# The Scholarship of Teaching and Learning

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## Abstract

The origins and conceptual foundations for the scholarship of teaching and learn-ing (SOTL) are described. National programs aimed at building understanding and ac-ceptance of SOTL are reviewed. To illustrate campus activity, NC State's faculty-led teaching initiatives over the past six years are recounted. Finally, with the goal of pro-viding for teaching what peer-reviewed journals provide for research, a proposal for national peer-review of teaching is offered.

## Introduction

Over the past decade, there has been a growing national discussion about the scholarship of teaching and learning (SOTL). Leading foundations have promoted this dialogue, and an increasing number of colleges and universities and professional societies have become engaged in it. In this article I provide background information about SOTL, illustrate aspects of the work with examples from my home institution, and propose a national review process for scholarly work on SOTL in parks, recreation and tourism.

### Origins of Discussion about the Scholarship of Teaching and Learning

The publication of the late Ernest Boyer's *Scholarship Reconsidered: Priorities of the Professoriate* (1990) greatly accelerated the growing national conversation about the scholarship of teaching. Boyer argued that the reward system for faculty, narrowly based on research productivity, was out of alignment with the societal demands facing higher education. As stated in his preface: "…the most important obligation now confronting the nation's colleges and universities is to break out of the tired old teaching versus research debate and define, in more creative ways, what it means to be a scholar. It's time to recognize the full range of faculty talent and the great diversity of functions higher education must perform" (Boyer, p. xii).

To "break out of the tired old teaching versus research debate," Boyer proposed four forms of scholarship that should be valued equally. The *scholarship of discovery* "…contributes not only to the stock of human knowledge but also to the intellectual climate of a college or university. Not just the outcomes, but the process, and especially the passion, give meaning to the effort" (Boyer, p. 17). In seeking to broaden the definition of scholarship, Boyer called for strengthening, not diminishing, research. The *scholarship of integration* is aimed at moving beyond narrow disciplinary confines and putting knowledge in perspective. This form of scholarship is concerned with making connections

across the disciplines and fitting research findings into larger patterns. The *scholarship of application* represents the academy's engagement with society that is institutionalized in land-grant universities. It asks how new knowledge can be applied for societal benefits, and it also asks how the university's agenda might be defined by social problems.

Boyer's fourth form of scholarship, and the subject of this article, is the scholarship of teaching. This form of scholarship recognizes that "the work of the professor becomes consequential only as it is understood by others. Yet, today, teaching is often viewed as a routine function, tacked on, something almost anyone can do" (Boyer, p. 23). The scholarship of teaching begins with faculty knowledge of the discipline—faculty must be masters of their field's content. Then, this form of scholarship demands that faculty bring this content to life for their students and nurture student capacity for deep and continuous learning. Finally, the scholarship of teaching recognizes that faculty members are also learners; their engagement with students naturally draws them deeper into both their subject's content and their pedagogy.

Boyer's expanded view of scholarship joined numerous other strands of work on teaching reform. One strand is focused on thinking about teaching and learning from a disciplinary perspective. Lee Shulman, the current president of the Carnegie Foundation, and others have for years argued that teaching is not mere technique and that generic "tips for teaching" are insufficient for improving teaching. For Shulman, the disciplines are the anchor points for teaching and learning. He suggests that the essence of teaching is guiding our students to an understanding of what it means to know something deeply as an historian, a linguist, a chemist, or an engineer. A disciplinary focus to pedagogy connects teaching practice with professional practice (Lazerson et al., 2000).

A second strand of work supporting the scholarship of teaching is peer review of teaching. Peer review has been a major focus of the American Association of Higher Education (AAHE). In a multi-campus initiative it led from 1994-98, AAHE's peer review of teaching project brought together teams of faculty to consider how effective peer review of teaching might be carried out (Hutchings, 1995). The teams developed nine strategies for moving beyond the view that teaching is a private activity limited to the teacher and his or her students and toward giving teaching the same kind of rigorous peer review that characterizes research. Peer review ranges from formative (self-improvement) to summative (decisions about promotion and tenure). Formative peer review offers faculty the opportunity to talk to each other about their teaching and their students' learning; for many, this exchange with colleagues meets a deeply felt need.

A third strand involves assessment of student learning. Particularly important here has been the work of Patricia Cross and her associates (Angelo and Cross, 1993). Over the years, they have built both the rationale and the methodology for faculty to be far more purposeful about determining whether their students are learning what they want them to learn. Classroom assessment focuses attention on questions formulated by the teacher, and it is formative (aimed at improving) rather than summative (aimed at judging). Beyond providing information on how we are doing in our teaching, taking assessment

seriously forces us as faculty to think clearly about our student learning objectives — unless we know where we're going, it's hard to determine whether we're getting there.

A fourth strand in the emerging intellectual work supporting the scholarship of teaching concerns standards for assessing scholarship. In a sequel to Boyer's landmark book, Glassick et al. (1997) argued that clear goals, adequate preparation, appropriate methods, significant results, effective presentation, and reflective critique can be applied to test the worthiness of scholarship, whether basic or applied, in all its various forms. *Scholarship Assessed* helped clarify the position that the scholarship of teaching is more than excellent teaching, particularly in its emphasis on reflective critique and the development of new understanding that is subject to peer review.

## Carnegie Foundation Provides National Leadership

The Carnegie Foundation for the Advancement of Teaching has led the effort to recast teaching as a form of scholarship. In 1998, Carnegie launched an initiative known as the Carnegie Academy for the Scholarship of Teaching and Learning (CASTL). CASTL was a five-year program funded for $6 million by Carnegie and the Pew Charitable Trusts. The goal was to "bring to faculty members' work as teachers the recognition and reward afforded to other forms of scholarly work in higher education." This was to be done not simply by lobbying but by focusing on teaching that produces significant, long-lasting learning for all students and by subjecting teaching to the same sorts of rigorous evaluation that characterize research.

CASTL had three components. First established was the "Pew Scholars National Fellowship Program." Fifteen faculty members from around the nation were selected for the pilot program in 1998-99, and additional cohorts were added in each year of the program. Following an initial ten-day retreat, each Pew Scholar explored a significant issue in "teaching for understanding" in his or her field. For example, a professor of psychology examined the use of examples in teaching, seeking to understand the properties of good examples, the best ways to use examples in teaching, and how students learn from examples. Disciplines represented in the first two cohorts of Pew Scholars included chemistry, English, management, psychology, history, mathematics, sociology, and performing arts. Pew Scholars were viewed as the vanguard whose explorations would help define and guide the overall CASTL program.

The second of CASTL's components was the "Campus Program." Coordinated by Barbara Cambridge of the American Association for Higher Education, this program encouraged campuses around the United States to engage in "campus conversations" about teaching as a scholarly activity. Over 120 institutions of higher education, ranging from community colleges to research-extensive universities, signed on and proceeded in their own ways to take stock and plan ways to enhance teaching and learning at their institutions. Reports on the Campus Program from around the country can be found in the newly published Campus Progress: Supporting the Scholarship of Teaching and Learning, edited by Barbara Cambridge (2004).

The third and last component of CASTL involved work with scholarly societies. Recognizing the importance of scholarly and professional societies in shaping faculty and academic life, this program had two components. First, it provided networking opportunities aimed at fostering cooperation and mutual support. Second, it offered small grants to support societies' ventures in expanding scholarly outlets, building peer review capacity, publishing exemplary efforts, and expanding attention to teaching and learning in graduate education.

A persistent challenge in the SOTL initiative has been defining what is meant by scholarship and clarifying how it is different from excellent teaching. Carnegie Foundation leaders Pat Hutchings and Lee Shulman (1999) suggested the following taxonomy:

- Excellent Teaching—what all faculty are obligated to do; it involves engaging students and fostering important types of learning

- Scholarly Teaching—excellent teaching that also involves classroom assessment and continuous improvement, is informed by current literature on both the content of the field and pedagogy, and invites peer review and collaboration

- Scholarship of Teaching—scholarly teaching that is made accessible for public review; as Shulman phrases it, "making teaching community property"

- Scholarship of Teaching and Learning—the scholarship of teaching extended to include assessment of student learning

A second challenge has been to describe what these various forms of scholarship look like, to build understanding about the most appropriate forms—in addition to articles, monographs, books, and the like—this scholarship might take. Again, Hutchings and Shulman offer guidance. As of 1999, their working bibliography of SOTL examples included the following:

> "...a book-length study of student errors in writing; a public pedagogical colloquium given by a faculty job candidate during the hiring process; a course portfolio with evidence about the effects of technology in the course; an online resource for exchanging and commenting on course materials and case studies; a protocol for ongoing collaborative inquiry; and a textbook" (Hutchings and Shulman, 1999).

## The NC State Experience

CASTL leaders suggested ways of getting the campus conversations started, but campuses had great latitude in how they proceeded. The colleges and universities in the Campus Program were free to pursue their campus conversations in ways that respected their unique cultures and histories. On some campuses the SOTL conversation enjoyed leadership by prestigious faculty supported both rhetorically and financially by administrative leaders. On other campuses, the campus culture dictated a low-key,

developmental approach; they "learned their way into" SOTL by publicizing instances of it as they emerged.

At NC State, the campus conversation about the scholarship of teaching and learning was well underway at the time we signed up, and it has only intensified since then. Rather than being a conversation guided from the top, we have a multiplicity of smaller conversations blossoming in various quarters of the university. Faculty committees engaged in NC State's discussion include the Council on Undergraduate Education, the Academic Policy Committee of the Faculty Senate, the Campus Writing and Speaking Board, the advisory committee for the Faculty Center for Teaching and Learning, the Honors Council, the Committee on the Evaluation of Teaching, and the Teaching and Learning with Technology Roundtable. In addition, NC State's conversation is being pursued in various ways by the faculty, staff, students and administrators participating in our Inquiry-Guided Learning initiative (a six-year effort funded substantially by the Hewlett Foundation), the curriculum diversity programs (pursued with support from the Alcoa Corporation), and the Campus Writing and Speaking Program. These diverse conversations have been energized by our regional accrediting agency's focus on student learning outcomes, and the fruits of their collective labors positioned the university well for a successful re-accreditation review, just completed. For its "quality enhancement project," as required by the Southern Association of Colleges and Schools, NC State will pursue an initiative called Learning in a Technology-Rich Environment (LITRE). LITRE was selected after widespread campus consultations. It reflects the great investment made within the past decade to improve teaching and learning, and it reinforces the university's identity as a leader in science and technology.

In sum, there is a tremendous amount of discussion, experimentation, and assessment going on at NC State, and the majority of it springs from the interests and concerns of faculty, staff and students at the grass-roots level. Because it springs from the grassroots, NC State's "conversation" about SOTL might at times seem too fractionated to accomplish anything worthwhile. However, many good things have been accomplished over the past six years or so. To describe our progress, I return Boyer's expanded view of scholarship and the other four "strands" involved in the emergence of SOTL.

**Boyer's expanded view of scholarship** has been the topic of a great deal of discussion here. More and more faculty members are publicly reporting their experiences with creative approaches to teaching—e.g. using active learning pedagogies, transforming their courses to make them more inclusive, employing technology to improve student learning, and expanding students' abilities to think critically and function effectively in groups through well-designed writing and speaking experiences. There is growing recognition of the value of this scholarly work. For example:

- A new Celebration of Teaching and Learning annually honors award-winning instructors and recognizes staff as well as faculty contributions to student learning.

- Expanded grant programs encourage innovation by academic departments as well as individual faculty members.

- The Provost annually makes a substantial award—in the form of a permanent addition to its base operating budget—to the university department that makes the strongest case for its achievements in fostering student learning.

- The university recently revised its policies for reappointment, promotion and tenure and explicitly identified six realms of faculty scholarship, including teaching (see below).

**The goal of anchoring teaching in the disciplines** guided the Hewlett Campus Challenge (HCC) program. HCC was the culmination of six years' work on inquiry-guided learning, and it focused on moving beyond scattered efforts by individual faculty and infusing active learning strategies into the academic major. Ten departments mobilized faculty/student teams and worked to identify a set of courses in the major that would be transformed so that students would have successively deeper educational experiences. A number of the departments that participated in the program made extraordinary gains, as described in a book on the program (Lee, 2004)

**Peer Review of Teaching** was the focus of a major effort by faculty serving on the Committee for the Evaluation of Teaching. The committee reviewed the campus's widely variable systems for peer-review of teaching and used criteria and standards found in Nancy Chism's Peer Review of Teaching (1999) to identify best practices. Their final report recommended a system that would be effective without being burdensome and recognized the importance of formative as well as summative peer review. It was accepted by the provost and staged for pilot program implementation before being derailed by turnover in top administration and, later, by the economic recession (NC State, 2000).

**Assessment of student learning** was a critical component of the Inquiry-guided Learning program. In the first venture, funded by Hewlett, 50 faculty members and 25 doctoral student participants built collective understanding of inquiry-guided instruction (e.g. cooperative learning, case studies, problem-based learning, and service-learning). In the second venture, funded by the Provost, attention was given to assessing student learning outcomes. In particular, we focused on classroom assessment, in which teachers regularly pose questions about the effectiveness of their pedagogical work and seek evidence of student learning through a variety of means. The most widespread classroom assessment technique is the "one-minute paper." In the inquiry-guided learning program and many others on campus, assessment of student learning came to be viewed not as something punitive forced by external evaluators but rather as an integral part of good teaching—posing questions and seeking evidence to determine whether students are learning what we hope they will.

**Assessing faculty scholarship** must be part of any discussion of improving conditions for the scholarship of teaching. A special committee created by the Faculty Senate

and led by the university's only Distinguished Professor at Large carried out a comprehensive review of the faculty reward system at NC State. Expanding on Boyer's formulation, the committee recommended that the realms of faculty scholarship be expanded to six realms—teaching and mentoring students, discovery research, creative artistry and literature, technological and managerial innovation, extension and engagement, and service in professional societies and within the university—and that more exacting criteria and standards be developed to evaluate performance in those realms. These recommendations were accepted as university policy for reappointment, promotion, and tenure. Information on these policies, including descriptions of the six realms of faculty scholarship, can be found on the provost's web site at NC State.

## Proposal: A National Review Panel for Teaching

One reason research has become dominant in faculty rewards is its system of blind peer review. Because of the credibility afforded blind peer review by faculty and administrators making reappointment, promotion and tenure decisions, other forms of faculty work and scholarship tend to be de-emphasized. When the scholarship of teaching and learning involves discovery research and is expressed in peer-reviewed forms, it is given due consideration. But what about the teaching work of faculty that does not take the form of traditional discovery research? According to Boyer, it may still represent scholarship, and by the Glassic et al. criteria it may be high-quality scholarship, but unless it has been subjected to blind peer review, it will not be given more than cursory consideration, particularly at research-oriented institutions. Even the peer-review of teaching procedures described above don't suffice, because those making personnel decisions may be dubious of departmental colleagues' objectivity and rigor.

Recently, I learned of the existence of a national review board for the scholarship of engagement. Like teaching faculty, faculty members whose work involves extension, outreach, and engagement have struggled for years to get their work considered on a par with research. To address this issue, the National Project for the Documentation and Peer Review of Professional Service and Outreach was created. Sixteen faculty members from four different institutions constitute the review board. Requests for review of faculty accomplishments in the scholarship of engagement are assigned to one or more of the reviewers, and within six weeks they provide written, anonymous reviews suitable for inclusion in the faculty member's dossier.

I suggest that, with one additional step, this is an excellent model for developing a system for peer review of teaching. The missing step I think is needed is to have review boards for SOTL that are specific to academic disciplines. To simply identify a number of outstanding teachers and ask them to review the work of teachers in disparate fields is to focus solely on pedagogy and to ignore content. Yet, content does matter: it makes a difference whether the material that is taught is current and appropriately comprehensive; and there is a "pedagogy of substance"—ways of teaching different subjects—that relates to disciplinary content. The crucial role of the disciplines in the scholarship of teaching

and learning is recognized in the third leg of the CASTL program, which aims to increase understanding and raise the status of teaching and learning within disciplinary and professional societies.

With these thoughts in mind, I presented the argument for a national SOTL review board in PRTM at the annual Chairs and Heads meeting. The response was favorable, and those assembled suggested that the Society of Park and Recreation Educators would be the natural host in our field. I suggest that SPRE design and implement a nomination process to select members of the national review board; assure that service on the board is recognized as a high professional honor as well as an important responsibility; and lead development of guidelines for submission of review materials (e.g. teaching portfolios, course portfolios, publications, web sites) that make the review process both effective and efficient. National board review letters would complement, not displace, other evidence of excellence in teaching.

Whether or not written anonymous reviews by esteemed peers acting on behalf of our national society will carry as much weight as titles in a leading journal will depend on local conditions at the candidate's home institution. But if we believe that teaching truly matters and that the future of the profession depends on having committed faculty working hard to prepare the next generation of professionals, we should give careful thought to developing a national review board.

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