Research in the State Capital: Helping Your State Legislators Understand and Appreciate Higher Education

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For a young and naïve undergraduate at a large research university, encountering the work of a current faculty member in a textbook and having the significance explained by another professor was always a thrill. Imagine the talk among the students when one of these faculty actually won the Nobel Prize for the work that had occurred down the hall from the classroom, and the subsequent bewilderment in the university community when a member of the state legislature publicly questioned the salary being paid to this Nobel laureate because "he didn't teach enough." Although these events occurred many years ago, it appears that state legislatures still have a very narrow concept of teaching, and little appreciation for the creative work that occurs in the universities that they support.

In most of their encounters with university personnel, the legislators are asked for money. Seldom are they shown the results of previous support, the relevance of university research and scholarship to the important issues of the day, and the gratitude of both students and faculty for the generosity of the people of the state in supporting their campuses. Fortunately, the Council on Undergraduate Research has provided important models for how undergraduates can convey these important messages on both the national level (Mateja, 1997; http://www.cur.org/postersession.html) and on the state level (Howard, 1998). Inspired by these examples, we organized a multi-campus "Research in the Capital" symposium involving both poster presentations and hands-on demonstrations led by teams of faculty, graduate and undergraduate students.

Held on April 17, 2001, this symposium brought together 40 undergraduate students and some of their graduate student mentors and faculty advisors from four schools in the

From the top - Spence Brooks and her project — Much Madness is Divinest Sense: An Examination of the Naylor Scandal of 1656. Jason Boyles exhibits his project — The Effectiveness of the Ergonomic Tool Design (ETD) Scissors. Shareefah Al Udagh (right) Explains her research on aggression to Stephanie Briggs. Jessica Luginoth discusses her research concerning cultural identity issues among second generation Algerian women from North Carolina with Senator Calvin Cuminham, who was the University of North Carolina’s student body president from 1995-96.

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University of North Carolina system: the University of North Carolina at Chapel Hill (UNC-CH), North Carolina Central University (NCCU) in Durham, North Carolina State University (NCSU) in Raleigh, and the University of North Carolina at Asheville (UNCA). The first lesson we learned was that despite the many differences in the size and missions of these campuses (UNC-CH and NCSU are Research I Universities, NCCU was founded for African Americans, and UNCA is the designated liberal arts university in the 16 member system), the research experiences from the undergraduate perspective were remarkably similar. We arranged the poster display alphabetically by county (or state, or country, for out-of-state and foreign students) for the convenience of the legislators and to facilitate communication among the students from different schools. We divided the symposium into two sessions so that half the students were at their posters and half the students were viewing other posters during each session. The students took advantage of this format (they reported visiting an average of 15 other posters, with several students reporting that they had visited all the posters). As one student wrote:

"I thought it was terrific to have all the schools together to show the breadth of study among all the undergraduates from each university."

We also learned that it is possible to arrange a successful symposium even when the time frame seems impossibly tight. (Due to a variety of circumstances we could not control, we had only five weeks to organize this event.) Since several campuses were involved, the responsibilities to recruit and prepare the participants were delegated to each school. The selection criteria included the originality and importance of the work, the students' abilities to communicate the significance of their results to non-specialists, and the relevance to social, economic, and/or cultural issues across the state. Students on the Chapel Hill campus benefited from a "dry run" in which they attempted to communicate their principal findings clearly and briefly while conveying enthusiasm and gratitude. They quickly learned to question each other effectively and communicate from within their various disciplinary traditions while trying to avoid jargon, although there were some surprises along the way. ("Deformations" might be clear to geologists, and the "troposphere" known to environmental scientists, but some of their peers asked for clarification.) Students on the Asheville campus were selected from among those who had just returned from the National Conference on Undergraduate Research. They had already benefited from a pre-conference practice session aimed at a general audience and the conference presentation itself. Each student received individual coaching on the production of a poster and on the etiquette of poster sessions.

We used two strategies to attract legislative attention. The legislative liaison from the Division of Public Affairs and University Advancement in the Office of the President of the University of North Carolina arranged for two high-traffic areas within the legislative office building for the symposium. In one, we set up three hands-on demonstrations, which included a nano-manipulator (a form of virtual reality), the human genome project (the legislators could "spool" DNA out of solution and touch the sticky white fibers), and the Southern Oral History Program, which focused on significant events for NC citizens such as school desegregation. Legislators passing through were given the schedule of the poster sessions in an adjoining building, and several sought out topics of interest to them.

Our second strategy was modeled after the "communication, connection and convenience" approach described previously (Howard, 1998). We used each student's home address and the NC legislature web site to find the names of each student's representative. We prepared letters for the students to send in advance, and a few received replies. We also purchased "lapel pins" with the emblem of each school for the students to give to their representatives. After the students set up their posters, we gave them each a packet with the information about their representatives (photos, office location, committee interests) that we had printed from the web, the lapel pins, schedules, and abstract books, and told them to visit their legislators and invite them to the poster session. We allowed about 45 minutes for these visits, and they were key to the success of the day. Each student visited an average of four offices, and while not every visit resulted in a legislative contact, all the students had positive experiences with members of the legislative staff. Many of these visits did result in subsequent legislative participation in the symposium. It was thrilling to watch legislators clutching their programs, asking for directions to "the poster from Cumberland county", etc.

It was also astonishing to watch the students gain confidence as a consequence of these contacts. As one student wrote:

"I learned how to translate technical scientific research into explanations appropriate for other students as well as legislators. It was pretty exciting to think that our research is the real thing and that it is applicable to individuals outside of the university community."

Several students also appreciated the importance of informing state government officials about their work. One student said:

"I learned first hand about an aspect of the public policy process that is hard to teach in the classroom — the actual transfer of knowledge from researchers to policymakers who can put the knowledge into practice."
Another wrote:

"I ... was able to share the knowledge gained from my research with people who could really make a difference — legislators, advisors, and other students. It was such a valuable experience — I can't say it enough."

According to the feedback we received from the students, an average of three representatives visited each poster. Several legislators conveyed their delight that the event occurred, their astonishment at the high quality of the work presented, their frustrations concerning their busy schedules, which prevented them from spending more time with the students, and their desire to attend similar events in the future. It appears that our legislators are beginning to revise their ideas about higher education and appreciate that it is an active process in which students work with others to ask important questions and develop solutions.

We were also delighted with the interactions among universities and between faculty and legislators encouraged by this event. For example, a faculty member present at the poster session has been invited to a brainstorming session on the future of science and math education in the state. It is clearly important for legislators to make contact with university faculty about issues in education or individual faculty areas of expertise. It is necessary for the faculty members to take the first step in establishing contacts.

Fostering connections among investigators with varying levels of sophistication and experience, including undergraduates, graduates, postdoctoral fellows and faculty (even Nobel laureates), is in fact the best "teaching" that we do, and results in lasting contributions to society. We conclude that students and faculty are excellent ambassadors to convey the true nature of the university to those who are financially responsible for it, and that both the student messengers and the legislative recipients benefit a great deal from such encounters.

References


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