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Promotion and Tenure: Application of Scholarship of Teaching and Learning, and Scholarship of Engagement Criteria to Health Professions Education

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Abstract

Purpose: This paper strives to provide clarity to two of the newer categories of scholarship as defined by Boyer and Shulman: 1) scholarship of teaching and learning, and 2) scholarship of engagement. Additionally, the paper will discuss the application of scholarship to promotion and tenure in health professional education. Lastly, potential barriers and challenges will be discussed with the introduction of possible models to assist faculty in career promotion efforts.

Method: A literature review was performed to retrieve articles and publicly accessible data related to faculty promotion and tenure in health professional education. The articles chosen focused on the scholarship of teaching and learning, and the scholarship of engagement.

Results: The results show a paucity of research focused on scholarship attainment within health professional education. Further, there are discrepancies among health professions and between academic institutions on scholarship criteria.

Discussion: More research on the application of the scholarship of discovery, the scholarship of integration, and the scholarship of application is needed in health professions education to further guide faculty and administrators. Investigation into the discrepancy in rank within tenured faculty in education is an area that would bring insight into current challenges and barriers, allowing educational researchers the ability to research and develop effective strategies.

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Keywords: Promotion; Tenure; Scholarship; Faculty development; Health profession

1. Introduction

In most health professions, the scope of practice has drastically changed over the past decade; however, the amount of change related to faculty promotion and

evaluation has yet to fully meet similar efforts in K-12 education systems. Because of the diversity of health professional educational institutions, there is subsequent diversity in the faculty ranks and criteria for promotion and tenure. The journey of all faculty includes promotion to higher ranks and the possibility of tenure which is important to many faculty and demonstrated through the expression of academic freedom.¹

Within promotion and tenure guidelines, there are three basic criteria that faculty must meet or exceed:

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teaching, service, and scholarship. Out of all the measures used in promotion and tenure criteria, the value and diversity within scholarship has been the hardest to evaluate. The criteria of scholarship has changed over the past twenty years through Boyer's works, but little has been explored on how these changes affect today's health professional faculty. The impact of Boyer's new paradigm on scholarship can be seen across many professions and has provided a better understanding and recognition for different forms of scholarly works in academia. Some faculty members feel that scholarship of teaching and learning, and scholarship of engagement is an abstract criterion when evaluating faculty for promotion, especially clinical faculty.²

Before we can enter into a discussion of the application of scholarship to promotion and tenure guidelines, we must first define scholarship and limit our scope to current needs in health professions education. Many of the definitions refer to types of scholarship while others are defined by institutional policy. From an academic perspective, both historical and traditional scholarship is specifically defined as the work of the professoriate, which encompasses several aspects of overlapping functions of the faculty.³

In 1990, scholarship was defined using four domains: discovery, integration, application and teaching.³ A few years later, Boyer expanded the definition of scholarship to include engagement and highlighted the institution's role in the community to work towards solving the nation's problems.⁴ Each category includes the creation, discovery, advancement, and transformation of knowledge along with measured outcomes through peer review.⁵

In the early 2000s, Shulman introduced the concept of scholarship of teaching and learning, which is more widely used over Boyer's term of scholarship of teaching and represents the new term for scholarship of teaching used today.⁶ In health professions education institutions, the three tenants of scholarship are most often expressed in the mission statement as shown in medical schools, pharmacy schools, and optometry schools.^{7–9}

This paper strives to provide clarity to two of the newer categories of scholarship as defined by Boyer and Shulman: 1) scholarship of teaching and learning, and 2) scholarship of engagement. Additionally, the paper will discuss the application of scholarship to promotion and tenure in health professional education. Lastly, potential barriers and challenges will be discussed with the introduction of possible models to assist faculty in career promotion efforts.

2. Methods

Pubmed along with profession specific searches were conducted in 2016 to retrieve articles and publicly accessible data related to faculty promotion and tenure in health professional education. While no specific keywords were utilized due to the small number of articles, articles that referred to the scholarship of teaching and learning, and the scholarship of engagement were primarily chosen. Journal articles and data sources were retrieved from diverse fields of professions including optometry, pharmacy, nursing, and medicine. Included articles described the past, present or projected state of faculty promotion and tenure in health professional education. Key themes were recorded and discussed.

3. Results

3.1. Scholarship of teaching and learning

In 1990, a dynamic endeavor of careful pedagogical procedures where faculty scholars transmit and extend knowledge by “keeping the flame of scholarship alive” was defined as the scholarship of teaching.³ Scholarship of teaching and learning includes not only all of the concepts within Boyer's scholarship of teaching, but it also invites the student and faculty learner into the conversation of teaching. Scholarship of teaching and learning expands the teaching community to include educational research, policy research, and those outside the educational institution who are involved in research and exchange for the betterment of society.¹⁰

Scholarship of teaching encompasses educating future scholars, transmitting knowledge, developing active learning techniques, and developing critical thinking skills mechanisms.^{4,11} Teaching through student engagement and student learning is a fundamental expectation of all faculty members across higher education.¹¹ When teaching encompasses classroom assessment and evidence gathering, current ideas about teaching, and peer collaboration and review, then teaching should be defined as scholarship as it demonstrates dissemination of information in scholarly venues.¹²

To attain scholarship of teaching and learning, all faculty members should possess a base (content expertise, clinical skills, research techniques) and a meta (psychometrics, conflict management, communication styles, instructional design, instructional delivery, financial development, policy analysis, and graphic design) professional skill set.¹³ Academic health

professional institutions should encourage and provide the tools necessary for faculty members to further develop their skill sets so they can participate in various types of scholarship. An example of institutional support could include faculty involvement in teaching academies that serve to sustain the infrastructure of teaching through web-based resources and online journals. Other examples include development opportunities, guidance documents, and workshops.

Health professions faculty can demonstrate scholarship of teaching and learning by designing and presenting quality courses, developing widely used textbooks or instructional manuals, contributing to regional and national education, publishing research related to education, being recognized by peers as a preeminent scholar, securing extramural funding to develop new curricular tools, and developing distance based learning.³ It can also be exemplified by using nontraditional modalities such as “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, and a protocol for ongoing collaborative inquiry” (p. 15).¹²

Scholarship of teaching and learning should result in work that is communicated publicly such as curriculum development, analysis, and outcomes assessment.⁵ When the scholarship of teaching and learning is applied effectively, it results in a catalyst of thought and action.¹² The scholarship of teaching and learning can potentially serve both faculty and students if nurtured and applied correctly because it is a systematic mechanism in which the profession advances itself by deepening the classroom experience.^{10–12}

In health professions education, analysis and critical thinking are imperative for successful practitioners. The utilization of classroom assessment techniques (CATs) to engage students in an active role in knowledge recall

<u>CATs</u>	<u>Teaching Goals</u>	<u>Topic</u>
Defining Features Matrix	Analysis of closely related concepts	Differential Clinical Diagnoses
Memory Matrix	Assessing student recall; basic comprehension of facts and principles	Slit Lamp Settings for Ocular Examination Normal Values for Lab Testing Formulas for Medication Dosage
Minute Paper	Useful in lecture or discussion; synthesis and integration of information	Clinical Rotations Systemic Disease Medication Interactions and Adverse Events
Muddiest Point	Learning terminology or facts; understanding of difficult concepts or theories	Cardiovascular Testing Interpretation Critical Theory Positivism and Social Medicine

Fig. 1. CATs in Health Professions Education. *Note.* Adapted from Angelo, T. A. & Cross, K. P. (1993). *Classroom Assessment Techniques: A Handbook for College Teachers*. San Francisco: Jossey Bass Publishers.

and understanding through the use of a defining features matrix, memory matrix, minute paper, or muddiest point can be added in health professional courses. While CAT's have been around for almost two decades, they have yet to be fully utilized outside of the K-12 arena even though they are applicable to today's learners across the continuum of the education process in the US. Fig. 1 provides an overview of selected CATs linked to potential health professional content.

CATs should be utilized and guided by specific course objectives to ensure faculty is using the appropriate CAT. In addition to needed growth and development in the area of scholarship of teaching and learning, there needs to be inclusion of scholarship of engagement criteria.

3.2. Scholarship of engagement

In 1996, a new type of scholarship emerged: the scholarship of engagement.⁴ Its emergence impacted how educational institutions interact, support, and engage with those outside of the educational system. The scholarship of engagement encompasses university and community collaboration and its effects on social, ethical, and civic problems.⁵ Research affirms that the sense of engagement is actively constructed and evolves around the individuals' past and current experiences, roles, and contexts; therefore, engagement is built on one's cultural and positional foundation.¹⁴

Faculty can demonstrate scholarship of engagement through service learning activities, civic or community engagement, civic empowerment, applied action research, public collaborative research, public scholarship extension, community outreach, and research partnerships.¹⁴ In health professional education, these activities best coordinate with community or public health related academic and clinical coursework. Scholarship of engagement activities can additionally be incorporated into patient advocacy issues embedded throughout the curriculum.

The scholarship of engagement should result in collaborations between universities and “our children, our schools, our teachers, and our cities [which must serve as a] staging ground for action” (p. 11).⁴ The scholarship of engagement should be valued with appropriate standards and metrics in institutions to ensure faculty participation and awareness.² Additionally, there need to be adequate venues for publication that are accepted by institutions towards promotion and tenure criteria.²

Most health professions have been grounded in the scholarship of engagement through various community

outreach efforts. The movement towards interprofessional education has also led to interprofessional academies of practice such as the National Academies of Practice (NAP). Still, there are bountiful opportunities for educators to demonstrate scholarship of engagement through didactic, clinical, laboratory, and research efforts. The adoption of the scholarship of engagement will demonstrate focus on health promotion and education strengthening the impact of health professional educators on bettering our public's health.

3.3. Promotion and tenure in health professional education

In academic health centers, there are three distinct groups: administrators, teachers and researchers, and clinicians.^{1,15} Each member of each group has a distinct set of values and perceptions needed to fulfill the entirety of the institutional mission. Group members should value each other's contributions and communicate effectively to create a “learning organization”.¹⁵ This level of understanding may assist academic health centers in striving to preserve their mission and “educate those constituent public who affect the academy's fate most powerfully [such as] patients, legislators, benefactors, students, alumni and the public at large” (p. 874) so that they may help support and promote effective public health.¹⁵ Furthermore, deeper levels of understanding will likely result in “an academic environment that reflects an expectation and enjoyment of scholarly activity” (p. 923).¹⁶

Faculty dynamics in most academic universities or health centers have expanded to include those with primary academic roles as well as clinicians and laboratory instructors, collectively referred to as clinical faculty.¹ On average, full time faculty members spend between 6 and 11 hours/week on research.¹ Clinical faculty members are expected to teach using practical applications with little time devoted to the development of traditional scholarship, introducing a potential barrier to promotion and tenure. Furthermore, many clinical faculty members serve in an adjunct role that further limits traditional scholarship opportunities.¹ Many clinical faculty members lack the time to investigate policies and procedures, and/or lack opportunities for university related orientations for clinical faculty. Therefore, clinical faculty often struggle to meet the stringent demands of scholarship during the tenure process.¹⁷

Because of the differences in faculty appointments, the definition of scholarship must be comprehensive for accurate application to all members of the academic

community, particularly as it relates to attaining promotion and/or tenure. Broadly, there are significant issues related to the application of scholarship associated with promotion and tenure which has led to litigation and angst amongst administrators demonstrating policy significance to higher education institutions.^{18,19}

Consistent with broad issues related to promotion and tenure across academia, health professional higher education institutions have also engaged in debate on tenure versus non-tenure tracks.^{20,21} Due to changes in society, economics, and technological advances, health professional institutions are reevaluating the traditional tenure system to ensure its relevance with today's diverse faculty ranks.²² As early as 1996, there was an increasing percentage of long-term, non-tenure track appointments (24%).²³

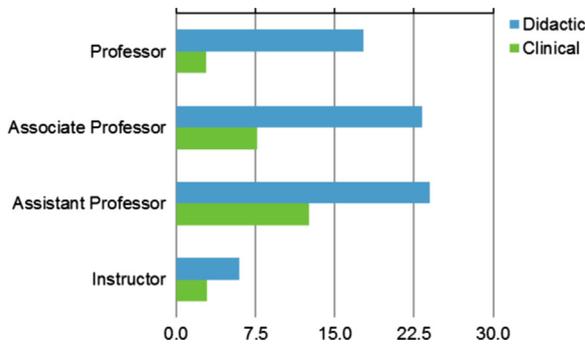


Fig. 2. Optometric Example of Disparity in Promotion. *Percentage of Didactic and Clinical Faculty by Optometry Rank** * represents full time faculty.

It is the responsibility of healthcare providers to serve their institutional, local, national, and international community through scholarly activities that result in protection of professions from transforming from a true education to simple training. Administrators should ensure that the institution's definition of scholarship is applicable to all faculty members and is revised periodically.²⁴ Faculty should understand the definition of scholarship, its application, and the institutional cultures to better determine institutional priorities related to promotion and tenure.

There needs to be a commitment towards the value of education (i.e. the scholarship of teaching and learning) just as there is value in research-based scholarship. Medical educators have evaluated their definition of scholarship to ensure that it encompasses all scholarship types and is applicable to all faculty members.²² Previously, Magill et al. demonstrated that medical school funds obtained from clinical services had risen dramatically from 5% in 1961 to 49% in 1994.¹⁵ Since then, it is likely that the monetary contributions from clinical education have continued to increase showing the financial value of clinical education. A commitment to teaching should be expressed throughout the university in both its academic and non-academic units.

However, with recent economic changes and a rise in tuition driven institutions, this level of commitment may be unreasonable at some institutions.²⁵ Additionally, there are barriers to change including the financial commitment and time expenditures needed to perform curriculum evaluation and reform.²⁶ The economic impact influences the availability of institutional resources necessary for a substantive evaluation

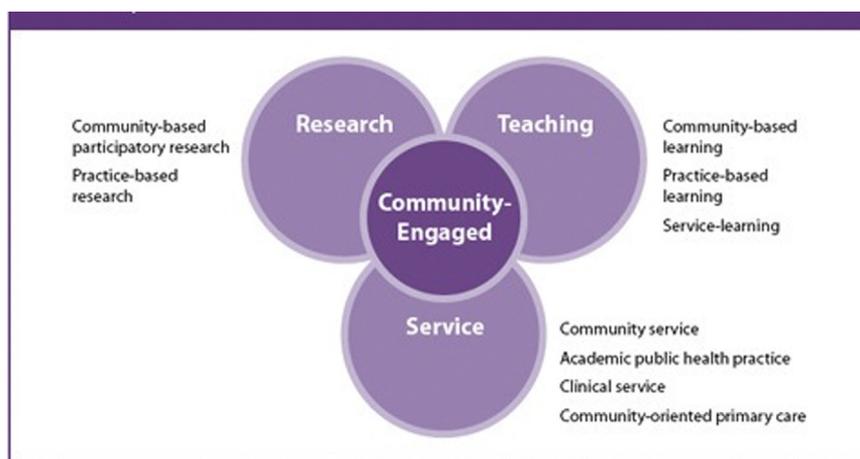


Fig. 3. Community Engaged Scholarship. *Note.* Reprinted from Community-Campus Partnerships for Health (2013). *Community-engaged Scholarship*. Accessed from <http://depts.washington.edu/ccph/scholarship.html>.

process and may require institutions to reallocate finances and faculty release time accordingly.²⁷

Society continues to challenge universities to be more accountable in their decision making, particularly around assessment.²⁸ There is demonstrated variability in accurate feedback and response rates associated with course evaluations, which can negatively affect faculty evaluations depending on the weighting system.^{29,30} Evaluation criteria for promotion and tenure should be measurable with specific applicability to support each faculty member throughout their careers. Despite its shortcomings, the evaluation criteria need to consider the effect of student evaluations and peer evaluations when they are used to measure scholarship and subsequent promotion as a useful tool in the process. Administrators should be aware that student and peer evaluations can be motivated by other factors such as personality conflicts, retaliation secondary to poor grades, or faculty envy or jealousy.³¹

3.4. Promotion and tenure in health professions education

Most health professional faculty members are diverse with varying academic ranks divided by primary responsibilities: including didactic, clinical, research, and administration. For example, of the 712 full time optometry faculty reported in the 2014–15 Annual Association of Schools and Colleges of Optometry (ASCO) Faculty Data Report, 71.2% have didactic responsibilities, 26.1% have clinical responsibilities, and 1.4% has research responsibilities. Therefore, the determination of faculty workload may need to be assessed to ensure equity between faculty members as it relates to scholarship and its measure for promotion and tenure.³²

Fig. 2 presents data from optometry and suggests the presence of institutional barriers for clinical faculty which may include both the inability for clinical faculty to attain upward movement through promotion and the inability of institutions to retain clinical faculty at higher ranks.³³ These barriers are likely present in most health professions educational institutions and shows a growing disparity in percentage of faculty moving up the academic ranks between didactic and clinical faculty.

The promotion data, along with profession specific tenure data, demonstrates challenges within health professional institutions related to promotion and tenure policies and practices between ranks.

In recent years, the scholarship of teaching and learning in health professions education has been

evolving to include team-based learning, interprofessional learning and blended learning. There are several benefits to team based and blended learning; however, new learning environments introduce additional challenges in faculty evaluation and effort.^{34,35} With the advent of new teaching pedagogy, health professional institutions need to provide a comprehensive definition for effective application in promotion and tenure decisions. There may be a need to make provisions for current faculty to be “grandfathered” into new policies and procedures.³⁶ Furthermore, a more tailored definition of scholarship may be required for different faculty appointments whether clinical or didactic to reflect the differences in teaching responsibilities and time devoted to research.

3.5. Application of scholarship of teaching and engagement on faculty promotion criteria

All forms of scholarship should be evaluated by faculty and administrators based on the degree and impact of (1) the development of new knowledge and understanding, (2) peer review, and (3) effective communication.⁵ Universities can apply the scholarship of teaching and learning, as well as the scholarship of engagement to their promotion documents resulting in equality when evaluating faculty members. For example, Loyola University has adopted a model of Community Engaged Scholarship as shown in Fig. 3.

This model encompasses the three arms of scholarship and demonstrates how teaching, service, and research relate to the community demonstrating scholarship of engagement. The Community Engaged Scholarship Model can serve as a framework for clinical faculty to showcase their scholarship as it applies to their daily activities. Community engagement, in general, serves to benefit faculty by introducing new areas for research and publications, enhanced networking, and a demonstration of one's commitment to scholarship.²⁶ In addition, there are benefits to the students and the community at-large through personal development of skills and attitudes, mentoring and networking, positive identity development, and increased motivation.³⁷

Explicit examples of scholarship within each category are an excellent way to fulfill the dual purpose of scholarship: to assist faculty in promotion and tenure and to disseminate scholarly information. Reduced ambiguity in the application of the criteria also serves to protect institutions from potential litigation by showing objective judgment.³⁸ Furthermore, examples of the level

of proficiency or attainment within each category of scholarship for different faculty ranks are helpful.

Upstate Medical Center provides its faculty with an in-depth appendix of “definitions and examples of scholarship and of proficiency and excellence in the areas of research, teaching and university [clinical or community] service.”³⁹ This document differentiates the different types of scholarship and provides a pathway for faculty to better understand the requirements needed for promotion. Health professional educators can use the Community Engaged Scholarship Model adopted by Loyola and the Upstate Medical Center definitions and examples as a guide to revise current promotion and tenure policies.

Although there are differences in the definition of scholarship by institution, there is a common denominator of service shown in dentistry, nursing, medicine, and optometry.^{40–43} Using the basic tenets of scholarship, mission statements could be restated as the scholarship in the service of research, the scholarship in the service of teaching, and the scholarship in the service of the community to more accurately represent emphasis on scholarship.¹⁶ These approaches can be expanded and applied to others in health professional education. In achieving their professional goals, faculty members should ensure that their expertise is aligned to the institutional mission by focusing on parallel scholarly efforts.

4. Discussion

The definition and application of scholarship has been shown to play an important role in shaping today's academic institutions. All types of scholarship are important, and diversity in scholarship, evidenced by faculty, is equally important to the success of the academic university. College and university administrators should understand its faculty dynamics and areas of expertise allowing each faculty member to uniquely contribute to the mission of service within the institution. The diversity in ranks and responsibilities between faculty members allows for sharing different perspectives and skills related to teaching and engagement. As shown, Shulman and Boyer's expanded definition of scholarship encompasses activities for the diverse responsibilities of its faculty.

However, there are many factors to consider in continuing support of our faculty and the health professions including the importance of explicit

documentation within faculty promotion and tenure submissions in enhancing transparency between faculty and administrators, which provides additional protection from litigation, the need for the appropriate application of scholarship, and the inclusion of explicit applications to promotion and tenure criteria. Remember that the definition of scholarship differs between health professional institution based on mission and faculty types. Once scholarship criteria have been clearly defined at the institutional level, the individual academic units have an obligation to sustain scholarship for the betterment of the university and its community.

To sustain scholarship, there should be an adequate reward system that results in equal effort, compensation, and mutual respect between all faculty members.⁵ Sustaining scholarship requires constant evaluation and support by every level of the organization. Transparency in the application of institutional policies and procedures will also support change and sustainability. There are several benefits to effective application of all types of the scholarship of teaching and learning and the scholarship of engagement: (1) equity between faculty members, (2) ability for career progression, and (3) duty to the students and public at large. However, change can be challenging as (1) the financial and (2) time burden to redefining or assessing how scholarship is interpreted and applied at an institution.

In conclusion, more research on the application of the scholarship of discovery, the scholarship of integration, and the scholarship of application needs to be investigated as it relates to health professions education to further guide faculty and administrators. Furthermore, investigation into the discrepancy in rank within tenured faculty in education is an area that would bring insight into current challenges and barriers, allowing educational researchers the ability to research and develop effective strategies. Lastly, a database of current assessment techniques used within health professions should be developed to determine areas that need improvement and to allow information sharing and enhanced collaboration across health professions faculty.

One-sentence bios

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Dr. Shilpa Register serves on the Innovation Speaker's Bureau for Johnson & Johnson, Vision Care Institute.

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