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The Scholarship of Teaching and Learning: An Opportunity for Clinical Faculty Members in Academic Pharmacy and Other Health Professions to Develop a Program of Scholarship

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Expansion in academic pharmacy and other health professions has increased the demand for clinical faculty members. The requirement to provide clinical service is unique to clinical faculty and creates a competing demand with the expectation to excel in the tripartite missions of their institution. The efforts of clinical faculty are heavily focused towards the institution's educational mission. However, often they lack formal training in educational methodology and require ongoing professional development to hone their teaching skills. Therefore, as clinical faculty develop as scholarly teachers, the scholarship of teaching and learning (SoTL) represents an ideal form of scholarship for them to pursue. This essay provides guidance on how clinical faculty members in academic pharmacy and other health professions can transform the act of teaching into scholarly teaching to develop a program of scholarship in SoTL.

Keywords

Scholarly teaching, scholarship of teaching and learning, academic pharmacy, clinical faculty members, promotion and tenure, faculty development

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Abstract

Expansion in academic pharmacy and other health professions has increased the demand for clinical faculty members. The requirement to provide clinical service is unique to clinical faculty and creates a competing demand with the expectation to excel in the tripartite missions of their institution. The efforts of clinical faculty are heavily focused towards the institution's educational mission. However, often they lack formal training in educational methodology and require ongoing professional development to hone their teaching skills. Therefore, as clinical faculty develop as scholarly teachers, the scholarship of teaching and learning (SoTL) represents an ideal form of scholarship for them to pursue. This essay provides guidance on how clinical faculty members in academic pharmacy and other health professions can transform the act of teaching into scholarly teaching to develop a program of scholarship in SoTL.

Introduction

In the past decade like many other health professions, academic pharmacy has witnessed tremendous growth resulting from the development of new programs and the expansion of existing programs. This growth coupled with the natural retirement of a generation of faculty greatly increased demand for clinical faculty (Brown, 2013). The accreditation standards for the professional program in pharmacy mandate all faculty members must be committed to the pursuit of research and other scholarly activities (Accreditation Council for Pharmacy Education, 2011). To advance the profession, science, and facilitate individual career advancement, emphasis is placed on all full-time faculty, including clinical faculty members, to maintain a consistent record of scholarship through publishing (Chisholm-Burns, 2012).

The faculties of colleges and schools of pharmacy are comprised of practice-oriented (i.e. clinical faculty) and non-practice oriented members. The provision of clinical service is unique to practice-oriented faculty in pharmacy and other health professions, and creates a competing demand with the expectation to excel in the teaching, research and service missions of their institution (Smesny, et al., 2007). Not surprising, clinical faculty members often find it challenging to pursue scholarship (Robles, et al., 2009). While they recognize engaging scholarship is required for their career advancement, many disagree with this requirement or believe the

importance of scholarship to their career advancement is overemphasized (Robles, et al., 2009).

As former chair of a pharmacy practice department in a publicly supported college of pharmacy I recognize the efforts of clinical faculty are heavily focused towards the institution's educational mission, and the opportunity to teach likely heavily influenced their career choice to enter academic pharmacy (Peirce, et al. 2008). Therefore, I believe the scholarship of teaching and learning (SoTL) is an ideal form of scholarship for clinical faculty members in pharmacy and other health professions to pursue.

This essay provides my views on how clinical faculty members in academic pharmacy can transform the act of teaching into scholarly teaching to develop a program of scholarship in SoTL. In doing so, the essay will briefly review the relationship between scholarly teaching and SoTL; illustrate ways to determine the value schools and colleges of pharmacy place on SoTL, provide insight on how clinical faculty members can effectively convey the scholarly nature of their teaching efforts for career advancement, and how they can engage in SoTL to benefit their institution and advance their career. While this essay focuses on clinical faculty members in academic pharmacy, it is hoped that concepts addressed herein are applicable to other disciplines, particularly those in the health sciences.

Scholarly Teaching and the Scholarship of Teaching and Learning

The scholarship of teaching has been the toughest Boyer's forms of scholarship to interpret and implement (Glassick, 2000). In some respects SoTL has been perceived differently than other forms of scholarship. In addressing the question of how the quality of scholarship is measured, Glassick, Huber, and Maeroff (1997) drew from expansive sources to investigate common standards among three of the forms of scholarships (discovery, integration and application) including review of hiring guidelines, tenure and advancement practices from many colleges. They also sought input from many granting agencies, scholarly press directors, and editors of scholarly journals. The input sought from these individuals focused on the decision process, criteria, and indicators they use to determine the scholarly merit of proposals and manuscripts (Glassick, 2000). However, to investigate elements of assessment the scholarship of teaching had with other forms of scholarship, their sources were limited to a review of instruments institutions use to obtain input from students and peers to evaluate college teaching (Glassick, et al. 1997).

I have served as a member of, and chaired the promotion and tenure committee at my institution; I have also provided external peer review for a number of schools and colleges of pharmacy in the United States. I believe many promotion and tenure committees struggle with assessing excellence in teaching. Teaching is often evaluated based upon basic or subjective

measures (e.g., contact hours, number of courses and students, student evaluations, internal peer reviews, and awards for teaching “excellence”). In addition, one’s accomplishments in the teaching mission are often viewed by promotion and tenure committees from the perspective that all faculty members are inherently qualified to teach, and since it is a basic responsibility of all faculty members, the activity requires little time or sustained effort (Kennedy, et al. 2003). In my opinion, such views stem from confusion surrounding the terms “scholarly teaching” & “SoTL”. In order to be considered scholarship, scholarly teaching must be made public; peer reviewed and critiqued according to accepted standards, and be reproducible and capable of being advanced by others (Shulman, 1999). Thus, SoTL involves two components, scholarly teaching and the subsequent production of scholarship from that effort (Richlin, 2001).

The Process of Scholarly Teaching and How It Relates to SoTL

Richlin (2001) notes the steps taken to engage in scholarly teaching are like any other scholarly endeavor, and begin with identifying the issue of interest (e.g., what one wants to do, improve, change or assess). Like any scholarly endeavor, the next step is to document the current state of the issue of interest. Skipping this step makes it impossible to determine the effectiveness of the subsequent intervention and will doom any scholarly endeavor, including scholarly teaching, to failure. Once this step is completed, in any scholarly endeavor it is essential to study past attempts and the prior approaches used to address issue of interest. Doing so enables the scholar to avoid repeating ineffective practices and builds upon what is already known in the given field (Richlin, 2001). This step is critical to selecting a method that will best facilitate the scholar in achieving their stated objective. Once selected, a method must be implemented, systematically observed, and its results recorded and analyzed. At this point a scholarly endeavor can be assessed to determine if it met its objective and subjected to peer review.

I believe clinical faculty members in academic pharmacy and other health professions are well positioned to follow the steps outlined by Richlin (2001), and engage in scholarly teaching. To start they must understand the possible opportunities to be innovative, or the issues to improve, change or assess are limited only by their desire to continually evolve as an educator. For example, clinical faculty can desire to improve learning in a class module, experiential education setting or practice setting; increase student engagement, or evaluate whether mobile technology, like computer tablets, improves an aspect of learning or their skills as an educator. Once they have identified an issue and its present state, learning what has been tried in the past will ensure their efforts are not in vain, enhance their understanding of the field and improve their ability to advance what is already known. After systematically documenting their observations and analyzing the results,

clinical faculty members can subject their efforts to peer review by standard course assessment procedures. Scholarly teaching then occurs when the teacher applies the new knowledge they gained to their practice (Richlin, 2001). Thus, by comparing the results of their efforts to their baseline observation, clinical faculty members can determine how effectively their method achieved its objective, and adjust their teaching methods or coursework accordingly. Finally, they can summarize the ongoing impact of this scholarly teaching on their teaching and the resulting learning in annual performance evaluations and a promotion dossier.

According to Richlin (2001), SoTL builds on the end product of scholarly teaching through the production of scholarship from that effort. After completing a scholarly endeavor any faculty member must decide whether the findings warrant the effort to create scholarship through formal peer-review by experts in the field and dissemination to the scientific community. With most forms of scholarship, this decision often depends primarily on the significance and impact, or lack thereof, of results in the context of the broader field. However, unlike other forms of scholarship, when engaging in SoTL, faculty members often must also consider whether the time and effort necessary to subject their findings a second peer review, and to develop the material into a manuscript suitable for dissemination will be appropriately rewarded by their institution in performance evaluations, career advancement or other forms of institutional support. Thus, in order to successfully engage in SoTL, clinical faculty members in academic pharmacy and other health professions must gauge the institutional culture towards such scholarship, and develop strategies to overcome any institutional bias or apathy towards SoTL.

SoTL and Institutional Culture: How to Gauge the Value of SoTL to Schools and Colleges of Pharmacy

In recent years, graduate pharmacists have received more teaching skills development as part of their graduate residency training programs. Such development opportunities, delivered in the form of a teaching certificate program have increased in popularity and seek to better prepare graduate pharmacists to teach prior to their first academic appointment. However, currently the content of these certificate programs is not standardized and is limited in scope (Ratka, et al. 2009, Havrda, et al., 2013). Therefore, upon first academic appointment, many clinical faculty members are not professionally trained educators. Without further faculty development opportunities, the lack of significant formal training may inadvertently cause many clinical faculty members to view teaching as an important, but perfunctory job task rather than a scholarly career endeavor. In addition, although more attention is being paid to training future clinical faculty members to teach, there are undoubtedly a number of institutions where faculty members interested in SoTL often receive little institutional support

or reward and thus either do not pursue their research interests in SoTL or abandon their efforts prior to dissemination in a peer-reviewed manner (Popovich & Abel, 2002).

Clinical faculty members interested in making SoTL the foundation of their scholarly efforts can gauge its value to the institution, and the institutional culture towards engaging in this form of scholarship by asking: "Does their institution demonstrate pride in its teaching enterprise?" An institution that is proud of its teaching enterprise will show it by making investments to maintain its excellence in the educational mission. These investments can include providing faculty members clear expectations and feedback; making the commitment to continually developing teaching skills among their faculty, and rewarding teaching excellence in a meaningful way (Piascik, et al., 2011a & 2011b). By taking these steps an institution will inform, train and motivate faculty members to approach teaching in a scholarly fashion rather than as a duty.

Institutional investment 1: Providing clear expectations and feedback

If an institution does not have pride in its teaching mission, it likely will not place much value on SoTL and will not make investments to maintain excellence in the education mission. Scholarly teaching is required to produce or engage in SoTL. When excellence in the education mission is not maintained, scholarly teaching will be the exception rather than the norm. Moreover, an institution that values scholarly teaching must also value SoTL; without scholarly teaching, there can be no SoTL. How an institution values its teaching mission is often reflected in its promotion and tenure document. Realistically, how the teaching mission is presented and weighted in that document influences how most faculty members invest in their teaching effort. Thus, the value an institution places on scholarly teaching should be evident in their definitions of teaching excellence in promotion and tenure criteria. Institutions that value scholarly teaching will incorporate its qualities and elements into their definitions of teaching excellence.

Institutional investment 2: Commitment to continuous professional teaching skills development for faculty

In order for faculty members to produce SoTL, an institution must do more than merely state its commitment to its teaching enterprise; it must invest in it through teaching skills development. If the goal is to foster SoTL, faculty members must be provided the tools needed to deliver scholarly teaching. Just as research skills development in grantsmanship fosters the scholarship of discovery, teaching skills development can foster the SoTL. Such an investment can be made by offering teaching skills development programs at the school or college, partnering with other units within the

university, or encouraging and supporting faculty members to take advantage of programming offered through national professional organizations.

Institutional investment 3: Recognizing and rewarding teaching excellence in a meaningful way

Emphasis on recognizing teaching excellence in academic pharmacy is common and continues to grow (Kalis & Kirschenbaum, 2008). There are many ways teaching excellence is recognized in academic pharmacy, but formal criteria for such awards are variable or absent (Piascik, et al., 2011b). The impact of programs to recognize teaching excellence has been debated in the literature. Whether the awards truly reflect institutional commitment to - or have the desired impact on - promoting and showcasing teaching excellence is unclear (Piascik, et al., 2011b). Those lacking formal criteria may be viewed as popularity contests, but if properly designed such programs likely achieve their goal and produce other tangible benefits that can motivate faculty members to improve their teaching skills through faculty development (Piascik, et al., 2011b).

How Clinical Faculty can Convey the Importance of Their Teaching for Career Advancement

Even if the institutional culture is supportive of SoTL, clinical faculty members are responsible for conveying the importance of their teaching to the promotion and tenure committee. Unfortunately in my experience, many clinical faculty members rely solely on traditional measures in their attempt to convey the importance of their efforts and make the case that they have demonstrated excellence in the institution's teaching mission. The traditional measures they use, including contact hours, number of courses, number of students, student evaluations, internal peer reviews, and awards for teaching "excellence", are important, but pretty mundane. While such measures certainly capture the perfunctory nature of the job of teaching, they do very little to convey anything scholarly about teaching. Moreover because most clinical faculty members are not trained educators, relying solely on the traditional measures to evaluate teaching excellence can advance the misconceptions that all faculty members are natural teachers and that teaching is an activity that like riding a bike requires little effort. Both misconceptions further hinder promotion and tenure committees' ability to evaluate the excellence of faculty member's teaching effort.

While clinical faculty members may have difficulty conveying the importance of their efforts, promotion and tenure committees have traditionally struggled to define "Teaching excellence". This difficulty arises because the instruments and traditional measures used to assess and quantify teaching excellence in an institution may be inadequate to identify

scholarly teaching (Kennedy, et al. 2003). The traditional measures that are often used to assess teaching are somewhat subjective and may not always measure characteristics related to teaching, particularly if they rely solely on student assessments.

If the institution is heavily focused on its research mission at the expense of its teaching enterprise, clinical faculty members may have to contend with institutional biases when attempting to convey the importance of their teaching to the promotion and tenure committee. For example, some committee members may value one scientific discipline or favor one form of scholarship over another. Obviously, such views ignore Boyer's expanded definitions of scholarship, and do not recognize that all scholarship, so long as it is scientifically sound, helps the institution achieve its missions. While SoTL may not attract significant resources, it fosters curricular innovations and further enables the institution to demonstrate excellence to its stakeholders, including accrediting bodies.

Successful advancement of clinical faculty members can only occur if all parties involved in promotion and tenure process recognize that all pharmacy academicians have a role in shaping the future of the profession, and doing so requires taking a scholarly approach to all of our efforts. Moreover all parties must recognize SoTL offers the opportunity to apply our scientific training to education for the betterment of our students. Lastly, SoTL provides many humanistic benefits to those who engage in this form of scholarship. It can provide an additional creative outlet to faculty members and be quite rewarding. Just as clinical faculty members should minimize reliance upon traditional measures to convey the importance of their efforts, promotion and tenure committees should not merely reward the act of teaching. Instead faculty members must go beyond using only traditional means to characterize their teaching effort and the promotion and tenure committee must recognize and value teaching that advances knowledge, stimulates active learning, and seeks to instill lifelong learning skills in students. To successfully convey the importance of their teaching efforts to the promotion and tenure committee, clinical faculty members must transform the act of teaching into scholarly teaching and SoTL.

How Clinical Faculty Members Make SoTL the Foundation of Their Scholarly Efforts

Scholarly teaching becomes SoTL when it demonstrates knowledge of the field and current findings about teaching (Richlin, 2001). It can also broaden one's perspective beyond the classroom. Clinical faculty members must recognize opportunities to engage in SoTL are present in all their teaching efforts. Their opportunities to engage in SoTL include but are not limited to, characterizing course effectiveness, describing innovation, exploring aspects of instructional design and assessment, integrating technology and using a variety of teaching techniques that are emerging paradigms in pharmacy or

other health professions education. In any of these opportunities there lie a plethora of questions that need to be tackled. Alternatively clinical faculty members need look no farther than their last teaching evaluation to form their next research question.

When I served as chair of the practice department, I scanned the table of contents of scholarly journals focused in pharmacy education and would identify manuscripts on topics that I knew our clinical faculty members could address or had addressed for a long time. I also scanned the pharmacy practice literature for manuscripts that addressed patient education or interprofessional education provided by pharmacists that were applicable to our clinical faculty members. After scanning the table of contents of the scholarly journals I would send what I found to the appropriate clinical faculty member(s) in hopes of prompting them to look at the field and recognize where they could add to the body of literature.

Table 1. Opportunities for Clinical Faculty to Engage in SoTL

Area	Example of Issues to Study
Course effectiveness	<ul style="list-style-type: none"> • student performance outcomes • how a course impacts professional awareness • student learning & curricular effectiveness
Innovation in Teaching	<ul style="list-style-type: none"> • the impact of technology • acceptance/understanding of a new topic • novel teaching methods
Instructional design & assessment	<ul style="list-style-type: none"> • implementation, efficacy of online exams • peer assessment • application of existing tools/resources to assessment of teaching

Table 1 lists representative issues that our clinical faculty members tackled based on their daily teaching efforts that were the basis of their efforts to engage in SoTL. In tackling these issues or others, clinical faculty members in my department identified gaps, implemented scholarly teaching methods to provide a solution to the issue and assessed the impact of their efforts. Often their scholarly teaching informed their future teaching efforts, augmented one of the department's course offerings, enhanced the faculty member's patient care services, and/or their clinical teaching efforts. More importantly, many clinical faculty members in my department were able to engage in the SoTL by subjecting their scholarly teaching efforts to local and

national peer review and ultimately disseminate their work as a scholarly manuscript or even a book chapter. In certain cases, the initial efforts of some clinical faculty served as a template to develop additional SoTL in their field or expand the scope of their work beyond the classroom to contrast what other health professions had done to address issue of interest to the clinical faculty member. Still others translated their efforts directed towards our institution's service mission into scholarly teaching and ultimately into SoTL. Through their service activities they recognized a gap in our course offerings and their scholarly teaching initially augmented our elective course offerings. Ultimately this effort laid the groundwork to implement a core course during curricular re-organization efforts and led to SoTL.

Barriers Clinical Faculty Must Overcome to Make SoTL the Foundation of Their Scholarly Efforts

Opportunities to engage in SoTL surround clinical faculty members, but so too do barriers. Below are barriers that clinical faculty members encounter as they engage in SoTL, and some strategies they can employ to overcome these impediments.

Barrier 1: Time and Effort

As a former practice department chair, I know clinical faculty members have practice and teaching (didactic and experiential) demands that leave little time for scholarship. This barrier is also common to clinical faculty members in other health professions (Smesny, et al. 2007). To overcome this barrier clinical faculty must view their practice site as their lecture hall and their lab. Clinical practice and education are inextricably linked, thus clinical faculty should focus their scholarly interests in their teaching efforts rather than solely on their clinical specialty. As discussed above, opportunities to engage in SoTL surround clinical faculty. In viewing their practice sites as their lecture hall, clinical faculty must draw from, and highlight it in all their scholarly teaching efforts. They must also recognize teaching occurs in a variety of settings beyond a classroom, including clinics, pharmacies, or on a ward. Therefore clinical faculty actually educate many types of "students" who need scholarly teaching, including patients and other healthcare professionals. Where there is scholarly teaching there can be SoTL. In fact a common theme in all my clinical faculty members' efforts summarized above was that they viewed their practice site as their lecture hall and their lab. The practice site informed their scholarly teaching, produced SoTL, and supported the institution's teaching mission. Viewing their practice site in this manner broadens clinical faculty members' perception of teaching; it allows them to identify ways to innovate, collaborate, evaluate and disseminate, and transform their practice site into their lab.

Barrier 2: A Narrow Institutional Definition of Scholarship

Historically, institutional recognition of other forms of scholarship over SoTL has been a deterrent to clinical faculty in pharmacy and other professions to engaging scholarship (Kennedy, et al., 2003; Smesny, et al. 2007). When the institution defines scholarship narrowly, clinical faculty members can attempt to change the culture by themselves, which is a significant undertaking that will take time and likely will be unsuccessful. Instead, clinical faculty members should build their skills and identify issues related to their efforts that fill a gap that impacts them. By demonstrating excellence and producing data that address local issues, they may inspire others to join their efforts or at least gain the attention of institution leadership. Either way a critical mass may then develop and generate the momentum needed to change the culture.

Barrier 3: Vague Career Advancement Guidance

Many promotion and tenure policy documents are vague, often by necessity. Traditionally they are intended to serve as a roadmap for success, not to function as a GPS to advancement. Lack of appropriate promotion and or tenure guidelines for clinical faculty members is a common barrier in academic pharmacy and other health professions (Smesny, et al. 2007). Clinical faculty members can overcome the inherent vagueness of their institution's promotion and tenure policy with data and documentation that tie their accomplishments back to the institutional mission. If clinical faculty members use a scholarly process to demonstrate their work led to improvements in teaching methods, course design or student outcomes, mission excellence will be evident.

Barrier 4: Lack of Mentors and Mentorship

Like many health professions, lack of mentors and mentorship in pharmacy academia is common (Smesny, et al. 2007). This barrier can be overcome by broadening one's definition of a mentor. In fact, SoTL is more amenable to this than other forms of scholarship, because clinical faculty members likely have many scholarly teachers as their colleagues. If qualified mentors are truly lacking in an institution, clinical faculty should look outside their institution locally and nationally to identify someone they respect who can help them. Professional organizations and their meetings are great for networking and perhaps starting a mentoring relationship. In broadening their definition of mentors, clinical faculty members may find it takes more than one mentor. If it does, so be it, individuals can have multiple mentors, mentors for different efforts, and mentors from different professions.

Barrier 5: Lack of Extramural Funding

In past decade extramural funding for all forms of scholarship has become harder secure. However, with SoTL, extramural funding has always been scarce because few funding sources solely devoted to the SoTL exist. Thus, all academicians engaged in SoTL should look to intramural sources, discretionary accounts, other local sources like the state or even professional organizations. The good news is that most SoTL projects actually require little if any funding.

Barrier 6: Research Regulatory Barriers

With many forms of scholarship, regulatory barriers exist. SoTL is no different, however the regulatory issues are fairly predictable standard. Professional students are a vulnerable population, in addition to human subject protections considerations required by federal standards (e.g., respect for person, beneficence, justice), clinical faculty members engaged in SoTL may also have to comply with other regulations related to privacy and confidentiality included in the Health Insurance Portability and Accountability Act or the Family Education Rights and Privacy Act. Fortunately, issues related to these regulations are widely known and easily manageable. To overcome this barrier clinical faculty members should seek guidance from research regulations and compliance experts at their institution.

Concluding Comments

In order to transform their efforts into SoTL and convey the importance of their teaching efforts during the promotion and tenure process, clinical faculty members in academic pharmacy and other health professions must approach teaching in a scholarly fashion rather than as a perfunctory duty. To engage in SoTL, clinical faculty members need an institutional commitment to the education mission that recognizes and values scholarly teaching. Individual clinical faculty members must also demonstrate creativity and recognize scholarly opportunities that surround them daily. Clinical faculty members possessing this awareness can transform the act of teaching into SoTL by recognizing their practice site's potential, identifying issues related to their efforts that fill a gap and impacts them, and relating their work back to their institution's missions. Lastly, clinical faculty members must recognize that like other forms of scholarship, barriers exist to engaging in SoTL, but they are not insurmountable if they learn to innovate, collaborate, evaluate and ultimately disseminate!

References

Accreditation Council for Pharmacy Education.2011. Accreditation standards and guidelines for the professional program in pharmacy leading to the

- Doctor of Pharmacy Degree, version 2.0. <https://www.acpe-accredit.org/deans/standards.asp> Accessed October 11, 2013.
- Brown DL. A looming joblessness crisis for new pharmacy graduates and the implications it holds for the academy. *Am J Pharm Ed* 2013;77(5):Article 90.
- Chisholm-Burns MA, Spivey C, Martin JR, Wyles C, Ehrman C, & Schlesselman LS. A 5-year analysis of peer-reviewed journal article publications of pharmacy practice faculty members. *Am J Pharm Ed* 2012;76(7):Article 127.
- Glassick CE, Huber MT, & Maeroff GI. Scholarship assessed: Evaluation of the professorate. The Carnegie Foundation for the Advancement of Teaching. Princeton, NJ. 1997.
- Glassick CE. Boyer's expanded definitions of scholarship, the standards for assessing scholarship, and the elusiveness of the scholarship of teaching. *Acad Med* 2000;75(9):877-880.
- Havrda DE, Engle JP, Anderson KC, Ray SM, Haines SL, Kane-Gill SL, Ballard SL, Crannage AJ, Rochester CD, & Parman MG. ACCP White Paper: Guidelines for resident teaching experiences. *Pharmacotherapy* 2013;33(7):e147-e161.
- Kalis MM, & Kirschenbaum HL. Faculty awards at US colleges and schools of pharmacy. *Am J Pharm Ed* 2008;72(4): Article 85.
- Kennedy RH, Gubbins PO, Luer M, Reddy IK, & Light KE. Developing and sustaining a culture of scholarship. *Am J Pharm Ed* 2003;67(3):Article 92.
- Peirce GL., Desselle SP, Draugalis JR, Spies AR, Davis TS, & Bolino M. Identifying psychological contract breaches to guide improvements in faculty recruitment, retention, and development. *Am J Pharm Ed* 2008;72(3):Article 49.
- Piasek P, Pittenger A, Soltis R, Schwartz L, Medina M, Bouldin A, Rose R, Scott S, Creekmore FM, & Hammer D. An evidence basis for assessing excellence in pharmacy teaching. *Curr Pharm Teach Learn* 2011a;3(4): 238-48.
- Piasek P, Bouldin A, Schwartz L, Pittenger A, Medina M, Rose R, Soltis R, Scott S, Creekmore FM, & Hammer D. Rewarding excellence in pharmacy teaching. *Pharm Teach Learn* 2011b;3(4): 249-54.
- Popovich NG, & Abel SR. The need for a broadened definition of faculty scholarship and creativity. *Am J Pharm Educ* 2002;66(1):59-65.
- Ratka A, Gubbins PO, Motycka CA, Gervasio JM, Johnson MS, & Maddox RW. Self-assessed proficiency and application of various skills learned during the postgraduate pharmacy teaching skills development programs. *Curr Pharm Teaching and Learning* 2010; 2:149-59.
- Richlin, L. Scholarly teaching and the scholarship of teaching. *New Dir Teach Learn* 2001;(86):57-68.
- Robles JR, Youmans SL, Byrd DC, & Polk RE. Perceived barriers to scholarship and research among pharmacy practice faculty: Survey report

from the AACP Scholarship/Research Faculty Development Task Force.
Am J Pharm Ed 2009; 73 (1):Article 17.

Shulman LS. Taking learning seriously. *Change* 1999; 31(4):10-17.

Smesny AL, Williams JS, Brazeau GA, Weber RJ, Matthews HW, & Das SK.
Barriers to scholarship in dentistry, medicine, nursing, and pharmacy
practice faculty. *Am J Pharm Educ* 2007;71(5):Article 91.