

1

The scholarship of teaching and learning in higher education: an overview

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Introduction

In scholarship and research having a problem is at the heart of the investigative process; it is the compound of the generative questions around which all creative process and activity revolves. But in one's teaching a 'problem' is something you don't want to have, and if you have one, you probably want to fix it ... Changing the status of the problem in teaching from terminal remediation to ongoing investigation is precisely what the movement for the scholarship of teaching is all about. (Bass, 1998–99)

Bass hits at the heart of the 'tired, old teaching versus research debate' (Boyer, 1990: 16): as university teachers we have inherited a culture that defines our research and status in terms of our discipline and relegates our teaching to some neutral transmission zone, lived out in what Shulman (1993) calls 'pedagogical solitude'. In this model a 'problem' in one's teaching is defined as a deficit; there is something wrong that must be 'fixed'. This in turn draws on a technical model of teaching to 'fix' it, thereby perpetuating the model of 'terminal remediation'.

Brew (2007) provides interesting insights on the teaching–research relationship, which throw light on why teaching and research have been polarized in this way. The traditional relationship between teaching and research is that they have inhabited separate domains (Brew, 2006: 18). 'Research' has been seen as taking place in a disciplinary research culture in which 'academics, researchers and postgraduate research students carry out the job of generating knowledge', whereas 'teaching is viewed as taking place within a departmental learning milieu' (Brew, 2007: 1), where teachers transmit knowledge. A graphical representation of this model suggests that teaching and research are, in fact, 'pulling in opposite

directions' (Brew, 2006: 18), and that their separate domains work in competition with each other for 'time, resources and space' (Brew, 2007: 1).

Many academics will be able to identify with the deficit thinking behind this model: time spent teaching is time taken from research. However, a different concept of teaching lies at the heart of the scholarship of teaching and learning (SoTL) 'movement' (Hutchings, 2004); it sees teaching as intellectual work, as a process of inquiry, as research that employs the same criteria as other forms of disciplinary research; as 'ongoing investigation' that is made visible, shared with others, peer reviewed and published (Shulman, 1999).

This chapter provides an overview of the literature on the SoTL, with particular reference to its emergence in the 1990s in the work of the Carnegie Foundation for the Advancement of Teaching in the United States. It explores different definitions of scholarship, looks at its theoretical underpinnings, summarizes some key developments and highlights some of the key debates.

The origins of SoTL

The story of how SoTL began is worth telling, not only because it gives teaching its rightful place in universities, colleges or institutes, but because it puts the focus on what good teaching is all about: student learning and the search for its compelling evidence. Though popularized in the publication of *Scholarship Reconsidered* in 1990, by Ernest Boyer, then president of the Carnegie Foundation for the Advancement of Teaching, the concept of a 'scholarship of teaching' existed long before Boyer coined the term. For example, in 1928, in his inaugural address as President of the University of Chicago, Hutchins suggested that all departments should carry out experiments in undergraduate teaching and learning – a fundamental activity of SoTL – and that PhD students should be involved in this process and not just let loose on the 'helpless undergraduates' (www.issotl.org/tutorial/sotltutorial/home.html). Hutchins' words are still visionary and pertinent. They speak to current efforts to develop graduate education to include teaching as an intrinsic part of research and research training.

Though Boyer's (1990) work on the scholarship of teaching has received most attention, McKinney (2004: 3) points out that others contributed to the earlier discussion of the concept. For example, Shulman (1987) coined the phrase 'pedagogical content knowledge'. Pellino, Blackburn and Boberg (1984) discussed multiple forms of scholarship, including the scholarship of pedagogy, while products, such as course content and activities, were seen as a form of scholarship in Braxton and Toombs' (1982) research. Indeed, it was Eugene Rice, as a scholar in residence at the Carnegie Foundation, who originally came up with the blueprint for the four scholarships (Edgerton, 2005: xii).

What is important, however, is that the idea of having to redefine and realign scholarship was inevitable. As Edgerton (2005: xiii) points out, had *Scholarship Reconsidered* never been published, ‘faculty priorities would still have surfaced as a major issue. The conditions under which colleges and universities do business were clearly changing’. What is paramount in terms of the development of scholarship at that time was that *Scholarship Reconsidered* spoke to academics ‘not in their roles as “professors” (members of a university), but as “scholars” (members of an intellectual community)’ (Edgerton, 2005: xii). In terms of the future development of SoTL, this distinction is crucial in underscoring the idea of teaching as ‘community property’ (Shulman, 1999) and foregrounding the idea of a ‘teaching commons’ (Huber and Hutchings, 2005).

Boyer’s paradigm of scholarship

In *Scholarship Reconsidered: Priorities of the Professoriate*, Boyer (1990) set out to reconsider the role of the faculty, so that all roles and responsibilities could be valued equally. His vast experience at all levels in the education system had taught him much about the nature of the teaching role, its relationship to student-centred learning and the challenges for teachers embedded in an active learning model:

... faculty, as scholars, are also learners ... While well prepared lectures surely have a place, 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. (Boyer, 1990: 24)

Calling for a radical reappraisal of scholarship, Boyer argued that universities needed new forms of scholarship that moved beyond those of the traditional model of research. Boyer suggested four new, overlapping forms of scholarship: discovery, application, integration and teaching (Boyer, 1990: 16). This reappraisal had the potential to transform understandings of academic work: ‘*Scholarship Reconsidered* transformed the discussion. Instead of describing faculty roles in terms of the familiar trilogy of teaching, research and service, it argued that faculty were responsible for four basic tasks: discovering, integrating, applying and representing the knowledge of their scholarly fields’ (Edgerton, 2005: xii).

Rice claimed that the primary intent was heuristic: ‘to reframe the discussion about what faculty do as scholars on a broad range of fronts and to open up a lively conversation across higher education on this important topic’ (O Meara and Rice, 2005: 17). In redefining the concept of scholarship, and questioning the dichotomy between teaching and research, Boyer

(1990: 15) began to bridge the teaching–research gap. He pointed out, for example, that the word ‘research’ was a recent addition to the language of higher education, used in England in the 1870s for the first time, to mark Oxford and Cambridge out as places of learning (research), as well as teaching. The term ‘research’ did not emerge until 1906, in American education.

Boyer (1990: 15) pointed to the richness of the term ‘scholarship’, which originally referred to a range of creative work, whose ‘integrity was measured by the ability to think, communicate and learn’, not by the number of publications a scholar produced, as has become the norm:

Scholars are academics who conduct research, publish, and then perhaps convey their knowledge to students or apply what they have learned. The latter functions grow out of scholarship, they are not to be considered part of it. But knowledge is not necessarily developed in such a linear manner. The arrow of causality, can, and frequently does, point in both directions. Theory surely leads to practice. But practice also leads to theory. And teaching, at its best, shapes both research and practice. (Boyer, 1990: 15–16)

Boyer’s argument (1990: 24) was that the teaching–research link needed to be reformed, and that a more inclusive view of what it meant to be a scholar was needed: ‘a recognition that knowledge is acquired through research, through synthesis, through practice and through teaching’ (Boyer, 1990: 24). In this new order there would be no hegemony; research, in the traditional sense, would be just one of four ways in which a scholar functions. If Boyer’s message is to be taken seriously, it is now necessary to look closely at each of the scholarships and tease out their implications.

The scholarship of discovery

Investigative scholarship comes closest to what is traditionally understood by research, with its focus on publication. However, Boyer produced a new definition:

The scholarship of discovery at its best contributes not only to the stock of human knowledge but also to the intellectual climate of a college or university. Not just the outcomes, but the process, and especially the passion, give meaning to the effort. (Boyer, 1990: 17)

In the new order, such scholarship also includes the creative work of scholars in the literary, visual and performing arts, hence the inclusion of all disciplines. Boyer’s focus on the words ‘process’ and ‘passion’ highlight the creative and compelling nature of research. The question behind this

kind of research is, 'What do I know and how do I know it?' This encompasses all aspects of research and investigation in all disciplines.

The scholarship of integration

Though he achieved his own doctoral degree in the traditional manner and was committed to traditional research, Boyer subsequently realized that scholarship required not just specialization, but integration. In proposing the scholarship of integration, Boyer highlighted the need for scholars to give meaning to isolated facts, analyses and observations, putting them in perspective and making connections within and between disciplines. This form of scholarship has much to do with purpose and goals of a general education.

As an academic dean, he began to question the overall purpose of the undergraduate experience and asked the question, 'And just what do we expect students to know and be able to do when they are handed a diploma?' (Boyer, 1990: 2). Indeed, such questions foreground the current focus across European universities on learning outcomes and the Bologna Agreement.

This scholarship suggests that the researcher as teacher needs to ask the question, 'How can the findings be interpreted in ways that provide a larger, more comprehensive understanding?' Boyer pointed out that the scholarship of integration is closely related to that of discovery. It involves, first, 'doing research at the boundaries where fields converge' (1990: 19). Such work, he suggested (1990: 21), is increasingly important as traditional disciplinary categories prove confining, forcing new categories of knowledge. The scholarship of integration, therefore, also includes the skill of interpretation, fitting one's own research – or the research of others – into larger intellectual patterns.

The scholarship of application

The third element, the application of knowledge, moves, in Boyer's terms (1990: 21) 'towards engagement', and, in the current literature, is referred to as the scholarship of engagement (Huber and Hutchings, 2005). Here, the scholar asks the questions, 'How can knowledge be responsibly applied to consequential problems? How can it be helpful to individuals as well as institutions? And, further, can social problems themselves define an agenda for scholarly investigation?' This is where theory meets practice and one informs and reforms the other.

Boyer provided interesting perspectives on the idea of service, central to this form of scholarship. He suggested that, too often, 'Service means not

doing scholarship but doing good' (1990: 22). In order to be considered as scholarship, however, it would have to do more than that:

Such service is serious, demanding work, requiring the rigor – and the accountability – traditionally associated with research activities ... The scholarship of application, as we define it here, is not a one way street ... New intellectual understandings can arise out of the very act of application ... In activities such as these, theory and practice vitally interact, and one renews the other. (Boyer, 1990: 22–3)

In short, the scholarship of application seeks ways in which knowledge can solve problems and serve the community. It implies the rigorous application of the scholar's expertise to 'consequential problems', which, in turn inform the discipline.

The scholarship of teaching

In relation to the scholarship of teaching, Boyer (1990: 23) cautioned that the 'work of the professor becomes consequential only as it is understood by others'. He therefore underlined the point that teaching is about learning. Teaching, in his terms, is not some 'routine function, tacked on, something almost anyone can do. When defined as scholarship, teaching both educates and entices future scholars' (Boyer, 1990: 23).

Boyer recognized that his commitment to active learning and lifelong learning had implications for pedagogy:

Teaching is also a dynamic endeavour involving all the analogies, metaphors, and images that build bridges between the teacher's understanding and the student's learning. Pedagogical procedures must be carefully planned, continuously examined, and relate directly to the subject taught ... knowing and learning are communal acts. With this vision, great teachers create a common ground of intellectual commitment. They stimulate active, not passive, learning and encourage students to be critical, creative thinkers, with the capacity to go on learning after their college days are over. (Boyer, 1990: 23–4)

Boyer articulated the intellectual work of teaching, an argument taken up by Shulman (1998): 'teaching, like other forms of scholarship, is an extended process that unfolds over time. It embodies at least five elements: vision, design, interactions, outcomes and analysis' (Shulman, 1998: 5).

'The new scholarship requires a new epistemology'

Kreber (2006: 114) suggests that SoTL was ready 'to come of age' in 1995 and points to the significance of articles in *Change* magazine in its development.

She highlights the work of Barr and Tagg (1995), who argued ‘for a new paradigm for undergraduate education, one where the focus would be not so much on teaching but on learning’ (2006: 114). She points also to the work of Donald Schön in interpreting the implications of Boyer’s new scholarship: it demanded a new institutional epistemology, a new way of knowing and documenting evidence. Schön (1995) argued that methods of ‘technical rationality’, with their positivistic focus, were limited in their capacity to deal with the real problems of teaching and learning in ‘the swampy lowlands’. He concluded that we needed ‘a kind of action research’, a reflective practice approach, in order to explore and understand student learning and professional practice.

Schön’s thinking foregrounds the new methodologies and genres that were invented to harness problems that were ‘messy, confusing and incapable of technical resolution’ (Schön, 1995). By mapping out new territory, he paved the way for the use of teaching and course portfolios and evidence-based learning in the work of Bernstein (Bernstein et al., 2006), Cerbin (2000) and others. The work of Cross and Steadman (1996) was also influential at this time in building a solid foundation for the work of SoTL.

The contribution of *Scholarship Assessed*

Though Boyer’s work was widely read and led to the intended, vibrant discussion needed around the concept of research as a multi-faceted scholarship, it left many questions unanswered. These concerned ambiguity surrounding the meaning of a scholarship of teaching in particular: was there a distinction between excellent teaching, scholarly teaching and scholarship of teaching? Another question emerged about how the scholarship of teaching aligned itself with the other scholarships. There was also the question of how these new forms of scholarship could and should be assessed.

It was in answer to the last question that *Scholarship Assessed: Evaluation of the Professoriate* was written in 1997. Here Glassick, Huber and Maeroff (1997: 25) argued that if all four scholarships were to be recognized and valued equally, then the same set of standards should apply to all of them. They identified the standards as follows: all scholarly work must have ‘clear goals, require adequate preparation, make use of appropriate methods, produce significant results, demonstrate effective presentation and involve reflective critique’. These standards applied as much to the scholarship of teaching as to that of discovery; all must meet the criteria in order to be considered as scholarship.

Developing a scholarship of teaching and learning

Shortly after the publication of *Scholarship Assessed*, Lee Shulman, who replaced Boyer as President of the Carnegie Foundation for the Advance-

ment of Learning, wrote an article entitled ‘Taking Learning Seriously’ (Shulman, 1999). Here Shulman developed the concept of a scholarship of teaching by further clarifying how it might be done:

An act of intelligence or artistic creation becomes scholarship when it possesses at least three attributes: it becomes public, it becomes an object of critical review and evaluation for members of one’s community; and members of one’s community begin to use, build and develop those acts of mind and creation.

Shulman’s definition emphasizes the idea that such scholarship would be accomplished only in the context of a community of scholars. This is the antithesis of ‘pedagogical solitude’ and the antidote to teaching as ‘dry ice’ (Shulman, 1993), i.e. as that which disappears without a trace, if not documented.

Shulman and Hutchings (1999) further developed the concept of SoTL in ‘The Scholarship of Teaching: New Elaborations, New Developments’, shifting the emphasis from teaching to learning:

A scholarship of teaching is not synonymous with excellent teaching. It requires a kind of ‘going meta’, in which faculty frame and systematically investigate questions related to student learning – the conditions under which it occurs, what it looks like, how to deepen it and so forth – and do so with an eye not only to improving their own classroom but to advancing practice beyond it.

Thus, SoTL is not done only to publish and critique teaching, but, more importantly, to inquire into student learning. To the three criteria already named as characteristic of a scholarship of teaching (making teaching public, open to critique and evaluation and in a form others can build on) Shulman and Hutchings added a fourth, embedded in the other three: ‘it involves question asking, inquiry and investigation, particularly around issues of student learning’.

From excellent teaching to scholarship of teaching

In the same article, it is clear that Hutchings and Shulman begin to draw distinctions between ‘excellent’, ‘scholarly’ and ‘scholarship of teaching’, aspects of the concept of SoTL that were missing from Boyer’s definitions. Shulman and Hutchings (1999) lay out the parameters of the discussion as follows:

... *all* faculty have an obligation to teach well, to engage students and to foster important forms of student learning – not that this is easily done. Such teaching is a good fully sufficient unto itself. When it entails, as

well, certain practices of classroom assessment and evidence gathering, when it is informed not only by the latest ideas in the field but by current ideas about teaching the field, when it invites peer collaboration and review, *then* that teaching might rightly be called scholarly, or reflective, or informed. But in addition to all of this, yet *another* good is needed, one called a scholarship of teaching, which in another essay we have described as having three additional features of being public ('community property'), open to critique and evaluation and in the form others can build on.

Shulman and Hutchings (1999) do not presume that all faculty will wish to pursue such a scholarship, but they do see it as 'a mechanism through which the profession of teaching itself advances, through which teaching can be more than a seat of the pants operation'. However, they point out that the scholarship of teaching is a condition for excellent teaching and underline the long-term commitment necessary to bringing such scholarship about:

It is important to stress that faculty in most fields are not, after all, in the habit of – nor do most have the training for – framing questions about their teaching and students' learning and designing the systematic inquiry that will open up those questions. Indeed one of the most fundamental hurdles to such work lies in the assumption that only bad teachers have questions or problems with their practice.

Conclusion

SoTL has its base in the disciplines, since all academics have a research discipline in which they are embedded. This is why SoTL is a 'big tent approach' (Huber and Hutchings, 2005) and reaches beyond the boundaries of educational research. Huber (2006: 72) points out that the disciplines have much to contribute to SoTL. She also indicates (Huber and Hutchings, 2005: 4) that 'there are elements of discovery, integration, and application within the scholarship of teaching and learning, because this work typically involves classroom inquiry, synthesizing ideas from different fields, and the improvement of practice, all at the same time'. Hence, the scholarships and disciplines are interdependent.

Hutchings (2004: 1) summarizes the progress that SoTL has made since 1990 by providing the evidence that now enables us to call it a 'movement', the core habits and commitments of which can be summed up as follows:

that teaching is intellectual work, that student learning poses challenging problems that require careful investigation, that rich evidence about learning needs to guide thoughtful improvement and that the

important work of learning and teaching should not be allowed to 'disappear like dry ice' (Shulman, 1993) but be made visible, sharable and useful to others.