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Self-study in a Community of Learning Researchers: what can we do to help teachers/teacher educators benefit from our research?

MIEKE LUNENBERG
VU University Amsterdam, The Netherlands
JOHN LOUGHRAN
Monash University, Melbourne, Australia
KIM SCHILDKAMP
University of Twente, Enschede, The Netherlands
JOS BEISHUIZEN
VU University Amsterdam, The Netherlands
JACOBIENE MEIRINK
University of Leiden, The Netherlands
ROSANNE ZWART
Radboud University Nijmegen & VU University Amsterdam, The Netherlands

ABSTRACT This article reports on the results of an intensive summer course in which a community of learners, consisting of three teaching and teacher education academics and 17 European PhD students in the field of education, conducted a collective self-study. The international collective self-study offered a unique opportunity to go beyond parochial and local perspectives on the process of research and knowledge creation. The central question in this summer course was: 'What can we, as researchers, do to help teachers/teacher educators benefit from our research and what can be learned through this research on research?' The participants first studied relevant literature about the – relatively new – concepts of self-study and a community of learners. Secondly, they studied and discussed their own research projects through the lens of a self-study methodology. The critical study and discussions of both literature and the research projects resulted in a list of 15 guidelines. In addition, the doctoral students experienced and learned that forming a community of learners can be an effective environment for collaborative inquiry learning and that conducting a collective self-study can be an effective way of carrying out research.

> *A Mediterrannean island, a research question and twenty researchers ...*

Introduction

In recent times, there has been growing support for the notion that practitioners (in this case, teachers and teacher educators) should be familiar with and involved in the outcomes of research relevant to and helpful in guiding their students' learning. However, the age-old distinction between theory and practice somehow affords more prestige to the production of knowledge rather than its use and, as practitioners, teachers and (to a lesser extent) teacher educators are not commonly viewed as innovators and creators of knowledge. Despite the fact that there have long been calls advocating a teacher-as-researcher perspective (Dewey, 1929, through to Stenhouse, 1975) and that considerable efforts have been directed toward diminishing the theory–practice gap

(see, for example, the Australian PAVOT [Perspectives and Voice of the Teacher] project [Loughran et al, 2002] and the Dutch ARTE (Action Research in Teacher Education) project [Ponte, 2002]), there is still relatively little involvement in teacher research in Europe and it is certainly far from being viewed as an integral aspect of practice.

As opposed to teaching itself, in the field of teacher education it must be acknowledged that a noticeable shift toward a view of teacher educator practitioners as producers of knowledge is occurring, and that there is some expectation that research matters in their work. This growing expectation in relation to knowledge production by teacher educators is promising and is clearly evident in the growing number of teacher educators publishing insightful accounts of their own work and/or professional development (self-studies) in academic journals. However, until now, this development has been much more visible in North America, Australia and New Zealand than in Europe. The appreciation for self-studies as a way for teacher educators to see themselves as both consumers and producers of knowledge (Cochran-Smith & Lytle, 2004; Cole & Knowles, 2004; Loughran et al, 2004) started in the nineties as a North American initiative and has only recently become of interest in Europe (Korthagen & Lunenberg, 2004). Consequently, there are still too many (European) teacher educators excluded from this development. There is a myriad of explanations for this exclusion but some stand out because of their congruence with those of the stereotypical practitioners of the education field – teachers. These include a lack of time, knowledge and cooperation between practitioners and researchers, resulting in the continuance of a theory–practice divide.

Time

Many teacher educators (like other teachers) simply do not have sufficient time to act as researchers of their own practice because they are often:

> part-time, adjunct, temporary, and/or clinical faculty and fieldwork supervisors; graduate
> students who supervise as part of financial assistantships or part-time jobs; and school-based
> personnel who work as site-based supervisors, coordinators and school-university liaisons.
> (Cochran-Smith, 2003, p. 22)

The implications of this situation are obvious. If research is not part of the work of teaching, then it is inevitable that it will be viewed as an additional extra and so the very demands of the work of the practitioner squeeze out the possibilities for researching practice. Additionally, if there is no time for research, the perceived purpose and value of doing research may well be diminished because of the competing demands associated with the immediacy of the practice setting.

Knowledge

Consequently, teachers (and teacher educators) lack what Garvey Berger et al (2005) describe as a robust understanding of multiple research methods, either quantitative or qualitative. More to the point, as suggested above, it could well be argued that they have little real interest in or need for such knowledge. Despite the growing literature of the field of practitioner/teacher research (Zeichner & Noffke, 2001), the reality is that perceptions surrounding the theory–practice gap suggest to practitioners that research skills and abilities are separate and distinct from practice, and that traditional research methods do not appropriately respond to the types of questions and issues they see a need to explore. This is not to suggest that research methods exclude practitioners' hopes for research, rather it is about the perceptions accompanying the ever-present theory–practice divide.

Collaboration

Finally, and perhaps the most prescient, is the lack of collaboration between practitioners and researchers, and the associated lack of support for collaboration. One way of responding to this situation is to think about ways of challenging the status quo by forming communities of knowledge producers, whereby researchers and practitioners together work to produce the

knowledge integral to their very practice within their particular contexts (Lunenberg & Willemse, 2006).

Forming communities of learners is a logical and promising way to stimulate inquiry learning (Beishuizen, 2004; Mintrop, 2004; Rico & Shulman, 2004; Whitcomb, 2004). Inquiry learning in such a community is neither teacher-oriented nor student-oriented, but originates from an interaction between all participants. Involving researchers can develop and stimulate teachers' and teacher educators' research competences, and researchers' sensitiveness to the demands and expectations of everyday practices. In this way, such a community would be advantageous in appropriately responding to an ongoing tension in research into teaching and teacher education, i.e. that research results are often not 'used enough' in practice, or even tend to be neglected or ignored (Weiss, 2001).

This introduction creates the backdrop for the study that is detailed in this article. As a consequence of working both within the practice setting as teachers/teacher educators and the academic setting (with a particular focus in this case on doctoral supervision), the rich interplay of these ongoing issues and concerns surrounding the theory–practice gap led the three professors involved to attempt to examine a fundamental research question embedded in their work: 'What can we, as researchers, do to help teachers/teacher educators benefit from our research and what can be learned through this research on research?'

This article is explicitly designed to offer an example of the ways in which questions, issues and concerns surrounding the theory–practice gap might be explicitly addressed within an international European community through collaborative enterprises in doctoral supervision. International collaboration in communities of learning offers a unique opportunity to go beyond parochial and local perspectives on the process of research and knowledge creation. It creates an opportunity for local practitioner knowledge to become international educational knowledge mediated by research partnerships, critical and supportive contacts with 'questioning others', and the support to go beyond unconscious local assumptions about the status quo (Bodone et al, 2004).

Additionally, the article is constructed such that the process employed in this study might offer new possibilities for others to take these ideas further in their own work, so that the next generation of European researchers (doctoral students) can see new ways of working with theory in practice so that they both inform each other in meaningful ways.

Context of the Study

Focusing on the Researcher

The research question 'What can we, as researchers, do to help teachers/teacher educators benefit from our research and what can be learned through this research on research?' can be answered from many different perspectives but, in this study, the focus is purposefully on doctoral students. Neophytes in any field initially struggle to come to grips with the protocols, expectations and applications of their work as they confront the learning dilemma of gaining technical expertise at the same time as attempting to grow beyond a solely technical-rational stance (Schön, 1983). Beginning researchers in the form of doctoral students, as the storehouse of the next generation of researchers, are crucial to the development of research knowledge, skills and abilities in action. Needless to say, they often wrestle with the inherent difficulties of communicating with experienced teachers and teacher educators with whom they might collaborate and study (and this is easily exacerbated when substantial age differentials exist, i.e. a young researcher with an older teacher/teacher educator). These difficulties may well be further complicated through the processes of sharing and discussing expectations, ideas and results with potential participants who are more experienced in and tied to the practice context than the researcher.

As one way of attempting to respond to this very situation, the project that is detailed in this article explores the processes and outcomes resulting from the collaboration between teaching and teacher education academics and young, novice researchers as, together, they examined ways of building stronger connections between theory and practice. By making that process and its results available to the European educational community through publication also acknowledges the importance of academics taking on board Boyer's (1990) notion of 'scholarship'. The status quo

with regard to the theory–practice gap will inevitably persist if Boyer's conceptualization of scholarship is not itself viewed as a powerful possibility for creating a new way of bridging the gap.

Description of the Summer Course

In the spring of 2005, in Cyprus, three academics met with 17 European Ph.D. students for an intensive international summer course on teaching and teacher education. The Ph.D. students were of Dutch, Scandinavian and Cypriot nationalities. The research topics of the participating doctoral students varied from specific aspects of (student) teachers' or teacher educators' professional development to more general aspects of education, such as leadership and assessment. The goal of the summer course was to connect new learning approaches (inquiry learning in a community of learners) with new insights in educational research and to support the participating doctoral students in reflecting on the consequences of these developments for their own research projects. The research question articulated above was the driver of the ensuing research program and in order to address this question, a self-study research methodology was applied. A community of learners was established with both expert (teaching and teacher education academics) and novice researchers (doctoral students) in order to create a living example of how the development of new insights in educational research might not only emerge, but also be purposefully developed.

Theoretical Framework

Self study. There has been a growing interest in self-study of teaching and teacher education practices culminating in the publication of the *International Handbook of Self-study of Teaching and Teacher Education Practices* (Loughran et al, 2004). In many ways, the handbook symbolizes the formalization of the field following a decade of development. Self-study is a specific form of practitioner research, and can be described as systematic research and reflection by teacher educators on their own practice. The aim of self-study is to improve this practice and to contribute to the knowledge base of teaching and teacher education; hence the burgeoning range of publications.

Self-study emphasizes learning through questioning and investigating in ways designed to enhance the development of understanding. A starting point for this learning by practitioners is confronting the dilemmas of practice that are often too easily ignored or misunderstood by those not so cognizant of the problematic nature of, and demands in, teaching. Teacher educators studying their teaching experiences can make explicit, and begin to better articulate, understandings of how different approaches to teaching about teaching can enhance students' learning about teaching. As a consequence, a great focus on one's thinking and acting can help to reframe one's practice (Schön, 1983).

Self-study is not only helpful for the professional learning of individual teacher educators, but it can also positively challenge and change teaching and teacher education practices and programs more generally, as several studies in the handbook noted above have illustrated. An underlying purpose of self-study can be found in the need to link teaching and research in a meaningful way, and to view the practices associated with both from different perspectives. One goal of self-study, then, is to seek alternative interpretations of situations in order to better explicate the complexity of the situation and further develop theoretical understandings of the practice setting.

Hamilton & Pinnegar (2000) discuss the development of theory through self-study, specifically public theory of teacher education. According to Hamilton & Pinnegar, teacher educators have a need to continually study their actions, reflect on them, collect data that documents students' response to that practice, and create and recreate teacher education as a living theory. The latter can be transformed into public theory by making the results of self-study available to others: self-study does not only involve the individual researching his or her practice and the development of private knowledge. Self-study is also based on the academic expectation that research should lead to the development of new knowledge, and that such knowledge should be made available for others (Loughran, 2004).

So, self-study can contribute both to the private theory of individual teacher educators and to the public theory of teacher education more generally. In a recent article, Cochran-Smith (2005)

elaborates on these twofold goals of self-study. She states that, as a teacher educator, she often conceptualizes her own professional work as a research site and, in so doing, learns about practice by systematically investigating her own practice and interpretative frameworks in ways that are critical, rigorous and intended to generate knowledge. Most of this work takes place in inquiry communities, consisting of communities of prospective teachers, experienced teachers, and/or teacher educators engaged in teacher research and self-study. According to Cochran-Smith (2005), inquiry communities can function as important learning spaces for prospective teachers, experienced teachers and teacher educators to learn together and generate knowledge – both local knowledge and knowledge that is useful in more public spheres. Collaboration in self-study can enhance learning by working together and sharing ideas and concerns with others (critical friends). This can help practitioners to broaden their perspectives on teaching. It can lead to a reframing of the way teachers perceive their teaching and therefore create new ways of seeing that which may previously not have been seen as problematic (see, for example, teachers such as Dusting, 2002; Senese, 2002, 2004; Austin & Senese, 2004).

Communities of Learners: focusing on student learning and participation

The notion of a 'community of learners' (CoL), in which all participants (with special attention to students) are considered as partners in the process of knowledge development, can be an important element in the methodology of self-study. Brown & Campione (1996) laid out a framework for the educational concept of the CoL; that is, inquiry learning. They describe the process of inquiry learning as a cycle of: (1) conducting research, (2) sharing the outcomes and (3) completing a consequential task (often a new research project). In this regard, working to bring such a process to fruition in teaching and learning situations is not only important for developing quality in teaching and learning, but also offers new ways of conceptualizing researching pedagogy more generally.

Mayer (2004) analyses the process of inquiry learning in more detail, suggesting that a mismatch between a student's current mental model of a particular phenomenon and the way the process or event actually manifests itself is the impetus for inquiry learning. An example of this mismatch is in the situation where students contend that burning decreases the weight of a substance and then are astonished to find that it is not the case after the substance has been burned. They therefore have a need to revise their mental model of the process of burning or oxidizing. This can be accomplished by creating a new model and by conducting an experiment to test the validity of this new model.

Mayer's view draws attention to the point that inquiry learning relies on students already possessing some relevant knowledge in the form of a mental model, and new knowledge is developed when new information and/or experiences are provided. The CoL concept challenges the stereotypical role of the teacher as transmitter of knowledge and encourages teachers to be designers of inquiry learning projects through which they can facilitate the process of knowledge development for students. In a CoL, students are first and foremost researchers. As designers and conductors of research projects, they need to be able to coordinate theory and evidence, and they need the necessary skills for testing hypotheses and drawing conclusions. In addition, they also need to be motivated to embark on inquiry learning projects. Their attention should be drawn by the unusualness of events or processes, and they should trust their own ability to bring a research project to an appropriate end. Taking students as partners in a CoL should increase their sense of control and, consequently, their motivation. In a CoL, students share and discuss research findings. By contrasting and comparing views, students learn to develop their own knowledge and to reflect on the quality of their assertions.

However, this may be easier said than done. For example, in accordance with the principle of scaffolding (Collins et al, 1989), students initially need to receive a lot of support before a teacher can gradually withdraw from the stage. This gradual shift from teacher to student control requires teachers to develop the necessary attitudes and expertise through their learning from reflection (Korthagen, 1993; Cochran-Smith, 2003) so that, just as is anticipated for the students, the teacher too joins in to be an integral part of the CoL.

Combining self-studies and communities of learners. (Collective) self-studies and CoLs appear to share some basic elements. To start with, both concentrate on a systematic, research-based approach from which outcomes are shared and discussed. Furthermore, integral to knowledge production is what LaBoskey et al (1998) emphasize when they note that, in collective self-studies, not consensus but the different approaches of the persons involved are essential in discussion. This maps favourably onto Brown & Campione's (1996) suggestions about encouraging collaborative learning. However, in self-study research, the subject is the practice of the teacher educator/researcher; in a CoL, the 'big idea' of a subject area is the subject. The starting point of a self-study is commonly a question or problem (problem in the Deweyan sense as something curious, puzzling, interesting, etc.) that arises from one's practice and, in the process of responding, public theory plays an important role. Self-study offers a context for reflection and can challenge personal theories about the situation under study (Korthagen & Lunenberg, 2004).

A second important aim of self-study – the contribution to the knowledge base for teacher education – also presupposes the connection of personal with public theory. In a CoL, the 'big idea' of a subject area ('the theory') is presented to the pupils in the form of an authentic situation, representing a serious and exciting problem. The aim is to trigger the existing mental models of the pupils. As Beishuizen (2004) notes, it is important to find authentic situations that appeal to knowledge the pupils already have and, at the same time, question that knowledge. Such an authentic situation invites pupils to look for information to solve the problem presented. So, both in self-study research and CoLs, participants do what Karmiloff-Smith & Inhelder (1975) described so long ago as most important for learning: 'If you want to get ahead, get a theory.'

A real difference between a collective self-study and a CoL concerns the participants. The persons involved in self-studies are commonly teacher educators who may well be skilled in research, cooperation, reflection and publishing. Moreover, teacher educators are simultaneously responsible for two layers of learning: not only are they responsible for facilitating the learning of their student teachers, but they also have 'obligations to unseen children' (Guilfoyle et al, 1997): the (future) pupils of their students. In a CoL, the participants may not always be so easily defined. They may be pupils, students, teachers, teacher educators, researchers or a mix of each. Consequently, in a CoL, it cannot be taken for granted that all participants are knowledgeable about or skilled in conducting research, cooperating and reflecting. Moreover, when the CoL consists of pupils or students, the role of the teacher emerges as another focus of attention through considerations such as: 'What does it mean for the role of the teacher to consider pupils and students as serious partners in a process of knowledge development?' This attention to the role of each of the persons involved is even more insistent when considered in the case of a mix of participants.

In essence, both self-studies and CoLs can provide rich learning environments for all involved, yet at the same time they hinge on participants developing certain competences. When applied to a context in which researchers genuinely collaborate with teachers, teacher educators or students, enhanced possibilities for learning from each other's competences emerge and the collaboration offers a real bridge between the theory–practice gap.

Method

In order to answer the main research question, the data collection and analysis methods used were structured around the way in which the teaching and learning environment and curriculum of the summer course were organized. Firstly, data was collected on the learning of the theoretical framework (self-study and CoL) by the doctoral students. Secondly, the doctoral students were asked to reflect on the data collection, examination, portrayal and meta-analysis of their own research projects.

Learning about the Theoretical Framework

In the first part of the course, an introduction to working as a CoL as an example of new learning and self-study research as an example of a new research approach were both fully outlined and explored. To illustrate the literature on CoLs which the participating doctoral students had studied

previous to the course, a case study was presented. This case study concerned a CoL consisting of students and teachers of a college preparatory school and teacher educators and researchers of the VU University Amsterdam (for more information, see http://www.devrolijkeschool.nl).

Based on the literature and the case study, a structured reflection took place. In small groups, the doctoral students conducted a meta-analysis of the case study according to the principles of self-studies and CoLs. The findings of each group became the basis of a plenary discussion about the functioning nature of a CoL in practice. In doing this, the doctoral students became more aware of the importance of clearly articulating and sharing a knowledge base for supporting learning (inquiry learning). Furthermore, through purposefully initiating a CoL approach, the doctoral students experienced 'what it is like' to use this method themselves.

In order to support the self-study approach further, a literature study on this subject was simultaneously conducted and subsequently applied in workshops in order to effectively model self-study as a way of enhancing professionalism and to contribute to the knowledge base of effective teaching and teacher education. Important topics from the workshop included: recognizing the contradiction between what is 'preached' (for example, students should be supported in finding solutions to problems through inquiry learning; research should contribute to practice) and what is 'done' (for example, telling students the solutions to problems; collecting information from teachers without reporting back the results to practice); seeking alternative perspectives for looking into and for interpretations of the teaching practice; shifting from a focus on successful teaching or carrying out research to a focus on learning (for example, an uncomfortable experience can be constructive to learning).

The purpose of using these methods in the summer course was to model and experience that which was advocated through the conceptual and theoretical frames of CoLs and self-studies. In this way, it was envisaged that the issues of public and private theory might be simultaneously addressed and meaningfully examined in the very nature of the research of the doctoral students. An anticipated outcome was that the doctoral students' research might be more meaningful not only to themselves, but also for those it was anticipated might benefit from their work. This brings us to the second part of the course.

Studying Their Own Research Projects

The second part of the course required a shift in focus to the work of the participating doctoral students. The first phase of this data collection process was associated with challenging them to reflect on whether or not the persons involved in their research projects learned from their involvement and what could be done to enhance this learning. Therefore, data from each doctoral student in response to the following two questions was formally collected:

1. Does your PhD study contribute to the learning of the pupils, students, teachers or teacher educators involved in your study? If so, how? If not, why not?

2. What possibilities are there to enhance the learning of the participants in the next stage of your study?

After reflecting on these questions and constructing formalized responses, the second phase of this data collection process involved the doctoral students discussing their individual answers in small groups of three or four students in order to help each other refine (or add new elements to) their individual responses developed in the first data phase. The results of this phase were then reported in a plenary session.

The third phase of this particular aspect of the study involved consolidating and summarizing these outcomes in order to create a preliminary list of guidelines that might be helpful for teachers/teacher educators in incorporating the findings of the research in which they were involved into their practice. The methodological approach adopted in this phase was that of intercoder reliability, which was conducted in order to ensure that that which was presented as the consolidated outcomes had been confirmed. (Because of time pressure, this third step was conducted by the three professors.)

The fourth and final phase involved the three teaching and teacher education academics constructing a summary of the reported outcomes to be presented back to the whole group for

discussion and consideration about the consequences for their research practices. This last step resulted in a final list of 15 guidelines for researchers aimed at explicitly supporting teachers and teacher educators to benefit from their research.

Results

In this section, we first present the guidelines as formulated during the course as the results of the first part of the research question: 'What can we, as researchers, do to help teachers/teacher educators benefit from our research?' Secondly, we describe the learning effect of the course on the participating doctoral students and professors in order to answer the second part of our research question: 'What can be learned through this research on research?'

Fifteen Guidelines

Based on the theoretical framework and the four steps as described in the previous section, a list of 15 guidelines (Figure 1) was articulated.

What Can We Do to Help Teachers/Teacher Educators Benefit from Our Research?
1. Make every effort to involve the teachers in problem definition, in conducting parts of the research and/or in reflecting on the findings.
2. Enhance collective/institutional learning through collaboration and joint reflection in the design stage of the study and/or by studying problems widely recognized in the school/group involved.
3. Take into account the different foci in teaching/teacher education, for example, doing research and supporting students to do research, reflecting and supporting students to reflect.
4. Take into account the experience of teachers: can both novice and experienced teachers benefit from your study? For example, should we encourage novice teachers to be involved in research on communities of learners when they are also busy dealing with the demands of beginning teaching?
5. Respect the (vulnerability of the) teachers involved. Build trust.
6. Study/discuss the teaching, not the teacher.
7. Respect the unique practices of teachers and the value of their personal experiences (authentic situations).
8. Take into account in the design of your study that the teachers may need 'space' with regard to their own style, motivation, ability to handle emotions, and so on.
9. Take into account the time teachers have available to participate in your study.
10. Be clear about your own ambitions: who do you want to benefit from your research? Know your boundaries!
11. Be clear (to teachers and students) about what to expect from the teachers in the context of your study. (If you expect them to be experts – on a specific subject, on supporting collaboration between students, on supporting research by students – check this and, if necessary, support them in carrying out that role.)
12. Be clear about the benefits teachers can expect from your research.
13. Expect that your mentor models how to discuss results with teachers in an interactive way.
14. Discuss the results with a group of participants with, as a motto, 'What can we learn from each other?'
15. Use your findings to organize courses.

Figure 1. Fifteen guidelines for helping teachers and teacher educators to benefit from research.

The participating doctoral students were enthusiastic about such a concrete result of 'learnings' from the course. The list, however, is not intended as an all-inclusive, generalizeable and germane set of propositions to apply to all studies; rather, they are guidelines which are helpful in conceptualizing the nature of studies involving the complex interactions of teachers/teacher educators and their learners, and the interplay of this with the research process itself. Nevertheless, it is interesting to ponder the value of developing such guidelines for reconsidering such research and doing so through the explicit research-on-research approach adopted for this summer school. Central to this outcome, however, is the realization that a CoL can meaningfully consider and then construct a useful list of such learnings as a direct consequence of their own collective self-study.

The Learning of the Doctoral Students and Teaching and Teacher Education Academics

Another important question central to this whole process is: 'What did the participants learn from this course?'

The data collected through phases one to four (as previously described) offers some insight into the learning of the doctoral students. We offer two indicative examples.

One of the questions we discussed was how teachers can benefit from our research:

> I am researching the use and effects of a self-evaluation instrument for primary schools. During the course, I became more conscious about a tension in my study between being an independent researcher and establishing a community of learners by working together with teachers involved in my research. On the one hand, as an independent researcher I want to obtain valid and reliable results that can be generalized to the entire population of Dutch primary schools. On the other hand, I intervene in my own research by trying to persuade schools to make more use of the results obtained by using the self-evaluation instrument. I believe that schools can profit from the use and improve the quality of education by using these self-evaluation results. Furthermore, I do not want to end up with the conclusion after four years of research that schools did not use the self-evaluation results, and that therefore the use of the self-evaluation results did not have any effects. The issue of being an independent researcher versus working together with teachers plays a major role in this example. By intervening in my own research, I am becoming a less independent researcher. I think it is important to be conscious about this tension and to try to learn from it.

Another question we discussed was the issue of language problems between, for example, researchers and teachers:

> The language of researchers is not the language of teachers. If schools agree to participate in a research project, in my opinion, the least you can do is communicate the results back to them. I already communicate with the schools participating in my research by means of newsletters with the results of my research, which I send to them several times a year. In these newsletters, schools can find, for example, the results other schools obtained by using the information generated by the self-evaluation results, and which factors can promote the use. Moreover, I communicate with teachers by publishing in teacher journals. 'I do not have the time to publish in these kinds of journals', is an argument often heard. However, writing such an article takes, in my experience, only one to two days. Furthermore, publishing in such journals also has some benefits. Researchers do not only read scientific journals, but also these teacher journals. Secondly, the teachers participating in your research might get more motivated by reading their results in these journals. This course stimulated me to continue to do so.

> Finally, I would like to end with saying that when you want to communicate your results back to the school, an important factor is that it is important to not only focus on the things that did not work, but also focus on what went well.

The doctoral students in these examples had already taken some steps to bridge the theory–practice gap; most other participating doctoral students did not have such experiences, among others, because 'this is not a subject in our regular courses' or 'the main purpose of my study is to develop theoretical instead of practical implications'.

The results of the study give rise to the idea that whether or not Ph.D. students are willing to put effort into diminishing the gap between theory and practice might depend on their beliefs with regard to the concept of learning and on their own position. Although our data does not allow conclusions with regard to this matter, we got the impression that northern European doctoral students are more influenced by constructivist beliefs on learning than southern European students. The northern Europeans concentrated on their role as researchers, while most Cypriot students combined their doctoral work with working as a teacher and therefore tended to focus on the benefit of their research for their own practice. The preliminary answer to the question 'Does your study contribute to the learning of the pupils, teachers or teacher educators involved?' of one Cypriot Ph.D. student illustrates this difference: 'my research is on school effectiveness so the results will benefit students'. The course offered the doctoral students from the different countries the opportunity to discuss the influence of local contexts on the process of conducting research.

The core of the final discussion (phase four), which naturally developed into an evaluation, was that the course had helped the doctoral students to develop as researchers and become more confident about their ability to help teachers and teacher educators to benefit from their research.

Not only did the doctoral students learn from the course, but also the three professors, as this reflection report of one of them shows:

> I was rather nervous about this course. I did not know the students; the course would only take three days and our program was very ambitious. Above all, the subject of the course – conducting research in a way that is useful to educational practice – is one of my main professional concerns. So, I wanted this course to be a success.

> I was relieved to learn that almost all participating doctoral students shared my concern. I know for sure that this was crucial for making this community of learners work, together with the certainty that the three of us would be able to improvise and be flexible if needed (which was, of course, the case). I do realize that the results of the self-study we conducted in this course will not be automatically applied by all participating doctoral students, but I feel that it is start ...

> Maybe, my main learning point (again!) is that as a teacher (educator) there always is that point where you have to leave your knowledge and experiences behind you, do what you feel is important and trust your intuition. As a teacher educator and researcher, I have to recognize this as a fact and reflect on/analyze the outcomes of my actions as input for further learning and study.

Conclusion and Reflection

As described in the introductory section of the article, the aim of the summer course for European doctoral students was to create a CoL that would carry out its own collective self-study to answer the question: 'What can we, as researchers, do to help teachers/teacher educators benefit from our research?'

The considerations behind this aim were that there is still a gap between educational research and practice. When researchers present findings to teachers they may well believe that they are presenting their information in a way that enables teachers to engage with the information intellectually, to apply the knowledge to their own context, and thus instigate change and/or improvement. However, from a teacher's perspective, it is equally the case that they may well perceive researchers as being experts who are presenting the world as it should be. The literature is littered with examples of teachers feeling that researchers do not necessarily present them with opportunities to be involved in data analysis and the subsequent shaping of the research 'learnings', the way they are developed, and/or whether or not such outcomes meet their priorities and needs at that time. As a consequence, instead of using research findings as a stimulus for discussion, teachers may well perceive the research as imposing standards that may not be realistic or immediately applicable to their own practice. Unfortunately, it is far too often the case that researchers are perceived as imposing their own theories and their own perceptions of the situation, and teaching teachers how to apply these in their schools and classes devoid of the idiosyncrasies of differences in context (Keiny & Dreyfus, 1993; Wikely, 1998).

A partial solution to this situation can be found in combining the role of teacher/teacher educator with the role of researcher. And while, especially in the last decade, internationally there has been incremental growth in better linking theory and practice through (in particular) the work of teacher educators involved in self-study, these positive developments do not necessarily account for the profession as a whole. In Europe, self-study research of teacher educators is not yet common. From the hundred participants of the last International Conference on Self-Study of Teaching and Teacher Education Practices (S-STEP, England, August 2006), only five came from Europe. One way of responding to this situation is to think about ways of challenging the status quo by forming communities of knowledge producers where researchers and teachers/teacher educators together can produce the knowledge integral to their very practice and context.

The fact is that young researchers (doctoral students) can experience difficulties when working and communicating with experienced (and often much older) teachers and teacher

educators. Therefore, by creating a CoL and carrying out a self-study, the teaching and teacher education academics hoped to offer the doctoral students participating in this summer course the opportunity not only to learn about but also to experience a new form of learning and a new way of conceptualizing a meaningful approach to research. The hope was that this process and experience would support them in collaborating in a more productive way with teachers and teacher educators. By experiencing what was advocated, the professors were hopeful that the approach would not simply lead to insights about important elements of 'support', but also be immediately applicable to the doctoral students' own research projects

The results of the course were threefold. In the first place, our community of learning researchers conducted an international collective self-study on the research projects of its members to find out the extent to which these research projects contributed to the learning of the pupils, students, teachers and teacher educators involved in the studies, and to discuss the possibilities of enhancing this learning. Together, a list of 15 guidelines to support the learning of participants in a research study was created. The doctoral students were pleased with the 'concreteness' of these particular results. Some issues emerged about this collective self-study and its results. For example, it would have been better if there could have been more time to carry out the intercoder reliability checking in the community of learners (instead of it being done by the professors). However, in the context of a summer school course, such limitations are not so great as to detract from the intention of the program in the first place.

Secondly, the results show that most doctoral students were positive about the relevance of the course in relation to their own research, especially with respect to working and communicating with the students, teachers and teacher educators with whom they work. Above all, the course offered the doctoral students from the different European countries the opportunity to discuss the influence of local contexts on the process of conducting research.

A critical question can be asked with respect to the 'translation' problems experienced by some students whose research projects were not in teacher education. Maybe the professors should have given this aspect more attention. Based on our findings, however, we were heartened by the fact that the chosen approach offered a way of coming to grips with the essence of self-study as a bridge across the theory–practice gap and with providing knowledge that has as its intention applicability and usefulness in, and for, practice. In conjunction with this point is the importance of the professors demonstrating that they were genuine participants and members of the CoL, and that through working with the doctoral students in the manner that they did, a small group volunteered to be involved in formalizing the work in the form of this article. Beyond the modelling of practice and the seriousness with which approaches to developing a CoL were conducted, the explicit link to self-study also helped to demonstrate the dynamic nature of learning through research and the importance of cultivating the attitudes of open-mindedness and responsibility (Dewey, 1929), so fundamental to reflective practice. In both the doctoral students and their professors collaborating in this way, the possibilities for similar learning became real and concrete through the example lived out in this practice, thus mirroring that which might be anticipated in the doctoral students' own research projects.

Thirdly, and finally, we dare to conclude (and the evaluation outcomes of the summer course confirm this) that the professors succeeded in 'teaching what they preached': the participants functioned as a CoL and carried out an interesting, engaging and relevant research project. This also seems to be an important conclusion, especially because the theme of the summer course for doctoral students was concerned with understanding the context and nature of researching teaching and teacher education. The fact that the two levels in this course – a CoL studying the possibilities of creating CoLs in research projects – became explicit is, in itself, an important outcome.

As researchers, we – the authors of this article – jointly suggest that this approach to helping the next generation of researchers to better understand the complex nature of researching teaching and teacher education is crucial in helping them to better grasp the inherent difficulties of the very work in which they are involved. We feel that the introduction of relatively new concepts such as CoL and self-study in Europe should not only be 'words', but also 'experience'. Through such an approach, we contend that researchers are more likely to begin to be cognizant and capable of addressing some of the persistent problems germane to the interplay of theory and practice in the

hope that there will be less likelihood that they remain as separate and distinct fields of endeavour, and rather that bridging the gap is an expectation, not a forlorn hope.

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Correspondence: Mieke Lunenberg, CETAR, VU University, De Boelelaan 1105, NL-1081 HV Amsterdam, The Netherlands (m.lunenberg@ond.vu.nl).