# Scholarship Reconsidered: Reconsidered

### Randall G. Bowden<sup>1</sup>

Abstract: Scholarship Reconsidered by Ernest Boyer generates a flurry of theoretical and applied activity. Much of the research centers on the concept of the scholarship of teaching as researchers explore what constitutes scholarship, which is often misdirected. Through lexical statistics and rhetorical analysis, the text is examined according to its overall intent with attention given to the scholarship of teaching. Results reveal the scholarship of teaching is a minor but important role and the text is intended for the renewal of the academy and society. Conclusions balance research based concepts advanced by scholars with the text's intent.

*Key words: scholarship, teaching, models, professoriate, academy, renewal.* 

#### I. Introduction.

It has been a little over 15 years since Ernest Boyer (1990) wrote, "The time has come, we believe, to step back and reflect on the variety of functions academics are expected to perform" (p. 2). His words generated and continue to spawn an abundance of perspectives associated with the professoriate, of what it means to be a faculty member, of scholarship. He set in motion a flurry of activity based on what he concluded to be the future work of faculty grounded in four scholarship domains: (1) Discovery; (2) Integration; (3) Application; and (4) Teaching. According to those four aspects of scholarship, Boyer hoped for a renewal of the academy and society. This renewal, he proposed, would come about when the full range of faculty talent is applied to the traditional academic foundation of teaching, research, and service. To provide the impetus, he refashioned them into those four domains with the admonition for scholars to rethink knowledge and its utility for societal well being.

After 10 years of Ernest Boyer's passing in 1995, the academy continues to wrestle with, explore, define, and apply what he queried: "Is it possible to define the work of faculty in ways that reflect more realistically the full range of academic and civic mandates?" (p. 16). Debates ensued about the importance of the role of research and teaching (Altbach, 2001). Moreover, much of the work in the last decade has been a research based approach about what constitutes the scholarship of teaching.

This paper examined the research based approach in seven major sections: (1) purpose; (2) background; (3) premise; (4) perspectives; (5) analysis and conclusions; (6) implications; and (7) recommendations. The purpose establishes the larger context of the scholarship of teaching. The background provides a brief overview of what scholars have done to separate the scholarship of teaching as a research based activity from the excellence of teaching. The premise considers the scholarship of teaching as the act of teaching and addresses the problem of rigor. In the perspectives section, current major models and developments of the scholarship of teaching are reviewed. Comments are also provided in the section as to the benefits consequences of the

<sup>&</sup>lt;sup>1</sup> Department of Teaching and Learning, University of North Dakota, 231 Centennial Dr. Stop 7189, Education Room 101, Grand Forks, ND 58202-7189, <a href="mailto:randell.bowden@und.edu">randell.bowden@und.edu</a>

current perspective of scholarship. Then, Boyer's text is analyzed according to lexical statistics and rhetorical analysis to examine the intent of the book as well as the role of the scholarship of teaching within it. Implications stem from the analysis as well as research based perspectives of scholarship. In the section it further challenges the prudence of Boyer's refashioning of teaching, research, and service into the four scholarship domains. The final section, recommendations, offers admonitions to take the next step to develop models for the excellence in the act of teaching.

### II. Purpose.

Concerning the scholarship of teaching, Boyer (1990) wrote: "Teaching is also a dynamic endeavor involving all the analogies, metaphors, and images that build bridges between the teacher's understanding and the student's learning" (p. 23). Boyer's statement was clear: It is these linguistic techniques where learning occurs because they build bridges to it. Investigators debate the theoretical aspects of what takes place for learning to occur (Chanock, 2005; Mayer, Fennell, Farmer, and Campbell, 2004; McCroskey, Richmond, and McCroskey, 2002; Quay, 2003; Rink, 2001). The intent, here, is not to delve into learning theory, but to analyze how the scholarship of teaching fits within the context of the book and examine what the overall intent of the text is.

The purpose is to reconsider the larger context of which Boyer wrote. And yet, specific attention is given to the scholarship of teaching to review it in a broader context after so many years of specific research development. The approach, then, is to investigate the scholarship of teaching and the entire text according to lexical statistics and rhetorical analysis. But first, providing a background of the major work resulting from the concept of the scholarship of teaching will help contextualize the need to reconsider *Scholarship Reconsidered*. Background

Down one road, the academy has made tremendous strides to make teaching more professional and more respectable through the establishment of the Carnegie Academy for the Scholarship of Teaching and Learning (CASTL) (Cottrell and Jones, 2003; Hutchings and Shulman, 1999). One of its programs is the PEW National Fellowship Program for Carnegie Scholars. Pew Scholars are expected to demonstrate scholarly performance in six arenas required by the program: "(1) have clear goals, (2) require adequate preparation, (3) make use of appropriate methods, (4) produce significant results, (5) demonstrate effective presentations, and (6) involve reflective critique" (Kreber, 2002, p. 152). Other advancements include faculty learning communities with grant assistance from the Lilly Foundation (Richlin, 2001; Richlin and Cox, 2004).

Down another road, the sheer number of publications and inability to refine the scholarship of teaching across disciplines and institutions suggest the waters have become more turbulent (Atkinson, 2001; Salvatori, 2002; Wagenaar, 2000). Scholars have even examined the concepts of "scholarship" and "teaching" separately to distinguish the scholarship of teaching from scholarly teaching in an attempt to bring better understanding to the issue (e.g. Richlin, 2001; Shulman, 1998).

Boyer (1990) saw them as a single item. "Yet, today, teaching is often viewed as a routine function, tacked on, something almost anyone can do. When defined as *scholarship*, however, teaching both educates and entices future scholars" (p. 23). These statements are the crux of the matter. In them Boyer both summarized a prevailing sentiment about teaching—"a

routine function almost anyone can do"—and defines the scholarship of teaching—it "educates and entices future scholars." To reinforce this perspective, he quoted Aristotle, "Teaching is the highest form of understanding," (p. 23).

Boyer (1990) was steadfast with his view of teaching as scholarship. Nowhere in the section on *The Scholarship of Teaching*, or in the book, does he deviate from the importance of teaching as a necessary and vital activity of faculty. Other activities, he explained, are to support and enhance classroom teaching. His comments, when related to the scholarship of teaching, resonated in the context of the classroom. Even when expressing teachers as learners, the thrust is toward the benefit of the student: "...teaching, at its best, means not only transmitting knowledge, but *transforming* and *extending* it as well. Through reading, through classroom discussion, and surely through comments and questions posed by students, professors themselves will be pushed in creative new directions" (p. 24). In his view it was not that scholarship necessarily promoted teaching but the other way around: "In the end, inspired teaching keeps the flame of scholarship alive" (p. 24).

### III. Premise.

The preceding comments encapsulate the problem. Currently, even though there are programs to advance the excellence of teaching, the scholarship of teaching is viewed primarily as a function of research. For Boyer, the scholarship of teaching centered on student learning. This is a major premise for understanding what is meant by the scholarship of teaching and its function in the larger context of the book: The scholarship of teaching is the act of excellent teaching.

Initially, with regard to the scholarship of teaching, it is not the depth of faculty understanding of their subject matter that concerned Boyer (1990). It is apparent he believed faculty already possess a goodly measure of understanding: "Those who teach must, above all, be well informed, and steeped in the knowledge of their fields" (p. 23). His impetus was that "[w]ithout the teaching function, the continuity of knowledge will be broken and the store of human knowledge dangerously diminished" (p. 24). He was concerned with the outlook of teacher understanding. Can he or she bring analogies, metaphors, and images to bear on the subject matter to where students learn? This does not mitigate the depth of knowledge, skill of course management, and contributions to the academy a faculty member must exhibit.

The analysis in this paper is grounded in the perception that Boyer (1990) was concerned with a larger more crucial aspect of the professoriate rather than establishing the scholarship of teaching as a function characteristic of research activities as frequently and broadly thought (e.g., Badley, 2003; Kreber, 2002; Richlin, 2001; Shulman, 1998; Trigwell, Martin, Benjamin, and Prosser, 2000).

Reconsidering *Scholarship Reconsidered*, particularly as it relates to teaching is not without its troubles. It faces challenges from the academy as a sort of catch-22 phenomenon. On the one hand, teaching is at the core of higher education (Altbach, 2001; Atkinson, 2001). This is problematic for on the other hand, this core work fails to be recognized, broadly across the professoriate, as rigorous activity on even ground with research, or at minimum, demanding legitimate assessment processes for career advancement (Li-Ping Tang and Chamberlain, 1997). Often relegated to a lesser role, teaching must compete with the prevailing attitude of the importance research plays in one's career. Within career progression, then, the act of teaching, itself, is not extensively viewed as a necessarily rigorous activity. As a result, a tremendous

amount of research has been generated to elevate teaching and related activities on par with the rigors of research.

To this stage of the paper, the issue can be summarized in the following terms. "Research will remain a central function" of the academic system in America even though respect for teaching grows (Altbach, 2001, p. 27). Although Boyer purported teaching as a scholarship activity to be evaluated equally with research, scholars have predominately defined it as doing research on teaching versus promoting the actual performance. The next section provides perspectives of what has developed as a consequence of viewing the scholarship of teaching as a research based function.

# IV. Perspectives.

For the past decade, exploring the scholarship of teaching has spanned the globe. Scholars in Canada (e.g., Kreber, 2002; Kreber, 2005), the U.K. (e.g., Badley, 2003), Australia (e.g., Asmar, 2004), and the U.S. (e.g., Cottrell and Jones, 2003) have completed considerable research to clarify the work of Boyer, particularly in the area of the scholarship of teaching. In this section, five major models are discussed as they provide perspectives about how the scholarship of teaching might be interpreted. Their development is predicated on how Shulman (1999) described differences among scholarship and excellence as they pertain to teaching.

Shulman (1999) provided momentum for a research based approach to the scholarship of teaching. "What Boyer did *not* do was draw a sharp line between excellent teaching and the scholarship of teaching. Now, however, we've reached a stage at which more precise distinctions seem to be wanted" (1999, p. 13). His work attempted to draw a sharp line in three major areas: (1) making teaching a process open to critique and evaluation; (2) placing it on a platform of community property; and (3) using the previous two in a form for which others could build their work.

The form entailed five elements of scholarship: (1) vision; (2) design; (3) interactions; (4) outcomes; (5) and analysis. Vision is the conceptual representation of a course. Design corresponds to the course activities: the plan. Interactions are active and reflective processes by which students and faculty members achieve the vision. Outcomes address multiple assessments utilized in the classroom to measure learning objectives. Analysis concerns measuring and examining outcomes for future improvement (Cottrell and Jones, 2003). Even given the use of terms emphasizing teaching, Shulman was direct when making the distinction between teaching and scholarship: "A scholarship of teaching is *not* synonymous with excellent teaching" (1999, p. 13). It is at this stage, where scholarship begins to be diverted from excellence of teaching and models emerge to bring clarity to the scholarship of teaching.

Much of the activity surrounding teaching as scholarship stems from "the enormous variation in the ways scholarship of teaching is represented" (Trigwell et al., 2000). Therefore, Cottrell and Jones (2003) framed a study that examined the five elements of scholarship established by Shulman. They suggested faculty design courses in a manner to transfer learning expectations to students. The responsibility of teaching and learning is shared, however, the approach to teaching resides more on the design of the course versus the act of teaching. The scholarship interest of Cottrell and Jones centered on what prompt faculty to implement Shulman's process and how it is measured. This is not an uncommon approach to scholarship given the pressure to define teaching as a scholarly activity "to be recognized as a legitimate form of scholarship in tenure, promotion, and salary decisions" (Pace, 2004, p. 1186).

With groundwork laid regarding the difference between the scholarship of teaching and excellent teaching, scholars have developed methods and models to represent precise distinctions among teaching issues teaching as called for by Shulman.

### A. Scholarship of Teaching Model (SofT).

Kreber (2005) took the approach of the SofT (Scholarship of Teaching) model. It builds on the theoretical construct of transformative learning theory of which faculty gather knowledge from their reflection of content (description of a problem), process (method of problem solving), and premise(s) (basis of the problem). The focus is on *faculty* experience. They gain knowledge as constructed by personal teaching experience predicated on firmly grounded educational research and theory. The model also requires three instructional domains of faculty knowledge: instruction, pedagogy, and curriculum. Faculty are to have explicit knowledge in all aspects of instructional design (instruction); how students learn and how to facilitate it (pedagogy); and goals of classes (curriculum). Kreber's purpose for developing and applying the model was to explore how faculty are connected to the SofT process by identifying forms of reflection and engagement. As a result, they should illuminate some variables for future investigation. By applying the model she hoped the process would instill a strong conception toward teaching and "bring about conceptual changes in students" (p. 353).

The model provides a platform for faculty to engage themselves in personal reflection and scholarly endeavors to apply to the craft of teaching. However, the link between SofT and student learning is not readily apparent and should not be assumed. In the larger scheme of scholarship, the model exhibits a single focus of teaching and does not consider all of Boyer's domains to overlap as he also intended. Additionally, it remains uncertain how the model helps address the larger scope of the role that the scholarship of teaching is to serve in society. Other models are similar to SofT.

#### B. Trigwell, Martin, Benjamin, and Prosser Model.

Trigwell et al. (2000) claimed within recent years there has been a shift in research away from teaching that encourages learning to an agenda that examines scholarship. Based on this assumption the Trigwell et al. model lacks a student learning connection, even though assumptions are made that student learning is improved by enhancement of one's approach to the scholarship of teaching.

From 20 teachers with heavy teaching loads, Trigwell et al. (2000) phenomenographically analyzed questions about how teachers approach scholarship. The information was used for the development of the model. Scholarship in the model contains four dimensions: (1) knowledge of teaching and learning and how it applies to one's discipline; (2) reflection on that knowledge, the faculty member's context, and the relation between the two; (3) focus on a selected teaching approach; and (4) the communication of the significant characteristics of the process to other scholars. By their own admission student learning is not the primary concern of the model: "Our investigations into the relational issue of the *what* of teaching and how it relates to teaching outcome is the focus of our continuing research" (p. 167). One cannot take for granted student learning is occurring because faculty enhance their knowledge of teaching and communicate it to colleagues. Once again, how the model connects to

Boyer (1990) can be brought into question: Where is the bridge between teacher understanding and student learning? How does the model fit within renewal for the academy and society?

Trigwell et al. (2000) viewed the idea of the scholarship of teaching as research based activity and addressed neither the act of teaching as a critical function nor learning as an intended outcome. Both the SofT and Trigwell models reflect the admonition of Shulman (1999) to provide a distinction between teaching and scholarship. A third model reveals a different approach.

### C. Decoding the Disciplines Model.

Middendorf and Pace (2004) focused on subject matter road blocks. Faculty should as a series of questions of themselves pertaining to problems student might face. Students are to master tasks toward learning. This approach to the scholarship of teaching was based on the 1986 inaugural address of Lee Shulman as president of the American Educational Research Association. It led to the Decoding the Disciplines model prominence. Faculty examine a series of seven guiding questions in a specific, linear series: (1) What is a bottleneck to learning in this class? (2) How does an expert remove bottlenecks? (3) How can a faculty member show students the steps to remove bottlenecks? (4) How will student practice these skills and get feedback? (5) What will motivate students? (6) How well are students mastering the learning tasks associates with the processes? (7) And, how can the resulting knowledge be shared with colleagues? Ultimately, the scholarship of teaching relies heavily on sharing findings with colleagues. Middendorf and Pace concluded the model links "teaching more closely with the kind of intellectual inquiry that drew the fellows toward being teachers in the first place, and it allows them to bring to teaching more of the skills that they have developed in their research" (p. 11).

The Decoding the Disciplines model tends to be a somewhat sterile progression of teaching versus a "dynamic endeavor" (Boyer, 1990, p. 23). It is represented by a series of stages and tasks, which give a sense of a linear view of teaching and learning. One cannot progress to the next stage without mastering the previous one. However, faculty can be encouraged to enhance their skills, contribute to learning, and share experiences with colleagues, whereas the SofT and Trigwell models promote a more formal research based approach with a much lesser emphasis on student learning. A common thread among the three models is a distinction between scholarship and teaching, which Shulman (1999) called for. Even more so, a fourth approach to the scholarship of teaching advances that distinction.

### D. Scholarship of Teaching Inventory.

This view of the scholarship of teaching is not formally a model, but an inventory and is important to include as a model (A broader view of scholarship through Boyer's four domains, Scholarship of Teaching section). It represents more holistically the scholarship of teaching as intellectual inquiry and instructional design. It involves scholarly ventures, such as exams that require higher-order thinking skills; preparation of learning activities; development of a new course; presentation of techniques to colleagues; new instructional practices; development of strategies to help students learn difficult concepts; and creation of approaches to assist students to think critically about course concepts. Subsequently, faculty members can convert their

materials into acceptable compositions for publications. Although a helpful list, faculty unfamiliar with the study of teaching and learning most likely will not benefit from it.

There is a consistent theme among the four previous models. They neither demonstrate broader renewal of the academy and society nor address the overlapping functions of the other three scholarship domains. Moreover, to varying degrees they separate scholarship from teaching. This aspect was clearly portrayed in the fifth model.

# E. Teaching><Learning Connection<sup>TM</sup> Model.

Another model, Teaching><Learning Connection™, was developed by Richlin (2001). Richlin articulated the dichotomy between the scholarship of teaching and scholarly teaching more clearly. She structured to the model to establish teaching activity separate from scholarship. She, then, demonstrated the links to learning. "In my view, the purpose of scholarly teaching is to impact the activity of teaching and resulting learning, whereas the scholarship of teaching results in a formal, peer-reviewed communication in the appropriate media or venue…" (p. 58). Others scholars maintain similar views (Hutchings and Shulman, 1999; Kreber and Cranton, 2000; Richlin and Cox, 2004). Some do not (Atkinson, 2001; Salvatori, 2002; Wagenaar, 2000) in that the scholarship of teaching is the act of teaching not research based approaches.

In the model, the scholarship of teaching is the foundation. The scholar identifies key issues, synthesizes results, places them in a larger context, prepares manuscripts, submits them for peer review, disseminates, publishes, and presents the information, which adds to the knowledge base of teaching and learning. Scholar teachers consult this literature, select and apply an intervention, conduct systematic observations, document them, analyze results, and obtain peer evaluations. Baseline performance is established during the process and other performance is continually checked against the baseline. Richlin (2001) concluded that experienced teachers help students achieve learning objectives. However, scholarly teaching involves justifying "the selection of methods from what is known in the literature; it must be explicit" (p. 60). Her discussion does not necessarily consider the possibility of excellence of teaching, which may not be found in the literature. She further assumes the process naturally results in student learning.

Even though a tremendous amount of work attempts to clarify the scholarship of teaching, there remains a significant amount of uncertainty. Whereas the five major models about the scholarship of teaching endeavored to define what Boyer considered "to be the work of the professor" (p. 23) in teaching as it is critical to "human knowledge" (p. 24), the reality is that the models appear not to capture the aim of the *Scholarship of Teaching*: "Almost all successful academics give credit to *creative teaching*—those mentors who defined their work so compellingly that it became, for them, a lifetime challenge" (Boyer, 1990, p. 24) [italics added].

With the work surrounding scholarship for well over a decade, it appears not much has changed. American postsecondary institutions and their faculty come under intense scrutiny and scathing indictments (Finkelstein, 2001; Newman, Couturier, and Scurry, 2004). Poskanzer (2002) related that "higher education today faces unprecedented demands to demonstrate productivity and efficiency to all its stakeholders" (p. 200). Among the scrutiny and indictments, and variations of scholarship interpretations, they have given rise to reconsider previous work and *Scholarship Reconsidered*.

#### F. Reconsiderations.

Distinguishing scholarship from teaching has been both beneficial and adverse consequences. On the one hand, the academy has advanced the importance of teaching as a vital function of the professoriate. It has analyzed Boyer's views, reshaped them, built upon them, and internationalized them. It has elevated teaching as a major topic of inquiry. It has given it a framework to evaluate peers. It has provided teaching institutes and programs for improving one's approach to scholarship activities.

On the other hand, the research based approach to clarifying what Boyer meant by the scholarship of teaching has created tensions among disciplines. Teaching has even been criticized about being too narrow (Scholarship of teaching: Now too defined?, 2005), particularly as a research activity. Atkinson summarized this issue, "If the Scholarship of Teaching and Learning is operationalized only as publishing in journals, we have simply begun to emphasize another research area" (2001, p. 1224). If true, how does the scholarship of teaching differ from the scholarship of discovery? This is an important notion because she further stated, "Many excellent teaching sociologists will never publish a refereed journal article about teaching, and there is no reason they should" (p. 1224). The same can be said of faculty in other disciplines, since they would be responsible for research and publication in their subject area as well as produce research and publications in areas of the scholarship of teaching.

Nevertheless, the trek to making distinctions among scholarship and teaching activities is a fortunate path. With scathing indictments directed at faculty work from the general public, parents, state legislators, congresspersons, business representatives, regulators, governing boards, and certainly students, something needed to be done to improve the outlook toward teaching, however it is approached. This, in part, was what prompted Boyer's (1990) charge of scholarship "to the renewal of the academy" and "to the renewal of society itself" (p. 81).

Illuminating the scholarship of teaching as research-based enterprises is also an unfortunate path. With the focal point on developing scholarly activity, the approach has been to establish empirical processes, design assessment methods, develop models, and appraise them as scholarship. Once completed the pressure is to report findings in peer reviewed publications and relate the information in a public forum to colleagues who evaluate the presentations. Thus, scholars have intentionally, or unintentionally, redefined teaching as the discovery domain. Teaching has, essentially, become another research product.

Maybe the time has come to reconsider what scholarship means in the context of Boyer's book. Even though tremendous strides have been made to advance issues surrounding teaching (e.g., Kreber, 2005; Middendorf and Pace, 2004; Richlin, 2001; Shulman, 1999; Trigwell et al., 2000), it appears after over a decade, much of the indictments surrounding the professoriate and the academy are the same (Finkelstein, 2001; Newman et al., 2004; Poskanzer, 2002).

Reiterating the purpose of this paper it is to reconsider the larger context of the scholarship and the role of the scholarship of teaching. To examine the issues, the following section analyzes *Scholarship Reconsidered* from two analytical approaches. First, lexical statistics is a method used to understand texts by word and phrase counts as well as frequencies. This method is applied to the section on the *Scholarship of Teaching* and then compared to other sections of the book to determine how much emphasis was devoted to the subject matter. Second, rhetorical analysis was applied to each chapter of the book. The purpose of the approach is to reveal an author's intent. Combined, they provide insights into the development of an

author's purpose for writing and support his or her purpose. These two approaches are explained in more detail below.

### V. Analysis and Conclusions.

Lexical statistics is as basic as word frequency counts or occurrence of strings of words (Lindsay and Gordon, 1999). The field of lexical statistics is concerned with "the quantitative analysis of words in texts...with word frequency distributions. Lexical statisticians count words in texts, calculate ratios between these words and compare counts and ratios of different texts" (Lexical Statistics, Introduction section, para. 3). A primary question governing the process deals with the following: Is there a functional interaction of words on the size of a text? Functional word interaction does not necessarily provide the needed understanding of a text. Therefore, additional assessment may be warranted. In this case, it is through rhetorical analysis that brings further light to lexical statistic results.

Rhetorical analysis "is the discovery of the author's intent and of how that is transmitted through a text to an audience" (Kennedy, 1984, p. 12). It involves the analysis of a message governed by a series of questions: (1) What is the situation?; (2) Who is communicating?; (3) What is his or her intention?; (4) Who is the audience?; (5) What is the content of the message?; (6) What structure does the message have?; (7) How does form and content interact?; (8) Does the message fulfill the author's intent?; (9) What does the message reveal of the culture in which it was intended? (Burton, 1998-2004, *Silva rhetoricæ*, Basic Questions for Rhetorical Analysis section). The following sections examine the text, *Scholarship Reconsidered*, according to lexical statistics and rhetorical analysis to assist in understanding two major thoughts. First, how does the scholarship of teaching fit within the context of the book? Second, what is the overall intent of the text?

#### A. Lexical Statistics.

Scholarship Reconsidered (Boyer, 1990) contains approximately 21,000 words excluding 42 pages of data tables. Of those 42 pages, 6 are related to teaching and of those 6, 2 are tied to the importance of research. There are an additional three-and-a-half pages of technical notes also not included in the 21,000 words for analysis. They pertain to the method of research on which the book was based and a description of the Carnegie Classification system. The chapter containing the four scholarship domains comprises 3,090 words, which is 14.7% of the seven chapter text. When converted to a ratio, the words in the chapter represent 1:6.8, so for every word devoted to scholarship domains, there are approximately seven words dedicated to other areas. It is concluded that the chapter is a minor part of the text. When the four domains are examined with specific attention to the scholarship of teaching, they serve even a lesser role in the book. Table 1 provides a summary of lexical statistics of the entire text, the chapter on scholarship, and the four scholarship domains. (Results have been rounded when reported.)

Of the 21,000 words in the text, approximately 470 are devoted to the scholarship of teaching. This represents approximately 2% of the words in the text (470/21,000). By placing the data in a ratio for approximately every 1 word he wrote dedicated to the scholarship of teaching 44.6 were dedicated to other areas of the book (1:44.6). The other scholarship domains faired better. Discovery is 2.8% of the text with a ratio of 1:35.6. Integration is 3.4% of the book with a ratio of 1:29.6. Application is 2.9% with 1:35 ratio.

When compared to other aspects of the chapter, the scholarship of teaching is not revealed as a dominate concept. For example, it represents 15.2% of the chapter as compared to 19.1% for discovery, 22.9% for integration, and 19.4% for application, with the remainder of the chapter committed to an introduction and conclusion. The ratio of words of the scholarship of teaching to the chapter is 1:6.5. Other domains are discovery (1:5), integration (1:4), and application (1:5).

Table 1. Lexical Statistics of Scholarship Reconsidered and Scholarship Domains.

Scholarship	Word Count	Percent of	Percent of	Ratio of	Ratio of	
Areas		<b>Entire Text</b>	Chapter	Words to	Words to	
				Text	Chapter	
Entire Text	21,000					
Scholarship	3,090	14.7		1:6.8		
Chapter						
Discovery	590	2.8	19.1	1:35.6	1:5	
Integration	710	3.4	22.9	1:29.6	1:4	
Application	600	2.9	19.4	1:35	1:5	
Teaching	470	2.2	15.2	1.44.6	1:6.5	

From the information above the scholarship of teaching served a minor role in the larger context than the other domains. Given this information, analyses were completed to see how all four domains compared among each other. The results indicated the scholarship of teaching again was the lesser of the domains.

When compared to discovery, teaching had 20% fewer words and a ratio of 1:1.3. The largest gap was with integration where teaching had 34% fewer words and a ratio of 1:1.5. Comparing it to application, it was similar to discovery with 22% fewer words and a 1.1.3 ratio. Teaching did not fair well among its other scholarship items.

The analysis revealed integration as the most important domain. It had 17% more words than discovery and 15% more than application. The word ratios were 1:1.2 and 1:1.8 respectively. Finally, when application was compared to discovery, it was relatively equal with 2% more words and a 1:1 ratio. Table 2 summarizes the results of the comparisons among the scholarship domains.

**Table 2. Lexical Statistics among the Four Scholarship Domains.** 

Scholarship	Word	Discovery		Integration		Applica	Application	
Areas	Count	Ratio	%	Ratio	%	Ratio	%	
Discovery	590							
Integration	710	1:1.2	+17					
Application	600	1:1	+2	1:1.8	-15			
Teaching	470	1:1.3	-20	1:1.5	-34	1:1.3	-22	

It can be concluded Boyer's attention centered not on the scholarship of teaching, but elsewhere. Within the text the scholarship of teaching has very low word counts as does all the domains. However, it is even the lowest among the other domains. Surprisingly, discovery is not at the top of the list. It is third of the four with more attention given to integration and application. With this, one might look again at Shulman's (1999) view that excellent teaching is

not synonymous with the scholarship of teaching whereas Boyer indicates it is. Within the scholarship of teaching section, Boyer actually relates what he meant by the scholarship of teaching: "When defined as *scholarship*, however, teaching both educates and entices future scholars" (1990, p. 23). It educates and entices. This statement is made within the context of student learning, dynamic delivery, and depth of knowledge of one's subject matter with the idea being that our future scholars are our current students.

Yet the scholarship of teaching had been expanded to mean other things based on 2% (470/21,000) Boyer's words. Additionally, these words have been redefined into scholarly activity to help illuminate how the scholarship of teaching might apply to faculty. Viewed another way, it is highly unlikely and doubtful researchers would report 2% of a result as a significant finding in their other research activities. However, since teaching is such an essential role of the academy and for society, 2% may warrant the activity it has generated.

If the analysis relied strictly on lexical statistics, it would appear subsequent scholarly development would have focused on integration, first, followed by application, discovery, and finally teaching. However, research is not this linear and lexical statistics does not provide a complete picture of the text.

# B. Rhetorical Analysis.

"We live in an intensely individualistic culture that creates barriers to solving social problems." One could think the previous quote came from Boyer's text *Scholarship Reconsidered*. It did not. It was from Atkinson (2001, p. 1225). Boyer actually set the stage this way: "We proceed with the conviction that if the nation's higher learning institutions are to meet today's urgent academic and social mandates, their missions must be carefully redefined and the meaning of scholarship creatively reconsidered" (p. 13).

Boyer proceeded to provide the characteristics of higher learning in the context of social mandates as a call for scholarship reconsidered. The scholarship of teaching should be, must be, examined in this broader context.

Chapter one gives a brief history of higher education's development as it relates and responds to contemporary life of the time. For example, one might consider the academy's early social responsiveness by placing education in the hands of "common people" with the Morrill Act of 1862 and the Hatch Act of 1887. Both were an agricultural and mechanical focal revolution in which learning was brought to the farmer. Later, with the Great Depression and world war, "Higher learning and government had, through scientific collaboration, changed the course of history—and the impact on the academy would be both consequential and enduring" (p. 10). Essentially, the importance of *research* came to the forefront as *the* mechanism for scholarly productivity and value. This led Boyer into chapter two where he introduced readers to the concept of a readiness to rethink scholarship and what it means to be a scholar for a renewal of the academy and society.

Chapter two, then, naturally developed the greater context of the professoriate and the academy. The professoriate, as he contended, is not the activity conducive to and participation in research, which is what the country's higher learning institutions were evolving into as well as deriving their value from. Boyer attempted to prompt faculty back into civic duty at all levels of their work, not just research. The place to begin was on campus: "Moreover, faculty, themselves, appear to be increasingly dissatisfied with conflicting priorities on the campus" (p. 16). He wondered if it was possible to define the professoriate to reflect the full range of academic and

civic mandates. He, then, offered the four scholarship domains. Subsequently, scholars cast them, particularly teaching, into the mold of research as expressed earlier in the paper. One could conclude that it is not possible "to define the work of faculty in ways that reflect more realistically the full range of academic and civic duty" (p. 16) if research is to remain the primary value standard of the professoriate. Clearly, Boyer's interest was for the larger well being of the academy and society. A theme he expanded in the remainder of the chapters.

In chapter three, it is the full talent of faculty that need to be tapped, not just the research component. In it he conceded that research is the hallmark of institutions. "For teaching to be considered equal to research, it must be vigorously assessed, using criteria that we recognize within the academy, not just a single institution" (p. 37). This is important for two reasons. First, it is recognized that research reigns as the premier activity for scholarly pursuits, not that it should be, but that it is. Second, it is the *teaching* that is important, not the research about teaching. Boyer attempted to ensure the act of teaching itself would settle on even ground with research. For two-and-a-half pages, he provided examples of how to improve the act of teaching so it becomes elevated with research. This was only one aspect of his approach to tapping the full talent of faculty. The chapter continued to explain additional areas and other approaches to the scholarship of being a faculty member. The teaching component was highlighted above to demonstrate Boyer's perspective of the scholarship of teaching as the act itself and not the activity of research about teaching as others asserted.

The next chapter's title almost explains it all: "The Creative Contract." Yet, he wrote the academy defines success in single-dimensional terms of research and publications. "The irony is that most professors do not think of themselves simply as researchers" (p. 43). Another ironic twist is that the agreed upon role of a faculty member is defined in terms of teaching, research, and service. However, when Boyer reconsidered the professoriate, teaching was the only term retained. Research and service were dispersed among discovery, application, and integration. The creativity contract, then, challenges the notion of a single-dimensional approach to the professoriate of research and publication. The chapter sets forth the concept of a three- to five-year arrangement of professional goals of which faculty reflect more realistically the full range of academic and civic duty. The hope was that a single dimension of research and publication would become the exception, not the norm.

Boyer followed in chapter six to steer the academy into a new generation of scholars. "They must think creatively, communicate effectively, and have the capacity and the inclination to place ideas in the *larger context*" (1990, p. 65) [italics added]. Although he pushed for a greater responsibility to the academy and society by faculty, he did not lose sight of the need for specialized work and original research. However, the scholarly breadth of its application and integration should be emphasized. "[F]uture scholars," he conveyed, "should be asked to think about the usefulness of knowledge, to reflect on the social consequences of their work, and in doing so, gain understanding of how their own study relates to the world beyond" (p. 69). It is this "world beyond" to which Boyer brings his scholarship reconsidered to a close.

In the final chapter, he strongly affirmed the importance of research. Nevertheless, he warned the academy to guard against *narrowly defining itself*—as has been done according to Atkinson (2001)—in terms of research production for the vitality of faculty, the success of postsecondary institutions, and well being of the world beyond the campus. "[S]cholarship," he wrote in a final sentence, "is required, one dedicated not only to the renewal of the academy but, ultimately, to the renewal of society itself" (p. 81).

Scholarship Reconsidered is a text not to highlight the scholarship of teaching. The scholarship of teaching is a minor, albeit important, aspect of the book because in its context it stresses the importance of the act of teaching to be reconsidered on par with research and how it applies to faculty meeting the changing needs of the academy and society. The success of the writing and the triumph of its subsequent development hinges on the academy's ability to accept Boyer's (1990) challenges in the greater context in which they were presented. That is to adapt to his conceptions of the professoriate, and refocus the work of faculty in a creative way. When accomplished, Boyer contended the academy would be revitalized and it would once again be more responsive to civic concerns.

The inference, then, is that these have not been accomplished; that Boyer has been overanalyzed at a level with disproportionate attentions converging on the scholarship of teaching. In the broader context, the scholarship of teaching, scholarship in general, and scholarship reconsidered mean much more.

### C. Answering the Questions of Rhetorical Analysis.

When examining *Scholarship Reconsidered* according to lexical statistics and rhetorical analysis, the results indicate Boyer (1990) was concerned with better education of students, a revitalized academy, and a renewed commitment to civic duty. His own words can answer many of the questions demanded of rhetorical analysis.

1. What is the situation? "Especially significant is the fact that students themselves increasingly have raised concerns about the priority assigned to teaching on campus." And, "What's really being called into question is the reward system and the key issue is this: what activities of the professoriate are most highly prized?" (p. xi). This gave rise for Boyer to comment on the situation of the time:

In the current climate, students all too often are the losers. Today, undergraduates are aggressively recruited. In glossy brochures, they're assured that teaching is important, that a spirit of community pervades the campus, and that general education is the core of the undergraduate experience. But the reality is that, on far too many campuses, teaching is not well rewarded, and faculty who spend too much time counseling and advising students may diminish their prospects for tenure and promotion. (pp. xi-xii).

Scholarship Reconsidered is an attempt to correct misgivings toward the professoriate. For over 15 years and the development of thousands of texts and programs on the scholarship of teaching, it appears not much progress has been made. "It is time to elevate the status of teaching—certainly at least to the level of research" (Newman et al., 2004, p. 56)

- 2. Who is communicating? The obvious answer is that Ernest Boyer was writing. What may not be so obvious is he was communicating on behalf "faculty from across the nation at all types of institutions" (p. 127). There were 5,450 of 10,000 faculty who responded to a 1989 National Survey of Faculty. The study was conducted for The Carnegie Foundation for the Advancement of Teaching by a research group from Virginia. The text represented a national concern of faculty.
  - 3. What was the intention? Boyer wrote:

For American higher education to remain vital we urgently need a more creative view of the work of the professoriate. In response to this challenge, we propose in this report four general views of scholarship—discovery, integration, application, and teaching. In

suggesting these activities we underscore the point that our intention is to spark discussion, not restrict it. (pp. xii-xiii)

It certainly has sparked discussion, more so in the area of the scholarship of teaching than others. In doing so, it has restricted the discussion as well. Because research still tends to be the mechanism by which faculty are rewarded, the scholarship of teaching has been cast into another measure of research activity. Furthermore the scholarships of integration and application, which lexically were predominant domains, are virtually non-existent in the literature.

- 4. Who is the audience? The audience is broad. Since Boyer expected a renewal of faculty as it applies to society, the audience becomes those people directly involved with and connected to higher education. He wrote faculty have serious concerns; higher education leaders are being called upon to respond to diverse student populations; and society is expecting greater responsiveness from its public education institutions.
- 5. What is the content of the message? The content was discussed in detail above by reviewing each chapter. Ultimately, it can be summarized according to Boyer:

American higher education has never been static. For more than 350 years, it has shaped it programs in response to the changing social context. And as we look at today's world, with its disturbingly complicated problems, higher learning, we conclude must, once again, adapt. (p. 81)

The meaning of the ability of higher learning was clear. He urged the professoriate to a renewal of the academy and society by a more creative and comprehensive work by faculty. He saw this taking place only as activities other than research were rewarded at the same level as research.

- 6. What structure does the message have? "It is this issue—what it means to be a scholar—that is the central theme of our report" (p. 2). "This report...," he concluded, "is toward a shared vision of intellectual and social possibilities..." (p. 80). A decade after the publication of those words, the quality of higher education was under question. Levine (2001) wrote that it was doing a miserable job answering basic questions raised by the government and it has not learned to function as a mature industry. Finkelstein (2001) was more direct by stating it is under indictment. More recently, it was reported as being criticized for having poor performance measures and lacking attention to societal needs (Newman et al., 2004).
- 7. How does form and content interact? Data from the report match the content. As Boyer stated, "Thus, the most important obligation now confronting the nation's colleges and universities is to break out of the tired old teaching versus research debate and define, in more creative ways, what it means to be a scholar" (p. xii). Unfortunately as Chait (2002) relayed, faculty, particularly new faculty, are overwhelmed with responsibilities. Furthermore, they feel they are under siege as criticized for being lazy. He continued that public entities from regents to the general populace question priorities and production of faculty. Whereas Boyer exhorted the academy to break away from the old mold of teaching versus research debate to help alleviate those concerns, it is still a major source of anxiety among faculty (Chait).
- 8. Does the message fulfill the author's intent? Accordingly, Boyer addressed this aspect well:

There is growing evidence that professors want, and need, better ways for the full range of their aspirations and commitments to be acknowledged. Faculty are expressing serious reservations about the enterprise to which they have committed their professional lives. This deeply rooted professional concern reflects, we believe recognition that teaching is crucial, that integrative studies are increasingly consequential, and that in addition to research, the work of the academy must relate to the world beyond the campus. (p. 75)

However, from concern to correction are gaps. Almost 15 years after the words above were written, the problem is much the same as institutions need to do a better job of preparing students with a proper view of the profession and their role in it (Nyquist, Woodford, and Rogers, 2004).

9. What does the message reveal of the culture in which it was intended? This can be addressed with a question Boyer posed:

As we move toward a new century, profound changes stir the nation and the world. The contours of a new order—and the dimensions of new challenges—loom large on the horizon. It is a moment for boldness in higher education and many are now asking: How can the role of the scholar be defined in ways that not only affirm the past but also reflect the present and adequately anticipate the future?" (p. 75)

The culture has not seemed to have changed much as indicated extensively in the previous paragraphs. It should be understood that criticisms of the academy are not unusual and most likely will not go away. The intensity of them changes and fluctuates over time, but to think they will disappear is to take a naïve stance. Birnbaum and Shushok (2001) indicated that if we look at how much higher education has been in *crisis*, it would represent 140 years of dismay. The intensity of criticisms and crises ebb and flow among the problems in higher education. It does seem, though, that the intensity surrounding the teaching/research debate has not lessened after 15 of Boyer's admonitions.

Reviewing the major developments of the scholarship of teaching and analyzing Scholarship Reconsidered according to lexical statistics and rhetorical analysis techniques provide a better understanding of the text and of teaching by answering two major questions. First, how does the scholarship of teaching fit within the context of the book? And second, what is the overall intent of the text? The scholarship of teaching is a critically important concept in the book. Throughout the text, though, teaching is referred to more as the act of teaching instead of research about teaching. This, in turn, is integrated into the overall aim of the text: "[T]o sustain the vitality of higher education in our time, a vision of scholarship is required, one dedicated not only to the renewal of the academy but, ultimately, to the renewal of society itself" (Boyer, 1990, p. 81). Given this broader view of Scholarship Reconsidered, it has implications for the academy and it role in society.

### VI. Implications.

Although the results demonstrate the scholarship of teaching plays a minor role in the larger context of the book, it sparked a renewed interest to improve teaching. Furthermore, it can be understood that the state of teaching has improved but still lags behind the prestige of research but teaching is gaining respect (Altbach, 2001). With a tremendous amount of pressure for teaching to be considered equal with research (Boyer, 1990) and the academy rewarding research more than other faculty activities, the present state of the scholarship of teaching will most likely continue on its current path—a long and laborious one with small, incremental gains. Therefore, the implications are a product of the analysis and the derisive assumptions of stakeholders about the current state of the professoriate being inefficient. The four implications below provide a perspective that the academy has created some of its own problems, and solved some too, as well as a view of Boyer possibly instigating unwarranted discussion.

First, much of the criticism of faculty originates within the academy itself. The professoriate, in a sense, has become its own enemy. In those instances where teaching is emphasized as a research activity, scholars have created a division in teaching. Initially,

investigations have drawn attention away from the act of teaching to recast teaching into a research mold. This has drawn criticisms from within the professoriate. Scholars not in the field of teaching and learning indicated they should not be responsible for research in their fields and research about the scholarship of teaching, too. Additionally, adopting a research perspective about teaching permeates graduate programs to where students are socialized into a belief that success is the ability to publish at a research institution versus to become an effective teacher (Newman, et al., 2004). Golde and Dore (2004) reiterated this perspective. Students obtaining the Ph.D. felt best prepared for research roles above all others as they entered faculty life. Since the Ph.D. is primarily a research degree, graduate education has its own set of problems. Its focus is on research as a requirement of the degree and the pressure to teach well serves as a criticism from stakeholders. A second implication addresses this more fully.

Second, although it is important to advance research about teaching to assist faculty in honing their craft, the major call of Boyer and others is for excellent teaching. "In a publish-orperish world, teaching at universities is typically given last priority. Good teaching is not delivering a lecture that one's colleagues would admire if it were published as an article" (Newman et al., 2004, p. 56). Moreover, somewhere along the line, it appears to be forgotten that the majority of postsecondary institutions in the U.S. are not research universities to where teaching not research is not the driving force. However, research seems to dominate the discussions. Research requires, for the most part, focused and narrowed investigations with specialized results and should provide contributions in both excellence of teaching and discovery. Research, though, and not teaching is rewarded in concert with the ability to obtain funding, publish in refereed journals, and present findings at peer reviewed settings, such as conferences. There is nothing inherently wrong with this as it can drive enterprise, solve national and international problems, fuel economic development, and help provide an educated citizenry. Additionally, with so much of this work at stake for promotion and tenure—ultimately personal livelihood—there is much to risk at the individual level to move beyond the norm. With a research based approached to the scholarship of teaching a stronger connection should be made between research about teaching and excellence of teaching. In one aspect, the third implication relates this perspective.

A third implication is that the academy is doing what it does very well. Scholars explore facets of a concept to bring better understanding to a phenomenon. This is what has been done with the scholarship of teaching. Scholars understand the difficulty of assessing teaching—excellent teaching—as they study it thoroughly to bring it to greater awareness so that not only is student learning maximized, but so is collegiate understanding. A greater awareness of the scholarship of teaching has been brought to light because of the four domains of scholarship and the academy's response to define teaching in empirical ways. Boyer provided the impetus to pursue the scholarship of teaching with both rigor and vigor. Institutes sprung forth. Programs developed. Faculty are trained, all in the name of better scholarship. And, teaching skills are enhanced because of the activity. But, is it too narrowed? Atkinson (2001) wrote it was. As a sociologist, she challenged the current thinking and legitimacy of why she should have to attend to the issues in her discipline *and* be required to research and publish in the area of teaching and learning to meet the demands many scholars render as the scholarship of teaching. Maybe the academy explored the issue of the scholarship of teaching too well and now the larger picture is obscure. Possibly Boyer is at fault here.

Fourth, was it reasonable for Boyer to reconsider scholarship as he did? For 350 years according to Boyer's own admission, the academy and the professoriate faced criticisms from

external stakeholders and internal personnel. Boyer's entire chapters one and two illustrate how colleges and universities responded to the needs of society and concerns of faculty. Neither has ever been entirely satisfied with their plight nor has society been non-critical of the academy. Given the nature of the times in which he wrote, it probably was reasonable to reconsider scholarship. It may not have been as reasonable to introduce a new way of converting teaching, research, and service into discovery, application, integration, and teaching. Since, it appears what Boyer was attempting to accomplish was a better combination of teaching, research, and service to bring about two fundamental results: deploy the full range of faculty talent in all aspects; and meet the needs of civic duty. Both would generate a renewed academy and society in his estimation. This probably could have been accomplished with less subsequent confusion surrounding teaching by presenting a fresh view of a strategy to overlap teaching, research, and service better versus redirecting them to discovery, integration, application, and teaching. However, how was Boyer to know his perspective would result in a predominantly research perspective of the scholarship of teaching? Nevertheless, the work is progressing strongly in the arena of the research of teaching and this is valuable for recommendations. Recommendations

One of the two recommendations falls into a similar concept criticized above. More work needs to be done to discover how to unify teaching, research, and service—or if one chooses—discovery, application, integration, and teaching for institutional and civic duty as well as promotion and tenure. Currently, most of the work has been to establish the scholarship of teaching as a scholarly activity with an impetus toward publications and presentations in peer reviewed venues. Scholars, if they choose, should begin with a fundamental mission of higher learning and work backwards. That is to say, start with civic duty and ask, "How does the work I'm doing foster the advancement of society with my teaching, research, and service?" Defining civic duty and using it as a measuring rod against teaching, research, and service may serve both

The second recommendation serves the current perspective of developing models and methods toward defining and advancing the scholarship of teaching. However, it should be recognized for what it is: discovery (research) about teaching. Research should be considered within its own context as it would within other disciplines and fields. People investigate teaching in their field as others research about biology, or sociology, or literature in their field. Although *Scholarship Reconsidered* and the scholarship of teaching did not explicitly promote a research perspective to teaching, the subsequent scholarship production has served two areas well: (1) ideas for better teaching; and (2) more attention for excellence for the act of teaching. Faculty should continue to research and publish models and methods of teaching. The benefit is that it generates attention to the excellence of the act of teaching as well as contributes to a body of theoretical knowledge. However, scholars, whose scholarship of teaching is research based or information is discovery derived, should take the next step and design models and methods to develop and evaluate the excellence of the act of teaching. These then can be utilized as valuable indicators for promotion and tenure as research.

#### Conclusion

the academy and society better.

The greatest concern in *Scholarship Reconsidered* was to propose a way to refashion the professoriate to meet the challenges a "new century" would bring. That the professoriate would adapt itself to meeting the profound changes he anticipated, would be to respond consistently as the academy had done for 350 years previously from colonial times to the 1990s. To extract one concept as scholars have often done—the scholarship of teaching—from Boyer's (1990) text and

cast it in a predominantly research role (Atkinson, 2001; Salvatori, 2002; Wagenaar, 2000), is to have misunderstood Boyer. To continue to focus on research, as he argued, would be inappropriate.

But if we are to take one concept—the scholarship of teaching—we must look at it in the context of which Boyer (1990) presented it. When he quoted Aristotle that the highest form of understanding comes from teaching, he set the stage for what was to be considered the scholarship of teaching. Atkinson (2001) understood this but few have followed her lead and chose to center the attention on research aspects surrounding teaching, not develop the act of teaching itself toward excellence. She, however, took a different stance and wrote, "Boyer's definition of the scholarship of teaching stresses the *practice* of teaching [italics added]. The scholarship of teaching is the process of transmitting perspectives, skills, and knowledge to others while remaining a vital learner oneself" (p. 1221). If this is done, it must serve the greater community as Boyer intended.

Moreover, "Is it possible to define the work of faculty in ways that reflect more realistically the full range of academic and civic mandates?" (Boyer, 1990, p. 16). It has been 15 years since Boyer (1990) wrote *Scholarship Reconsidered* and a few years into a new century. The answer is still unclear, but the search toward lucidity is progressing well.

#### References

A broader view of scholarship through Boyer's four domains. Appendix B: The Inventory of Scholarship. (2002). *ASHE-ERIC Higher Education Report*, 29. Hoboken, NJ: John Wiley and Sons.

Altbach, P.G. (2001). The American academic model in comparative perspective. In P.G. Altbach, P.J. Gumport, and D.B. Johnstone (Eds.), *In defense of American higher education*. Baltimore: The Johns Hopkins University Press.

Asmar, C. (2004). Innovations in scholarship at a student-centered research university: An Australian example. *Innovative Higher Education*, 29(1), 49-66.

Atkinson, M. P. (2001). The scholarship of teaching and learning: Reconceptualizing scholarship and transforming the academy. *Social Forces*, 79(4), 1217-1230.

Badley, G. (2003). Improving the scholarship of teaching and learning. *Innovations in Education and Teaching International*, 40(3), 303-309.

Birnbaum, R., and Shushok Jr., F. (2001). The "crisis" crisis in higher education: Is that a wolf or a pussycat at the academy's door? In P.G. Altbach, P.J. Gumport, and D.B. Johnstone (Eds.), *In defense of American higher education*. Baltimore: The Johns Hopkins University Press.

Boyer, E.L. (1990). Scholarship reconsidered: Priorities of the professoriate. The Carnegie Foundation for the Advancement of Teaching. New York: John Wiley and Sons.

Burton, G. (1998-2004). *Silva rhetoricæ*. Brigham Young University. Retrieved December 18, 2005, from http://rhetoric.byu.edu/.

Chait, R.P. (Ed.). (2002). *The questions of tenure*. Cambridge: Harvard University Press. Chanock, K. (2005). Scholarship of teaching and learning: Investigating patterns and possibilities in an academic oral genre. *Communication Education*, 54(1), 92-99.

Colby, A., Ehrlich, T., Beaumont, E., and Stephens, J. (2003). *Educating citizens: Preparing America's undergraduates for lives of moral and civic responsibility*. San Francisco: Jossey-Bass.

Cottrell, S.A., and Jones, E.A. (2003). Researching the scholarship of teaching and learning: An analysis of current curriculum practices. *Innovative Higher Education*, 27(3), 169-181.

Finkelstein, M.J. (2001). Understanding the American academic profession. In P.G. Altbach, P.J. Gumport, and D.B. Johnstone (Eds.), *In defense of American higher education*. Baltimore: The Johns Hopkins University Press.

Golde, C.M., and Dore, T.M. (2004). The survey of doctoral education and career preparation: The importance of disciplinary contexts. In D.H. Wulff and A.E. Austin (Eds.), *Paths to the professoriate: Strategies for enriching the preparation of future faculty*. San Francisco: Jossey Bass.

Huber, M.T. (2004). *Balancing acts: The scholarship of teaching and learning in academic careers*. Washington, DC: American Association for Higher Education and The Carnegie Foundation for the Advancement of Teaching.

Hutchings, P., and Shulman, L.S. (September/October, 1999). The scholarship of teaching: New elaborations, new developments. *Change*, 11-15.

Kennedy, G.A. (1984). *New Testament interpretation through rhetorical criticism*. Chapel Hill, NC: The University of North Carolina Press.

Kreber, C. (2002). Controversy and consensus on the scholarship of teaching. *Studies in Higher Education*, 27(2), 151-167.

Kreber, C. (2005). Reflection on teaching and the scholarship of teaching: Focus on science teachers. *Higher Education*, 50(2), 323-359.

Kreber, C., and Cranton, P.A. (2000). Exploring the scholarship of teaching. *Journal of Higher Education*, 71(4), 476-495.

Levine, A. (2001). Higher education as a mature industry. In P.G. Altbach, P.J. Gumport, and D.B. Johnstone (Eds.), *In defense of American higher education*. Baltimore: The Johns Hopkins University Press.

Lexical Statistics. (n.d.). Introduction. Retrieved January 10, 2006, from <a href="http://www.sfs.unituebingen.de/~lothar/TTQM/Scripts/WFD-01.html">http://www.sfs.unituebingen.de/~lothar/TTQM/Scripts/WFD-01.html</a>

Lindsay, R.K., and Gordon, M.D. (1999). Literature-based discovery by lexical statistics. *Journal of the American Society for Information Science*, 50(7), 574-587.

Li-Ping Tang, T., and Chamberlain, M. (1997). Attitudes toward research and teaching: Differences between administrators and faculty members. *Journal of Higher Education*, 68(2), 212-227.

Mayer, R.E., Fennell, S., Farmer, L. and Campbell, J. (2004). Personalization effect in multimedia learning: Students learn better when words are in conversational style rather than formal style. *Journal of Educational Psychology*, 96(2), 389-395.

McCroskey, L.L., Richmond, V P., and McCroskey, J.C. (2002). The scholarship of teaching and learning: Contributions from the discipline of communication. *Communication Education*, *51*, 383-391.

Middaugh, M.F. (2001). Understanding faculty productivity: Standards and benchmarks for colleges and universities. San Francisco: Jossey-Bass.

Middendorf, J., and Pace, D. (2004). Decoding the disciplines: A model for helping students learn disciplinary ways of thinking. *New Directions for Teaching and Learning*, 98. Hoboken, NJ: Wiley and Sons.

Newman, F., Couturier, L., and Scurry, J. (2004). *The future of higher education: Rhetoric, reality, and the risks of the market*. San Francisco: Jossey-Bass.

Nyquist, J.D., Woodford, B.J., and Rogers, D.L. (2004). Re-envisioning the Ph.D.: A challenge for the twenty-first century. In D.H. Wulff and A.E. Austin (Eds.), *Paths to the professoriate: Strategies for enriching the preparation of future faculty*. San Francisco: Jossey Bass.

Pace, D. (2004). The amateur in the operating room: History and the scholarship of teaching and learning. *American Historical Review*, 109(4), 1171-1192.

Poskanzer, S.G. (2002). *Higher education law: The faculty*. Baltimore: The Johns Hopkins University Press.

Quay, J. (2003). Experience and participation: Relating theories of learning. *Journal of Experiential Education*, 26(2), 105-116.

Richlin, L. (2001). Scholarly teaching and the scholarship of teaching. In C. Kreber (Ed.), *Scholarship revisited: Perspectives on the scholarship of teaching*. New Directions for Teaching and Learning, 86. Hoboken, NJ: John Wiley and Sons.

Richlin, L., and Cox, M. D. (2004). Developing scholarly teaching and the scholarship of teaching and learning through faculty learning communities. In M.D. Cox and L. Richlin (Eds.), *Building faculty learning communities*. New Directions for Teaching and Learning, 97. Hoboken, NJ: John Wiley and Sons.

Rink, J.E. (2001). Investigating the assumption of pedagogy. *Journal of Teaching in Physical Education*, 20(2), 112-128.

Salvatori, M.R. (2002). The scholarship of teaching: Beyond the anecdotal. *Pedagogy*, 2(3), 297-310.

Scholarship of teaching: Now too defined? (2005). The Teaching Professor, 19, 8.

Shulman, L.S. (1998). Course anatomy: The dissection and analysis of knowledge through teaching. In P. Hutchings, (Ed.), *The course portfolio: How instructors can examine their teaching to advance practice and improve student learning*. Washington, DC: American Association for Higher Education.

Trigwell, K., Martin, E. Benjamin, J., and Prosser, M. (2000). Scholarship of teaching: A model. *Higher Education Research and Development*, 19(2), 155-168.

Wagenaar, T. (2000). "Comments from editors of teaching sociology" presented at The Scholarship of Teaching and Learning in Sociology conference. James Madison University, Harrisburg, VA. July. From Atkinson, M. P. (2001). The scholarship of teaching and learning: Reconceptualizing scholarship and transforming the academy. *Social Forces*, 79, 1217-1230. Retrieved November 18, 2005, from www2.chass.ncsu.edu/slatta/cowboys/sotl\_sf.pdf.