Teaching the Unfamiliar to a Crowd

Katherine Truby, *University at Albany, SUNY*
Meredith L. Weiss, *University at Albany, SUNY*
David L. Rousseau, *University at Albany, SUNY*

ABSTRACT The experience both of being exposed to unfamiliar systems and places and of being an anonymous face in a large class can be not just alienating for undergraduates, but antithetical to effective learning. We propose a number of active learning strategies designed to help students fully master the material presented even in very large classes in comparative politics and international relations, while also improving students' attendance and interest and developing critical thinking, reading, and writing skills, without overburdening the instructor. Among these strategies are Team-Based Learning, interactive approaches such as debates and simulations, and low-stakes assignments such as "minute writing."

Teaching about politics in faraway places to undergraduates with minimal prior familiarity poses inherent challenges. Students may find it difficult to process details of political systems dramatically different in institutional forms, dominant cleavages, and political cultures than their own, let alone to move beyond just acquiring facts. When those undergraduates are in large classes, as is common especially for "gateway" classes, the challenges are all the greater. Nudging students through the transition into realms unfamiliar is easier when each student can be mentored and assisted individually; large classes generally prohibit such one-on-one guidance and increase the temptation for nervous, incompletely committed, or simply poorly prepared students to "tune out." Even those making a serious effort may become lost in strange-sounding names and details, feel intimidated by the more worldly (or merely more wordy) few in the class, and fall back on preconceived stereotypes or imperfect parallels with what they already know.

Careful attention to course design can mitigate these concerns. We explore the literature on instructional and learning styles, coupled with our own experiences, to focus on the intersection of teaching about "foreign" regions and cultures (in the United States or elsewhere) and teaching large classes. This article focuses primarily on Team-Based Learning (TBL) as a strategy for mitigating the challenges of teaching the unfamiliar in large classes, not only because of its effectiveness, but also because the pedagogical political science literature to date has remained largely silent on this topic. While TBL is a complete approach to course design and implementation, its component strategies—particularly its emphasis on interactive approaches and critical but low-stakes applied assignments—are especially relevant for large classes in comparative or international politics. Moreover, the approach can enhance any course even without a full-scale transition to TBL.

The challenges of teaching large classes across disciplines are well documented in the literature (Carbone and Greenberg 1998; Cooper and Robinson 2000; Heppner 2007; Doyle 2008). A sense of anonymity among students in large classes is common (Heppner 2007) and can compound the instructor's challenge of sparking a desire to learn more about diverse polities and cultures. In addition, feelings of disconnect between instructors and large rooms full of students tend to make students feel less accountable for their own learning (Doyle 2008). Finally, for many instructors, the sheer number of students in large classes poses pedagogical dilemmas, wherein they perceive breaking from the traditional lecture approach to be too time consuming and costly, yet they are not satisfied with their students' learning outcomes. TBL and its component strategies alleviate many of these challenges by incorporating a higher proportion of active engagement, including in the large classroom.

Even if some proportion of students are driven primarily by general education requirements, the average student in a class on international politics generally *is* keen to learn about new political systems and cultures. Student-centered *active learning* may be the most useful approach for moving beyond acquisition of information (Omelicheva and Avdeyeva 2008; Prince 2004): students apply and extend upon what they have read or learned in lectures,

Katherine Truby *is a doctoral candidate in political science and a fellow in the Institute for Teaching, Learning and Academic Leadership at the University at Albany, SUNY. She can be reached at ktruby@albany.edu.*

Meredith L. Weiss *is associate professor of political science at the University at Albany, SUNY. She can be reached at mweiss@albany.edu.*

David L. Rousseau *is an associate of professor political science and Dean of Rockefeller College of Public Affairs and Policy at the University at Albany, SUNY. He can be reached at drousseau@albany.edu.*

fostering real familiarity with the material as well as critical reading and thinking skills (Smith 2008, 2). Ideally, students read assigned texts or other materials before coming to class (and are compelled by the structure of the course and assessments actually to do so), then answer questions, complete exercises, participate in simulations, or otherwise engage with the material during class time. Students *will* ultimately learn and retain more from an effective balance among approaches, yet active learning remains scarce, especially in large introductory courses (Archer and Miller 2011; Felder and Brent 1996; Lane 2008, 57–9).

STRATEGIES FOR EFFECTIVE TEACHING AND LEARNING

A general description of TBL and how it may be especially helpful for large, internationally focused classes follows. In addition, we briefly review the component active learning strategies that an instructor can implement immediately in the classroom without a radical revision of the course design.

Team-Based Learning

TBL[1] offers a particularly effective way of both facilitating students' grasp of new and challenging material and making large classes effective learning environments. TBL is not simply using groups on an ad hoc basis; it requires consistent, meaningful use of carefully constructed, semester-long teams. The professor's role, in turn, shifts from "dispenser, of knowledge" to more of an instructional facilitator and guide, (Lane 2008, 55). Similar to other

completed, the number of times they have traveled internationally, or even how comfortable or anxious they feel about the course material. After the students have formed a line based on these characteristics, the students count off from that queue in the number of the teams to be formed. Students then sit together and work in those teams for the duration of the course; if the course uses Blackboard or another course management application, each team might have its own online discussion forum, as well. To facilitate class administration, it helps to prepare a folder for each team, including any handouts for that day, any graded work to be returned, and a sign-in sheet (because attendance matters especially inasmuch as students should not be credited for team work in which they were not there to participate).

Michaelsen (2004a, 28) identifies the four core principles of TBL: (1) teams must be carefully formed and properly managed; (2) students must be accountable for both individual and team work; (3) group assignments must "promote both learning and team development"; and (4) students must "have frequent and timely performance feedback." Occhipinti (2003, 69) outlines the key assumptions and benefits of the approach (which he terms "cooperative team learning"), from promoting active rather than passive learning to requiring that students reflect on and articulate their own perspectives. Students' performance—measured in grades or in mastery of the subject matter—generally improves significantly with a team-based approach, because students learn from multiple sources and modes (Felder and Brent 1996). Learn-

Learning takes on an added social dimension, as students are accountable to one another; attendance, participation, and preparation tend to rise dramatically in consequence. With TBL, "students' social and intellectual experiences of the classroom become interlocked and amplified" (Sweet and Pelton-Sweet 2008, 30).

instructional approaches, like the flipped classroom, a method that uses technology to push lecture outside of classtime, TBL allows instructors to push course content into out-of-class preparation, leaving class time for offering "expert feedback," applying concepts, and solving problems (Richardson 2012, 6). The general TBL sequence begins with student preparation outside of class, assessed at intervals through individual and group readiness assessment tests (RATs), typically 10-question multiple-choice tests designed by the instructor. The instructor provides further details and context through short lectures and pushes students to a deeper understanding of the relevant concepts through applied exercises, usually completed in teams.

Teams, each with between five and seven students, are the cornerstone of TBL. Ideally they should be formed on the first day of class to maximize diversity. A common strategy is to identify those traits most germane—related, for instance, to prior coursework in the discipline or subfield, demographic traits, or even "anxiety about the course topic" (Sweet and Pelton-Sweet 2008, 37)—and organize students according to these traits in the first class, without advance warning (lest groups of friends try to game the system). For example, in an introductory international relations course, an instructor might ask students to line up according to the number of political science classes they have

ing takes on an added social dimension, as students are accountable to one another; attendance, participation, and preparation tend to rise dramatically in consequence. With TBL, "students' social and intellectual experiences of the classroom become interlocked and amplified" (Sweet and Pelton-Sweet 2008, 30).

That said, TBL still allows for individual responsibility and assessment. The result of this method is a mix of frequent applied (and graded) exercises and immediate clarification and extension. Team activities account for only part of each student's grade—we have counted for between 10% (for a partial-TBL class) and 40%. Moreover, team activities often work best when they follow a solo assignment to allow individual-level assessment, to discourage free-riding among students who have not adequately prepared for class, and to force students to think through their ideas and understandings independently *before* reforming these in the context of a group. All members of the team rate the contributions of their team members, ideally at least twice in the term (to give members the opportunity to adjust their behavior in response to teammates' critiques), further deterring free-riding. (See Michaelsen and Fink 2004 for suggested rubrics.) Studies from other disciplines, particularly the physical sciences and medicine, indicate better grades and exam performances by students during semesters of TBL-adoption and less free-riding when peer

Figure 1
The Team RAT Scratch Card

IMMEDIATE FEEDBACK ASSESSMENT TECHNIQUE (IF AT)

Name: TEAM #1   Test #: 1
Subject: _____   Total: 34

SCRATCH OFF COVERING TO EXPOSE ANSWER

observation mechanisms are taken up (Kamei et al. 2012; Koles et al. 2010; Parmelee and Michaelsen 2010).

The RAT, a rigorous multiple-choice quiz, exemplifies this mixture of individual and team accountability and reward. RAT questions should require not just factual recall, but integration and analysis, to foster and engage critical reading and thinking skills. Ideally, students read the material assigned for a unit on their own, then take the RAT *before* any in-class discussion of that material. Many times, RATs can replace other accountability mechanisms, such as pop quizzes, often used by instructors. That said, we have found the format to be equally effective mid-unit, as the distribution of reading may require. The RAT includes two stages: first, students complete the purposely difficult test individually; next, they complete it in teams, using a specially designed scratch card (see figure 1)². The scratch card makes taking the plunge in settling on an answer all the more momentous, but also allows immediate feedback when scratching reveals a star (correct) or a blank (incorrect), plus permits partial credit for second and third choice answers. Nearly all students perform better on the team test—and in the process of discussing and defending their answers among their teammates, they learn the material in an especially effective way. To advertise how well students perform in their teams, plus add an element of competition, the top-scoring team can be awarded a bonus. Immediately following the RAT, the professor can then focus an ad hoc mini-lecture specifically on those questions students still do not understand. Of especial benefit for a large class: grading even individual RATs is extremely quick, and with the scratch-card format, teams tally up their own team scores. Indeed, TBL overall is readily scalable across class sizes, and effectively combats the anonymity and passivity that too often mark large classes (Michaelsen 2004b).

TBL is especially well-suited to comparative and international politics courses. Each team, for instance, can be assigned a particular country for the duration of the term. Students readily gain a sense of ownership and attachment; their country assignment gives them a particular perspective on the topic or region being studied, which they are allowed to develop for an extended period. We have used this strategy advantageously for classes in Southeast Asian politics, a region almost entirely unfamiliar to most stu-

dents in the class. Many students develop a near-immediate attachment to "their" country, which effectively personalizes the material. Moreover, these country assignments lend themselves well to in-class presentations, debates, or other exercises. More broadly, TBL offers security in numbers. Students inclined to be embarrassed or paralyzed by their own relative ignorance of or unfamiliarity with the world outside the United States realize how many others in the class are equally new to the material; on the converse, those students who *do* have prior experience with other polities and cultures are able to share the benefit of those experiences.

These advantages notwithstanding, some students may *not* appreciate either the requirement of working in teams or the extent to which they are asked to take responsibility for their own learning. Whatever its failings, the traditional lecture format is familiar and readily understood by grade-obsessed students. (The problem can be even more pronounced when teaching outside the United States, in societies in which deference to the instructor is viewed as paramount.) The best strategies for minimizing student pushback are to be extremely clear in laying out the course structure and requirements, to avoid being defensive or apologetic about the approach, and to explain or demonstrate the benefits of TBL. Consider having a sample RAT sequence on the first day, for instance an ungraded pretest to familiarize students with the RAT format, give you a sense of what they know, and foreshadow what they will learn. (You can then repeat the RAT at the end, to reinforce for students how far they have come.) Most students will perform poorly on the individual RAT (and gratifyingly well if administered again at the end of the course). However, working in teams, they will likely be able to come up with at least most of the answers even on the first day of class. Call attention to the obvious: that nearly everyone performed better on the team RAT than the individual one (because this *will* be the case), and that in the process of completing the team RAT—without any intervention from you at all—most of the students learned something from their peers. Such strategies will not preempt all negative feedback, but most students will quickly see that they really do learn more, and more seamlessly, from the interactive, applied, *active* approach of TBL than from a more standard format.

It is also important to emphasize that student pushback on TBL (which does not always occur) is not from aversion to group work. As most instructors can attest, what turns off many, if not most, students from group work is unreliable team members or logistical difficulties in meeting outside of class. In our experience, TBL does not suffer from these problems. The free-riding problem is solved by maintaining permanent groups and providing within-group feedback on performance. Within-group peer pressure encourages everyone to do the reading and come to class prepared. In addition, TBL emphasizes group activities *within* the classroom rather than outside.

Active Learning Approaches

Although TBL as developed by Michaelsen and others is intended as a comprehensive approach, it can still be quite effective when partially integrated into a course. Even using teams

more sparingly, and having team work count for a smaller proportion of students' grades, can convey the core benefits of making students accountable to their teams, disrupting the anonymity of a large class, and providing a ready structure for in-class applications of material read individually at home—that is, for active rather than passive learning. Moreover, even full-on use of TBL does not exclude either some time devoted to lectures or inclusion of other assignments or assessment tools. The precise balance of tools and assessments is at the instructor's discretion. We describe some of these active learning strategies that are ideal for TBL classrooms, but can be easily incorporated ad hoc into large classes, such as debates, simulations and "low-stakes assignments."

Debates are an ideal vehicle for getting students to engage multiple sides of an argument rigorously and consider new perspectives. In our classes, debates focus on a specific contestable statement (for example, "The US should expand foreign aid to 1% of gross domestic product" or "NATO should withdraw from Afghanistan immediately") and take one of two forms: "on the spot" debates that take place in one class period and rely on general preparation such as that week's assigned

ing to lectures may not allow" and give instructors the chance to "perform experiments and illustrate actual processes in the classroom" (Shellman 2001, 827). Above all, simulations force students to play unfamiliar roles. How does a political leader in Pyongyang think about ballistic missile defense? How might responses to rising wheat prices in Moscow (a major exporter) compare with those in Cairo (a major importer)? How should a member state of ASEAN balance regional norms of non-interference against pressure from trading partners to intervene in a miscreant neighbor state's affairs? Beyond asking students to play unfamiliar roles, simulations often require students to work well in groups. Simulations are particularly well-suited to the TBL classroom, where less time needs to be spent creating well-functioning, cohesive teams because they are already in place.

Although the literature on simulations is vast, a few key points are worth noting. A simulation is an imitation or enactment of a situation in which students play roles and interact with each other. In a case study, students learn about a topic through reading about and discussing a real-world situation, such as the 1967 Six Day War. In contrast, in a simulation, the students learn about the

Debates can work in large classes and small. In one semester in which debates provided extra credit, 56 students out of just more than 200 volunteered for a prepped debate. In this case, the course had three debate days, and a second classroom was used to conduct a second simultaneous debate with a guest faculty member.

reading or a "prepped" debate, which can count for a large portion of the final grade (up to 30% in our classes), and can require teams to prepare extensive briefing books[3] outside the classroom, over several weeks. Both of these formats are useful for breaking down anonymity in the classroom by requiring students to interact with one another and speak in class. By incorporating well-organized debates into large classes, not only do students have a shared experience to draw on during subsequent classes, but debates also enhance the development of critical thinking and civic engagement, core values of political science education (Boeckelman et al. 2008).

Debates can work in large classes and small. In one semester in which debates provided extra credit, 56 students out of just more than 200 volunteered for a prepped debate. In this case, the course had three debate days, and a second classroom was used to conduct a second simultaneous debate with a guest faculty member. The teams were composed of six students, all of whom worked on the briefing book; three of the six conducted the oral debate for additional extra credit points. Debates can also transcend space: a free Skype connection can bring in teams from around the country or around the world. Finally, prepped debates fit nicely within a TBL framework. The within-group peer pressure and team building that occurs through the TBL process early in the semester provides for coherent teams for prepped debates in the second half of the course. This effect is especially evident if teams are given some time in class to discuss progress on the briefing books.

Like debates, simulations offer students a way to get outside their usual way of thinking, by putting them in a (simulated) alternative framework. Simulations "permit students to experience institutional processes in ways that reading textbooks and listen-

topic by becoming active participants in a situation of which they can directly influence the outcome. In a simulation of the Six Day War, for instance, playing the role of Nasser, a student group must decide whether or not to order the removal of United Nations peacekeepers from the Sinai. Simulations can vary on many dimensions, including the level of abstraction (highly abstract situations versus highly detailed real-world situations), the type of interaction (asynchronous versus synchronous), duration (a single class versus several weeks), format (face-to-face versus computer), size (large lecture with big teams versus small seminar with individual roles), and preparation (extensive preparation prior to class versus none). Asal and Blake (2006) argue that the pedagogical goal of the exercise should drive the selection within each dimension. A single course may incorporate several very different simulations for specific instructional purposes.

Asal (2005) argues that there are six different stages in a simulation that can serve as teaching points. The *preparation stage* gives students an opportunity to develop policy papers that explore the situation and/or their roles. In the *playing stage*, students enter their roles and are forced to make a series of choices in the face of constraints and independent actions by others. Strategic *pauses* allow the instructor to intervene to make critical points, shift the discussion, or to highlight interesting behavior. The *oral debriefing stage* gives students a chance to examine the sequence of actions and the outcome of the simulation. The *written debriefing stage* requires students to reflect more deeply on their experiences in response to an instructor prompt. Finally, the *examination stage* allows students to use the experience of the simulation to answer an examination question focusing on a parallel situation or related concept. Each of these stages

provide opportunities for both individual and team-level feedback, making simulations a natural active learning technique in the TBL classroom.

The biggest challenge in running a large and complex simulation involves developing (or borrowing) a sufficiently well-developed framework. Efforts such as the International Communications and Negotiation Simulations (ICONS) Project at the University of Maryland facilitate this process by providing access to fully developed simulations (e.g., on the Ecuador/Peru border crisis) and permitting faculty to develop new simulations within that framework. Other prefabricated simulations are available on a host of issues. For instance, we have used a game called "The International Trade Game" (http://www.economicsnetwork.ac.uk/handbook/games/42.htm), for comparative politics and political economy classes, to introduce issues of comparative advantage and factor endowments.

Finally, including frequent low-stakes assignments can facilitate teaching unfamiliar concepts and contexts to students in large classes. Low-stakes assignments systematically allow the instructor to ascertain which students are lost and when to intervene effectively and efficiently. TBL and the other strategies detailed above can help but may also allow bewildered or struggling students to hide behind a competent team to a certain

responses as a starting point for a follow-on activity (such as solving an analytical puzzle or ranking key points from the reading). (These exercises might be also tied in with preparation for debates, simulations, or other activities.) More sustained writing, such as requiring students to keep a journal in which they reflect on the reading or otherwise engage with the material (e.g., McKeachie 1999, 133), may serve the same purposes of pressing critical thinking and analysis, similarly granting a lens on students' progress. However, with a large class, reading these journals, even at a perfunctory level, can be unwieldy.

Low-stakes activities structured around current events may be especially germane for classes on international themes. These activities force students to notice newly encountered countries or concepts in the news, emphasizing both the extent to which these *are* in the students' usual ambit, however much previously disregarded, and the real-world relevance of what they are learning. An added benefit is that after the course ends, students who continue to follow current events will presumably continue to see these states and themes mentioned, aiding knowledge retention. Current events can be used in several ways to spark interest through engagement. The instructor might present a relevant newspaper article, video clip, or transcript of a speech, and ask students individually to complete a microwriting assign-

> *Low-stakes activities structured around current events may be especially germane for classes on international themes. These activities force students to notice newly encountered countries or concepts in the news, emphasizing both the extent to which these* are *in the students' usual ambit, however much previously disregarded, and the real-world relevance of what they are learning.*

extent. Including a range of quick, easily graded, individual assignments presses students to keep up with the reading, alerts the instructor to students who are *not* responding to relatively simple prompts appropriately, and allows students to try out ideas and test their comprehension when they have little to lose, rather than merely hoping for the best at exam time. Two strategies are especially appropriate for international politics classes: very brief in-class writing assignments and the use of current events.

Large class sizes tend to deter professors from assigning writing, thus giving students little chance either to practice academic writing or to articulate creative, on-the-spot responses. Assigning microwriting assignments ("minute papers" or "half-page responses" etc.) is an easy solution. These extremely short writing assignments may fall at the start, middle, or end of the class. Although graded (cursorily), they do not carry much weight—the low risk encourages students to be bold in their responses, really testing their grasp of the material. Possible prompts include having students identify the most important thing they learned in the previous class, the assigned reading, or that day's lecture; jot down what is confusing them the most; take a stand on a topic open to debate; or respond to a substantive query (McKeachie 1999, 82, 210–11). Depending on the size and structure of the class, the professor can collect the papers and scan them quickly, pick a few at random to address and/or grade, have teaching assistants collect them and use the responses to frame their next tutorials, or have teams use members'

ment relating recent developments to a theory they have been studying, positing how their team's assigned country should respond, or predicting the consequences of the development described, then meet in teams to discuss their responses and reach a consensus position. Alternatively, students might be either encouraged or required to circulate and comment on relevant news stories, perhaps on a blog on Blackboard. (For instance, for a unit on regime types, each team might be required to find a recent article referencing specific attributes of its assigned country's regime.) The instructor can lend weight to this assignment by making reference to some of the posted stories each week, both so students feel they are getting credit for the task and to motivate them to read what their classmates have posted.

CONCLUSIONS

While these strategies are more widely germane, we think they are especially useful in making the unfamiliar approachable, particularly for large classes. Whether through full adoption of TBL or ad hoc use of multiple active learning strategies, we can overcome some of these challenges, helping ease students' entrée into unfamiliar material, particularly when the size of the class prohibits more direct hand-holding.

What do these teaching techniques have in common? First, they all involve *active learning* in which student-produced work becomes the center of the learning experience. Although lectures

can still be used, they no longer serve as the central (or sole) mechanism for student learning. Second, all the activities force students to think critically and generally to take an explicit position on an issue. A microwriting exercise might ask students to identify the most politically legitimate state in a region and justify their choice. In a debate, rather than just be asked to discuss foreign aid or their opinion of it, they are required to make a specific choice and then develop an argument in support of that selection. Similarly, in simulations, the teams must make explicit choices at decision points. Third, most of the techniques compel students to approach a given issue from different perspectives by examining counterarguments (debates) or playing new roles (simulations). Fourth, most of the techniques require students to write either in preparation or reflection. Writing is central to the development of critical thinking skills and something that sadly is often neglected because class size; the techniques presented here offer challenging, but easily evaluated assignments feasible even for very large classes. Fifth, most of the techniques emphasize student-to-student interactions. Finally, most of the techniques carefully orchestrate some combination of individual preparation, collective discussion and extension, and individual reflection. That combination eases students' approach to unfamiliar places and perspectives, allows for continuing assessment, and makes for a dynamic and effective class.

ACKNOWLEDGMENTS

NOTES

1. TBL as used here refers not to a generic concept, but to a specific pedagogical approach. For details beyond the general strategies sketched here, see especially Michaelsen et al. 2004 or the resources available at ⟨http://teambasedlearning.apsc.ubc.ca/⟩.

2. The most important part of the team RAT is the immediate feedback provided by the card. Individual instructors, departments or teaching centers can purchase RAT scratch off cards, called IF-ATs (Immediate Feedback Assessment Technique) in bulk through Epsteineducation.com. At our university, the teaching and learning center buys the scratch cards in bulk and distributes them free to the more than 100 faculty and graduate students using this technique. Enterprising instructors have created their own immediate feedback cards that use mechanisms other than the scratch off.

3. A briefing book is a formal, collectively produced document in which the team lays out arguments and evidence for a proposition, a counterargument and evidence against the proposition, and a response to the counterargument. The briefing book, which is evenly divided between arguments for and against the proposition, is graded independently of the oral debate and accounts for 50% of the final debate grade.

REFERENCES

Archer, Candace C., and Melissa K. Miller. 2011. "Prioritizing Active Learning: An Exploration of Gateway Courses in Political Science." *PS: Political Science and Politics* 22 (1): 429–34.

Asal, Victor. 2005. "Playing Games with International Relations." *International Studies Perspectives* 6: 359–73.

Asal, Victor, and Elizabeth L. Blake. 2006. "Creating Simulations for Political Science Education." *Journal of Political Science Education* 2: 1–18.

Boeckelman, Keith, Janna L. Deitz, and Richard J. Hardy. 2008. "Organizing a Congressional Candidate Debate as Experiential Learning." *Journal of Political Science Education* 4: 435–446.

Carbone, Elisa, and James Greenberg. 1998. "Teaching Large Classes: Unpacking the Problem and Responding Creatively." In *To Improve the Academy*, ed. M. Kaplan, vol. 17, 311–26. Stillwater, OK: New Forums Press and the Professional and Organizational Development Network in Higher Education.

Cooper, James L. and Pamela Robinson. 2000. "The Argument for Making Large Classes Seem Small." *New Directions for Teaching and Learning* 2000 (81): 5–16.

Doyle, Terry. 2008. *Helping Students Learn in a Learner-Centered Environment: A Guide to Facilitating Learning in Higher Education.* Sterling, VA: Stylus.

Felder, Richard M., and Rebecca Brent. 1996. "Navigating the Bumpy Road to Student-Centered Instruction." *College Teaching* 44 (Spring): 43–7.

Heppner, Frank. 2007. *Teaching the Large College Class: A Guidebook for Instructors with Multitudes.* San Francisco, CA: John Wiley & Sons.

Kamei, Robert K., Sandy Cook, Janil Puthucheary, and C. Frank Starmer. 2012. "21st Century Learning in Medicine: Traditional Teaching versus Team-Based Learning." *The Journal of the International Association of Medical Science Educators* 22 (2): 57–64.

Koles, Paul G., Adrienne Stolfi, Nichole J. Borges, Stuart Nelson, and Dean X. Parmelee. 2010. "The Impact of Team-Based Learning on Medical Students' Academic Performance." *Academic Medicine* 85 (11): 1–7.

Lane, Derek R. 2008. "Teaching Skills for Facilitating Team-Based Learning." *New Directions in Teaching and Learning* 116 (Winter): 55–68.

McKeachie, Wilbert J. 1999. *McKeachie's Teaching Tips: Strategies, Research, and Theory for College and University Teachers*, 10th ed. Boston: Houghton Mifflin.

Michaelsen, Larry K. 2004a. "Getting Started with Team-Based Learning." In *Team-Based Learning: A Transformative Use of Small Groups in College Teaching*, ed. Larry Michaelsen et al., 27–50. Sterling, VA: Stylus

———. 2004b. "Team-Based Learning in Large Classes." In *Team-Based Learning: A Transformative Use of Small Groups in College Teaching*, ed. Larry Michaelsen et al., 153–67. Sterling, VA: Stylus

Michaelsen, Larry K., and L. Dee Fink. 2004. "Calculating Peer Evaluation Scores." In *Team-Based Learning: A Transformative Use of Small Groups in College Teaching*, ed. Larry Michaelsen et al., 229–39. Sterling, VA: Stylus.

Michaelsen, Larry K., Arletta Bauman Knight, and L. Dee Fink. 2004. *Team-Based Learning: A Transformative Use of Small Groups in College Teaching.* Sterling, VA: Stylus.

Occhipinti, John D. 2003. "Active and Accountable: Teaching Comparative Politics Using Cooperative Team Learning." *PS: Political Science and Politics* 36 (1): 69–74.

Omelicheva, Mariyaz, and Olga Avdeyeva. 2008. "Teaching with Lecture or Debate? Testing the Effectiveness of Traditional vs. Active Learning Methods of Instruction." *PS: Political Science and Politics* 41 (3): 603–7.

Parmelee, Dean X., and Larry K. Michaelsen. 2010. "Twelve Tips for Doing Effective Team-Based Learning (TBL)." *Medical Teacher* 32 (2): 118–122.

Prince, Michael. 2004. "Does Active Learning Work? A Review of the Research." *Journal of Engineering Education* 93 (3): 223–31.

Richardson, Leslie. 2012. "Turning Your Classroom Inside Out." *NEA Higher Education Advocate* 29 (3): 6–9.

Shellman, Stephen M. 2001. "Active Learning in Comparative Politics: A Mock German Election and Coalition-Formation Simulation." *PS: Political Science and Politics* 34 (4): 827–34.

Smith, Gary A. 2008. "First-Day Questions for the Learner-Centered Classroom." *The National Teaching and Learning Forum* 17 (5) (Sept.): 1–4.

Sweet, Michael, and Laura M. Pelton-Sweet. 2008. "The Social Foundation of Team-Based Learning: Students Accountable to Students." *New Directions in Teaching and Learning* 116 (Winter): 29–40.