Scholarship In Real Time: Use Of Assignments To Achieve Scholarship Of Teaching
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ABSTRACT
In higher education, Boyer’s work “Scholarship Revisited” has regained attention as a greater number of academic programs are applied fields where scholarship defined solely as research is too limited in concept. While discovery of knowledge is critical to the academic enterprise, effective teaching is acknowledged as equally important in the age of outcome-focused education, such as in allied health fields. The time required balancing teaching loads that require 12 hours in the classroom, plus office hours and committee participation can present quite a challenge to the tenure-track faculty member trying to also build and grow a body of research. In the Boyer Model, the Scholarship of Teaching is defined as means of not only educating students but also enticing them to be future scholars (Boyer, 1990). This scholarship demands that teachers be well-informed in the knowledge of their fields. In Allied Health fields, this can be another time challenge as research agendas often follow particular niches within the broader field of study while classroom expertise requires generalist information dissemination. And while continued clinical practice can be informative to the educational enterprise, practice alone does not provide best evidence based information for the classroom. This article will describe the use of assigned course work that bridges the time gap created by these conflicting demands. The assignment calls for the student learners to be critical appraisers of information as it is presented in public formats by requiring that they find the scientific source and analyze the accuracy of the publically presented information. It facilitates the teacher-learner in completing a literature review of emerging topics within the field of study to meet the requirement to be well-informed. Further information on how to make these efforts obvious for the tenure process is discussed.

Keywords: Scholarship of Teaching and Learning; Scholarship; Teaching; Learning, Boyer Model, SoTL

INTRODUCTION
Ernest Boyer is credited with initiating a re-examination of the work of academic institutions in the seminal report: Scholarship Reconsidered: Priorities of the Professorate (1990). In this work, Boyer introduces four dimensions of academic scholarship (discovery, integration, application and teaching) that he proposes should be of equal value within institutions of higher education for decisions regarding rank and tenure. This reconsideration held out the hope that, through greater respect afforded to teaching; student learning could also be improved (Trigwell & Shale, 2004). What Boyer failed to do was to provide a clear operational definition of the terms; or, as Kreber (2007) phrases it; Boyer failed to “articulate … under what conditions the teaching-learning transaction constituted a form of ‘scholarship’” (p. 2).

This paper focuses on the scholarship of teaching. First, a definition is offered from the literature that includes an expansion of the term to ‘teaching-learning’. This reflects the primary goal of teaching (learning) as well as the give-and-take nature of the teaching learning process. Next, the ideas and concepts that define scholarship are applied to the scholarship of teaching and learning and put in context of allied health education. A brief discussion of the demands on the time of the tenure-track academic is discussed with the remainder of the paper devoted to providing an example of an assignment that has worked to bridge this time gap.
SCHOLARSHIP OF TEACHING AND LEARNING (SoTL)

Ernest Boyer and colleagues at the Carnegie Foundation for the Advancement of Teaching are credited with initiating a re-examination of the work of academic institutions (1990). This expansion of scholarship beyond discovery (research) included the idea that teaching was a form of scholarship undervalued in higher education. It has been left to other scholars to more precisely define that concept and to develop means of applying it to academia (Thomas, 2011; Kreber, 2007A; Andresen, 2000; Healey, 2000; Kreber, 2007B; Kreber & Cranton, 2000; and, Trigwell, Martin, Benjamin, & Prosser, 2000).

Rather than refer to scholarship of teaching, it has become more common to include learning as part of the scholarship. One logical reason is that teachers are not more important in the process of the teacher/student exchange: rather the most important outcome is how much students learn (Smith, 2008). Boyer explained that “good teaching means that faculty, as scholars, are also learners” (1990, p. 23-24); also indicating an intrinsic link between the concepts. Trigwell and Shale (2006) indicate the strength of the relationship between teaching and learning by proposing that increased respect for one (learning) could improve the other (teaching) simultaneously. An operational definition, therefore, should contain the iterative process that is teaching and learning and by which both are enhanced.

In clarifying the scholarship of teaching, Boyer (1990) included ideas such as being well informed of the knowledge of the discipline, stimulating active learning, encouraging critical thinking, creating a desire for life-long learning, and pushing teachers to learn through this process of knowledge transformation. Teachers strive to have students share their interest in the knowledge of their discipline using classroom techniques and assignments that encourage this active learning and critical thinking. The idea of life-long learning can be fostered also by showing students how new information continues to contribute to course material. By asking students to engage in knowledge collection, they can demonstrate the process of knowledge transformation. Moving forward to current thoughts on the fundamentals of the SoTL, Trigwell, Martin, Benjamin, & Prosser (2000) clarify three elements of SoTL: engagement with the contributions of others to scholarship of teaching and learning; reflection on one’s own teaching and learning; and, sharing processes and outcomes with others. These two sources are supportive of one another in aiding the development of a useable definition of the SoTL. Interest in other’s contributions is required if one is to be well informed of the knowledge of the discipline. Reflection on the process occurs as teachers evaluate the effectiveness of a particular approach or assignment and as students ask questions to integrate information between courses (critical thinking). Sharing the process is a necessary requirement of scholarship so as to complete the cycle of good teaching in which teachers are learners and vice versa.

It is impossible to move forward in defining SoTL without exploring the idea of engagement. Here the idea is that “teaching and its scholarship have become a shared enterprise” (Starr-Glass, 2011). In the context of higher education, engagement “refers to the time, energy, and resources students devote to activities designed to enhance their learning” (Stefani, 2008, p. 1). At the university, learning is understood to mean “questioning, challenging, debating, and creating knowledge as well as … exploring and coming to know what is known” (Haggis, 2006, p. 525). To ensure engagement, SoTL must include curriculum development that allows for authentic learning experiences; uses of the potential of technology, and “introduce[s] and induct[s] students into the discourse of the discipline” (Stefani, 2008, p. 6). Without engagement, active learning cannot take place and the chance to instill a desire for life-long learning is jeopardized. Authenticity is ensured when classroom activity and assignments are strongly correlated to practice within one’s discipline. Although beyond the scope of this paper, technology has become an integral part of that process as well.

It is of value to also ensure that a definition of SoTL would include elements of scholarship. Scholarship is generally associated with five criteria: a deep knowledge base, an orientation of inquiry, critical reflection, peer review, and, dissemination of information (Andresen, 2000). Applying these criteria, a definition of the SoTL would include the curiosity of teachers about the phenomenon of teaching and learning and the extent to which critical reflection develops from it. Applying generic as well as discipline-specific knowledge would result as one attempts to solve the problems noted during reflection. An iterative process would ensue in which the teacher identifies and interprets the changes and makes further changes until such time as success indicates the time to share the results with peers (Kreber, 2007). SoTL, therefore, can be defined as being knowledgeable of the latest ideas within one’s
discipline as well as being familiar with current ideas on how to teach within the discipline and sharing through publication and/or presentation of the teaching and learning process itself. (Healey, 2000) This definition supports the approach to SoTL that applies educational theory as well as research to practice (Kreber & Cranton, 2000). It moves beyond the ideas drawn from Boyer’s work of SoTL merely being a scholarship of discovery in which the product is papers on teaching; to the idea that SoTL means excellence in teaching (Kreber & Cranton, 2000).

Scholarship of teaching and learning (SoTL) is, therefore, a familiar process to teachers. Each time a course is re-taught, the experiences are compared and adjustments made to aspects that did not seem to work well. How deliberate this process is varies in levels of being intentional and systematic (Smith, 2008). What is needed is information on combining teaching and scholarship in a manner that makes scholarship obvious while also enhancing teaching. Only in combining demands will all the requirements for tenure be achieved. Let us now turn to the examination of an assignment which is presented as a model for combining teaching and scholarship while streamlining the burden of meeting multiple demands of time and energy.

ALLIED HEALTH CURRICULUM

Fields that are often identified as allied health include, but are not limited to; nursing, physical therapy, occupational therapy, pharmacology, and medical technology. Those disciplines include aspects of the biological and chemical sciences as well as principles of sociology, psychology, and ethical reasoning as integral components for preparing graduates for practice within the chosen field. In colleges or smaller university settings, faculty members within allied health are called upon to teach these fundamental courses in order to ensure the content meets the particular objectives specified within the standards of an accrediting organization. Within occupational therapy, kinesiology and neuroscience are common examples.

Credentialed by a background in applied areas of neuroscience (for example, experience working with children or adults with neurological disorders such as cerebral palsy, traumatic brain injury or stroke); faculty members will rarely have the broad knowledge demanded by the subject matter. To be “steeped in the knowledge of the field” (Boyer, 1990, p.23), teachers would need to find additional time to gain generalist knowledge (for effective teaching, the SoTL) and specialist knowledge (for tenure and promotion, the scholarship of discovery research). This can be a challenge for the tenure-track faculty member who must clearly demonstrate scholarly work, but in addition must demonstrate teaching effectiveness (including a 12 credit teaching load, student advising, and curriculum development) and service (to the university through committee work, to the profession through presentations and leadership roles, and to the community through volunteerism).

In order to meet these demands on time, faculty members try to find ways of making one task fit multiple requirements of tenure and promotion decision. Since assessment of student learning has become a requirement of the academic enterprise (Gibbs, 1999), it would be efficient to pair this mandatory activity with the need to remain knowledgeable of the field. When developing course assignments to assess learning and meet the objectives of the course, the faculty member looks to not only assess learning but also to model the methods of inquiry within one’s discipline and to address the questions commonly asked within that discipline (Kreber, 2007). Evidence-based practice is the current mantra of allied health professions and has become an imperative component of teaching and learning within the allied health professions. In order for students to integrate the process, attempts are made to simulate it beginning with the desire/need to seek evidence, advancing to the methods used to obtain evidence, and, culminating with the ability to critically analyze the information once it has been obtained. Within the context of a neuroscience course, an assignment was developed to model the process and provide an opportunity for its execution by the students, hoping to incorporate the learning for future course work. The intent is to meet the standards of SoTL by stimulating student interest through active learning; accessing current discipline knowledge across the spectrum of the subject matter for the teacher; and, demonstrating knowledge transformation as new information becomes incorporated into class discussions. Simultaneously, the methods of scientific inquiry are modeled for application within allied health; in this case, occupational therapy.
THE ASSIGNMENT

Scientific inquiry is often sparked when one becomes aware of new information of interest and about which one wants to learn more. Public media is often the source of the process when one hears or reads an item of interest in the news. Students are consumers of this news often via web-based media but often lack the critical thinking to question the material as presented or to clarify it through systematic inquiry. As it is imperative for the teacher to gather knowledge about the broad topic of a neuroscience course, the two needs can be combined to achieve the desired outcome within the confines of a semester course.

The curriculum for an occupational therapy program has a related-required course entitled Neuroscience for Rehabilitation. Within this course, the students are provided with an opportunity to develop critical analysis and scientific inquiry while providing the teacher with the latest research findings within the broad course dimensions. Students are asked to obtain a hard copy of a news story related to neuroscience in which they have an interest. After summarizing the content of this public information, students are required to obtain the scientific research study that has been identified as the source for the reported news source. This requires applying principles of literature review as would be used for scholarly writing or, in current practice trends, to support evidence-based practice. Evidence-based practice demands that students are able to locate supportive information for a practice intervention or to cease applying outdated interventions (Crist, Hinojosa, & Kramer, 2005). This assignment, therefore, provides an authentic application of learning within the discipline. In the next step of the assignment, students are required to analyze the research and summarize the actual results. Once the two components are analyzed, students then do a comparative analysis to determine if the publically disseminated material is in fact accurate and true to the original work. Students turn in the public news story, the scientific research article and their written summaries and analyses. This material is a review of current literature which is then applied to the course content to keep it current and to inform the teacher. While the teacher stills needs to read and apply the material, the time-consuming literature review has been done, freeing the teacher to use time to engage in activities that meet the other demands of a tenure-track faculty position (for example: committee work, scholarship of discovery, or advising).

MAKING SoTL OBVIOUS

The final dimension is to show the various constituents the work behind the SoTL. These constituents include the students themselves, faculty colleagues, the Rank and Tenure Committee and Academic Officers within the institution. One model for accomplishing this is the use of published course packs. Within the context of the previously referenced course (Neuroscience for Rehabilitation); required course materials include a course pack of outlines/power-point slides for each unit of study within the course. Incorporated into these outlines are the articles providing newest research within the scope of the course with accurate referencing for the reader who is interested in learning even more. This published work is used to show the effort made on the part of the teacher to be well informed of the knowledge of the discipline, to stimulate active learning, and to learn via the process of knowledge transformation. In combination with the syllabus, which details the assignment requirements, the teacher can also demonstrate their encouragement of critical thinking, and the creation of a desire for life-long learning in the students. In providing the artifact as tangible evidence of the process, the SoTL becomes transparent.

It is further possible to take this product and publish it to a broader audience as evidence of scholarship of practice. Publishers are often seeking authors for texts; especially in those disciplines which are unique or in which some areas of expertise are scarce. Sharing the idea in a written paper or presentation further demonstrates scholarship of discovery in terms of the SoTL rather than within the confines of one’s discipline. It raises the profile of the task at the core of teaching excellence and, if applied systematically across courses, clearly demonstrates a tenure-track faculty member’s commitment to scholarship as well as teaching.

SUMMARY

This paper attempted to provide a clearer understanding of the scholarship of teaching and learning. Beginning with Boyer’s seminal work and incorporating subsequent authors’ ideas, a workable definition of the concept was provided. This was subsequently applied within the parameters of a course in the allied health (occupational therapy) curriculum. A method of balancing the demands of tenure-track faculty was discussed by
making use of course assignments to meet outcomes demanded by both the learner and the teacher. Suggestions on making the process transparent in order to gain the necessary credit to advance one’s teaching position were also discussed. It is hoped that this application is useful to the beginning academic struggling to achieve excellence across the spectrum of teaching, service and scholarship.

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