

Positioning Scholarly Work on Teaching and Learning

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In this short invited essay I want to raise some concerns about positioning scholarship on teaching and learning within the disciplines. As this journal and others attest, not all pedagogical work is located there, but with the recent interest in scholarly work on teaching and learning there has been an accompanying move to more firmly wed pedagogical scholarship to the disciplines (Healey 2000). I'd like to begin with what is lost when the preference is for pedagogical scholarship owned by the disciplines.

Placing scholarship within a discipline narrows the potential audience. Discipline-specific pedagogical periodicals are not read widely within the discipline but they are not read at all by faculty outside the discipline. This has two negative consequences. First, good work that transcends discipline-specific considerations of teaching is now seen by a limited number of faculty when it is in fact relevant to a much larger audience.

Case in point: the most well organized and succinct summary of the research on active learning I have seen was published in the *Journal of Engineering Education* (Prince, 2004). I have yet to share this convincing case for engaging students with any faculty member who did not respond to it favorably. Many techniques, including specific strategies, can be used in a wide variety of disciplines.

Case in point: Green (1997) developed a unique and effective system that engages students in the generation of multiple-choice exam questions.

Case in point: Yamane (2006) designed an assignment that brings students to class having done and ready to discuss the reading.

The list of examples could go on for pages and yet all this good work is lost to those not in the discipline. I have been around way too long to imagine that faculty are going to read pedagogical literature from other fields. Getting them to read anything pedagogical almost requires an unannounced pop quiz. Unless delivered to them directly, they are not going to seek out these other sources, which is my point. Good discipline-based scholarship is seen by a very few when it is relevant to very many.

Second, a good deal of wheel reinvention occurs because many instructional issues transcend disciplines. Concerns, advice, experiences and research pertaining to group work are a good example. For my book, *Enhancing Scholarly Work on Teaching and Learning*, (Weimer, 2006) I looked at two years of every pedagogical periodical I could find (since publication of the book I have learned of some I missed). Every journal I reviewed contained at least one article (most had many) on group work—the logistics of forming groups, the design of tasks, the problems of dysfunctional members, the assessing of individual and collective contributions in groups, as well as articles describing specific projects and others reporting research. Most of this literature is isolated and idiosyncratic.

It is not written with knowledge of small group dynamics as a well-researched area of study. Nor is it written with a sense that how groups are being used in one discipline might be relevant to how they are being used in another. In other words, lessons learned in one field are relearned in another and that collective information never becomes a coherent knowledge base that might inform practice wherever and whenever groups are used in college classrooms.

Also lost are unique research designs and forms of inquiry developed within the disciplines. Obviously, findings that are specific to one discipline cannot be extrapolated to other fields, but the research designs certainly can be. Some of these studies are so worth replicating. In a recent issue of the *Teaching Professor* (December, 2007) I summarized a 2007 study by McKinney (a sociologist) who asked students about how they were learning material in their major courses. Pomales-Garcia and Liu (2007) (both engineers) wondered how undergraduate engineering majors defined a quality educational experience. There isn't a discipline I can think of that would not benefit from soliciting this kind of feedback from their majors.

Besides these reasons against positioning pedagogical scholarship mostly in the disciplines, the arguments given for locating it there rest on two assumptions I would like to challenge. The first is the widely held assumption that teaching in every discipline is unique—that unless you teach (meaning know and understand) physics, you cannot possibly address issues related to instruction in that field. The evidence that challenges this assumption includes decades of work on the ingredients and components of instruction which have been shown time and again to transcend disciplines (For a couple of venerable references see Feldman, 1988 or Sherman and others, 1986. More recently look at Bain's 2004 book on what the best teachers do). In addition, the experience of those of us who work with faculty across disciplines also challenges this claim of disciplinary uniqueness. The issues that faculty bring to us—how to grade participation, how to generate discussion, how to promote academic integrity, what uses of technology enhance learning—come to us from faculty regardless of discipline, and we see the solutions proposed being effectively applied in many fields.

It is true that how knowledge is configured, how it is organized, how it grows and builds does vary across the disciplines. Some years ago Shulman (1987) introduced the idea that pedagogical knowledge was embedded in understanding content. Unless you understand sidereal time, you cannot propose ways of explaining it, examples that illustrate it, or metaphors that might link it to what is already known. But is this content knowledge or pedagogical knowledge? And are good explanations, examples and metaphors all that effective instruction requires?

The amount of scholarship devoted to how to teach a particular content topic or subject area varies across the fields. However, in all but a couple of the discipline-based pedagogical periodicals I reviewed, cross-disciplinary issues are addressed regularly and extensively. This is why, even if I didn't edit a newsletter that needs content, I would still regularly read some pedagogical periodicals far removed from my own discipline (*Journal of Chemical Education*, *Journal of Engineering Education*, *Journal of Management Education*, *Teaching Sociology* and *Teaching of Psychology*, to mention some of my favorites). Without question there are some things that make an example effective in biology that are not applicable when examples are used in history. Interestingly though, these unique characteristics are not topics addressed in the pedagogical periodicals (or elsewhere, for that matter). Reading a variety of the discipline-based journals, I am convinced that what

they share in common transcends what makes them different. In terms of current content, pedagogical uniqueness is not a strong reason to prefer discipline-based scholarship on teaching and learning.

The other argument used to justify positioning serious pedagogical scholarship within the disciplines is that this is the place where work is counted. Promotion and tenure decisions start at the departmental level and it is the assessments of those within a discipline that matter most. This is true, but the argument rests on the assumption that disciplinary knowledge and content background are somehow relevant to making judgments about scholarly work on teaching and learning. In fact, three problems regularly emerge when discipline-based colleagues judge scholarship on teaching and learning. First, there is no guarantee that colleagues in the discipline are pedagogically savvy—that their views of teaching are anything but eclectic, idiosyncratic and uninformed. Whatever those views, they become the lens through which the work of others is assessed. Second, most discipline-based faculty are not well versed in the conduct of educational research. They are quick to criticize or cast aside methods that do not conform with the protocols and conventions of the discipline. Time and again in my experience I've seen faculty impose disciplinary standards on work that has nothing in common with what or how the discipline studies phenomena. And finally, some forms of pedagogical scholarship are unique—they integrate experiential and empirical knowledge, they review findings and extrapolate practical implications, they look reflectively and critically at practice drawing viable lessons from experience, for starters. Unfamiliar with this kind of work, discipline-based faculty have no criteria with which to judge it. So, I don't think discipline-based colleagues automatically make better assessments of pedagogical scholarship.

Moreover, if the standards of the discipline are used to assess practitioner scholarship, it will never measure up. Or if it does, it will be because pedagogical scholarship has lost its unique identity and has become like accepted research in the field. I'm not suggesting anything less than rigorous standards—those of us committed to pedagogical scholarship are as concerned about quality as those in the disciplines who judge research scholarship. I am advocating for the application of relevant standards. Unfortunately, many of those have yet to be articulated.

When interest in the scholarship of teaching was first born, some work on standards occurred and some useful generic rubrics were developed (see Diamond and Adam, 1993 and Glassick, Huber and Maeroff, 1997 for examples). But at this stage, we need much more specific criteria that can be applied to scholarship that draws lessons from experience, scholarship that seeks to apply what is known about teaching and learning, scholarship that offers advice, and scholarship that studies issues empirically, be that quantitative, qualitative or descriptive. I am not especially hopeful or optimistic about faculty within departments generating these more specific assessment criteria. I think it is more likely that they will return to the standards of the discipline. So, despite the presence of promotion and tenure decision-making, that does not buttress the case for making disciplines the main domain for scholarship on teaching and learning. It does not ensure that quality judgments will be made or that work will be assessed with relevant criteria.

Finally, as long as the disciplines house most of the scholarly work on teaching and learning, the focus will continue to be on the credibility of this work as scholarship. That is an important issue, but it is not the only aspect of this work that needs to be considered. Most practitioner scholarship on teaching and learning does not advance knowledge in the Boyer sense of discovery-based scholarship. It is not work that is part of integrated streams of

research where findings lead forward to new findings. It is written to improve practice. It is applied scholarship--even its empirical inquiries address questions that are ultimately pragmatic.

A new set of issues emerges when this pragmatic application is the defining characteristic of the work. One of the sad (and amazing) facts about pedagogical scholarship is how little of it is read. This is true for both books and articles. Even in large disciplines, even in disciplines where the cost of the pedagogical periodical is part of the professional association membership fee, these publications have extremely modest subscriber bases. In my review of these journals, I did not find one with more than 10,000 subscribers and in 2005, according to the National Center for Education Statistics, there were 630,000 full time faculty in the U.S. alone. The main reason the literature remains unread is that there are virtually no norms in any discipline expecting those who teach to grow and develop as teachers the way they are expected to grow and develop as disciplinary scholars. You can teach your whole career and never read a book or article devoted to expanding your pedagogical knowledge and, mind you, that reading is excused even if you have had no formal training in how to teach.

I have maintained for many years now that college teaching as a profession will never be taken seriously unless there is a viable literature associated with its practice. But then how can the viability of a literature be established unless it is read. And will it ever be read in the absence of norms expecting professional development. This chicken-egg conundrum shows how inextricably linked and interdependent the two are. I'm not sure how we escape the viciousness of this circle but doing nothing will lead to nothing but dizziness. And there is certainly enough literature that those of us who care about it can begin to discuss its viability.

Work on teaching and learning needs to be respected as credible scholarship at the same time it serves the information needs of a profession, but these two goals operate at cross purposes. Publication in peer reviewed journals is certainly one way to establish the credibility of the work (and you see any number of the pedagogical periodicals now publishing their rejection rates and using those percentages to equate themselves with top-tier research journals). But are articles in journals, especially articles reporting research, what practitioners need to improve their practice? Most research articles (and most pedagogical publications are including more of them) are anything but kindly reading. They are more likely to cure insomnia than to improve practice.

On the other hand, pedagogical literature has a long history of including material not generally considered credible scholarship. For example, it is quite acceptable for senior teachers, even some not so senior, to publish books that make definitive statements about how to teach and not include one single pedagogical reference. Most pedagogical journals still regularly publish articles based on the wisdom of practice. But these experiential reports, say a faculty member who has devised a unique way to orchestrate participation in a large class, can impact the practice of many teachers.

I don't see the disciplines addressing this second and equally compelling viable-literature-for-the-profession need. What college teachers do in the classroom should be informed--by what we've learned from experience and by what we've discovered empirically. If we are committed to college teaching finally gaining its long over due status as a profession, then we must tackle issues associated with establishing and disseminating the knowledge on which practice should be based.

In this short essay I have written dichotomously about the location of pedagogical scholarship but I don't think this is an either or proposition: either it's embedded in the disciplines or it exists in some place beyond disciplinary boundaries. Currently it exists in both locations and work located beyond disciplinary borders can accomplish some things work within the disciplines cannot. Work beyond disciplines is well suited to explore the unique identity of pedagogical scholarship, its construction as a knowledge base for practice and its viability as a literature to inform and improve practice. However, scholarship located in this venue is not without problems. Space prevents addressing them here. In this space

I wanted to call attention to the issues that discipline-base scholarship presents and challenge the viability of preferring scholarly work on teaching and learning based there.

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