The Scholarship of Teaching: 
Yesterday, Today, & Tomorrow

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Abstract: Ernest Boyer’s Scholarship Reconsidered: Priorities of the Professoriate expanded the definition of scholarship to include the dimensions of discovery, integration, application, and teaching, broadening the ways both faculty and institutions define and examine faculty work. Boyer’s fourth scholarship, the scholarship of teaching, remains without codification. Confusion remains between what differentiates scholarly teaching from the scholarship of teaching and sensibly, how one is to implement either of those into practice. This paper will examine the definitional uncertainty that remains alongside the seminal and current research in the scholarship of teaching. Particular attention will be paid to agreements and uncertainties that have emerged, potential directions for the field to advance and practical implementation issues both in the classroom and institution.

When Ernest Boyer wrote Scholarship Reconsidered: Priorities of the Professoriate in 1990, it is unclear whether he recognized the impact such a small volume would have on faculty. His expansion of scholarship to include the dimensions of discovery, integration (later changed to engagement), application, and teaching broadened the ways both faculty and institutions define and examine faculty work. Almost twenty years later, the topic of scholarship is still very much on the minds of those in academia. In particular, Boyer’s fourth scholarship, the scholarship of teaching, remains without codification. Confusion remains between what differentiates scholarly teaching from the scholarship of teaching and sensibly, how one is to implement either of those into practice. Faculty members active in the scholarship of teaching feel further uncertainty regarding how their teaching scholarship will be valued on both the disciplinary and institutional levels (O’Meara, 2005). This paper will
examine the definitional uncertainty that remains alongside the seminal and current research in the scholarship of teaching. Particular attention will be paid to agreements and uncertainties that have emerged, potential directions for the field to advance and practical implementation issues both in the classroom and institution.

In articulating the scholarship of teaching, Boyer (1990) was attempting to broaden the definition of scholarship to include all aspects of academic work, not simply publishing research. In his words, “surely, scholarship means engaging in original research. But the work of the scholar also means stepping back from one’s investigation, looking for connections, building bridges between theory and practice, and communicating one’s knowledge effectively to students” (p. 16). He goes on to specify knowledge of the discipline, pedagogical procedures, and the ability to transmit, transform and extend knowledge as essential to the scholarship of teaching. Boyer’s relatively loose framework allowed many interpretations and sparked years of debate as to what actually constituted the scholarship of teaching.

Boyer’s failure to articulate the precise scholarly nature of teaching stimulated two questions according to Kreber (2007): What conditions of teaching constitute scholarship? Or, she posits, was Boyer’s intention to imply that all teaching is scholarship? To answer the first question we require an accepted definition of scholarship. Shulman (2004) articulates that an act of intelligence or artistry becomes scholarship when it meets three criteria: first, it must be made public; second, it must be subjected to the critical evaluation of one’s peers; and third, one’s community must begin to develop and build upon the initial act. In light of these criteria, it seems unlikely that anyone would imply that all teaching should be classified as scholarship.

The ambiguity of Boyer’s initial definition of the scholarship of teaching has led to continuing discussion and articulation of definition. Braxton, Luckey, and Helland (2002) labeled the confusion surrounding the definition of the scholarship of teaching as a “conceptual quagmire” (p.106). McKinney (2007) presents a thorough summary of the different conceptualizations of the phrase ‘scholarship of teaching.’ Citing early work of the Carnegie Foundation, one early definition used was “problem posing about an issue of teaching or learning, study of the problem through methods appropriate to the disciplinary epistemologies,
applications of results to practice, communication of results, self-
reflection, and peer review” (from Hutchings & Cambridge, 1999, p.7. as
cited in McKinney, 2007, p.6). This definition emphasizes not teaching
itself, but questions that arise from the teaching process and how
investigations of those questions then get incorporated back into teaching
practice. The notion that the scholarship of teaching may differ across
disciplines and requires a reflection of one’s practices and be subject to
critical evaluation is also important to note. Braxton and colleagues’
(2002) definition contrasts this and puts practice in the spotlight. They
say the scholarship of teaching is the “development and improvement of
pedagogical practices” (p. v).

Wanting a more simplified definition, Weimer (2006) chooses to avoid
the confusion revolving around the term scholarship of teaching and
instead calls the concept pedagogical scholarship. Simply, she defines it
as “published work on teaching and learning authored by college faculty
in fields other than education (Weimer, 2006, p.19). While the objective
of simplification was obtained, by excluding education, the definition
seems too narrow. A partnership between one involved in the field of
education and another in a discipline without training in pedagogy
appears to have the makings of a perfect pairing to engage in the
scholarship of teaching, yet Weimer’s definition would exclude this
union.

Seeking to end the definitional debate and instead focus attention on
institutionalizing the concept of the scholarship of teaching within
universities, in 1998 and 1999, Kreber (2001) undertook a Delphi study
with an international panel of experts in the field of the scholarship of
teaching. The goals of the study were three-fold: (1) to gain expert
agreement on the seminal components of the scholarship of teaching, (2)
to identify and agree upon areas involving the scholarship of teaching
that still remain unresolved, and (3) to suggest possible resolutions for
these problems. The panelists had high agreement and strong group
consensus on eighteen components of the scholarship of teaching and on
twenty-one unresolved issues remaining in the scholarship of teaching;
the items with the highest agreement and the strongest consensus are
detailed below. These items will now guide this discussion.
Exhibit 1.2

*Important Features or Components of the Scholarship of Teaching (Part I of the Delphi Questionnaire) Identified by Panelists*

<table>
<thead>
<tr>
<th>Item</th>
<th>Category 1: High Agreement and Strong Group Consensus</th>
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<tbody>
<tr>
<td>2.</td>
<td>Those who practice the scholarship of teaching carefully design ways to examine, interpret, and share learning about teaching. Thereby, they contribute to the scholarly community of their discipline.</td>
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<tr>
<td>21.</td>
<td>Faculty that practice the scholarship of teaching are curious about the ways in which students learn and the effects of certain practices on that learning.</td>
</tr>
<tr>
<td>32.</td>
<td>The scholarship of teaching has characteristics that make it different from other forms of the scholarship of discovery, integration, and application.</td>
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<tr>
<td>41.</td>
<td>Engaging in classroom research is important but is not sufficient for the scholarship of teaching.</td>
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</tbody>
</table>

(Kreber, 2001, p. 15)

By examining components the scholars believe comprise the scholarship of teaching we gain valuable insight into what is and what is not scholarship. Item 2 reveals that Boyer’s mention of teaching remains valued, but further it is not the teaching itself that comprises scholarship, but rather what has been learned from teaching. In examining practice and sharing knowledge gained one is contributing to the discipline. High agreement on this item demonstrates the scholars’ opinion that a contribution to the scholarship of teaching is not just a contribution to the pedagogical literature, but also a contribution to the literature of the disciplines. Item 21 exposes that scholars engaging in the scholarship of teaching are seeking to improve the discipline, but further there is a consideration for students and the ways that they learn and what faculty can best do to facilitate that learning. This conception is furthered by the more recent referral of the scholarship of teaching as the scholarship of teaching and learning, both will be used synonymously here.
Item 32 reiterated that scholars believe that the scholarship of teaching needs to continue to be distinct from the other forms of scholarship, but included in the expansion of the definition of scholarship. Scholars like Rice (1991) argue that the scholarship of teaching has distinctions apart from the scholarships of discovery, application, and integration, but is still deeply intertwined with them. Rice’s definition of the scholarship of teaching is three pronged: synoptic capacity, pedagogical content knowledge, and what we know about learning. Synoptic capacity is using content knowledge to make linkages between elements of the discipline and the context in which it lies (Braxton, Luckey, & Helland, 2002). Pedagogical content knowledge was first coined by Shulman in 1987 in the recognition that teaching is subject and domain specific. He says, “if different disciplines value particular forms of evidence and argument, narrative and explanation, then their pedagogies should reflect the same forms of representation and exposition” (Shulman, 2002, p. vi). Rice’s pedagogical content follows from this and is essentially the knowledge of how to help students understand the subject matter taught and the conventions associated with a field. It is the best practices of a discipline. Pedagogical content knowledge is a central construct of the scholarship of teaching and learning to other contemporary scholars as well (Paulsen, 2001; Braxton et al., 2002; Kreber, 2001). Finally, there is what we know about learning. With this, Rice was conveying the inquiry of understanding students’ learning process and how they construct meaning of the subject (Braxton et al., 2002).

The final item that garnered both high agreement and strong group consensus was a statement dispelling classroom research of being a sufficient condition of the scholarship of teaching. This notion may be in response to the initial usage of the terms classroom assessment and classroom research interchangeably. In response to Cross and Angelo’s (1988) Classroom Assessment and Research, simple assessment techniques like the one minute paper found usage in university classrooms. These techniques were referred to as research. In later work, Cross and Steadman (1996) made a distinction between research and assessment. They say, “observing students in the act of learning, reflecting, and discussing observations and data with teaching colleagues, and reading the literature on what is already known about learning is one way classroom teachers can implement the scholarship of teaching. It is what we call classroom research” (p. 2, as quoted in Paulsen, 2001). The Delphi study participants do not seem to agree that
classroom research is in itself a form of scholarship. This debate between research and teaching will be discussed later.

Exhibit 1.3
Unresolved Issues Surrounding the Scholarship of Teaching (Part II of the Delphi Questionnaire) Identified by Panelists

<table>
<thead>
<tr>
<th>Item</th>
<th>Category 1: High Agreement and Strong Group Consensus</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The lack of broadly acceptable definitions for the scholarship of teaching, scholarly teaching, excellence in teaching, expert teacher, and research on teaching and learning is an unresolved issue.</td>
</tr>
<tr>
<td>2.</td>
<td>The assessment, recognition, and reward of the scholarship of teaching remains a primary challenge.</td>
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<tr>
<td>3.</td>
<td>Who determines the standards and criteria by which to review and critique the scholarship of teaching (leaning theorists, cognitive psychologists, discipline specialists) has not been resolved.</td>
</tr>
<tr>
<td>7.</td>
<td>The lack of an agreed-upon language for communicating about the scholarship of teaching remains a challenge.</td>
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<tr>
<td>20.</td>
<td>How the new technologies of instruction may influence the development of a scholarship of teaching remains an unresolved issue.</td>
</tr>
<tr>
<td>30.</td>
<td>The links between expertise in teaching and expertise in the scholarship of teaching have not been sufficiently explored.</td>
</tr>
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</table>

(Kreber, 2001, p. 16)

Even more telling from Kreber’s (2001) Delphi study is not what the scholars agree that the scholarship of teaching is, but rather the issues that they have identified as being unresolved. Item 1 reiterates that the field felt a lack of definitional coherence that to some degree still exists. A review of current publications suggests that Shulman’s (2000) definition of the scholarship of teaching has risen to become the standard. He says, “We develop a scholarship of teaching when our work
as teachers becomes public, peer-reviewed critiqued, and exchanged with members of our professional communities so they, in turn, can build on our work. These are the qualities of all scholarship” (p. 158). Excellence in teaching and expert teacher are only peripherally mentioned in the scholarship of teaching literature. Those who are excellent or expert teachers, as defined by any number of measures, are not necessarily engaged in the scholarship of teaching. Unless a teacher is meeting Shulman’s criteria of scholarship they are not practicing the scholarship of teaching regardless of their excellence. The same idea applies to item 30. The differentiation between expert and novice in teaching or in the scholarship of teaching has not been readily explored.

Hutchings and Shulman (1999) address the difficult nature of discerning between scholarly teaching and the scholarship of teaching. They argue that all faculty are responsible and obligated to approach teaching with the aim to “engage students and to foster important forms of student learning” (p. 13). However, when good teaching entails “creating practices of classroom assessment and evidence gathering, when it is informed not only by the latest ideas in the field but by current ideas about teaching the field, when it invites peer collaboration and review, then that teaching might rightly be called scholarly, or reflective, or informed” (p.13). Hutchings and Shulman further extend their criteria for scholarly teaching to meet their definition of the scholarship of teaching. In addition to the conditions quoted above, for one to practice the scholarship of teaching the teaching must be community property, available for evaluation, and presented so that others can continue to build upon it. These definitional distinctions have been supported by other scholars in more recent writings (Paulsen & Feldman, 2006; McKinney, 2007).

The last clause of item 1 is the trickiest. The International Society for the Scholarship of Teaching and Learning conceptualizes the scholarship of teaching and learning as the bridge between teaching and research. As depicted in the Figure 1, teaching is all of the activities a faculty member engages in relating to students, scholarly teaching is a smaller subset of this that is teaching informed by pedagogical literature and practice. The research circle is Boyer’s scholarship of discovery. When one conducts research on teaching and learning, one is bridging the gap between teaching and research and conducting the scholarship of teaching and learning. The implication is that in conducting the scholarship of
teaching one is participating in teaching, scholarly teaching and research simultaneously.

Items 2 and 3 regarding the critique and assessment of the scholarship of teaching are matters institutions are continuing to wrestle with as the scholarship of teaching and learning is more widely accepted and encouraged in postsecondary education. In Scholarship Assessed, Glassick, Huber, and Maerooff (1997) articulate six criteria for the evaluation of scholarship. Colbeck and Michael (2006) have interpreted these criteria to the following: work is scholarly if the scholar has “(1) stated important and achievable goals, (2) demonstrated adequate knowledge of the relevant literature and skills, (3) applied appropriate methods effectively, (4) achieved goals that add to knowledge in the field, (5) presented results for review by a community of peers, and (6) publically shared and critically reflected on the value of the work” (p.8). These criteria seem to present a defined enough structure such that identifying and evaluating forms of scholarship could be rather mechanistic and regimented, however, there is still disagreement as to the value of different forms of scholarship.

**Figure One**
Uncertainties Surrounding the Scholarship of Teaching

One uncertainty surrounding the scholarship of teaching is the value placed upon it by colleagues and in promotion and tenure decisions. Braxton, Luckey, and Helland (2002) set out to investigate the extent to which faculty members and institutions have embraced and engage in the four domains of scholarship. After surveying 1,424 faculty members, they discovered that the scholarship of discovery continues to be viewed as the most legitimate and acceptable form of scholarship. To expand the concept of what counts as scholarship, Braxton et al. (2002) outline dimensions of scholarly activities, unpublished scholarly outcomes, and publications that are all methods to make an individual’s scholarship of teaching visible and subject to peer review and implementation. They argue that institutional mission should play a primary role in determining which form of scholarship is most valuable for promotion and tenure decisions.

A second uncertainty surrounding the scholarship of teaching is the lack of agreed upon language for communicating about the scholarship of teaching. This is a natural extension of not having a solid definition of the concept. When the field agrees on what the scholarship of teaching is, natural definitions will flow from that. Despite the lack of codification, there has been some attempt to define commonly used terms. The Visible Knowledge Project (http://cndls.georgetown.edu/crossroads/vkp/) housed at Georgetown University has a web-based glossary of commonly used terms aimed at those attempting to implement the scholarship of teaching into their practice. Though quite brief, it is a first step in building a common knowledge base and hopefully one that will continue to be enhanced. Having a common language will assist institutions and departments in having conversations surrounding the scholarship of teaching.

Also in question regarding the scholarship of teaching is the role new technologies of instruction will play in the development of a scholarship of teaching. Certainly, the prevalence of electronic media on college campuses has the potential to both enhance and harm the scholarship of teaching. Focusing on the positive, the internet and web based tools allow faculty another avenue to reach students and peers. Online blackboards mean that virtual discussions can occur outside of class and
office hours. New media may provide a level of comfort or anonymity that a student cannot obtain in a classroom setting. Also, initiatives like the Carnegie Foundation’s Knowledge Media Laboratory (http://www.carnegiefoundation.org/programs/index.asp?key=38) offer an outlet for making one’s scholarship publically available for implementation and critique. As technology continues to evolve, its use will remain unresolved. But, as scholars of teaching persist investigating and publishing on technology’s many usages and successes, beneficial utilization practices will proliferate.

Thus far, this paper has discussed the difficulties in defining the scholarship of teaching and some of the uncertainties that remain in the field. Items from Kreber’s (2001) Delphi study with high levels of agreement and group consensus have guided the discussion of accepted concepts regarding the scholarship of teaching and those concepts that remain unresolved. Attention has been given to supplement Kreber’s unresolved concepts with recent publications to demonstrate if any further resolution has been met. There is value to codifying definitions and resolving intellectual debates, however the scholarship of teaching is in practice despite the uncertainties. The next section will discuss this.

**Classification of the Scholarship of Teaching**

At this point, discussion will shift away from conceptualizing the scholarship of teaching and toward the more practical aspects of its acceptance in institutions and the publication milieu. Weimer (2006) argues that a close examination of the previously published scholarly work is necessary to advance the discipline. She correctly states that this task has not been undertaken in the past and is necessary for both the discipline and the practice. Citing Braxton, Luckey, and Helland’s (2002) finding that 75 percent of the sample of faculty members had not published in the domain of the scholarship of teaching within the prior three years, Weimer believes that faculty shy away from pedagogical scholarship because they do not see their colleagues conducting this research and they do not see it valued at the institutional level. Obtaining credibility through classifying existing literature seems like a stretch, but establishing distinguishing characteristics of pedagogical scholarship and finding exemplars of those is the building block to recognition. Furthermore, for college teaching to be respected as a profession a body of literature must be linked to it. Beyond that, practitioners must call
upon and utilize the literature to improve their teaching and hopefully gain the confidence and investment in the discipline to want to advance it by publishing scholarship of teaching themselves.

Weimer’s (2006) classification system involves two streams, literature invoking the wisdom of practice and literature describing research. Research scholarship is further divided into three areas: quantitative investigations, qualitative studies, and descriptive research. Mirroring scholarship in the social sciences, quantitative investigations are experimental in nature and utilize treatment and control groups with an intervention. Qualitative studies are newer in pedagogical literature and fewer exist. These studies utilize the natural environment of the subject and results are analyzed interpretively (Weimer, 2006). Finally, descriptive research is just that, data (usually survey) is collected and then described and interpreted. There is no judgment implied as to which stream is most valuable, rather all are viewed as increasing the knowledge base.

Wisdom-of-practice literature is what Weimer (2006) calls practitioner’s writings based on their pedagogical experience. She subdivides wisdom-of-practice into personal accounts of change, recommended-practices reports, recommended-content reports, and finally, personal narratives. In personal accounts of change literature the practitioner analyzes a change (in technique, strategy, or approach) and the result of that change in the classroom (Weimer, 2006). Essentially, some portion of the practitioner’s teaching has changed and this is a description of the circumstances that brought about the change and the consequences and results for both the students and the teacher. The second and third types of wisdom-of-practice literature are both recommendations from the practitioner. This advice giving literature can either be focused on recommending a practice for some aspect of instruction or recommending devices to explain course content and further what content is recommended for a certain degree or course (Weimer, 2006). The final type of wisdom-of-practice literature is the personal narrative. Personal narratives are unique in that they are reflections of a practitioner that rely on opinions, judgments, ideas and insights gained over a career (Weimer, 2006).

Weimer’s (2006) typology of pedagogical scholarship one of the beginning steps to establishing a baseline of credible scholarship. To
make scholarship on teaching more viable for the enhancement of the profession, she suggests four possibilities: scholarship must have an impact on instruction, it must contribute to a coherent knowledge base, it must assist in maintaining professional standards, and finally, it must be well written and enjoyable to read. That said, Weimer insists that the scholarship of teaching be accessible for those seeking to engage in it frequently and those just wanting a bit of experience. She argues that keeping expectations manageable will encourage more faculty to participate. This will broaden the knowledge base and with more participation one would also expect to have more readers of the literature. Increased exposure amongst practitioners will then translate to more scholarship of teaching. When this type of work becomes common in postsecondary education it will be more difficult for those making promotion and tenure decisions to avoid.

Institutionally, it seems to be of nothing but benefit for universities to promote the scholarship of teaching to their faculty and the best way to promote broader views of scholarship is to account for them in the tenure and reward structure. Boyer (1990) emphasizes that liberal arts colleges in particular should embrace the scholarship of teaching because it fits with the institutional mission of a liberal arts school. This aligns with Diamond’s (1993, 1999) assertion one essential attribute of a promotion and tenure system is that it supports the institutional mission of the school. The ultimate goal of the scholarship is to enhance teaching and learning which is perfectly aligned to the consumers of colleges, students. When classroom instruction becomes better students learn more and look more favorably on the university which can only enhance reputation and prestige.

Diamond’s (1993, 1999) second characteristic of tenure and promotion systems is that they must be sympathetic to the differences in discipline. Individual disciplinary societies have placed different emphasis on the importance of teaching in promotion and tenure decision-making in their official rhetoric (Diamond & Adam, 2000). Different disciplines have different levels of publication productivity and the reward structure should recognize that (Braxton, Luckey, & Helland, 2002). However, rallying faculty around enhancing the scholarship of teaching can help build multidisciplinary communities across the university and increase productivity. Diamond’s third criteria for an effective promotion and tenure system is that faculty must believe that the system is equitable.
For an institution to embrace all four of Boyer’s domains of scholarship is one way to accomplish this.

Universities can also benefit from the scholarship of teaching because it can reenergize established faculty. Studies show professors tend to become less productive later in their careers, so by opening a new line of research to them it may boost productivity and possibly satisfaction. University teaching is very contained and solitary (Nation & Evans, 2000). Examining one’s own teaching and putting aspects of it on display to others can improve not only the initial scholars teaching, but those who critique it. Promoting opening teaching to a wider audience than simply students reinforces a university’s reputation of scholarly excellence. People show off things they are proud of and a university encouraging the display of what happens inside classrooms is a tacit acknowledgement of approval of faculty. However, the changing tide has not come without tension. Huber’s (2004) monograph highlights struggles and successes of scholars implementing the scholarship of teaching into practice across a variety of disciplines and institutions. In “making work that matters work that counts” (Huber, 2004, p. 3) scholars encountered consequences to the progression of their careers, promotion and tenure.

Proliferation of Centers for Teaching across university campuses is evidence that pedagogical scholarship is finally gaining recognition and promotion on some campuses. It seems that institutions are making an effort to encourage the scholarship of teaching among faculty. However, despite the existence of trainings and centers, there is still a need for an attitudinal shift amongst faculty. Engaging in the scholarship of teaching in one’s own classroom on a small scale, and even more, encouraging and assisting colleagues to do the same, can be the impetus the scholarship of teaching needs to gain widespread acceptance. McKinney (2007) asserts that the scholarship of teaching and learning and an institutional culture that promotes and values teaching and learning have a reciprocal relationship. She lists various factors she personally and anecdotally views as valuable to developing a culture of teaching and learning. Factors she lists include many discussed in this paper: shared language, integration with mission, use of the reward system, and teaching centers, among others. She stresses that changing culture in an institution toward valuing the scholarship of teaching and learning needs to happen from the top-down, with the institution basing decisions on the
impact of student learning, but more importantly, from the bottom-up, with professors actually applying the scholarship of teaching and learning.

In teaching skillfully, practicing scholarly teaching, and then examining one’s practices using the scholarship of teaching, one is improving practice and more importantly improving ways to promote student learning. Having excited and engaged students is servicing the discipline by promoting tomorrow’s scholars to enter the field. The problem remains that most doctoral students are not receiving pedagogical training and so enter the classroom with content knowledge but not the best practices to transmit that knowledge to students. The scholarship of teaching is education training for those outside of the field of education and just as valuable and necessary as Boyer’s other three domains of scholarship.

**Recommendations for the Future**

Institutions should seize the opportunity to embrace the scholarship of teaching throughout their college and university. To this end, I offer the following suggestions:

Create and support a pedagogical center on campus. Funnel resources toward ensuring new professors, contingent faculty, seasoned scholars, and graduate assistants have the training and support to be effective instructional leaders.

Breed the attitude that quality pedagogy is valued. Reward not just media mentions and research breakthroughs, but also faculty that are making an impact with the institution’s students.

Teaching must be considered fully in the tenure and review process. Excellence in teaching cannot simply be determined through student evaluations, but also through observation, and self-reflection. Scholarship in teaching advances the discipline, department and institution and should be rewarded.

Make a conscious effort to contribute to the discussion of the scholarship of teaching. Contribute to the literature, read the latest publications, and share favorites with colleagues.
Increasing the visibility of pedagogical scholarship, rewarding excellence in pedagogy in the classroom and as a legitimate form of research, and transmitting positive valuation of the scholarship of teaching in the indoctrination process of new and future faculty are all fruitful paths to superior teaching. Classrooms of students deserve nothing less.

References


