Teaching Research Methods Track Summary

—Amy Brandon,
University of Houston
—Mitchell Brown,
American University
—Christopher Lawrence,
Saint Louis University
—Jennifer Van Heerde,
University College London

The Teaching Research Methods Track at the third annual APSA Teaching and Learning Conference included 26 participants from schools ranging from small colleges to major research universities. The program included presentations on the state of the undergraduate research methods field, information literacy, and a variety of teaching innovations, culminating in a large group discussion where we agreed upon a common set of strengths, opportunities, and challenges to teaching research methods, as well as a set of recommendations for a future Conference track.

State of the Research Methods Field

Our session kicked off with the preliminary results of a survey on the content of undergraduate methods courses in political science departments. The investigators found significant variety in the topics covered in the methods courses, although most courses focused more on "methods" than the scope of the discipline, and more on quantitative rather than qualitative methods. They also found that the methods course is typically the teaching responsibility of one or two faculty members, even in relatively large departments. These findings formed the backdrop for later debates among the participants about what the ideal form of the methods course—or a set of methods courses—might be.

Information Literacy

Two presentations focused on developing students' information literacy skills. Their approaches were tied to the standards of information literacy promulgated by the Association of College and Research Libraries and past research on students' progression in research and analytical skills. These papers emphasized the importance of developing student skills in locating relevant sources for research papers and of assessing whether the anticipated learning outcomes in these courses were met. As was the case for the research on the content of the methods course, these papers led to participant debate over whether these skills needed to be emphasized in the methods course or throughout departmental curricula.

Teaching Innovations

Not unlike presentations from previous years, many of the presentations focused on the problems inherent in teaching undergraduate research methods. Students lack basic knowledge of the research process and, more commonly, lack interest in research methods. The teaching innovation presentations focused on the various styles used to overcome these intrinsic problems.

A common theme was the importance of engaging student interest in research methods. Several suggestions were proposed, but the most common method used to engage students is to simply present them with behavioral phenomena they find interesting, and the more practical the material, the more engaged the students become. By using real-world examples that students can relate to through provocative readings and guest lecturers with policy implications, the presenters argue that student interest can be primed for further training.

Once the students are engaged the next step is to train students to understand what type of data they need and how they are going to analyze them. Teaching innovation presentations ranged from "Just Plain Data Analysis" (JPDA), the compilation and presentation of numerical evidence to support arguments at a very rudimentary level, to much more complex mathematical presentations directed at understanding formal modeling.

A discussion about what should be taught in an undergraduate research methods course brought the session full circle. There was general consensus about basic course content: an understanding of key political science indicators; where to find literature and supporting data; how to assess literature and the supporting data's academic quality; reliability and validity; the use of appropriate statistical measures; and data presentation skills. The group then discussed the best approaches for conveying the material, which varied greatly from faculty-lead, hands-on student-conducted research projects to online Internet-based hybrid-type courses to interactive techniques for teaching abstract concepts.

The importance of research methods as a required course was again discussed, a carry-over from last year's track. We agreed that research methods should be required and the students should be exposed to methods early in their academic careers so they will be better prepared to understand academic literature in upper-division courses. One solution is to integrate methods concepts across the curriculum using various lower-division courses to explicate the scientific method or particular methodologies. Integration of methods across political science courses may provide some remedy to the quality and quantity of methods training undergraduates receive.

Conclusion

By the close of the Conference, we agreed upon a common set of strengths, opportunities, and challenges to teaching undergraduate research methods, as well as a set of recommendations for a future Conference track. Our common goal is to provide undergraduate political science students with a strong fundamental understanding of the research methods used in our field and the skills to apply these methods outside of the classroom. Finally, we closed with two recommendations for next year's Conference. First, we would like to see more paper proposals based on formal assessment of teaching research methods. There are many opportunities for innovation reflected in the approaches presented during the Conference. What is lacking is systematic assessment of the competing course designs and teaching techniques. Second, we would like to see a roundtable with research methods textbook authors to discuss the motivations behind certain inclusions, exclusions, and approaches in their books.

Teaching with Technology I Track Summary

—Donna Axel,
New Jersey City University
—Ruth M. Ediger,
Seattle Pacific University
—Izabela M. Kaczorowska,
University of Illinois at Chicago

Understanding the importance of using technological tools in teaching political science, the organizers of the APSA Teaching and Learning Conference dedicated two tracks to teaching with technology. Track I was moderated by Robert H. Trudeau of Providence College.

The first session focused on utilizing technology in the classroom. Antonio Rappa of the National University of Singapore demonstrated the usefulness of Integrated Virtual Learning Environment

https://doi.org/10.1017/S1049096506240897 Published online by Cambridge University Press

(IVLE), a web-based technology, for political theory courses. Three main benefits emerged from his research: professors can track students' performance level and depth of participation more easily, students can participate at their own pace, and professor-student communication can transcend the traditional school hours. Bob Van Dyk of Pacific University, Oregon, introduced ways to instruct students about Geographic Information Systems (GIS), a graphic computer program that layers data to help students understand physical relationships. For example, students used GIS to consider public policy issues such as resource allocation and preservation by juxtaposing maps of the breeding grounds of the spotted owl with logging maps. Mark Tompkins of the University of South Carolina explored the usefulness of two different computer-based programs that help students understand the complexity of federal budgetary constraints and common property issues involved in public policy decision making. Ruth Ediger of Seattle Pacific University presented data on student perception that a computer-based geoquiz program which tested student knowledge of the location of the world's countries and capitals is superior to traditional memorization methods. The students also reported that they were more likely to study for geoquizzes because it was enjoyable.

The second session assessed technological tools used among political science scholars and teachers. Roger C. Lowery of the University of North Carolina at Wilmington introduced Student-response Systems (SRS), a student-polling technology much like a TV remote control, designed to record and maximize student participation particularly in large classes. With SRS professors can increase students' active participation, awareness of their colleagues' views, satisfaction, and attendance. Gregory D. Miller of William and Mary College addressed the valuable role of movies inside the classroom. Like Lowery, Miller cautioned against using technology for technology's sake. John H. Riley, Jr. of Kutztown University of Pennsylvania compared the effectiveness of PowerPoint for three academic levels of students: high-, middle-, and low-achieving. He found that although high- and low-achieving students' grades were virtually unaffected, the grades of the middle-level group were significantly higher. Davida J. Alperin of University of Wisconsin, River Falls, assessed the difference between teaching with and without the use of computers, concluding that student performance and final grades are unaffected by computer usage.

The final session highlighted effective strategies for e-learning and online instruction. Francis Moran, III of New Jersey City University compared final grade results for the 2004–2005 calendar years in specific classes with sections offered both online and in the traditional classroom each with identical substance. His research showed that the online student grades were higher, suggesting that the online environment provides a forum for debates in which ideas are more fully developed; alternative views are more common in light of the virtual anonymity; writing skills improve more rapidly; and "quiet" students participate. Moran resolved the researcher's ethical dilemma of exposing one group of students to potentially beneficial technology while depriving the control group by allowing students to select whether to enroll in an online or in-class section. Chunmei Yoe of Southeastern Oklahoma State University (SOSU) considered the practical and pedagogical implications of teaching American Government both in class and online; she attempted to maintain structural similarities. Yoe was unable to reach many definitive conclusions regarding whether online courses are more accessible (affordable/convenient) and/or efficient since the data available to her included only SOSU students, and it was not possible to determine whether online courses were more accessible and/or efficient to non-SOSU students. Ulrich Gysel of the International Relations and Security Network (ISN) at the Swiss Federal Institute of Technology Zurich (ETHZ) presented a paper co-authored by Sean Costigan of ISN/ETHZ. They introduced ways to utilize open source and cutting edge technology in serving cooperative security. ISN/ETHZ produces free, open material (www.isn.ethz.ch/edu) for teaching IR. To get a handle on openly available content, web-wide, they suggested establishing an e-learning in IR certification body and the possibility of a clearinghouse for open source e-learning content. The paper was presented with a mind mapping tool (http://en.wikipedia.org/wiki/Mindmap) as an alternative to PowerPoint, which allows for presentations of ideas in a linear and non-linear manner.

Lessons Learned/Conclusions Reached

On the final day of the conference, the Teaching with Technology I Track summarized their sessions into a "Top Ten List of Conclusions" for the poster presentation. This order is only meant to imply that the final (or number one) conclusion is the most crucial:

10) For technology to be useful one should not be required to be a technology expert; indeed many session participants were not technologically savvy, yet reported successfully using a variety of classroom technologies.

9) Although technology is a good tool to increase student enthusiasm, one could end up pandering to students and defeat potential learning opportunities.

8) Technology is beneficial for providing information as long as the temptation to overload students is avoided.

7) Institutional objectives are helpful in reducing the cost of education in some cases and in aiding standardization but could potentially get in the way of faculty goals. This problem can be avoided if institutional objectives and faculty goals are more deliberately harmonized.

6) When creating online courses it is important to consider whether the subject-matter is appropriate for the online setting.

5) Faculty, universities, and publishers all have a potential interest in the creation, ownership, licensure, and copyright of content and technology.

4) When conducting research on the effectiveness of technology for student learning, one must consider the ethics as well as ways to minimize the impact of measuring the effect.

3) The costs (time and money) to faculty and students involved in mastering and using the technology must to be considered. It is important to incorporate the technology in ways that students will not perceive as burdensome.

2) One must first establish clear teaching and learning objectives and goals and then decide if the technology is appropriate.

1) The primary focus of the teaching faculty is teaching and not technology. Technology can be used effectively to enhance student learning but it is not a substitute for good teaching.

https://doi.org/10.1017/S1049096506240897 Published online by Cambridge University Press