated as SD and placed within parentheses.

Data from the free-response answers yielded an interesting variety of results. Most dramatically, the number of students acknowledging types of “social media” as means of low-cost advertising rose from 2 of 58 (3.4%) pre-survey respondents to 22 of 49 (44.9%) post-survey respondents. Answers involving the power of student government to allocate money, a point of emphasis during the discussion, rose from 3 of 58 (5.2%) of pre-survey respondents to 13 of 49 (26.5%) post-survey respondents. Seven of 49 (14.2%) post-surveys cited “surrogate” as a campaign position, while no pre-survey responses shared that perspective.

**Scholarly Significance**

The two-day simulation was conducted during the last month of high school in a senior AP social studies class. Only 49 of 66 students completed both the pre- and post-surveys. Conducting the study closer to the middle of the year might have increased the rate of participation. The participating students gave post-survey quantitative responses that rose to statistical significance, albeit with modest increases in scores.
Acknowledgement of types of “social media” as means of low-cost advertising on the post-survey could be attributed to the repeated emphasis given to social media by the guest presenter. Impact of the guest presentation on students’ knowledge of general student government was apparent in the qualitative responses of students regarding the power of student government to allocate money and identification of student campaign roles. In addition, students’ responses reflected the use of surrogates for classmates to disseminate campaign points within the simulated election, a practice reported in 14% of post-survey responses.

The current study employs a case study design. Addition of control group data is a logical next step in future research, although comparisons between simulations and conventional instruction methods can be problematic because learning goals differ (Gredler, 1996). Lack of correspondence between surveys and simulation content presented a threat to internal validity, as noted on survey feedback. Due to time constraints and classroom behavior, simulation content shifted from a focus on dissemination of information regarding student government and general elections to interactive communications material. Importantly, the person conducting the campaign simulation workshop was a beginning student in an undergraduate teacher certification program – not a credentialed high school teacher. Repeating the campaign simulation with an experienced teacher as facilitator also is a logical progression for future research. The modest rise in post-survey scores on student government elections, general elections, and general student government is in stark contrast with the impressive gain in knowledge of elevator speeches, which accentuates the importance of having students actively engaged in the simulation workshop material.

Our empirical study provides a foundation on which to draw conclusions relating to the performance of short-term simulations within high school populations. Electoral representations have not thoroughly been studied in high schools on short-duration timeframes. Together with previous researchers such as Baranowski (2006), Glazier (2011), and Wakelee (2008), the current study expands the gradual increase in research of short-term immersive learning in high school classrooms.

Our research raises new questions regarding which methods adequately test complex learning strategies required for simulation performance (Gredler, 1996). Given the repeated demand for each student to perform elevator speeches, new questions arise regarding how much repetition within interactive learning
is necessary to increase student skills for civic engagement. Additional research is needed on the longitudinal impact of social studies simulations on long-term political participation.

The current findings are significant in demonstrating that simulations are a beneficial classroom tool for presenting curricula in an interactive manner. Exposure to a two-day election simulation in high school social studies classrooms resulted in improvements on measures of knowledge relating to civic engagement, elevator speeches, student and general government.
References


Appendix A: High School Campaign Simulation Pre- and Post-surveys

Items were divided by content categories: (1) student government elections (seven items), (2) general elections (six items), (3) general student government information (four items), and (4) elevator speeches (one item).

AP Social Studies Campaign Skills for High School Civic Engagement

*Post-Workshop Survey*

All responses will remain anonymous for research purposes. Please do not leave identification or name on survey. If you wish not to participate, please turn in blank copy. Thank you.

1. Name two powers/functions that student governments typically exercise? (2 points)

2. Identify one common source of student government funding? (1 point)

3. Name three positions on a political campaign team (other than campaign manager): (3 points)

4. Other than serving on campaigns, how else might individuals become involved in the election process? (2 points)

5. Name two examples of low-cost advertising common on campuses: (2 points)
6. “Elevator speeches” should ideally:
   A. Be given in elevators.
   B. Describe entire campaign platform.
   C. Engage the audience.
   D. Prove intelligence through jargon.

7. Citizens submitting ballots during elections are called:
   A. Lobbyists.
   B. Polling workers.
   C. Republicans.
   D. Voters

8. Identify a campaign manager’s job description.
   A. Balance and monitor campaign finances
   B. Coordinate campaign operations
   C. Organize social events
   D. Serve as candidate for office

9. Nationally, women comprise approximately _____ percent of university student body presidents.
   A. 32
   B. 40
   C. 57
   D. 62

10. When do most student government elections occur?
    A. April/March
    B. Early September
    C. First Tuesday in November
    D. January/February

11. What is the USA’s global rank for female representation in the national legislature?
    A. 3rd place
    B. 12th place
    C. 41st place
    D. 59th place

12. Student governments most commonly award funding to:
    A. Intramural sports leagues
    B. Student organizations
    C. Student research proposals
    D. Student scholarships

13. Nationally, turnout in student governmental elections hovers around:
    A. 6%
    B. 19%
    C. 31%
    D. 48%

14. How much is online voting estimated to increase student elections turnout?
    A. 4%
    B. 9%
    C. 16%
    D. 27%
15. Most student governments are elected via:
   A. Maximum member districts
   B. Multimember districts
   C. Multiple elector divisions
   D. Single member districts

16. Attempts to describe “perfectly run” campaigns are:
   A. Scientific.
   B. Objective.
   C. Platonic.
   D. Subjective.

17. Which criterion is valid for receiving a Michigan absentee ballot?
   A. Automobile repairs.
   B. Out of town on Election Day.
   C. University Identification.
   D. Younger than 60 years old.

18. What source most commonly provides information about individual student candidates?
   A. NPR/PBS
   B. Political Science Professor
   C. School Administration
   D. Student Newspaper

19. What body typically establishes rules for student campaigns?
   A. Dean of students office
   B. Judiciary body of student government
   C. Student conduct board
   D. Student-run election commission

20. Theory arguing that 20% of strategies produce 80% of results:
   A. Ceteris paribus.
   B. Elephant flow.
   C. Pareto principle.
   D. Steinberg’s theorem.

Free Write Activity (time permitting): In the space below or lined sheet of paper, please comment on you feel the workshop could be improved or feelings about workshop/content in general.
Appendix B: Data from High School Campaign Simulation Pre- and Post-surveys

|   | Pre1 Post1 | Pre2 Post2 | Pre3 Post3 | Pre4 Post4 | Pre5 Post5 | Pre6 Post6 | Pre7 Post7 | Pre8 Post8 | Pre9 Post9 | Pre10 Post10 | Pre11 Post11 | Pre12 Post12 | Pre13 Post13 | Pre14 Post14 | Pre15 Post15 | Pre16 Post16 | Pre17 Post17 | Pre18 Post18 | Pre19 Post19 | Pre20 Post20 | Pre21 Post21 | Pre22 Post22 | Pre23 Post23 | Pre24 Post24 | Pre25 Post25 | Pre26 Post26 | Pre27 Post27 | Pre28 Post28 | Pre29 Post29 | Pre30 Post30 | Pre31 Post31 | Pre32 Post32 | Pre33 Post33 | Pre34 Post34 | Pre35 Post35 | Pre36 Post36 | Pre37 Post37 | Pre38 Post38 | Pre39 Post39 | Pre40 Post40 |
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