

Challenges to, and Suggestions for, Merging Research and Teaching in Undergraduate Regional Public Universities

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The premise of this symposium is to address the issue of merging research and teaching. Choosing one or the other is a false dichotomy. Nonetheless, there are also tradeoffs; merging them is not as simple as it seems because professors must strike a balance that makes sense for them. As usual, it is a complicated relationship that bedevils many professors and departments.

The focus of this article is on undergraduate departments at regional public universities and their challenges of finding means to merge research and teaching. Several challenges will be addressed including teaching loads, teaching both core curriculum classes and classes for majors, publication pressure despite heavy teaching loads, and the tremendous effort required to be an effective classroom teacher with underprepared students.

Two implicit themes of the symposium are *ensuring students learn the essential skills needed to conduct different types of research* and *incorporating the class into one's own research*. Thus, in the face of these challenges, how to include undergraduate research in the political science curriculum (to teach students research skills) and a method for professors to also merge research and teaching (incorporate the class in one's research) is also discussed.

CHALLENGES PROFESSORS FACE IN UNDERGRADUATE PROGRAMS AT REGIONAL PUBLIC UNIVERSITIES

Understanding that research and teaching can be merged, faculty in undergraduate-only programs at regional public universities face challenges that emphasize the primacy of teaching over research. It is important to acknowledge these realities.

The Effort of Teaching

To help students succeed at regional public universities requires tremendous effort from undergraduate professors. Many of the students at regional universities, while intelligent, often are not college ready. Institutions cannot simply hope that the students will “figure it out” or adopt a “sink or swim” approach. Instead, many resources are focused on interventions to help students succeed, and these efforts

are often targeted toward first-year students taking core curriculum courses (like American government).

These efforts involve political scientists working with students on developing college readiness skills such as note taking, college reading, and studying. Faculty members are also expected to participate in interventions, such as early warning systems to identify struggling students and learning communities. With these activities in mind, note that teaching is much more than presenting the material. Teaching also means helping students to understand how to learn. Therefore, professors at regional public universities invest more time in teaching and less in research.

Teaching Loads

Professors at regional public universities often teach four courses per semester, and if they have a research release, the teaching load is reduced to three. Some professors will receive credit for two courses if they teach one big course. Either way, they carry a heavy teaching load. The tradeoff is that research expectations for them are lower than at research universities, and teaching students is the priority.

Core Curriculum Courses

Related to heavy teaching load is the core-curriculum commitment. Without graduate programs that provide graduate students to teach introductory classes, professors in undergraduate programs teach the core curriculum courses in political science as well as the upper division courses for majors. This requires numerous preparations each semester over a wide range of subjects.

Increasing Publication Pressure

Many regional public universities are taking steps to increase research productivity to improve the institutions' research classifications. In Texas, numerous regional public institutions seek to become “emerging research universities.” The pressure on professors to publish more research could be an incentive for faculty members to engage their undergraduate classes in their professor's research. However, if teaching loads are not adjusted to reflect increasing publication

expectations, professors may deemphasize teaching in their pursuit of research.

SUGGESTIONS FOR MERGING TEACHING AND RESEARCH

Although there are many challenges, there are benefits for student learning that emerge from research. This section presents two suggestions for merging research and teaching at regional public universities.

Undergraduate Research

Undergraduate research has been identified as a High Impact Practice for undergraduate students (Kuh 2008).

The goal is to have the entire curriculum focused on providing senior political science majors an opportunity to engage in a semester-long, directed, research project.

Using National Survey of Student Engagement (NSSE) data, Kuh found that undergraduate research was a practice that predicts student success and is beneficial for students with varying precollege experiences. How can departments offer opportunities for students to experience undergraduate research? This depends on the available resources a department has and how it chooses to use them.

To help students learn the essential skills needed to conduct research, departments should provide a class where that is its purpose. This course is not “Introduction to Research Methods,” but a senior-level seminar class. At Texas A&M University-Corpus Christi, students take quantitative research methods and statistics classes prior to taking the senior seminar. The program decided to introduce research methods prior to the senior seminar so that the seminar allows students to apply content and methods and not to introduce research methods. The goal is to have the entire curriculum focused on providing senior political science majors an opportunity to engage in a semester-long, directed, research project. I taught a senior-level class for political science majors that was centered on having the students empirically test, with secondary survey data, a research question that they developed.

To make the class manageable, I provided the students with a version of the 2008 American National Election Studies (ANES). Specifically, I used the Setups version obtained from the Interuniversity Consortium for Political and Social Research that is modified for classroom use. This strategy kept the class manageable. Also because I was familiar with the data set, I could work with students to identify suitable variables and steer them to research questions that could be answered with it. Shively’s *The Craft of Political Research* (2011) was used during the semester. Each week the class worked on different parts of political science research and assignments on how to do specific types of analyses using SPSS. Recently, I was able to teach the class in a computer lab in which all the computers had SPSS. In addition, I worked with the publisher to have a student version of SPSS available for the student to purchase at the University Bookstore.

Students learned how to develop a causal hypothesis, a literature review, a multivariate research design (using either linear or logistic regression), an analysis, and then a conclusion. A major part of the class was helping students understand why a multivariate research design was important for testing their proposed hypotheses.

The class grading was on an accept/resubmit basis with the understanding that students would make multiple attempts to learn how to successfully conduct their research and demonstrate an understanding of the concepts. Students became frustrated when they did something “wrong” when their hypothesis was not supported by their research. It took time for them to grasp that it is okay

if a hypothesis is not supported because that is a finding. It also led to discussions about measurement and model specification.

By the end of the semester the students were excited about their work. They could see how they had actually engaged in introductory political science research and tested a hypothesis. They also understood that the type of thinking they engaged in, and the skills they developed, would benefit them in their future endeavors.

One semester some seniors shared a story with me. They were working on their research in a computer lab in the evening, crunching the numbers in SPSS. Some other students in the lab began a conversation with them about their work. The other students then asked what graduate program they were in, and they responded that they were senior political science majors. The other students were in a doctoral program and were impressed with the work being conducted by these senior political science majors.

One memorable project a senior completed examined attitudes toward gay marriage. The student hypothesized that support for gay marriage increased as age decreased. Through the work the senior realized that it was necessary to control for party affiliation and religiosity. The student did the analysis and found that even when controlling for party and religiosity, support for gay marriage remained statistically significant and increased as age (of the respondent) decreased. The student was very excited to realize that the evidence supported the hypothesis.

Doing this work also benefits me as a researcher. Just as professors get ideas for research from visiting with other professors, I also get ideas for research from my discussions from students (I want to be clear that I am not taking their ideas). One semester I was preparing a paper for a conference presentation examining generational differences and presidential vote preferences. The students used the data set I was using that semester, and I would use my own work as an example (because I was also conducting research). The discussions with

them about my work, and their feedback, gave me ideas and influenced my work.

Scholarship of Teaching and Learning

Another area where undergraduate regional public university professors can merge research and teaching, incorporating the class into one's research, is the scholarship of teaching and learning (SOTL). The premise of SOTL is to investigate student learning using the methods of the academic discipline. For political scientists, this means using some type of

SOTL involves hypothesis testing and rigorous investigation of the impact of teaching on student learning.

learning outcome as the dependent variable, and then teaching interventions as independent variables. Professors who choose to introduce a new note-taking strategy for students in an introductory class, can then research the impact the note-taking intervention has on student learning in the class. These examples are based on quantitative research. SOTL can also be conducted using qualitative methods.

SOTL's origins are traced to the work of Ernest Boyer's *Scholarship Reconsidered: Priorities of the Professoriate* (1990). Boyer proposed we broaden our definition of scholarship to reflect different types of scholarship, and that these different forms all need to be counted as scholarship. Traditional research was classified as the scholarship of discovery. Research into what our students learn was classified as the scholarship of teaching and learning. The Carnegie Foundation for the Advancement of Teaching established the Carnegie Academy for the Scholarship of Teaching and Learning (CASTL) with the aim of promoting the development of SOTL.

SOTL is not descriptions of teaching interventions, nor is it scholarly teaching. Instead, SOTL involves hypothesis testing and rigorous investigation of the impact of teaching on student learning. Furthermore, it is embedded in the discipline and not something reserved for higher education research "experts." Hutchings and Shulman (1999) describe SOTL as research "in which faculty frame and systematically investigate questions related to student learning—the conditions under which it occurs, what it looks like, how to deepen it, and so forth—and do so with an eye not only to improving their own classroom, but to advancing practice beyond it." The *Journal of Political Science Education* is a good example of a political science journal that publishes SOTL research.

A colleague and I engaged in SOTL research by testing the impact of using the *New York Times* in class, with control groups, to determine if it increased student interest in politics and attitudes toward civic engagement (Huerta and Jozwiak 2008). The research found that using the *New York Times*

increased student understanding of civic engagement, but not student interest in politics. This peer-reviewed article of empirical research was published in the *Journal of Political Science Education* and counted as research toward promotion and tenure.

A key for SOTL to be successful is that it must be recognized and count as research for promotion and tenure. It must also be rigorous and subject to peer review and replication. In other words, it is the merging of research and teaching using one's classroom.

CONCLUSION

The suggestions I propose to merge research and teaching are modest and manageable. They are not new concepts, but rather concepts that are effective in other academic disciplines and that can be incorporated in political science. A semester-long, directed undergraduate research class for senior political science majors provides an opportunity for political science majors to learn essential research skills. The professor's own research can be enhanced via this process.

Furthermore, if we wish to eliminate the gap between research and teaching, we must take a broader view of research and give credit and respect for faculty engaging in SOTL. SOTL is an area where faculty in undergraduate regional public universities can excel. However, if promotion and tenure policies do not consider SOTL as research, then there is little incentive for faculty to engage in it.

Research and teaching are essential features of higher education. We must understand that one vision of research will not fit across all institution types. The research university model seems to dominate our profession, and that model presents significant challenges in undergraduate programs at regional public universities. If we take a broader view of merging research and teaching, then we can make progress. ■

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