

Does SoTL really transfer into teaching practice? A contribution to a difficult conversation

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ABSTRACT: A cornerstone in SoTL claims that if academic teachers engage in a critical reflection on teaching, aided by literature and an engagement in a public discussion, they become more scholarly teachers. As part of a compulsory pedagogical course in our faculty, doctoral students complete a group project where they write a report that explores a teaching and learning topic of their choice using relevant scholarly literature and pedagogical theory. An examination of these reports shows that course participants are able to use references from journals in the area of psychology, pedagogy, cognitive science, and sociology frequently and in relevant and integrated ways. However, from as little as a few months to several years after taking the course, former course participants that we interviewed tend to describe good teachers from a trait perspective, especially in terms of a teacher's presence and performance, solve problems through a trial and error strategy, and admit that it is not natural to converse with colleagues about problems or ideas. Although interviewees were generally able to show signs of a scholarly approach to teaching when pressed to explain their thinking, their initial responses suggest that it may be difficult for them to transfer what they learned in the pedagogical course to genuine teaching situations. To better promote SoTL among new academic teachers, it is important that we consider this possibility and work to address the challenges it presents.

1 INTRODUCTION

At the heart of the scholarship of teaching and learning (SoTL) is the idea that ongoing inquiry, reflection, and peer scrutiny are important in the development of a scholarly teacher (Trigwell *et al.*, 2000). As academic developers who promote SoTL we aim to encourage teachers to become more scholarly because this will ultimately lead them to be better teachers, resulting in better student learning. An obvious way to expose early-career university teachers to SoTL is to integrate a SoTL-style project into a pedagogical course. Ideally, budding university teachers would take such a course as early as possible, ideally around the time they start teaching at a university level. For many, especially in the engineering fields, this time is during a teacher's doctoral education.

1.1 The course *Introduction to teaching and learning in higher education*

At Lund University Faculty of Engineering (LTH), we offer a compulsory pedagogical course to all doctoral students, *Introduction to teaching and learning in higher education* (or, the intro course). It runs four or five times a year, with 25 participants each time.¹ An important part of this course is a project completed in groups of five, addressing a topic participants find interesting or relevant. It can be anything under the broad umbrella of *teaching and learning in higher education*; some groups gather empirical material while others complete a literature study. All project reports must include relevant theory and use relevant literature to analyze the chosen topic. In addition to literature and theory presented during the course itself, groups are encouraged to explore other scholarly literature. The final result of the project is a ten-page project report that is made available to all teachers at LTH in a faculty-wide database. Thus, between 100 and 125 doctoral students each year engage themselves in a SoTL project.

1.2 The (potential) problem(s)

Doctoral students taking the intro course are exposed to the foundational aspects of SoTL: they encounter pedagogical theory and research; they reflect on and talk about teaching with people from diverse backgrounds and who often have no connection to their own specific teaching activities; and

¹ The course is normally given twice in English and twice in Swedish (with an extra course section occasionally being offered to meet high demand). The English course groups are predominantly international students, whereas the Swedish course groups are predominantly Swedish-born students.

they find and work with scholarly literature on teaching from a variety of sources and fields of study. But we need to more carefully examine how well our course participants actually do when they complete a SoTL project.

Also, does this experience lead course participants to internalize aspects of a scholarly approach to teaching, and are they able to re-activate parts of this approach after leaving the course and returning to their everyday context? Anecdotal evidence suggests that although they are able to complete pre-defined SoTL-type tasks in a structured environment like in a pedagogical course, they may actually revert to pre-course approaches once the course ends.

2 METHODS

We investigated whether participants were able to find and work with scholarly literature to produce a scholarly text (Study 1). We also surveyed and interviewed previous course participants from six months up to several years after they completed the course to see how they thought and reasoned about teaching, i.e. after they had returned to their regular working environment (Study 2A and 2B).

2.1 Study 1: doctoral students using educational research in group project reports

In order to determine whether course participants were able to make use of specialized literature in their project reports, and how they integrated their chosen sources, selection of twenty project reports (all of those completed in 2013) was analyzed (Roxå, accepted). Of these reports, nine were in Swedish and eleven were in English. All sources used in each report were tabulated and grouped into categories based on disciplinary origin. For each source from educational research and related areas (including psychology, higher education, and cognitive science, etc.), the way that source was used in the corresponding report was also characterized.

2.2 Study 2: doctoral students reflecting after returning to their academic homes

In an online survey of doctoral students at LTH ($n = 106$, conducted in late spring 2016, Study 2A) and follow-up interviews with twelve respondents (conducted in fall 2016, Study 2B), questions about SoTL-related activities were used to probe doctoral students' experiences in their everyday academic contexts. Survey respondents in Study 2A were both Swedish and international students, at all stages of doctoral study, and approximately as many females (52) as males (54). In Study 2B, a group of survey respondents who volunteered to be interviewed consisted of seven Swedes and five international students, ranging from first-year to already-defended students, six men and six women. In the survey, which placed research and teaching adjacent to one another as the two most substantial activities in an academic job, the participants were asked to indicate how supportive they felt their immediate working environment was of conversations about research and teaching. Semi-structured follow-up interviews asked interviewees about a teaching challenge they had themselves experienced, what they believed a good university teacher does, and what their experience was of talking about teaching with their colleagues. The interviews were audio recorded with the interviewees' permission.

3 A SoTL APPROACH: IN A COURSE VERSUS "AT HOME"

We regularly hear from current and former course participants that the intro course offers them a space to think and talk about teaching in a way that they seldom experience or have not experienced in their home departments. However, we are also aware that this space to think and talk about teaching may not be available in their home working environment. This may pose an important problem for the work we do to promote SoTL in our faculty.

3.1 Doctoral students can take a SoTL-based approach to a course project...

A concern when requiring doctoral students to incorporate pedagogical theory and literature into their writing is that the literature may be too far removed from their discipline to be understandable or relatable. This might impede their ability to effectively use relevant literature, and could also cause them to choose simpler, more accessible sources such as textbooks and literature provided in the course, rather than seeking out more directly relevant, specialized sources. In Study 1, 66 of all the 344 references used in the twenty reports came from educational research or related areas. Since these sources could be considered the most advanced for a SoTL report, it is also important to look at *how* these sources were incorporated into the reports (Table 1).

The reference is...	Count
unconnected (once or more than once)	0
used to support a general claim	30
used to support a specific claim	41
used and quoted to support a claim	5
summarized so that several aspects are used	8
used to frame the report or construct a perspective	4

Table 1. How references from educational research and related areas are used in the reports.

The most common way of using these specialized references is as support for either general or specific claims in the report text. This is consistent with how references are used in engineering and science, suggesting that course participants drew on their experience in disciplinary academic writing while using sources in their project report.

Most encouraging is the fact that not once was a source randomly referenced in the text without being integrated, which clearly shows that these writers judiciously selected and conscientiously integrated specialized sources into their work.

In this experience of writing a group project report, it seems that course participants are able to find specialized literature within fields related to educational research and use this literature in meaningful ways, at least when they are required to do so. This indicates that within the structured context of a course project, doctoral students are able to engage authentically in a SoTL project.

3.2 ...but this SoTL-based approach appears to be transient

Although course participants do demonstrate the ability to engage in SoTL within the structured context of a pedagogical course, there is no guarantee that this ability persists beyond the end of the course. It is possible that participants engage fully in a SoTL project but do not share this new knowledge with their colleagues. This has been called *SoTL Trajectory 1* (Roxå, Olsson, and Mårtensson, 2008), in contrast with *SoTL Trajectory 2*, where individuals use their SoTL experience in their day-to-day interactions with colleagues, thereby allowing their SoTL experience to influence their colleagues.

A key factor in SoTL newcomers being able to follow Trajectory 2 is likely the existence of established communities of practice: if senior colleagues are open to new ideas and conversations about teaching, then younger colleagues who complete pedagogical courses will have an easier time bringing their learning back with them. In the survey (Study 2A), more respondents indicated that their immediate working environment was more supportive of conversations about research than about teaching; the survey results were not more negative when it came to teaching (the percentage of “somewhat/very unsupportive” responses was similar), but they were less positive, with more neutral responses and far fewer “very supportive” responses (Figure 1). This result suggests that doctoral students may not always inhabit enabling environments when it comes to SoTL, which could make it more difficult for some to internalize and use SoTL.

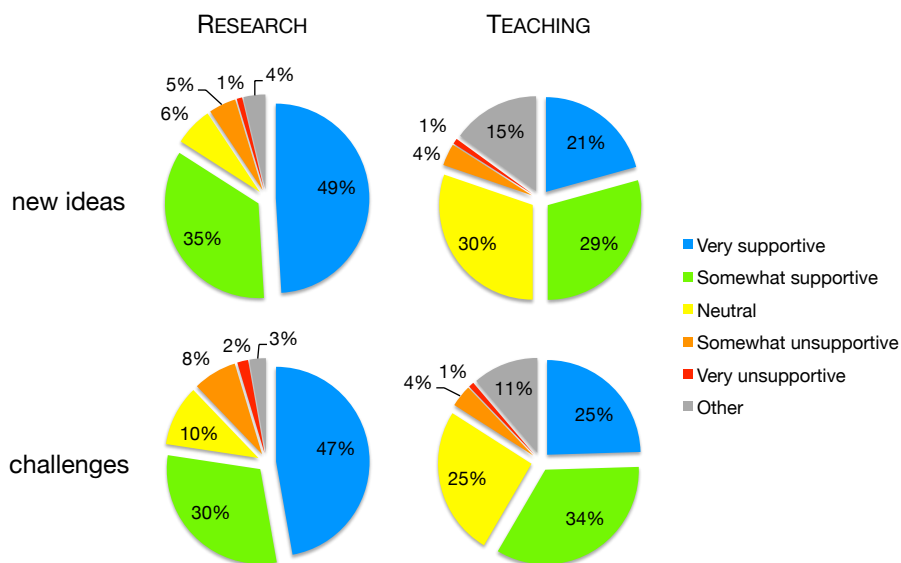


Figure 1. Survey responses ($n = 106$) to the question: “How would you characterize the atmosphere of your immediate working environment when it comes to discussing [new ideas or challenges] about [research or teaching]?” While the level of support for conversations about teaching is not more negative, it is distinctly less positive.

In Study 2B, interviewees generally agreed that the survey result was consistent with their own experience. Most interviewees thought it was perfectly natural for their immediate working environment to be less supportive of conversations about teaching than conversations about research. Some interviewees suggested that it was risky to admit they were struggling with teaching, since this might imply they weren't expert enough in the subject they were teaching or didn't really deserve their place in the doctoral program. It could be that even though doctoral students may have the opportunity to talk about teaching, they might not (dare to) take it because it could be perceived as an admission of weakness. However, some interviewees said that they did not have this experience, and that they were absolutely able to talk about teaching if they wanted to, but that perhaps these conversations were not as productive as they might be (in one case, they sometimes felt more like “whining sessions”). Even if they do engage in conversations about teaching, it could be that these conversations are not very scholarly at all.

Rather than asking former course participants in our interviews to revisit their course projects, which might cause them to simply parrot what they did in the course, we asked participants more generally about teaching in order to explore whether or not their overall view of some aspects of teaching were consistent with SoTL. For example, based on course participants' ability to use relevant literature in their course projects, we might predict that they would believe that a good university teacher uses pedagogical theory to inform their practice, solves problems using empirical and/or literature-based inquiry, and talks about teaching both locally and in broader contexts.

Eleven of the twelve interviewees had completed the intro course, from as little as six months to several years prior. When asked what a good university teacher does, most interviewees tended to talk about teaching in terms of lecturing and focused on delivering accurate and interesting content. They pointed out the importance of being well prepared and indicated that students should perceive their teacher as an expert. Lecturing was frequently described in terms of performing (either drawing implicit parallels with giving presentations or talking explicitly about teaching *as* a presentation). Interviewees focused primarily on how a good teacher should inspire students and show enthusiasm in their teaching; *presence* in the classroom, especially in lectures, appeared to be an important characteristic of a good teacher.

One thing that characterized most interviewees' responses to the question, “what does a good university teacher *do*?” was a tendency to pivot their answers so they were really explaining what a good university teacher *is* (such as, a good university teacher “inspires students” or “shows

enthusiasm” or “is there for students”). Could it be that the interviewees in this study, when asked to explain what a good teacher does, thought back to their own experiences as a student, and ended up actually explaining what they *as students* considered to be indicative of a good teacher?

We could see interviewees talking from their experiences as students elsewhere in the interviews. When asked to explain how to approach solving a teaching challenge, many interviewees talked initially about thinking about the problem and trying to come up with a solution on their own; when pressed, many interviewees explained that they would use their own experience as a student to decide how to solve a teaching problem. This type of reflection also appeared when some interviewees talked about planning teaching: they would start by thinking about what worked for them as a student. Some interviewees said they would talk to close colleagues (for example, fellow doctoral students working with the same course), but this was more focused on people who shared exactly the same teaching duties.

4 CONCLUSIONS AND OUTLOOK

Study 1 shows that course participants in an introductory pedagogical course are able to find and use relevant and advanced literature in a structured SoTL-project report, but Study 2 suggests that this ability may not translate to a more general scholarly approach to teaching and learning after they leave the course. In interviews, doctoral students did not immediately offer scholarly responses, but many interviewees were able to offer hints of a scholarly approach when pressed. It could be that upon returning to their home working environment, doctoral students simply do not have opportunities to practice what they have learned in the course. It appears as if the dominant teaching culture they experience “at home” has a stronger influence on their approach to teaching than our intro course. Perhaps our course participants struggle to transfer their learning from our course to their own teaching context; the transfer may simply be too nonspecific, too figural, or too far (Royer, 1979). It is encouraging that many interviewees were ultimately able to show signs of a scholarly approach when pressed to further explain their answers in interviews. However, in a spontaneous teaching situation, can we really expect that a pedagogical course can sufficiently prepare a doctoral student to be able to activate these lessons independently?

The results presented in this paper suggest that we who promote SoTL need to take a more deliberate approach to exploring whether and how SoTL newcomers adopt a scholarly approach to teaching and learning with the help of pedagogical training.

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