Active Learning Strategies for Diverse Learning Styles: Simulations Are Only One Method

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ABSTRACT Although political science instructors increasingly recognize the advantages of incorporating active learning activities into their teaching, simulations remain the discipline's most commonly used active learning method. While certainly a useful strategy, simulations are not the only way to bring active learning into classrooms. Indeed, because students have diverse learning styles—comprised of their discrete learning preferences—engaging them in a variety of ways is important. This article explores six active learning techniques: simulations, case studies, enhanced lectures, large group discussion, small group work, and in-class writing. Incorporating these activities into an introductory, writing-intensive seminar on globalization and surveying students about their engagement with course activities, I find that different activities appeal to students with different learning preferences and that simulations are not students most preferred activity. Bringing a broader range of active learning style.

olitical science lends itself to a wide range of active learning activities. Unlike traditional teaching methods, where students more passively take in information through at-home readings and professor-delivered lectures, active learning demands more—and more engaged—student participation. Active learning helps students not only learn content but also develop critical thinking and writing skills (Bonwell and Eison 1991). These activities require instructors to offer opportunities "for students to meaningfully talk and listen, write, read, and reflect on the content, ideas, issues, and concerns of an academic subject" (Meyers and Jones 1993, 6; emphasis in original). Indeed, the annual National Survey of Student Engagement includes increasing active and collaborative learning as one of only five benchmarks of effective educational practice (NSSE 2012). In the United States, millennials (the generation born after 1980) account for more than 75% of all undergraduates and more than 85% of full-time undergraduates (US Department of Education 2012); because this generation is more likely to attend college, more ethnically and racially diverse, and more likely to embrace technology than previous generations (Taylor and Keeter 2010), engaging them in more interactive ways is critical. Because students have diverse

learning preferences, a broad range of active learning activities can help engage them in their learning.

In political science, often we focus on a single active learning activity: simulations. These include mock conventions, assemblies, debates, and other collaborative activities when students take on roles and make decisions accordingly. Simulations and role plays are the most common active learning activities in introductory courses (Archer and Miller 2011), and these are also used in upper-level, graduate, and online courses (e.g., Baylouny 2009; Brynen 2010; Parmentier 2013). Since 2006, simulations and role plays have been featured in one or two tracks at the annual APSA Teaching and Learning Conference; a recent issue of The Journal of Political Science Education focused exclusively on simulations (Asal et al. 2013); and many articles show faculty how to integrate these activities into their classes (e.g., Auerbach 2012; Wedig 2010). Role plays are common in all subfields, including American politics (e.g., Baranowski 2006; Rinfret, 2012), comparative politics (e.g., Baylouny 2009; Biziouras 2013), international relations (e.g., Loggins 2009; Oros 2007), and even political theory (Ahmadov 2011; Schaap 2005).

Studies show that students learn from the role plays in their political science courses. Students report greater engagement, insight, and learning after participating in simulations (e.g., Brynen 2010; Oros 2007). More important, studies using control groups show that students perform better on quizzes if they have participated in a simulation or discussion (Powner and Allendoerfer

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2008), better comprehend, apply, and evaluate complex concepts when taught through debate (Omelicheva and Avdeyeva 2008), have better knowledge of the material and perform better on exams after participating in brief simulations or collaborative activities (Baranowski 2006; Centellas and Love 2012; Lay and Smarick 2006), and remember more information over the long term after taking part in simulations (Bernstein and Meizlish 2003). Thus, simulations help students engage more deeply with course material, understand complexity, perform better on assignments, and better retain material over time.

However, simulations are not the only way

to bring active learning into our classrooms. Because students have diverse learning styles, comprised of their distinct learning preferences, it is easier for them to learn and engage with material in ways that complement their learning styles; as a result, incorporating a broader range of active learning activities in our courses may help make our teaching more effective (Bonwell and Eison 1991; Dunn 2000; Meyers and Jones 1993). Research demonstrates that "educators ... have increased students' academic performance by responding to their diverse learning styles" (Dunn 2000, 8). A recent study demonstrates the promise of applying learning styles to teaching, demonstrating that learning styles significantly influence students' performance when exams are given in different formats (Leithner 2011). Some studies have investigated active learning activities other than simulations. For instance, case studies can be effectively integrated with simulations; after students become familiar with a case, they then take on a specific role in a simulation (e.g., Crossley-Frolick 2010; Fliter 2009). Additional studies show that many other active learning activities can engage students and improve student learning, including case studies without simulations (Craig and Hale 2008; Krain 2010), discussion (Pollock, Hamann, and Wilson 2011), enhanced lectures (Huerta 2007), experiential learning (Bardwell 2011), writing (Çavdar and Doe 2012), and combining two or more active learning activities (e.g., Auerbach 2012; Powner and Allendoerfer 2008).

ACTIVE LEARNING STRATEGIES

To evaluate the impact of active learning activities on student learning, I incorporated six common active learning techniques into an introductory, writing-intensive seminar for first-year students focusing on globalization: simulations, case studies, enhanced lectures, large group discussion, small group work, and in-class writing. I taught four sections of this course (with 14 to 16 students) at two private, selective, small liberal arts colleges between September 2007 and December 2010. I invited students to complete an anonymous survey about their learning preferences and satisfaction with course activities at midterm and at the end of the semester. Asking students to reflect on their preferred ways of learning and satisfaction with class activities does not directly measure either students' learning styles or the effect of active learning strategies on student learning. However, it helps us understand the impact these activities have on students' perceptions of what they have learned and which techniques they believe helped them learn. Because students' perceptions of their learning are linked to their learning outcomes, examining students' perceptions has value (López-Pérez, Pérez-López, and Rodríguez-Ariza 2011).

Table 1Active Learning Strategies Classified by LearningEnvironment and Learning Medium

LEARNING ACTIVITY	LEARNING ENVIRONMENT	LEARNING MEDIUM		
Simulations	Social	Verbal; can also be physical		
Case studies	Social; solitary	Verbal		
Large group discussion	Social	Verbal; can also be visual		
Enhanced lectures	Solitary; can also be social	Verbal; visual		
Small group work	Social; solitary	Verbal; can also be physical		
In-class writing	Solitary; can also be social	Verbal; visual		

This study was not conducted at institutions typical of American higher education system; private, four-year, not-for-profit institutions enroll only 14% of all tertiary students in the United States, and small liberal arts college are a small subset of this group. However, comparing 2010-11 statistics from both institutions' Common Data Set to statistics from all undergraduate students in the United States reveals some commonalities. Compared to the national average, both institutions had a similar or lesser percentage of white students (63%), both had a similar or greater percentage of international students (3.5%), and whereas one of the institutions was a women's college, the other had only a somewhat lower percentage of women (57%); the Common Data Set does not give any information about students' income level or age (US Department of Education 2012: Institute of International Education 2011). Thus, the student body at these two schools is somewhat representative of students studying at all US institutions of higher education.

LEARNING STYLES ENGAGED BY ACTIVE LEARNING STRATEGIES

The impact of learning styles on student achievement has been explored in a wide range of postsecondary education fields, from biology to economics to law (e.g., Bonwell and Eison 1991; Dunn 2000). Although learning styles are not mutually exclusive and students can—and do—learn in many ways, students learn most easily when they are taught in ways that complement their preferred learning styles.

Although the many learning styles inventories have important differences in how individuals' many discrete learning preferences are classified into their overall learning styles, these inventories also have important commonalities (Dunn 2000, 6). Here I focus on two key dimensions: preferred learning environment and preferred learning medium. Looking at learning environment, individuals learn best in either *social* situations, where they explore new material with others, or in *solitary* situations, where they reflect on their own. Looking at learning medium, individuals learn best when they are exposed to new material *visually*, in graphs or diagrams, *verbally*, via written or spoken words, and when they can interact *physically*, through movement or touch. As shown in table 1, all six of these active learning activities appeal to students with a range of learning styles.

Although millennials, the majority of our students, are technologically adept (Taylor and Keeter 2010), this study did not address the role of technology. However, technology can help facilitate active learning activities, from using listervs and instant messaging in a simulation (Brynen 2010) to creating a factchecking blog for an election (Bardwell 2011). Next, I examine the learning styles most engaged by these six activities and describe how I incorporated each activity into my course.

Simulations can take place in a single class or several classes, and students sometimes prepare, in advance, an outline, statement, or briefing paper (e.g., Fliter 2009; Loggins 2009). These exercises are appropriate for smaller classes of up to 35 students (e.g., Baranowski 2006; Rinfret 2012). For larger classes, online synchronous or asynchronous activities can be used (e.g., Bernstein and Meizlish 2003; Coffey, Miller, and Feuerstein 2011), activities can be incorporated into discussion sections (Oros 2007), several students could be assigned to play an individual role (Wedig 2010), or some students could serve as observers (Baylouny 2009). Role plays appeal to social learners, verbal learners, and, to some extent, physical learners. In this course, students engaged in two simulations, each during a single class period; debriefing generally continued into the next session. The first simulation was a bilateral trade negotiation, and the second was a policy roundtable about the future of globalization.

Like role plays, case studies ask students to explore a particular situation. Whereas simulations ask students to take on the roles of key actors, a case study is "an intensive study of a single unit for the purpose of understanding a larger class of (similar) units" (Gerring 2004, 342). Case studies help students grapple with complex issues, examine interrelated processes, discuss decision making in difficult issue areas, and engage in critical think-

tures may be more easily incorporated, particularly in larger classes. Unlike traditional lectures, enhanced lectures are broken up by active learning activities. There are many ways to punctuate a lecture, such as giving students the opportunity ask questions, pausing to let students compare ideas, inviting students to write and reflect on the presented material, and asking students collaborate in small groups (Bean 2011, 202–05; Bonwell and Eison 1991, 13-19). This activity also appeals to students who prefer solitary learning, although opportunities for interaction can engage social learners. Enhanced lectures draw in verbal and visual learners, because the lecture is presented verbally and usually accompanied by visuals. I used short lectures with opportunities for questions and discussion to clarify key content, such as examining authors' differing definitions of globalization, and writing strategies, such as using rough drafts to show effective and ineffective thesis statements.

Small group activities ask students to interact with just a few classmates, encouraging students to listen, promoting cooperation, and encouraging respect for different viewpoints. An instructor can ask small groups to generate ideas, summarize key points, assess understanding, review assignments, or solve problems; each group can then report a portion of their discussion to the rest of the class (Brookfield and Preskill 2005, 101–23). The entire class can examine and react to each group's findings, and the instructor can connect what the class has discussed to the overall learning objectives (Bean 2011, 183–201). Small groups can engage social and verbal learners, as well as physical learners if students move

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ing and analysis (Bean 2011, 159; Bonwell and Eison 1991, 38–40). Case studies appeal to verbal, solitary, and social learners: solitary learners can digest the materials on their own, whereas social learners can talk through the case with classmates. In this course, students studied globalization through three extended case studies: fast food, film, and climate change.

Large group discussion promotes student learning in a variety of ways. Discussion has many potential benefits for students: to share their voice, communicate their ideas, connect to a topic, explore diverse perspectives, recognize their assumptions, listen attentively, collaborate effectively, synthesize information, and tolerate ambiguity (Brookfield and Preskill 2005, 21–22). However, all students must contribute to discussions, not only a few (Bean 2011, 205–10). Discussion seems ideally suited to political science courses as it encourages students to respect others' opinions, grapple with complexity, and understand that often no one response is correct. Large group discussion appeals to students who prefer social and verbal learning, and, if someone takes notes on the board to share with others, it can also engage visual learners. In this course, large group discussion was the most common activity. In a single class, for instance, I would ask students to summarize and reflect on key arguments, respond to open-ended questions, and contrast the views of a specific author with their own.

Although simulations, case studies, and large group discussion take considerable time to plan and carry out, enhanced lecaround to work with their classmates. Some students are more willing to participate in small groups than a larger group, so small groups provide an opportunity to engage more reserved students who may be more solitary learners (Brookfield and Preskill 2005, 10). Frequently I asked students to break into small groups to discuss and evaluate a specific text.

In-class writing is the most solitary of these learning activities. Students can be asked to write for many reasons. For example, instructors can ask students to summarize or reflect on particular text before discussion, summarize what has been covered, or examine the implications of a topic just covered. Focusing on writing, students can comment on their peers' drafts, revise their own drafts, or sketch out ideas for upcoming papers. In-class writing prompts students to engage with course material, clarify and reflect on key concepts, and discover and explore new ideas (Bean 2011, 131–43). This activity engages verbal, visual, and solitary learners, although peer review can make writing more social. I used in-class writing to help students reflect on course material, such as asking why they found one reading more persuasive than another, and to work on key writing strategies, through reviewing their peers' papers.

Most often, this course engaged in several active learning activities during each class period. For instance, in a one class, I asked students to write down several questions they had about the days' readings, put one of these questions on the board, asked small groups to choose a few questions for discussion and share their

Table 2 Student Responses about which Active Learning Strategies Helped Them Learn

	FREQUENCY OF EVALUATION SCORE				STUDENTS AGREEING		STANDARD		
I LEARN BETTER WITH	1	2	3	4	5	(%)	MEAN	DEVIATION	N
Large group discussion	0	1	6	28	18	87	4.19	0.71	53
Simulations	0	10	9	11	23	64	3.89	1.17	53
Case studies	0	2	17	21	12	63	3.82	0.83	52
Small group work	0	5	19	21	7	54	3.58	0.85	52
Enhanced lecture	0	5	21	20	6	50	3.51	0.81	52
In-class writing	3	17	14	14	5	36	3.01	1.09	53

Note: Likert scale, 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree. Final student evaluations from four sections of an introductory first-year seminar on globalization (14–16 students) taught between Fall 2007 and Fall 2010. 91% (53 of 58) of students responded, but some did not answer every question. Midterm evaluations (not shown) had similar results.

findings with the whole class, and concluded with a large group discussion on a few related, open-ended questions tied to the course's overall learning objectives.

ASSESSMENT OF ACTIVE LEARNING STRATEGIES

I examined students' survey responses about how these six active learning activities contributed to their learning. Although I did not ask students to complete a learning styles inventory, I learned a great deal about their preferred activities from their survey responses.

Table 2 shows students' responses to the quantitative questions about which active learning activities helped them learn. Large group discussion was the most preferred active learning method, with 87% of students agreeing that this activity helped them learn. Simulations trailed well behind, with 64% of students agreeing that this activity helped them learn, followed closely by case studies (63%). A majority found small group work (54%) and enhanced lectures (50%) helpful, but only 36% of students found in-class writing helpful.

Students' qualitative responses likewise demonstrate that a majority of students felt that large group discussions, simulations, and case studies were the most helpful activities, and lectures and in-class writing were less helpful. One student wrote, "the discussions are interesting and stimulating," while another noted that the best aspect of the class was "listening + participating in discussions. Very interesting." Another commented that her favorite class activity was "debates! They were so fun and helped a lot." Another student found the "policy simulations very fun and informative." Almost as many students agreed that they learned as much from case studies as they did from role plays. As one student commented, "I enjoyed the case studies and learning about the different aspects and effects of globalization." However, note that some students found *other* activities useful. One of the 50% of students who found enhanced lectures helpful commented that she most enjoyed the "PowerPoints on writing" that accompanied enhanced lectures on key writing skills. Another student, part of the 36% of students who found in-class writing helpful, noted that one of the best aspects of the course was "peer editing," which generally happened in class.

Simulations sparked the broadest disagreement among students, shown by the question's standard deviation (1.17), the highstrong division in opinions is also shown in students' qualitative responses. Many students found simulations helpful and enjoyable. One student put a 6 on the quantitative evaluation form, and others repeatedly circled the 5 and added exclamation marks to show their enthusiasm. But 36% of students did not agree that role plays helped them learn. One student explained that while the simulations "were often fun and in some ways helped provide perspective, [they] otherwise were uninformative." Although some students appreciated that role

est of any in the survey. The

plays gave a glimpse into the difficulty of making policy, others found this exasperating. Wrote one student, "the debate about trade ... was excellent. It really exposed me to the reality of why it is difficult for nations to come to a consensus." However, another student found role plays unhelpful because "they never accomplish an agreement." Other students contrasted their frustration with simulations to other activities they found more successful. Reflecting the 23% of students who noted that large group discussions helped them learn whereas role plays did not, one student wrote that "class discussions have been most helpful" but that simulations were the "least successful" activity. Comparing simulations to case studies, one student wrote, "We should spend less time debating topics and more time in specific case studies." Commented another, "I really enjoyed the case studies. I found them useful. I didn't feel like I learned much in the policy simulation."

Among the most and least preferred activities, there were no prominent differences in students' preferred learning medium. All six activities are verbal; the only major differences are that role plays and small group work can have a physical aspect and that lectures and writing generally have a visual component. However, a salient difference in learning environment is shown. Large group discussions and role plays are very social, whereas enhanced lecture and in-class writing are more solitary. Students reflected on this distinction in their survey responses. As one student explained, "I am engaged and learn when we discuss." Wrote another, "I liked the simulations and discussions help clarify things." Although solitary learners seemed to be in the minority, their learning preferences still need to be considered. As one student commented, "discussion was at times intimidating." Wrote another, "I would have liked more small group discussion and individual writing / analyzing time." Wanting more time to reflect on the material, one student suggested, "maybe more lectures on the readings instead of discussion."

Examining students' responses to class activities helped me better understand which activities students found valuable. Without the survey, I would have assumed that students learned most from simulations, as a vocal majority of students were very enthusiastic about them. Instead, students' survey responses showed that a substantial minority found simulations unhelpful and that large group discussion was actually the most preferred active learning strategy.

CONCLUSION

This article demonstrates that students have diverse preferences about which active learning activities best promote their learning and that not every activity promotes learning for all students. I discovered that, despite first impressions, only 64% of students agreed they learned from simulations, whereas 87% of students agreed they learned from large group discussions. Given that simulations are the most commonly used and evaluated active learning strategy in political science, it is surprising that there is sharp disagreement among students about whether simulations are the best way to promote learning. Remember that students both canand do-learn from activities that do not mesh with their learning preferences and that not every student will be engaged by each active learning activity. Although we cannot engage all students with every class activity, by adding more active learning strategies to our teaching repertoires we can design our courses to appeal to students with all learning styles at least some of the time.

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REFERENCES

- Ahmadov, Anar. 2011. "When Great Minds Don't Think Alike: Using Mock Trials in Teaching Political Thought." PS: Political Science and Politics 44 (3): 625–28.
- Archer, Candace C., and Melissa K. Miller. 2011. "Prioritizing Active Learning: An Exploration of Gateway Courses in Political Science." *PS: Political Science and Politics* 44 (2): 429–34.
- Asal, Victor, Nina A. Kollars, Chad Raymond, and Amanda M. Rosen. 2013. "Editors' Introduction to the Thematic Issue: Bringing Interactive Simulations into the Political Science Classroom." *Journal of Political Science Education* 9 (2): 129–31.
- Auerbach, Arthur H. 2012. "Teaching Diversity" Using a Multifaceted Approach to Engage Students." *PS: Political Science and Politics* 45 (3): 516–20.
- Baranowski, Michael. 2006. "Single Session Simulations: The Effectiveness of Short Congressional Simulations in Introductory American Government Classes." Journal of Political Science Education 2 (1): 33–49.
- Bardwell, Kedron. 2011. "Fact Checks, Voter Guides, and GOTV: Civic Learning Projects in American Political Courses." *Journal of Political Science Education* 7 (1): 1–13.
- Baylouny, Anne Marie. 2009. "Seeing Other Sides: Nongame Simulations and Alternative Perspectives of Middle East Conflict." *Journal of Political Science Education* 5 (3): 214–32.
- Bean, John. 2011. Engaging Ideas: The Professor's Guide to Integrating Writing, Critical Thinking, and Active Learning in the Classroom. 2nd ed. San Francisco: Jossey-Bass.
- Bernstein, Jeffrey L., and Deborah S. Meizlish. 2003. "Becoming Congress: A Longitudinal Study of the Civic Engagement Implications of a Classroom Simulation." *Simulation and Gaming* 34 (2): 198–219.
- Biziouras, Nikolaos. 2013. "Midshipmen Form a Coalition Government in Belgium: Lessons from a Role-Playing Simulation." PS: Political Science and Politics 46 (2): 400–05.
- Bonwell, Charles, and James Eison. 1991. "Active Learning: Creating Excitement in the Classroom." Washington, DC: ASHE-ERIC Higher Education Report 1.
- Brookfield, Stephen, and Stephen Preskill. 2005. Discussion as a Way of Teaching: Tools and Techniques for Democratic Classrooms. 2nd ed. San Francisco: Jossey-Bass.
- Brynen, Rex. 2010. "(Ending) Civil War in the Classroom: A Peacebuilding Simulation." PS: Political Science and Politics 43 (1): 145–49.

- Çavdar, Gamze, and Susan Doe. 2012. "Learning through Writing: Teaching Critical Thinking Skills in Writing Assignments." PS: Political Science and Politics 45 (2): 298–306.
- Centellas, Miguel, and Gregory J. Love. 2012. "'We're Off to Replace the Wizard': Lessons from a Collaborative Group Project Assignment." *PS: Political Science and Politics* 45 (3): 506–12.
- Coffey, Daniel J., William J. Miller, and Daniel Feuerstein. 2011. "Classroom as Reality: Demonstrating Campaign Effects through Live Simulation." *Journal* of Political Science Education 7 (1): 14–33.
- Craig, John, and Sarah Hale. 2008. "Implementing Problem-Based Learning in Politics." European Political Science 7 (2): 165–74.
- Crossley-Frolick, Katy. 2010. "Beyond Model UN: Simulating Multi-Level, Multi-Actor Diplomacy Using the Millennium Development Goals." *International Studies Perspectives* 11 (2): 184–201.
- Dunn, Rita. 2000. "Capitalizing on College Students' Learning Styles: Theory, Practice, and Research." In Practical Approaches to Using Learning Styles in Higher Education, eds. Rita Dunn and Shirley A. Griggs, 3–18. Westport, CT: Bergin and Garvey.
- Fliter, John. 2009. "Incorporating a Sophisticated Supreme Court Simulation into an Undergraduate Constitutional Law Class." *Journal of Political Science Education* 5 (1): 12–26.
- Gerring, John. 2004. "What Is a Case Study and What Is It Good For?" American Political Science Review 98 (2): 341–54.
- Huerta, Juan Carlos. 2007. "Getting Active in the Large Lecture." *Journal of Political Science Education* 3 (3): 251–64.
- Institute of International Education. 2011. "Open Doors Fact Sheet: Fast Facts." In Open Doors 2011: Report on International Educational Exchange. New York: IIE.
- Krain, Matthew. 2010. "The Effects of Different Types of Case Learning on Student Engagement." International Studies Perspectives 11 (3): 291–308.
- Lay, J. Celeste, and Kathleen J. Smarick. 2006. "Simulating a Senate Office: The Impact on Student Knowledge and Attitudes" *Journal of Political Science Education* 2 (2): 131–46.
- Leithner, Anika. 2011. "Do Student Learning Styles Translate to Different 'Testing Styles'?" Journal of Political Science Education 7 (4): 416–33.
- Loggins, Julie. 2009. "Simulating the Foreign Policy Decision-Making Process in the Undergraduate Classroom." PS: Political Science and Politics 42 (2): 401–07.
- López-Pérez, M. Victoria, M. Carmen Pérez-López, and Lázaro Rodríguez-Ariza. 2011. "Blended Learning in Higher Education: Students' Perceptions and Their Relation to Outcomes." *Computers and Education* 56 (3): 818–26.
- Meyers, Chet, and Thomas B. Jones. 1993. Promoting Active Learning: Strategies for the College Classroom. San Francisco: Jossey-Bass.
- National Survey of Student Engagement. 2012. Promoting Student Learning and Institutional Improvement: Lessons from NSSE at 13: Annual Results 2012. Bloomington: Indiana University Center for Postsecondary Research.
- Omelicheva, Mariya, and Olga Avdeyeva. 2008. "Teaching with Lecture or Debate? Testing the Effectiveness of Traditional versus Active Learning Methods of Instruction." *PS: Political Science and Politics* 41 (3): 603–07.
- Oros, Andrew L. 2007. "Let's Debate: Active Learning Encourages Student Participation and Critical Thinking." *Journal of Political Science Education* 3 (3): 293–311.
- Parmentier, Mary Jane C. 2013. "Simulating in Cyberspace: Designing and Assessing Simple Role Play Activities for Online Regional Studies Courses." International Studies Perspectives 14 (2): 121–133.
- Pollock, Phillip H., Kerstin Hamann, and Bruce M. Wilson. 2011. "Learning through Discussions: Comparing the Benefits of Small-Group and Large-Class Settings." Journal of Political Science Education 7 (1): 48–64.
- Powner, Leanne, and Michelle Allendoerfer. 2008. "Evaluating Hypotheses about Active Learning." *International Studies Perspectives* 9 (1): 75–89.
- Rinfret, Sara R. 2012. "Simulating City Councils: Increasing Student Awareness and Involvement." *PS: Political Science and Politics* 45 (3): 513–15.
- Schaap, Andrew. 2005. "Learning Political Theory by Role Playing." *Politics* 25 (1): 46–52.
- Taylor, Paul, and Scott Keeter, eds. 2010. *Millennials: A Portrait of Generation Next: Confident. Connected. Open to Change.* Washington, DC: Pew Research Center.
- US States Department of Education. National Center for Education Statistics. 2012. "Postsecondary Education." *Digest of Educational Statistics 2011*. Washington, DC: Department of Education.
- Wedig, Timothy. 2010. "Getting the Most from Classroom Simulations: Strategies for Maximizing Learning Outcomes." PS: Political Science and Politics 43 (3): 547–55.