

Is it a good strategy to offer pedagogical training to doctoral students?

Jennifer E. Löfgreen, *Centre for Engineering Education, LTH*

Abstract — At Genombrottet, half of the pedagogical training we deliver annually is to doctoral students. With our limited resources, it is important that we strategically plan the work we do so that we achieve the best possible results. At the same time, good pedagogy requires that our teaching efforts be based on a good understanding of the actual needs of our course participants. Given that doctoral students face a very different reality from that of academic faculty, can we be sure that our efforts yield the results we want, for all parties involved? In order to answer this question, we need to gain a better understanding of the organisational meso-level where doctoral students at LTH learn how to teach and how to do research. This study, which is in its early stages, aims to do just that.

Key words – PhD education; pedagogical training; strategic academic development

I. INTRODUCTION

At Genombrottet, our primary aim is to support and promote the development of a strong teaching culture at LTH where student learning is prioritized and a reflective, evidence-based teaching practice is the norm. Through our pedagogical academy [1], we can see evidence of a growing body of faculty that demonstrates increasing excellence in teaching based on their ability to use the pedagogical literature, critically reflect on their own teaching practice, and demonstrate clear development over time. Yet achieving this kind of culture shift is not easy. Roxå and Mårtensson argue that “[t]aking individuals from their professional context, training them, and then expecting them to influence their peers once they return is hardly likely to happen, especially if the teachers trained are younger colleagues within a professional community” [2]. In other words, when individuals with limited influence or power try to bring new ideas back with them, they may face a serious homecoming problem: inertia among their colleagues dampens or even extinguishes their enthusiasm to implement new ideas, and the status quo prevails. Our pedagogical courses usually consist of individuals, rather than teaching teams, which means that there is a good chance our course participants will encounter this homecoming problem. If our ultimate goal is to promote a scholarly teaching and learning culture made up of communities of practice situated in enabling environments that promote the development of teaching scholars through regard and reward [3], then we must think strategically

about the best way to plan and deliver pedagogical training, and what mediating circumstances might be necessary beyond our courses. We must also continually check our assumptions against the changing reality our course participants face.

This is especially important when considering pedagogical training for doctoral students, since they are often the most junior members of their professional community and are already grappling with the experience of being socialized into their potential future roles as faculty members [4], while at the same time trying to navigate myriad challenges that come with this pivotal transition from student to academic (for those doctoral students who will take faculty positions). Their teaching duties can be very different from those of faculty members, and this means that their priorities when it comes to pedagogical training can also be different. At the same time, doctoral students at LTH must navigate the politics of the (changing) academic world they inhabit, trying to understand how to prioritize their different responsibilities and figure out how best to secure the support they need to successfully complete their degree. If we are to offer the most suitable pedagogical training possible for doctoral students at LTH, and if we are to be successful in our efforts to convince doctoral students to take a scholarly approach to teaching, we need to learn more about and try to understand the *real* experiences of the doctoral students we teach. There is only a “small amount of research on differences in daily events and practices while doing a PhD” [5], yet this is exactly the information we need to determine how well suited our efforts actually are to the needs of doctoral students. Understanding not only the teaching responsibilities of doctoral students, but also the local influences doctoral students experience from the microcultures they inhabit [6] and the personal challenges they may face as individuals trying to manage real life as a doctoral student [7], would be a very good strategy indeed.

II. THE STUDY

This study aims to gain a better understanding of the organisational meso-level where doctoral students at LTH learn how to teach and how to do research. This understanding should give us better insight into the reality that doctoral students at LTH face and help us determine how we can better support doctoral students in their development outside of their research activities, including (but probably not limited to) their approach to teaching. As a way of narrowing the scope somewhat, the first overarching question this study will try to answer is: **Are we convincing doctoral students that teaching is a scholarly activity? If so, in what way, and if not, why not?**

The first phase of the study was a preliminary online survey that was available to doctoral students at LTH in May and June of 2016. This survey asked respondents (of

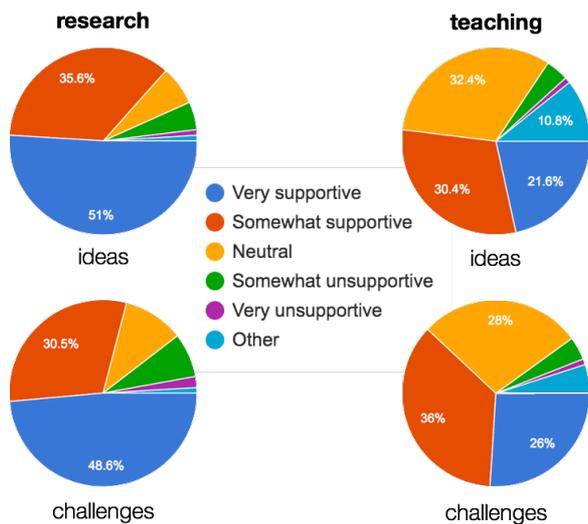


Fig. 1. Survey responses ($n = 106$) to the question: "How would you characterize the atmosphere of your immediate working environment when it comes to discussing [new ideas or challenges] about [research or teaching]?" While the level of support for conversations about teaching is not more negative,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

which there were 106) to think about research and about teaching, and situated these two activities as adjacent academic activities, rather than competing ones. Respondents could indicate if they were willing to participate in follow-up interviews and/or focus groups; 33 respondents indicated they would participate in follow-up activities. So far, twelve follow-up interviews have taken place. The interviews were semi-structured with eight core questions and room for relevant follow-up questions, and each took approximately 60 minutes to complete. The interviewees were six men and six women, five Swedes and seven non-Swedes, and they ranged from being in their first year of study to having recently defended their thesis.

Given that talking about teaching can have significant implications for teaching development [8] and that a scholarly approach to teaching involves sharing ideas with colleagues, one question in the survey asked doctoral students how supportive they felt their immediate working environment was of different conversations about research and teaching. It stands to reason that a supportive local environment would be an enabling factor in doctoral students adopting a scholarly attitude when it comes to teaching, while an unsupportive environment could be a critical obstacle. When it comes to discussing new ideas and challenges in research and teaching, most doctoral students perceive their environment is more supportive of discussions about research than about teaching (see Figure 1), which suggests that there may be a disconnect between the message we send in our pedagogical training and the reality that doctoral students experience in their collegial networks. Interviewees generally said these results were consistent with their own experiences, and offered a variety of explanations for this. One interviewee referred to the social and professional risks a doctoral student takes by admitting they are struggling in teaching:

"With research, people can be more open. [With teaching] people can be more afraid to open up, afraid of saying something stupid."

Another interviewee pointed out the influence of priorities in doctoral students' work, where teaching takes a back seat:

"Being a Ph.D. student, you have a lot of projects and deadlines all the time, and [teaching] is kind of down-prioritized to where you don't deal with it."

However, one interviewee had a very different experience:

"[We have] more [conversations] than others have – they can be really loud discussions sometimes – it could be because the head of department ... has worked with Genombrottet..."

So doctoral students feel there is less room for conversations about teaching than conversations about research, but academic leaders can have a positive influence if they show support for the exchange of ideas about teaching.

III. THE SESSION

This study is in its very early stages. The session will present some preliminary findings and explore some initial patterns and ideas that have emerged from a first pass through the survey and interview results. Three main areas will help determine whether we are convincing doctoral students to see teaching as a scholarly activity:

1. Talking about teaching: a scholarly approach requires a community of practice that shares ideas.
2. Teaching as compared to research: how do these two activities work together (or not) in doctoral students' understanding of academic work?
3. Espoused theories vs. theories in action [9]: do doctoral students' ideas and practice line up?

REFERENCES

- [1] T. Olsson and T. Roxå. "Assessing and rewarding excellent academic teachers for the benefit of an organization." *European Journal of Higher Education*, vol. 3, no. 1, pp. 40–61, Apr. 2013.
- [2] T. Roxå and K. Mårtensson, "How effects from teacher-training of academic teachers propagate into the meso level and beyond," in *Teacher Development in Higher Education: Existing Programs, Program Impact, and Future Trends*, Routledge, 2012, pp. 213–233.
- [3] S. van Schalkwyk, F. Cilliers, H. Adendorff, K. Cattell, and N. Herman, "Journeys of growth towards the professional learning of academics: Understanding the role of educational development," *International Journal for Academic Development*, vol. 18, no. 2, pp. 139–151, Jun. 2013.
- [4] A. E. Austin, H. Campa III, C. Pfund, D. L. Gillian-Daniel, R. Mathieu, and J. Stoddart, "Preparing STEM doctoral students for future faculty careers," *New Directions for Teaching and Learning*, vol. 2009, no. 117, pp. 83–95, Dec. 2009.
- [5] T. John and P. Denicolo, "Doctoral Education: A Review of the Literature Monitoring the Doctoral Student Experience in Selected OECD Countries (Mainly UK)," *Springer Science Reviews*, vol. 1, no. 1, pp. 41–49, Aug. 2013.
- [6] T. Roxå and K. Mårtensson, "Microcultures and informal learning: a heuristic guiding analysis of conditions for informal learning in local higher education workplaces," *International Journal for Academic Development*, vol. 20, no. 2, pp. 193–205, Apr. 2015.
- [7] S. Acker, E. Haque, S. Acker, and E. Haque, "The struggle to make sense of doctoral study," *Higher Education Research & Development*, vol. 34, no. 2, pp. 229–241, Feb. 2015.
- [8] T. Roxå and K. Mårtensson, "Significant conversations and significant networks – exploring the backstage of the teaching arena," *Studies in Higher Education*, vol. 34, no. 5, pp. 547–559, Jul. 2009.
- [9] R. Kane, S. Sandretto, and C. Heath, "Telling Half the Story: A Critical Review of Research on the Teaching Beliefs and Practices of University Academics," *Review of Educational Research*, vol. 72, no. 2, pp. 177–228, Jun. 2002.