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Evolution and Engagement in SoTL: Today, Tomorrow, and Internationally

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Abstract

This article presents a revision and extension of remarks made by the authors as part of a plenary panel at the 2010 SoTL Commons Conference at Georgia Southern University in Statesboro, Georgia (USA) on the current and future state of SoTL both in their respective countries (New Zealand, Israel, Denmark, the United States, and Trinidad & Tobago) and internationally. We devote special attention to issues and themes that are common across our countries and others.

Keywords

International SoTL trends, Future of SoTL

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Introduction

At the 2010 SoTL Commons Conference, the five of us presented a Plenary Panel Discussion on the topic "SoTL Today, SoTL Tomorrow, SoTL Internationally" (Gunn, Kurtz, Lauridsen, Maurer, & Steele, 2010). At the request of numerous conference attendees, we have put our thoughts to paper and revised and extended our remarks. What follows can be conceptualized as the current status and future of SoTL in five countries: New Zealand, Israel, Denmark, the United States, and Trinidad & Tobago. In each case, special effort has been made to either place these developments in an international context, or to discuss how they extend beyond the country referenced to an international audience.

The Scholarship of Teaching and Learning With Technology

The scholarship of teaching and learning is key to successful elearning strategies. However, it is not the most common driver of such initiatives either at present or in the past. In countries around the world, national and institutional strategies promote the use of technology to enhance teaching and learning. Government initiatives like New Zealand's *Encouraging and Supporting Innovation Fund* are common. This focus is not new. Developments in computer and Internet technology have been applied to educational design since the 1960s. Drivers are often practical as well as pedagogical, as increasing scale and diversity within classes challenge faculty to find creative ways to apply the principles of scholarly teaching to their practice. Institutions tend to push technology use as an efficiency measure. However, experience shows that quality elearning is expensive, demanding investment of time and creative effort, which is justified by positive impact on learning and engagement (Bates, 2000; Gunn & Harper, 2007, Oliver, 2005; Paulsen, 2000). Evaluation is a significant feature of this work, as new approaches require evidence to show they are different, perhaps better, and at least as effective as other methods.

Evidence is also needed to offset the kind of speculation that accompanies every technological development. Observers predict a future where traditional institutions and teaching methods are replaced by convenient, contemporary, computer facilitated learning. For a recent example, see Tapscott & Williams (2010). These predictions are generally flawed, because they make no reference to the scholarship of teaching, or they grossly miscalculate the rate of diffusion of new technologies.

Reviewing the Evidence

Recent research and evaluation reveals certain conditions that allow elearning to permeate the culture and practice of institutions:

- An overarching strategy to demonstrate priority and guide elearning development across the disciplines;
- Commitment of funding and resources to endorse the priority and support development of elearning innovations;
- Processes to reconcile different priorities, e.g., IT Services concern for security and standardization with faculty desire to experiment and choose from a range of emergent technology systems;
- Institutional policies and systems that support implementation of the strategy, e.g., assessment policy that supports the use of online strategies, and promotion policies that reward teaching innovations;
- Flexible, easy to use, integrated and well supported IT systems;
- Professional development that effectively promotes the scholarship of teaching and elearning;
- Mechanisms to disseminate successful elearning innovations as sustainable and accessible systems.

While these factors create ideal conditions for elearning, they are not in themselves sufficient. The key to success is grounding elearning developments in the scholarship of teaching and learning, and promoting this on a large, if not necessarily enterprise-wide,

scale. While this may be obvious to anyone working in the field, it can be hard to convince all stakeholders what this means in practical terms.

Reviewing the Practice

A critical appraisal of the discipline identifies reasons why faculty engagement with elearning is limited. While there are many elearning exemplars, current challenges are: producing compelling evidence of the impact of scholarly teaching with technology on learning; dissemination of that evidence; and diffusion of innovative educational practices. Reflecting on these challenges identifies ways they might be addressed.

Many 2010 SoTL Commons Conference presenters raised questions about research and evaluation methods. Early impressions from a meta-analysis of studies of elearning evaluation are that diverse qualitative methods and reporting formats make it difficult to move beyond case studies to more general findings. The design-based research approach, (Barab & Squire, 2004) evolved to address gaps in evaluation practice, and identified the need to generate theory from multiple cases. It may be the case that not many researchers are actually doing this. A logical direction would be to move towards a more standard evaluation and reporting format. Not to restrict the diversity that reflects the richness of practice, but to address broader goals to communicate more clearly within and beyond the discipline.

Questions about dissemination of SoTL research and evaluation results also featured in many sessions. Suggestions to forge closer ties with other disciplines and explore avenues such as the media are worth considering. However, dissemination aims will not be served if we create another disciplinary 'silo' for SoTL! One obvious connection is with faculty / professional development where promoting the scholarship of teaching is a priority aim. The fields are well aligned and face many common challenges. But is dialogue happening? If so, where is it taking place? Are joint conferences and journals worth exploring? Gunn (in press) puts the same questions to the international academic development community.

Much has been written on the diffusion of innovations, which is a form of individual and organizational learning, so effect does not follow cause in a predictable relationship. Many strategies are used to pursue this goal, and there is benefit in studying them in the same way as the scholarship of teaching. Using the definition 'systematic reflection on teaching and learning made public' (McKinney, 2010), the art is in ways to 'make public' as much as 'systematic reflection on teaching and learning'. Both are creative enterprises with long and intriguing journeys ahead.

Pedagogical Challenges for Social Networking Applications

Whether it is interacting in a virtual world like Second Life, facilitating knowledge via Wikipedia, networking via Facebook, sharing video delivered via YouTube, or developing an e-portfolio using a blog, more teachers around the world and in Israel are using Web 2.0 applications for classroom and online teaching. These innovative technologies have an impact on the Scholarship of Teaching and Learning, hopefully to improve the teaching-learning process.

Web 2.0 technologies include an increased emphasis on user generated content, content sharing and collaborative work. Web 2.0 refers to a perceived second generation of web

development and design that facilitates communications and secures information sharing, interoperability, and collaboration on the web (Harris & Rea, 2009).

Incorporating web 2.0 applications that originally were not developed for educational purposes stimulates questions like the following: Do educators know how to choose the best applications for teaching process? Do educators properly implement the technology? How do we (teachers) know they (students) have learned the content? The need is to use these applications to enhance and enrich learning and not hinder pedagogy. There is a main pedagogical challenge that is essential in this process: collaborative work and its effect on an individual's knowledge and the need to find new ways to assess a student's achievements.

Through collaboration and creation of content, Web 2.0 technologies enable a more student-centered and constructivist way of learning. Evidence from the field reveals the beneficial effects of collaborative work on the learning process (Harris & Rea, 2009). Most Web 2.0 technologies have aspects of collaboration and sharing knowledge. They allow students to work together on assignments and projects so their learning can increase by peer-to-peer sharing. This innovative way of learning has its drawback: how can the teacher be sure that the individual student really learned? Actually, the broader question is related to assessment and evaluation of students' outcomes. It is true that a teacher can, for example, track each individual page of a wiki glossary or Google docs project, but this is not realistic given a teacher's workload. Teachers need to have tools to identify students' learning both as part of a group and as an individual learner.

New Web 2.0 technologies and websites, such as a blog, wiki or YouTube, make new demands on learning, and they provide new supports to learning, even as they also dismantle some of the learning supports upon which education has depended in the past. For example, in the past there was a clear path for assessing students' achievements or outcomes mainly by test or a project. With Web 2.0's new pedagogical rationale of group knowledge, how can educators be sure that students have actually learned the content material? This question is still unsolved and calls for further theoretical investigation and field implementation.

Whether a classroom is on the ground or online, the teaching-learning environment needs to be stimulating, reinforcing, relevant, interactive, challenging, rewarding, and supportive. Web 2.0 applications can assist in achieving these educational goals. Like all technologies, the use of Web 2.0 technologies presents both opportunities and challenges to educators and learners. The use of Web 2.0 applications involves a process of exploration and learning for all participants. Educators need to learn how to develop innovative models of teaching and delivery methods, as well as assessments tools, tailored to these innovative technologies. The challenges are fundamental and far from over! They are a subject to further research and discussions like the one we had at the SoTL Commons Conference.

An Emerging Field in a Changing Landscape

Like in many other countries, SoTL is an emerging field in Denmark. While research and development projects may not be labeled SoTL, more often than not they would qualify as such. Danish universities are rooted in the Continental European tradition of the Humboldtian research university, and a considerable part of the faculty still consider teaching and learning an obligation they have to live with. However, this picture is slowly

changing, one reason being that there is now a mandatory program of pedagogical training for all assistant professors. In other words, after young colleagues begin in a tenure track position, they must complete this pedagogical training program in order to qualify for a fully tenured position as associate or full professor (chair). This has led to an enhanced focus on the pedagogical aspects of a university career, and the establishment of pedagogical training centers at universities. Several of these centers also offer other in-service training programs to all faculty, part-time teachers and student instructors (GTAs) (cf. e.g., the Aarhus School of Business LEARNING STYLES LAB at www.asb.dk/lslab). At the top management level of the university, these programs are seen – at least by some – as a valuable contribution to the accountability now required for accreditation, which, on a large scale, is still a relatively new phenomenon at European universities.

With a constructivist point of departure, the pedagogical training centers advocate a focus on learning rather than teaching, just as they encourage teachers to engage students in active learning, problem based learning, etc. However, the teachers who then actually do so, face new, and for many, unexpected problems. Traditionally, many of us have said that if you want to implement changes in the university sector, get the students on board. They will help you by pressing ahead to demand changes such as the exploitation of what are no longer “new” technologies (e.g., the Web 2.0 applications described above). At the same time, many colleagues have observed that, surprisingly enough, students are more reluctant when it comes to other student-activating modes of delivery. Why is that? The constructivist credo that the one who is active is the one who learns, or learns the most, is not always well received by the students. Being active takes time! We are therefore faced with the unusual situation that even though research as well as experience tell us that students would learn better and deeper if they were more active in the learning process, not all students are prepared to devote the time needed to be active students rather than passive listeners at a (traditional) lecture. Is it because they have not fully realized that they cannot expect new knowledge to be served on a silver plate for them, or is it because the current generation of students reject what is not electronically available to them?

In the Danish primary and secondary school systems, there is an ethos of interaction, dialogue and critical thinking, which is also – or should be – reflected at the tertiary level. At a very early age, students are required to conduct independent, problem-based project work, and one would take it for granted that they would all be well prepared for being active students at university. Fortunately, this applies to many, if not all of them. However, in the era of globalization, Danish universities also receive an increasing percentage of students who have grown up in a different country, culture and pedagogical tradition. Some of them are used to an educational system similar to the Danish, others are not. This adds an extra dimension to the challenges described above. While everyone involved should be enriched by the multicultural and multilingual classroom of the international university, this is not necessarily perceived as an enrichment by the students. Some foreign students find it really hard to adapt to an educational tradition that is distinctly different from what they have grown up with, and domestic students do not always have the patience to introduce them to it. How do we overcome this challenge?

The situation described here leads us to conclude that faculty who try to promote a constructivist, student activity-based agenda are faced with a double challenge. They have to convince their peers that this is the way forward at a time when universities are obliged to accommodate an ever increasing percentage of an age cohort in its programs (different percentages in different countries, but almost all of them on the rise). They also have to convince students that, at the end of the day, they gain so much more and will obtain better

grades if they take the time to be active students. There is no doubt that existing and future SoTL research results can help us in these endeavors, so that the arguments in favor of the student activity-based agenda are grounded in convincing data, and there are even better examples of successful practice than is currently the case.

The Rising Tide of SoTL

SoTL in the U.S. is cresting a wave. Support for SoTL has been building since the publication of Ernest Boyer's (1990) *Scholarship Reconsidered*, in which he called for the valuing of the "scholarship of teaching" and a renewed focus in American higher education on reflective and disseminated teaching practices. In the two decades since the publication of Boyer's book, the landscape of American higher education has changed dramatically, and in ways that actually create a "perfect storm" opportunity for SoTL: Accrediting bodies are demanding greater focus on assessment of teaching and learning. A corporate style "business model," which demands a focus on "evidence based decision making" (i.e., what is the data that supports why we teach the way we teach), is increasingly taking hold at the highest levels of university administration. Legislators and taxpayers are clamoring for public universities to focus on "the basics," by which they mean quality teaching, rather than disciplinary research. Students and parents, faced with ever-rising tuition and fees (largely as a result of decades of government underfunding of higher education), are expecting and demanding more engaging, higher quality educational experiences. At the same time, as state governments further cut their funding for higher education, faculty to student ratios grow and class sizes bulge. Faculty, who are caught in the middle of all of this, need real answers to address these issues. The Scholarship of Teaching and Learning alone can provide those answers. It is SoTL that tells us what works in the classroom and why. It is SoTL that allows us to share our "best practices" with others so that countless faculty members need not reinvent the wheel every time they encounter a new issue or obstacle in teaching. It is SoTL that will allow us to communicate to the public, whether they be accreditors, administrators, legislators, taxpayers, parents, or students, that we *focus on and value* quality teaching and learning experiences.

It is this last point that prompted vigorous discussion with the audience in the Plenary Session. The question was asked how to get "buy in" from administrators who do not currently value SoTL as much as disciplinary research. The panel offered numerous suggestions. It was noted that the pressures explained above, especially from students, are likely to have an impact over time, forcing even the most reluctant of administrators to acknowledge the value of SoTL. It was also suggested that universities could be more proactive about SoTL and see this not as a threat to disciplinary research, but an opportunity to revise the university's mission to better reflect the current and future needs of society. Many universities currently advertise that their faculty are doing "cutting edge research" in their disciplines. No university is advertising that their faculty are doing "cutting edge research" in SoTL. Given the focus of so many stakeholders on the basic educational mission of universities, consider the potential marketing impact if one or a small number of universities not only promoted and valued SoTL, but actively advertised that focus to parents and prospective students. Those universities could quickly become leaders of the new SoTL movement and could potentially have a great transformative impact on American Higher Education and beyond.

The Future Will Build on the Experience of the Past

The Scholarship of Teaching and Learning has emerged as a form of pedagogical research that is often rooted in the disciplines in which we as scholars were trained. These disciplines may be in the physical/natural sciences, humanities and social sciences, the medical sciences and the creative arts. Today SoTL is widely recognized as systematic, deliberate inquiry into how we can be better teachers and improve our students' learning. The objective is to share our scholarship with others formally. It is one form of scholarship. It is distinguished from Scholarly Teaching (ST), which is concerned with improving our instructional practices using a scholarly approach and is not focused on wider formal dissemination.

As often happens in other forms of inquiry, scholars and researchers draw upon how research is undertaken within and across the disciplines with which they are familiar. Godfrey Steele is interested in the issue of engaging graduate communication students by involving them in assessment practices. In order to do so, he adopts research methodologies used in communication studies and other disciplines. He draws upon quantitative and qualitative and mixed approaches as required by the concerns, objectives and outcomes associated with teaching and learning. It may well be that if we wish to engage students in their own assessment, apart from borrowing from other disciplines, SoTL may evolve into a discipline in its own right with its distinct, yet overlapping, approach to inquiry.

For example, do we approach systematic, deliberate and reflective inquiry on Scholarly Teaching (ST) in the same way as the Scholarship of Teaching and Learning? He suggests we respond by asking: What are the commonalities and differences between ST and SoTL, and how are their approaches alike and at the same time different from other approaches? He thinks there is a place for engaging our students by involving them in the research process, too.

We also need to engage our colleagues and administrators within and across disciplines and to get them to see this form of scholarship as important enough to be treated seriously at the institutional level, and as a fair basis for assessment, tenure and promotion.

First, to do so we should see SoTL as an art and a science with its own evolving methods of inquiry to address its peculiar concerns and challenges. The deliberate intentional inquiry should be complemented by an intuitive approach that is open to unintended possibilities. Second, we should engage ourselves and our colleagues and administrators as well as our students.

David Glenn's (2010) article in the *Chronicle of Higher Education* reported on deliberations at a meeting of the Association of American Colleges and Universities. The advice is: Don't wait for faculty tenure and promotion to change to improve teaching. But Leah Shopkow's response to this advice is to ask, "How long can one volunteer to do things while one's administration only pays lip service?" We need to note David Glenn's later comment that "Faculty engagement is needed for student engagement." BUT how do we do so? How do we develop a SoTL disciplinary sense that has evolved with its own identity? And how do we, at the same time, engage ourselves, our colleagues and our students? Tomorrow's SoTL should address these two questions as well as other questions that may emerge.

Concluding Remarks

Our five countries share many commonalities with respect to the current and future state of SoTL, and it is interesting to note the different strategic approaches being pursued and promoted in different parts of the world. For example, Trent Maurer notes that in the U.S., although most university administrators have not yet fully embraced SoTL, there is a growing popular movement among many key stakeholders to prioritize quality teaching over traditional disciplinary research. No such trend is visible in New Zealand, where the largest research focused university is pursuing closer links between the two through a 'revival' of what some scholars consider the 'mythical' teaching-research nexus. The aim is to foreground discipline based research as a way to enhance the quality of teaching in financially constrained and otherwise challenging circumstances. This strategy does not reflect a national trend however, as various responses to government teaching quality imperatives align with the status and strengths of each of the country's eight universities.

It is important for scholars to maintain an optimistic view of the future, to value diversity across disciplines, and to internationally disseminate national and cultural responses to the challenges that arise from changing circumstances. Two common factors among all our countries are increasing student to faculty ratios and growing class sizes. Forging closer links between the two core areas of the mission of universities, i.e., teaching and research, may be a key strategy to maintain manageable workloads for faculty without compromising quality in either area. Using and sharing knowledge about teaching and learning offers obvious benefits, and using evidence to support plans and decisions is, as it always has been, critical to the success and survival of higher education. The elearning landscape of the recent past shows evidence of the risks of allowing forecasts rather than data to drive strategies.

Reflecting on Our Colleagues' Statements

A summary of comments made by colleagues on this panel reflects key issues to guide SoTL into the future. Cathy Gunn commented on evaluation and the need to draw on more sources of data. This is useful insofar as we are able to marshal our resources and collect authentic data from our teaching and learning experiences. Sometimes, however, the ethical issues of obtaining consent to use teaching and learning data subject to Institutional Review Board [IRB] approval, as well as the reluctance of our colleagues to participate in data collecting and sharing, remain serious but not unassailable challenges. Engaging colleagues seems to be a useful approach.

Gila Kurtz spoke about the value of being current in our pedagogical ideas to enhance learning and research. She identified the importance of studying the effect of collaborative work on the learner and the need to find new ways of assessment. These themes resonate with Cathy Gunn's interest in technology and evidence on its use and Karen Lauridsen's concern with acquiring evidence on student-activity-based agenda. In expressing similar concerns in the context of challenges to funding and winning public support for SoTL, Trent Maurer spoke to the value of developing a cutting-edge SoTL research profile and Godfrey Steele focused on an evolving SoTL research tradition and the need for faculty, student and institutional engagement. Trent Maurer's comment on budget cuts and the impact on higher education is important for SoTL. It has both local and international implications. For example, it is a serious issue occupying attention in the Caribbean and in Trinidad and Tobago at the University of the West Indies, St. Augustine Campus, where Godfrey Steele

leads the faculty union, the West Indies Group of University teachers (WIGUT). WIGUT recently hosted a public seminar on “Sustainable Funding of Higher Education in Challenging Times” on March 4, 2010 (please see <http://sta.wigut.info>) to address similar concerns, particularly regarding the hiring and retention of faculty, funding the academy and students, and the maintenance of quality assurance standards. In response to the question from the plenary audience about what can be done about spreading word of SoTL, Godfrey suggested that in order to do so we need to enlist the support of the media in explaining our aims and concerns in SoTL to the public. We also need to secure a commitment from faculty and administration in doing so. Budget cuts can have a negative impact on the research on teaching and learning which we need to sustain to advance the SoTL discipline.

The challenge now is to convince stakeholders who are not directly involved in SoTL that it should be prioritized as a constructive response to emergent circumstances. It is interesting to note the differences as well as the similarities between our countries. As Trent Maurer noted, in the U.S. the current economic crisis has precipitated the largest reductions in state funding for public universities in that nation’s history. This has led to a *demand* among key stakeholders, namely students, parents, legislators, and taxpayers, to cut anything from university budgets not directly and essentially related to their core educational mission. Similar trends are emergent in other places, though the drivers are institutional management rather than other stakeholder groups. Although these stakeholders are not explicitly demanding more SoTL research, such research would be consistent with their demands. This ideally positions “reluctant” faculty and administrators to embrace SoTL as a way to both placate these stakeholders and retain the other core part of their universities’ missions: generating knowledge through research. In contrast, as Godfrey Steele has noted, in Trinidad & Tobago, despite commitments to government funding, there are similar threats to sustainable funding of higher education in that nation, and the wellspring of public support for the core educational mission of its universities has been significantly smaller. Without broad demand for a focus on teaching from key stakeholders, it is left up to university faculty to do the “heavy lifting” of convincing other faculty and administrators of the need and value of focusing on SoTL.

On the positive side, new technology and the scholarship of teaching and elearning are rising to challenges of scale and productivity across all of our countries. Design-based research studies from around the world show how technology can be used to scale up the principles of good instructional design to ensure quality learning in large classes and with diverse student populations. Innovative designs can present rich environments for active learning in any set of circumstances. While these developments are time consuming to start with, the concept of reusability offers efficiencies down the track. The challenge in this area is to move a critical mass of teachers and institutions away from the “one size fits all economies of scale” approach to elearning, and to disseminate the “transformed practice” approach of SoTL in its place. This leads back to the general discussion among panel members and delegates of how to promote the SoTL philosophy and practice across institutions and among wider stakeholder groups. Many practical strategies were identified. The medium and long-term outcomes are awaited with interest.

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