FROM THE DESK OF

SoTL, academic practice, and academic development
Johan GEERTSEMA1

1 Centre for Development of Teaching and Learning, National University of Singapore

Address for Correspondence: Assoc Prof Johan Geertsema, Director, Centre for Development of Teaching and Learning, National University of Singapore, Central Library Annexe, Level 6, 10 Kent Ridge Crescent, Singapore 119260

Email: johan.geertsema@nus.edu.sg

Recommended citation:
SoTL, academic practice, and academic development

What is the point of the scholarship of teaching and learning (SoTL)? If SoTL is worth engaging in, then how might one do it? And how could institutions foster such engagement in SoTL?

I take it as axiomatic that the fundamental purpose of engaging in SoTL is to improve student learning. SoTL can help improve student learning since it consists of a body of knowledge about education through which academics can develop their teaching expertise. While disciplinary expertise is of course a sine qua non for teaching at university, developing expertise in teaching is crucial too since teaching is a key component of what it means to do academic work. Moreover, we cannot assume that teaching effectively is possible merely through intuition and experience, important though they are. Instead, what is needed so that academics can develop their expertise in teaching is rigorous reflection on teaching as a core element of academic practice. If it is to have depth and rigour, then such reflection must be informed by the existing body of knowledge about teaching and how students learn. Through scholarly engagement with what the literature tells us about learning and teaching, and at the same time by reflecting on how principles derived from the literature can apply to their own teaching context, it becomes possible for faculty to learn how best to create a learning environment that will encourage students to pursue deep approaches to learning. Such reflection on the basis of the scholarship of teaching and learning must be transformative in the sense that it should lead to change in the way we approach our teaching, for in engaging with the literature and reflectively relating it to our own practice, as teachers we build an expertise in teaching that complements our disciplinary expertise, which then transforms not only the way we approach our teaching, but the ways our students approach their learning.

If ultimately the purpose of engaging in SoTL is to improve student learning, then the way to achieve this end is through engaging with SoTL to improve teaching quality. And good teaching, in John Biggs and Catherine Tang’s definition, “[supports] those activities that lead to a deep approach to learning and to the attainment of the intended learning outcomes” (2011, p.55). In short, if SoTL is concerned with the improvement of learning, then it is at the same time concerned with the improvement of teaching. For this reason, SoTL has a strong developmental orientation. This contrasts with a conception of SoTL that sees it as research.

In what follows, I unpack this set of ideas, and I start by returning to Ernest Boyer’s foundational reconsideration of scholarship, or in other words: the work of academic practice.
Boyer and the four functions of scholarship

A quarter of a century ago, in 1990, Boyer influentially distinguished between four functions of scholarship: those of discovery, application, integration, and teaching (p.16). This marks a convenient starting point for thinking about SoTL since it provided the impetus for a movement that has by now achieved global reach—or almost global reach, a point to which I return below. In drawing his distinction, Boyer was making a case for a “more comprehensive, more dynamic” (p. 16) view of what it means to be a scholar and of engaging in scholarship, which is to say: in academic work. As he pointed out in a phrase that still resonates, in particular in research-intensive universities, “according to the dominant view, to be a scholar is to be a researcher—and publication is the primary yardstick by which scholarly productivity is measured” (p.2). Boyer thought this more-or-less exclusive emphasis on disciplinary research, or what he termed the scholarship of discovery, amounted to a restricted, impoverished view of academic work:

Scholarship in earlier times referred to a variety of creative work carried on in a variety of places, and its integrity was measured by the ability to think, communicate, and learn. What we now have is a more restricted view of scholarship, one that limits it to a hierarchy of functions. Basic research has come to be viewed as the first and most essential form of scholarly activity, with other functions flowing from it. Scholars are academics who conduct research, publish, and then perhaps convey their knowledge to students or apply what they have learned. (p.15)

The problem with taking disciplinary research as the basis of scholarship, as Boyer pointed out, is that “knowledge is not necessarily developed in such a linear manner.” (p. 15) In other words, the flow of knowledge is not necessarily from research to teaching, or from research to real-world application. Instead, other dimensions of scholarship can inform research. Academic work forms a complex system with many elements that affect one another and the environment within which it occurs, and recognising this is important if we want to understand how this work works.

Boyer was at pains to emphasise that he was not in any way attempting to detract from the central position of scholarly work; rather, scholarly, “disciplined, investigative efforts within the academy should be strengthened, not diminished” (p.17). This is to make the point that scholarship has more functions than that of discovering new knowledge. Relevance and thus the work of applying knowledge in the real world are additionally crucial dimensions of scholarship, as is the case with connecting knowledge with other disciplines and contexts, including the non-specialist. The fourth function of scholarship is the academic work of teaching, which consists not only of passing knowledge on, but of “[stimulating] active, not passive, learning” (p.24) so that students will have “the capacity to go on learning after their college days are over”. In Boyer’s view teaching needs to move beyond transmitting information. Though lectures have their place, “teaching, at its best, means not only transmitting knowledge, but *transforming*
and extending it as well” (Boyer’s emphasis, p. 24). This is to say that, if we are to do justice to teaching as itself a form of scholarship, then we must recognise that “faculty, as scholars, are also learners” (p. 24). As faculty we need to learn about teaching, since teaching is much more than merely repeating knowledge to students. Instead, teaching at its best has the potential to change knowledge by inspiring students to engage in scholarship themselves, developing their own ideas by building on previous work and connecting it with their own. Moreover, since at least Marton and Säljö’s influential distinction between surface and deep approaches to learning, we have known that teaching must involve much more than transmission of knowledge if genuine learning is to occur (for a good overview, see Biggs & Tang, chapter 2). Instead, faculty need to foster a deep approach to learning.

So, in sum, this is perhaps the most significant point that Boyer makes: academic work consists of different dimensions or functions, and it is unproductive to perpetuate the simplistic binary of teaching and research. Thinking instead of scholarship in a more integrated, holistic way, as Boyer proposes, has several implications not only for what it means to be an academic, but also for the questions I raised at the start: why one might engage in SoTL, what it might mean to do so, and how institutions can foster SoTL work.

**SoTL as a means of development, or as a kind of research?**

It would be inaccurate to say that there is universal agreement on how to respond to these questions, but the various positions can be reduced to two main schools of thought. The first sees SoTL as a means of development, while the second sees it as a form of research. Keith Trigwell usefully outlines these two positions as follows:

The Scholarship of Teaching and Learning can be defined in many ways. [One definition involves SoTL] as having a primary focus on improving the learning of the teachers’ students, while satisfying several key elements of scholarship: a scholarly inquiry leading to the production of a public artefact and the peer review of that outcome. This is in contrast to a definition that sees scholarly journal publications as the major outcome, with a primary focus on faculty career development and contributions to new knowledge that may (or may not) lead to improved teaching and learning generally. (2013, p. 99)

Both positions agree on three fundamental points: that SoTL as scholarship needs to involve rigorous scholarly inquiry into student learning and thus into teaching as a key aspect of academic practice; that this needs to be made public; and that this process of making it public needs to be subject to peer review. These points are essential if we conceive of teaching as itself a form of scholarship; scholarship around learning and teaching, in other words, SoTL, must be held to the same rigorous standards as
other forms of scholarship. Moreover, as Trigwell demonstrates, there is evidence of a correlation between being active in SoTL on the one hand, and approaches to teaching that foster deep student learning (p.100).

Where the two schools of thought diverge, however, is in the ultimate purpose and hence audience of SoTL work, and concomitantly its outcome. The second position outlined by Trigwell emphasises publication in a scholarly journal as a major outcome. It sees SoTL as primarily a means of advancing faculty careers through their contribution to the creation of new knowledge about education, knowledge which “may (or may not) lead to improved teaching and learning generally” (2013, p.99). Improved teaching and learning is no longer the primary focus; while improved learning may still occur, nevertheless the focus here ultimately is on generating new knowledge in the service of faculty career development, in other words, tenure and promotion. In short, where the first position sees SoTL as scholarly investigation of student learning by the teacher in order to improve it, the second sees SoTL as conducting research into one’s own teaching and learning context in order to publish. In the first case, faculty members inform themselves about important aspects of their practice as teachers and the effects these have on their students’ learning, and they do so to improve their practice so as to become more focused on active student learning and less focused on only transmitting knowledge. In the second case, faculty members conduct formal studies with a view to publication in international journals. Here SoTL is confused with education research since, if we now return to Boyer’s work, we can discern that the second position conflates the two scholarships of discovery and teaching.

As we saw, the scholarship of discovery is Boyer’s term for disciplinary research. Scholarly investigation which has the purpose of advancing disciplinary knowledge is research. If we engage in such investigation to advance knowledge of education, then we are conducting research in education, which would necessarily require becoming experts in the discipline of education. However, as Mårtensson, Roxå and Olsson have argued, it does not make sense in the context of research-intensive universities to “aim for a professional identity as a teacher that incorporates the identity of an educational researcher” (2011, p.60). This is particularly the case since, in research-intensive institutions, a significant part of academic identity consists of the work done around disciplinary research, so it seems not only unproductive but unrealistic to expect of such academics to develop a parallel expertise in education that would be comparable in degree to their disciplinary expertise: “The demands on academic teachers to keep abreast with what is happening in their own discipline are already overwhelming. Some individual teachers will engage to a degree where they do educational research in its disciplinary sense, but probably not the majority”. Even in such cases where faculty are appointed on a practice or education-oriented career track, we should take an integrated approach to academic work. It is important for them to continue pursuing scholarly investigations into their disciplinary expertise, even if these do not eventuate in publications, for the reason that they need to stay abreast with the expansion of knowledge in their area of expertise, which militates against aiming “for a professional identity as a teacher that incorporates the identity of an educational researcher”. While
in exceptional cases some academics may develop as high a degree of expertise in the additional discipline of education and its vast body of knowledge as well as sophisticated set of methods, this is unlikely to happen on a large scale. Given the realities of what it means to do academic work in research-intensive institutions, it is best to guard against conflating the scholarship of teaching and learning with the scholarship of discovery, that is, disciplinary research that creates new knowledge.

However, as I will continue to argue below, SoTL can have a strong developmental function. Over time, finding ways to strengthen faculty members’ close engagement with the scholarship around learning and teaching—without undue and overhasty emphasis on publication in top journals but instead encouraging a more local way of making scholarly investigation public—will build institutional capacity in education that will, in the long run, help pave the way towards education research.

There is a second important reason for distinguishing between education research and SoTL. If the purpose of SoTL is to improve learning and teaching, and hence academic practice at the institution—since, after all, students learn and faculty teach in particular institutions—then it makes sense to orient SoTL inquiry towards a local, institutional level. It makes much less sense to disseminate SoTL inquiry on a public, global level: it goes without saying that SoTL understood as research in education, and thus as the scholarship of discovery, would demand an audience that goes beyond the local level. Here faculty would need to conduct research that can be published in top international journals. This may be good for their career advancement, but it would come at the cost of reduced local impact, and thus reduced effect on the improvement of teaching and learning at the institution. Local impact would be reduced for the reason that it would be much less visible than when made public locally. If a faculty member engages in a scholarly investigation of her teaching practice and its impact on student learning (in other words, a SoTL project) and this is published in a journal aimed at a global audience of education specialists, then it should be evident that this work will circulate among those specialists, not among local colleagues. This is so since, if truth be told, local colleagues are too busy dealing with the multiple demands of academic work—in particular, with keeping up-to-date with the research being published in their disciplines, whether it is because they are research-active in their discipline, or whether it is to stay current with disciplinary expertise for the sake of their teaching duties. On the other hand, if it were made public locally, for example in a departmental seminar, at a learning and teaching workshop, as a working paper, or in a local journal that is aimed at the local, institutional level and thereby has high circulation at this level, then it would be more visible locally and consequently have higher local impact than if it were made public elsewhere.

We can understand this point better if we consider the different kinds of knowledge, and thereby the different levels of scholarly investigation, in which academics engage all the time. In particular, it is necessary to draw a distinction between research and other forms of scholarly investigation. To count as research, a scholarly investigation needs to fulfil certain criteria, one of the most important of which is that it requires a public
audience on a supra-institutional level. For research to be taken seriously, it needs to reviewed by expert peers from the field as a whole and it must have demonstrable global impact, as most especially measured by citations. But this should certainly not lead us to dismiss scholarly investigations that do not have global impact and that therefore do not count as research; on the contrary, such scholarship remains invaluable in scaffolding and thereby making possible research. Drawing on Stephen Rowland’s distinction between the personal, shared and public contexts of knowledge, Paul Ashwin and Keith Trigwell distinguish between three levels on which scholarship takes place (Figure 1).

![Figure 1: Levels of investigations showing relations between the purpose, process and outcomes of that investigation (Ashwin & Trigwell 2004, p.122)](image)

As academics, we constantly engage in scholarly investigation into aspects of our academic practice. We read cases to keep up-to-date if our discipline is law, or we read journals like *Science* or *Nature* if we work in STEM disciplines. These investigations result in personal knowledge, on which we can then build to strengthen scholarly work, including the scholarly work of teaching aimed at encouraging deep approaches to learning. This work takes place within our community of colleagues, and the next level of investigation moves personal knowledge towards local knowledge within the workgroup, the department, the classroom, or the lab. Examples would be faculty seminars where faculty share their scholarly work to receive feedback from colleagues, who thereby verify the “evidence-gathering methods and conclusions”. Another example would be peer review of teaching, where faculty open their classrooms to colleagues who then verify their work, thereby strengthening local practice by feeding into academics’ personal growth (level 1) as well as local knowledge about teaching and student learning (level 2). The third level of investigation has a wider audience, and here faculty send their work into the world beyond their immediate contexts for verification and critique, so that their work in turn becomes public knowledge read by others to inform themselves (level 1), build local, institutional knowledge, and thus the cycle of knowledge building continues. So another important reason for drawing a distinction between SoTL and education research is that “in order to have an impact on a particular culture, teachers engaging in scholarship at a local level … are probably the most important category, in contrast to those operating on a global level (for instance by contributing publications in international educational journals)” (Mårtensson, Roxå and Olsson 2011, p.60).
This local, institutional dimension is crucial for knowledge building. As Scardamalia and Bereiter have argued, knowledge building on a local level is no less valuable than cutting-edge, original research. Far from it: such local knowledge contributions to the community are essential for successful knowledge-creating organizations, including universities. In fostering such local knowledge creation, we foster work that advances “the state of the art” (2014, p.399), not necessarily in the disciplinary field, but in the university as a community of knowledge. It is a question not of building individual expertise only, but a collective expertise that is an “emergent distributed phenomenon” not found in any individual mind. Knowledge thereby becomes greater than the sum of its individual parts, which means recognizing that developing those individual parts needs to take place within the context of knowledge building within the institution.

Lest this emphasis on the local be mistaken for a plea for parochialism, I hasten to add that the local of course always stands in some relation to the global. As Wenger puts it when he discusses what he terms the expansive dimension of identity, “a healthy identity will not be exclusively locally defined” (2000, p.240). It instead involves “multimembership” of different communities, thereby requiring one to cross multiple boundaries and creating bridges that can open new possibilities for personal growth and development that dialogically feed into the local and global communities of which we form part to different degrees. Identities, including academic identities that form part of a social learning system, need to “achieve simultaneously high degrees of local connectedness, global expansiveness, and social effectiveness” (Wenger, 2000, p.241). Engaging in SoTL—even and especially when this is focused on the local level—requires that one engage with education scholarship, a body of public knowledge that is practised and circulates globally. This is anything but an argument for insularity, but instead for a rigorous dialectic of the global and the local, and for local communities within the university with one another. As I have put it already, even if SoTL is oriented towards the local, it is informed by the global, and it is a means for scaffolding academic work that itself in years to come can result in work with a global reach.

Moreover, a local SoTL focus cannot be the end point in part because the world of SoTL has, despite its rapid spread over the last quarter century, remained limited in reach. As Peter Looker recently pointed out in this journal, “the scholarship of teaching and learning movement … has been concentrated in a handful of countries, mostly English-speaking, and mostly Western” (2011, p.26). Indeed, probably the first major SoTL conference aimed at an audience beyond North America, Australia, and the British Isles was held only in June 2015 (EuroSoTL), though significantly enough, it took place in Cork, Ireland, thereby tending to confirm rather than expand its culturally-specific origins (the next conference will take place in 2017, in Sweden). Looker’s question is why it is the case that SoTL has been so slow to spread beyond its origins, and his answer is that SoTL is itself “the product of particular cultural practices” (p.27). A quick example may elucidate this: instead of approaching Chinese learners from a perspective informed by theory that originates in the Anglophone world, with its own culturally specific practices, Looker suggests that “it would be interesting to see the perspective reversed, with a study of the Western learner from a Chinese perspective”
Since teaching and learning are not “culture-fair” (p.28), we need to take account of the local contexts within which they happen. But it also means “problematizing, or even defamiliarising, Western contexts of teaching and learning, a willingness to open up to all the forces, political, cultural, institutional, that shape what happens in the ‘classroom’” (p.29). In short, it means that we need a local approach to SoTL sensitive to the Asian contexts within which we work, while at the same time affecting the global context by opening it up to an enriching ‘otherness’ (Wenger, 2000, p.233).

**Academic development and SoTL**

What the above suggests is that SoTL must have a strong developmental component on the institutional level, which raises the question as to how academic developers at our universities should position themselves toward SoTL. Before ending, I briefly consider this issue.

Within a research-intensive context, as I have argued, it makes sense to see SoTL as primarily a means for developing teaching in order to support student learning, in particular by moving beyond a model of teaching premised on transmission of knowledge so as to emphasise the importance of deep learning; such learning requires a student-centred approach that fosters active learning. There are at least the following implications.

First, SoTL can become a lever for improving student learning in research-intensive institutions. Academic development units such as the NUS Centre for Development of Teaching and Learning should therefore find ways of supporting academics in order to develop their SoTL capacity. These units are a prime institutional vehicle for fostering engagement in SoTL and should help equip academics with rigorous theoretical foundations to underpin their approach to teaching and student learning. What this means is that they themselves should follow a scholarly approach to academic development. Courses and workshops for faculty and students should be scholarly; they should be informed by both the scholarship of teaching and learning as well as that of academic development in order thereby to collaborate with course participants so as to engage them in transformative reflections on their own practice as teachers and learners. One way of doing so would be to reimagine professional development programmes as opportunities to scaffold project-based scholarly investigations into academic practice. As I have argued, such scholarly investigations have the potential not only to improve student learning outcomes, but also to strengthen the university if they are aimed at the local level. Moreover, in thus building capacity, these locally-oriented scholarly investigations can build capacity in such a way that practitioners may reach the next level, namely research contributions to the discipline of education beyond the institution itself. The degree to which they aim towards an identity as education researchers will of course depend on institutional imperatives such as employment tracks that require discovery research in education. Regardless of formal policies, however, if we follow
an integrated approach to academic work, then academic developers need to find ways of fostering scholarly approaches to teaching for all academics at the institution.

Second, academic development units should work to encourage SoTL as a means of changing institutional culture in ways that will strengthen teaching and learning. A distinction is sometimes made between scholarly teaching on the one hand, and the scholarship of teaching and learning on the other. For example, Richlin and Cox think that the purpose of “scholarly teaching is to affect the activity of teaching and the resulting learning, while the scholarship of teaching [and learning] results in a formal peer-reviewed communication in appropriate media or venues, which then becomes part of the knowledge base of teaching and learning in higher education (2004, p.128). As is evident from this, they firmly orient the scholarship of teaching (and learning)—in other words SoTL—as research. This is problematic, as I have argued, since it orients SoTL to a supralocal level meant to inform a wider audience beyond the institution, to return to Ashwin and Trigwell’s important distinction. It further conflates Boyer’s scholarship of teaching with the scholarship of discovery, which has significant implications for the identity and work of academics. Instead, attention to the local level becomes limited to scholarly teaching. Scholarly teaching in this definition precludes the crucial component of making one’s teaching or one’s scholarly investigation into learning and teaching visible, which is a problem if one of the key things needed for changing institutional culture so as to strengthen teaching and thereby learning is what Wenger would call the reification of practice, where people produce artifacts that can become boundary objects that “support connections between different practices” (2000, p.236). In other words, if faculty do the work of paying attention to the scholarship around teaching and learning, then this should ideally eventuate in something concrete that allows them to share their work, not only formally but also informally, and thereby potentially have an impact on colleagues in other parts of the institution. Colleagues can thereby find solutions to issues they themselves experience in their teaching. If the scholarly teacher documents the project on which they worked in a course offered by an academic development unit, then academic developers can refer people with similar interests or problems to it. In Wenger’s terms (p.235), they then become brokers who can link the different communities of practice in the institution so that the scholarly project on teaching and learning can become useful to other colleagues at that institution. But then, in being made public (albeit on a local, institutional level), it already becomes SoTL and the distinction becomes moot. While we certainly want to encourage scholarly approaches to teaching, scholarly teaching should not be seen as standing in a dichotomous relation to SoTL.

Finally, to reiterate, SoTL can strengthen academic development. Academic development units need to walk the talk: if they seek to encourage SoTL work from participants, as they should if their overarching aim is to develop academic teaching in the service of improved student learning, then they need themselves to design and implement programmes that are relevant to academics’ needs in being practice-based, in modelling active learning that can result in participants not merely receiving skills training but engaging in deep learning about learning, and in being anchored in scholarly
reflection on learning and teaching. In doing this, academic development units can strengthen the scholarship of teaching and learning by focusing on SoTL as a means for developing high-quality teaching and improved student learning outcomes. Such capacity building will result not only in strengthening the institution, but over time in producing work that can become research, which will thereby have a global impact beyond the institution itself.

I would like to express my thanks to the AJSoTL Editorial Board for inviting me to contribute; special thanks to Chng Huang Hoon and Peter Looker for their valuable feedback.
REFERENCES


