

Facilitating self-study of teacher education practices: toward a pedagogy of teacher educator professional development

Eline Vanassche & Geert Kelchtermans

To cite this article: Eline Vanassche & Geert Kelchtermans (2016) Facilitating self-study of teacher education practices: toward a pedagogy of teacher educator professional development, *Professional Development in Education*, 42:1, 100-122, DOI: [10.1080/19415257.2014.986813](https://doi.org/10.1080/19415257.2014.986813)

To link to this article: <https://doi.org/10.1080/19415257.2014.986813>



Published online: 22 Jan 2015.



Submit your article to this journal [↗](#)



Article views: 1330



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 16 View citing articles [↗](#)

Facilitating self-study of teacher education practices: toward a pedagogy of teacher educator professional development

Eline Vanassche* and Geert Kelchtermans

Centre of Educational Policy, Innovation & Teacher Education, KU Leuven, Dekenstraat 2, Postbox 3773, 3000 Leuven, Belgium

(Received 25 July 2013; accepted 9 November 2014)

This article reports on a two-year study of a self-study research group facilitation. The research group was designed as a professional development project in which six experienced teacher educators investigated their practices using a self-study approach. The pedagogical rationale of the facilitation was based on four broadly shared theoretical principles on how teacher educators can effectively work on their professional development. These theoretical principles were translated in a series of propositions ('if ... then ...') making clear the implications these principles held for the interventions of facilitators of teacher educator professional development. Qualitative content analysis of the audiotapes of the research group meetings, the facilitators' logbooks and all the written materials produced during the project serves as an empirical validation and refinement of these principles. The findings are presented as amendments to the original propositions. By interpretatively discussing why these propositions functioned as they did in practice, we contribute to the development of a pedagogy of teacher educator professional development.

Keywords: professional development; teacher educator; self-study research

1. Introduction

Professionalizing teaching remains high on the policy agenda in many countries (for example, Cochran-Smith and Fries 2001, Darling-Hammond 2010, European Commission 2010). Since the beginning of the 1980s, this discourse of continuing professional development has been linked to various forms of practitioner research. Teachers actively initiating and performing research in their own classrooms became thought of as a powerful approach to improve their understanding of practice and – as a consequence – their repertoire for professional action (for example, Little and McLaughlin 1993, Darling-Hammond 1997, Cochran-Smith and Lytle 1999).

This line of thinking is also found in the Self-Study of Teacher Education Practices approach (Loughran *et al.* 2004), where it is explicitly linked with teacher educators. Self-study research refers to teacher educators intentionally and systematically investigating their practices in order to improve them, based on a deepened understanding of these practices, as well as the contexts in which these practices evolve. By making their results public, self-study researchers simultaneously aim at contributing to a public knowledge-base of teacher education. The

*Corresponding author. Email: eline.vanassche@ppw.kuleuven.be

birth of self-study in the early 1990s has been labeled as ‘the single most significant development ever in the field of teacher education research’ (Zeichner 1999, p. 8). Nevertheless, the goal of scholarship and the associated expectation of research rigor have been reported as challenging and difficult to maintain if personal practice and experiences are the focus of the research (Bullough and Pinnegar 2001, Feldman 2003, Vanassche and Kelchtermans 2015). This is especially true for teacher educators working in higher education contexts where the focus traditionally is on teaching, rather than research. This has inspired several teacher educators to pair up with an experienced academic researcher when engaging in self-study research (for example, Lunenberg *et al.* 2010, Lunenberg and Samaras 2011). As such, new collaborative formats for both research and professional development emerge and – as a consequence – also issues of the conditions and ‘pedagogy’ or facilitation necessary to make these collaborations work. These issues, however, have not yet been systematically addressed in research.

This study contributes to this issue and answers the question of how teacher educators’ professional development can be meaningfully facilitated in a self-study research group.

2. A collaborative self-study project

The context for this study was a two-year collaborative project of five Flemish teacher training programs. Participants included six experienced teacher educators (i.e. John, Ellen, Tasha, Gus, Louis and Carter [pseudonyms], whom we will refer to as ‘the teacher educators’). They were self-selected and extensively briefed about the purposes of the project before they agreed to join. Project funding was used to buy research time from their daily job (10% over a two-year period). Table 1 summarizes the general characteristics of these teacher educators and the topics chosen for their self-studies.

None of the participating teacher educators had been expected to be active researchers before, aiming to publish their work in academic or professional journals.¹ To outbalance the limited research expertise on the part of the teacher educators, this project included two experienced academic researchers (i.e. the first and second authors, Eline and Geert, whom we will refer to as ‘the facilitators’). Our role was to support teacher educators’ professional development and to provide the necessary theoretical and methodological input. More specifically, we organized monthly meetings with the following agenda: informing the teacher educators on the theory and practice of qualitative case-study research in general, and self-study research in particular; coaching them in the design, implementation and analysis of their self-study; and providing the theoretical and conceptual tools (e.g. research literature, theoretical frames, concepts) for framing, analyzing and discussing the results of their self-study research. Figure 1 provides an overview of the research group meetings.

These research group meetings were supplemented with individual support through email, telephone and one-on-one meetings with the facilitators. These individual meetings mirrored the agenda of the group meetings, but the support was tailored more specifically to each individual’s developing support needs during the different project stages. This included, for example, developing an interview guideline for the specific purposes of their study or a facilitator conducting observations in the teacher educator’s practice. Taken together, this individual and group-based

Table 1. Background information for the participating teacher educators.

Name	Institute	Affiliation	Research experience	Research questions
John	HEC	Bachelor's program in elementary teacher education	None	What aspects of student-teachers' professional self-understanding are left unexplored in a competency-based approach? How does student-teachers' self-understanding develop throughout the program? How can I actively support the development of their self-understanding?
Gus	HEC	Bachelor's program in elementary teacher education	Participated in several practice-based research programs	How can I describe student-teachers' self-image at the end of the teacher education program? What values and norms do they adhere to?
Ellen	HEC	Bachelor's program in early childhood teacher education	Research assistant at university for one year	What implicit and explicit messages do I convey to student-teachers and school-based mentors with the assignments during practical training?
Tasha	CAE	Specific teacher education program	None	What is the impact of being unfamiliar with student-teachers' area of expertise in post-lesson conversations during practical training?
Carter	UPB	Specific teacher education program	Research assistant at university for two years	What are the opportunities and pitfalls of being unfamiliar with student-teachers' area of expertise?
Louis	UPB	Specific teacher education program	None	How can I describe my task perception as a teacher educator in post-lesson conversations with student-teachers during practical training?

Notes: HEC, higher education college ('*hogeschool*'); CAE, center for adult education ('*Centrum voor Volwassenenonderwijs*'); UPB, university-based program ('*universiteit*').

trajectory constitutes the research group facilitation that was subjected to a systematic and in-depth analysis for the purposes of this article.

3. Content and rationale of the facilitation

We selected four pedagogical principles from the research literature reflecting the state of the art of research on teachers' and teacher educators' professional development. Each principle refers to an established, and broadly shared, understanding of professional development and involves clear consequences for the actions and interventions of facilitators aiming to design or support teacher educators' professional development. Therefore, the theoretical description of each principle below ends

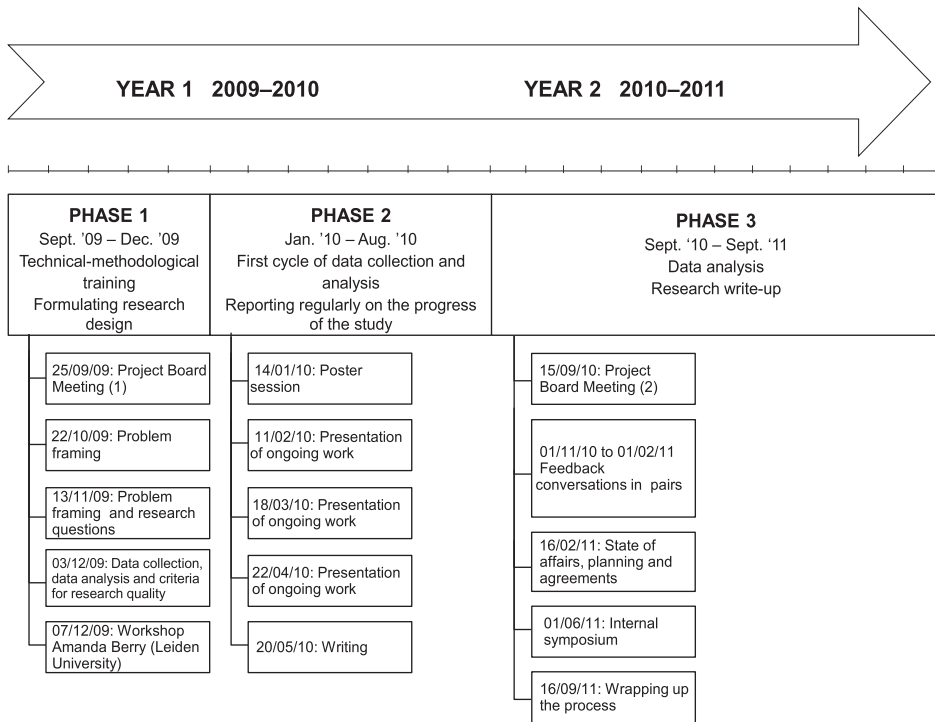


Figure 1. Overview of the research group meetings.

with rephrasing the principle as a proposition or working hypothesis ('if ... then ...') for facilitators' actions.

First, there is agreement in the research literature on the fact that professional development not only involves changes in professional practice (actions), but also in practitioners' thinking about the how and why of that practice (Little 1993, Ross and Regan 1993, Day 1995, Borko 2004, Day and Sachs 2005, Kelchtermans 2009). Professional development aims at a more refined and effective repertoire of educational practices and strategies, as well as a more grounded (validated) knowledge-base of teacher educators' professional responsibilities and situations (Kelchtermans 2004).² Therefore, we argue that professional development should not only concern instrumental knowledge, but also involve one's normative assumptions about teacher education as these are enacted in practice. In line with this, we framed our first proposition:

If we want professional development to result in qualitative changes in both teacher educators' actions and thinking, then we need to support them in making their normative views on teacher education explicit, as well as critically evaluating them (through discussion with peers and others).

Second, the idea that professional development is a contextualized process of sense-making is widely agreed upon (Lave 1993, Richardson and Placier 2001, Knight 2002, Reeves and Forde 2004, Kelchtermans 2006, Wermke 2011). The particularities of the professional working context – and practitioners' more or less

conscious reflections upon it – strongly impact (facilitate or hinder) their professional development. Kelchtermans (2006) has distinguished between the structural and the cultural characteristics of the professional working context, in the way that they constitute the actual working conditions in which teacher educators live and perform their professional lives. Structural conditions refer to the relatively stable allocation of funding, student populations, formal positions, and administrative procedures. Cultural working conditions involve the collectively shared normative ideas about good teacher education in the teacher training institute, the nature of its collegial relationships, as well as the organizational culture (see also Hargreaves 1994, Stoll 2000, Hargreaves *et al.* 2010). Following this line of research, our second proposition was:

If professional development results from the meaningful interaction between the individual teacher educator and his/her professional working context, then teacher educators' individual experiences, issues or questions need to be interpreted against the background of the structural and cultural working conditions in the teacher training institute.

Third, there exists a strong body of research on the qualities of the collaborative relationships in learning groups. A central concept in this line of research is that of the professional learning community (Cochran-Smith and Lytle 1999, DuFour 2004, Stoll *et al.* 2006). Based on a systematic review of the literature, Stoll *et al.* defined a professional learning community as, 'a group of people sharing and critically interrogating their practice in an ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way [...] operating as a collective enterprise' (2006, p. 223). Following this definition, a trusting, collegial environment is crucial in the critical reflection on personal practice within a group setting, including a self-study research group (see also Hoban *et al.* 2007, Kitchen *et al.* 2008). Hence, our third proposition:

If professional development is organized through peer group meetings, then the meetings should exemplify the concept of a professional learning community, characterized by making explicit, publicly sharing, and critically interrogating one's teacher education practices in order to improve them.

Finally, research on partnerships between academic researchers and practitioners has emphasized the need to work together from a perspective of complementary competence in the collective endeavor (Cochran-Smith and Lytle 1999, McCutcheon 1995, Zeichner 2002, Kershner and Hargreaves 2012). Complementary competence refers to the mutual recognition and positive appreciation of the specific and distinct expertise that both researchers and practitioners hold and bring in when engaging in the collaborative research project. Teacher educators' competence stems from their day-to-day enactment of their practice, which involves purposeful pedagogical interventions aiming at preparing student-teachers for their job, but also committing themselves to and taking responsibility for student-teachers' learning. Inquiring into those experiences requires developing the proper distance to look at personal practice and experiential knowledge and systematically question this, in order to deepen one's understanding. Collaborating with a trained researcher – who has the necessary theoretical and technical–methodological expertise – can help in finding that distance and translating it into research activities and research questions. Building on this line of research, our fourth proposition was:

If teacher educators and academic researchers collaborate in a research project aiming at professional development, then this collaboration should happen from a perspective of complementary competence in which the different expertise of both parties is mutually acknowledged and positively valued.

Table 2 summarizes these propositions and indicates their implications for the actions of the facilitators of teacher educators' professional development.

This study aimed to empirically validate and analytically refine these broadly shared theoretical assumptions on (facilitating) teacher educators' professional development. Our research questions were: (1) how did our pedagogical principles on facilitating teacher educators' professional development in a research group actually work out in practice (and why)?; and (2) what amendments (i.e. nuances or conditions) to these principles are necessary based on the interpretative analysis?

4. Methodology

4.1. Data collection and analysis

Data collection was systematically intertwined with our facilitation practice. As such, the collected data not only provided evidence to answer the research questions for this study, but also served as an ongoing source of information about the teacher educators' developing support needs and were used to constantly modify our facilitation practice. Research data included: audiotapes of the research group meetings (see Figure 1), journal-writing of the facilitators, written reports on the meetings between the facilitators and document analysis. For the specific purposes of this study, these data were complemented with a focus group interview detailed below.

Each research group meeting was audio-taped, resulting in approximately 30 hours of recordings. As facilitators, we regularly met to debrief and prepare for the individual and group meetings. These meetings resulted in written minutes, representing our interpretation of the evolving support needs and the social processes in the research group, as well as our attempts to structure the content and pedagogy of the meetings accordingly. Journal-writing by the facilitators was another means to record and keep track of our developing interpretations and insights, but also to work through problems, concerns or tensions during the process. In the journal, we reflected on two sets of experiences: the development of the research group; and the second-order inquiry into the research group facilitation process. Finally, we collected and archived all email conversations, materials used and written output of the self-studies over the course of the two years.

Data analysis included several phases. First, we systematically reconstructed the actual facilitation practice and its rationale in a matrix. The matrix display was a means to condense the data-set and convert oral to textual data. More specifically, we identified for every research group meeting: the program and activities of the meeting (what?); the meeting goals (why?); the rationale underlying the program and activities (why in that way?); and the texts, notes and articles used in that meeting. This entailed repeatedly listening to the audiotapes as a whole and reading through all the written material. The results of this reconstruction were communicatively validated (Altrichter *et al.* 1993) with the teacher educators in a focus group interview. This interview also allowed us to complement the interpretative reconstruction of the research group facilitation with experiential data from the teacher educators (i.e. their analysis of how the project unfolded and the effects of our facilitation practice).

Table 2. Pedagogical rationale (propositions): facilitator interventions, triggered learning processes, and desired outcomes.

Proposition	Facilitator interventions	Triggered learning processes	Desired outcomes
If we want professional development to result in qualitative changes in both teacher educators' actions and thinking, then we need to support them during the process in making their normative views on teaching and teacher education explicit, as well as critically evaluating them (through discussion with peers and others).	Challenging teacher educators' normative assumptions about good teacher education.	Creating an awareness and problematization of implicit, taken-for-granted, normative assumptions about teacher education.	Validating and possibly rethinking these assumptions as the basis for optimizing and changing practice.
If professional development results from the meaningful interaction between the individual teacher educator and his/her professional working context, then the individual experiences, issues or questions of the teacher educators need to be interpreted and understood against the background of the structural and cultural working conditions in the teacher training institute.	Contextualizing teacher educators' practices and their understandings of that practice.	Broadening the attention from the 'self' to the 'self as situated in the teacher training institute'. Creating an awareness of cultural values and norms in the institute and their impact on teacher education practices.	Becoming aware of the multiple influences in their practice. Enabling transfer of the knowledge gained in the process to the working context of the teacher training institute.
If professional development is set up through peer group meetings, then the meetings should exemplify the concept of a professional learning community, characterized by making explicit, publicly sharing, and critically interrogating one's actual teacher education practices in order to improve them.	Striving for and acting from the guiding principle of the professional learning community.	Creating an awareness of other perspectives on and approaches to educating teachers.	Inviting teacher educators to consider multiple perspectives on educating teachers.
If teacher educators and academic researchers collaborate in a research project aiming at professional development, then this collaboration should happen from a perspective of complementary competence in which the different expertise of both parties is mutually acknowledged and positively valued.	Acknowledging and valuing the different but complementary competences of both parties. Engaging in actions that explicitly elicit and draw on both types of expertise in striving for the research goals.	Suspending the tendency to immediately look for and enact practical solutions to a situation. Taking time to interrogate, analyze and understand the questions or challenges in that situation.	Supporting and encouraging teacher educators to become the self-directing agents (as well as the ones responsible) for their research projects.

The second step in the analysis consisted of a qualitative content analysis of the matrix looking for indications of changes in either the teacher educators' or the facilitators' stance toward the project. In doing so, we used the notion of critical incidents and phases (Measor 1985, Sikes *et al.* 1985) as heuristic concepts to identify key experiences or turning points in the research group facilitation. We used the constant comparative method (Miles and Huberman 1994, Strauss and Corbin 1998) to validate emergent themes in the data-set by continuously checking the entire data-set for the consistency and validity of the themes. Throughout this process, we wrote interpretative memos in which we kept track of our analytical refinement of the pedagogical principles in our rationale (formulated as amendments).

4.2. Ethical considerations

Our double agenda as facilitators and researchers was openly communicated to the teacher educators. Every step in making elements of this project public was extensively discussed with the teacher educators and their respective institutes before, during and after the project to obtain informed consent. Verbal permission to record and use the meetings, email conversations and texts was obtained from all the teacher educators before the start of the project and was explicitly reconfirmed in the process of completing this study. Anonymity was secured by using pseudonyms for the teacher educators, as well as through careful editing in all produced texts.

5. Findings

5.1. Amendments to the first proposition

The first proposition stated that in order for professional development to result in changes in both teacher educators' thinking and acting, their normative beliefs about teacher education need to be made explicit and critically discussed throughout the group process. The analysis confirmed the validity of this proposition, but added three important amendments or conditions necessary to achieve the public sharing of normative beliefs.

5.1.a. Systematically reflecting on mirror data from teacher educators' practices, as well as thoughtfully introducing relevant theoretical frameworks, facilitates the public sharing and critical discussion of normative beliefs

Reflecting back on the process, all teacher educators underscored the importance of data from their actual practices as the starting point for their critical and systematic reflection. Bronkhorst (2013) coined the term mirror data to refer to data that literally 'hold up the mirror.' These data make the reflection more binding by providing feedback on actual teacher educator behavior in practice and its outcomes. Mirror data included, for example, video-recordings of post-lesson debriefing sessions with student-teachers (Louis and Carter), internship evaluation reports (Gus), or observational reports of microteaching sessions (Tasha) and teacher educator staff meetings (Ellen). A clear illustration of the role of mirror data is found in Louis' case, with video-recordings demonstrating clearly that his actual behavior in post-lesson debriefings did not align with his highly valued constructivist beliefs about student-teachers' learning. Louis tended to act in a rather directive way, 'telling' student-teachers what

to do and deciding how to work on it, rather than helping them to reflectively discover teaching alternatives for themselves (see also Berry 2007). As such, the mirror data revealed how his actual teacher educator behavior not only deviated from the intended goals, but jeopardized the achievement of these goals in his practice (living contradiction; Whitehead 1993):

It was absolutely shocking to see myself on the video: ‘what are you doing?’; ‘look at those poor students’. I really wanted to understand the impact of this behavior and learn how I could control the tendency to be so directive. (Louis, group meeting)

Mirror data became a powerful tool to uncover teacher educators’ tacit knowledge of practice, yet in itself did not suffice to achieve professional development. For this to happen, the feedback from the data required expanding upon, questioning, and clarification by means of relevant theoretical frameworks or literature thoughtfully introduced by the facilitators. This allowed the teacher educators to more specifically label and understand what was occurring in their practice and eventually align their teacher educator behavior more fully with their educational beliefs. Louis, for example, drew on the supervision model developed by Van Looy *et al.* (2000) in his analysis of the interaction patterns during post-lesson debriefings. The model analytically distinguishes between different supervision roles emphasizing role alternation depending on the set learning goals. It helped him to refine his normative belief that his directive style was to be avoided at all cost, jeopardizing his constructivist beliefs, but rather that, depending on the characteristics of the situation and student-teachers’ learning needs, different supervision roles might be (more) effective: ‘These roles are not fixed, neither are the tools and methods to be used. Rather it is about finding the appropriate match between the method, and the goals and characteristics of the situation’ (Louis, research report).

This example illustrates how principles of practice (as part of teacher educators’ professional knowhow) became more refined and outbalanced, doing more justice to the complex reality these teacher educators were dealing with. This corroborates the results of previous research on the role of conceptual tools in professional development trajectories (Hoban *et al.* 2007, Lunenberg *et al.* 2010). An important challenge for facilitators, then, is ensuring that the thoughtfully introduced theoretical frameworks do not operate in a prescriptive way (e.g. research-based indications of ‘what works’ and, therefore, ‘what should be done’), rather than providing the tools to unpack and explain current practices (see also Winkler 2001).

5.1.b. Systematically reflecting on one’s practice in order to make explicit one’s normative beliefs implies that teacher educators have to engage simultaneously in two very different agendas. This can be a source of tension

The teacher educators in this project were partly released from their jobs and thus structurally granted the time to concern themselves with the reflective study and improvement of their practice in comprehensive ways. Since the opportunities to engage in this kind of reflective work in their daily practices were scarce, these working conditions and learning opportunities proved highly motivating for all participants. Carter, for example, stated how he ‘never really thought about things in such a way. Without a doubt I have missed out on loads of learning opportunities’ (individual meeting). Ellen confirmed this:

In-depth discussions amongst colleagues are very rare. Questions like: ‘how should we handle this as a team?’, ‘what is our vision?’, are rarely asked. We always squabble about the small things and whoever screams the loudest seals the deal. That is one of the reasons why this was such an inspiring and motivating experience. (Ellen, focus group)

On the other hand, reflectively, systematically and collaboratively investigating questions of practice meant that the teacher educators worked in unusual ways on, for them, an unusual agenda. This reflective agenda implied postponing the tendency to immediately look for and enact practical solutions to a situation or problem. Indeed, clarifying phenomena working from a research-based attitude was a fairly slow and time-consuming process that often led to reactions of impatience or even frustration. The next quote is exemplary for this point:

There’s a big difference between spending the day pragmatically putting out fires and reflective learning. It’s really a different mode of being present in practice. It’s about taking a step back and that really doesn’t come naturally to me. Even if one is partly released from one’s job, it’s really difficult. It feels like stepping off the carousel to watch how the carousel is turning, but at the same time the carousel cannot but keep on turning. (Louis, focus group)

Louis’ comment highlights the twin message. On the one hand, the teacher educators were struggling to preserve the time to work on their self-study alongside their daily tasks and responsibilities despite the formal exemption from their job. On the other hand, it was difficult to simultaneously work on two agendas with such distinct purposes and different ways of being present in teacher education practice.

5.1.c. These tensions need to be made explicit, since they may result in acts of resistance on the part of the teacher educators. For facilitators, it is important to be able to ‘read’ and interpret that behavior properly in order to avoid it jeopardizing the process of professional development

The analysis revealed the importance of explicitly acknowledging tensions between both agendas since, if tensions arose, teacher educators tended to prioritize their teacher education practice grounded in their commitment and responsibility to student-teachers. The urge to act overruled the need to understand their goals and the benefits and pitfalls of choosing one course of action over another. An example is the research group resisting our decision to continue to work on the research questions and a precise demarcation of their research goals. John, for example, overtly expressed his impatience: ‘I just want to start data collection’ (group meeting). In an individual meeting, he repeated his concern: ‘Shouldn’t I be collecting data? Time is flying.’ Others voiced their concerns more covertly, stressing the limited time they had available for their study in the midst of their daily responsibilities:

There’s absolutely no way that I can revise the inquiry planner today or tomorrow. First, I want to read through all the microteaching reports student-teachers made. And whether I like it or not [...] I really need to start marking papers. (Tasha, email)

Informed by the relevant research literature (Louden 1992, Pedretti 1996, Brody and Hadar 2011, Richmond and Manokore 2011), these comments might be read as the teacher educators wanting to preserve the *status quo* and resisting our invitations to look ‘beyond the nuts and bolts of teaching practice’ (Pedretti 1996, p. 313) into their normative beliefs. However, this behavior in fact exemplified the tension

between reflectively inquiring into experience and the pressure of daily practice. Their resistance reflected their commitment and professional responsibility to student-teachers, which conflicted with the research agenda. As a facilitator, it is important to be able to properly ‘read’ acts of resistance and react accordingly, since it potentially jeopardizes the processes of professional development.

5.2. Amendments to the second proposition

With regard to the need to contextualize teacher educators’ individual experiences and questions in the working conditions of the teacher training institute, the analysis confirmed the supportive role of structural working conditions in the process, but more importantly showed the accordance between the individual teacher educator’s normative beliefs and that of the organization to be a crucial determinant in the process. We add two important amendments to the original proposition.

5.2.a. Teacher educators’ professional development in terms of their practices and normative beliefs is affected by and will in turn affect the collective practices and normative beliefs of the organization (organizational culture). This can facilitate as well as inhibit individual teacher educators’ professional development. Facilitators need to be aware that supporting teacher educators’ development might bring them into conflict with their colleagues or teacher training institute

Although the final goal of the self-study projects was always related to the improvement of teacher educators’ personal practice, the chosen research interest always and inevitably involved a normative stance. In defining something as relevant and important to research, teacher educators immediately revealed their normative beliefs about good (and improved) teacher education.

If these normative beliefs aligned with the organizational culture, a joint commitment to and ownership of the project developed. The individual teacher educator’s processes of professional development potentially served as a catalyst for organizational development (see also Korthagen and Lunenberg 2004). This also involved clear consequences for the structural conditions provided to the teacher educator to participate in this project. Efforts were made to ensure that the teacher educator had enough time, the results of the project were closely monitored in staff meetings, and colleagues actively took part in the study. In Gus’ case, for example, a colleague became an active research partner supporting him in the process of data collection and analysis. This served as ‘a signpost for the generous trust and support from my head of department’ (Gus, individual meeting). These structural working conditions not only involved practical benefits, but also carried an important symbolic meaning. Teacher educators invested a lot of time and energy into this project, but more importantly also risked themselves and their personal practices. If these efforts were met with organizational support, this served as an explicit recognition and appreciation of these efforts.

If the priorities of individual teacher educators (as evidenced in the goals of their study) did not accord with the normative program of the teacher training institute, not only did the dissemination of the developed understandings fail to occur, but also the professional development of the individual teacher educators and the relationships with their colleagues became at risk. John’s case is exemplary for this finding. His research interest focused on ‘the more personal characteristics of teaching

such as enthusiasm, personality, caring, and working with children' (group meeting) and how to adequately support these as a teacher educator. John's research interest, and the normative assumptions about teacher education it was based on, explicitly contested the competency-based curriculum policy in his institute. In exploring 'the more personal characteristics of teaching' (group meeting), which are not easily documented in a list of competences, John inevitably also questioned the basic assumptions of the operating curriculum policy. From the start, his self-study research thus involved a strong political agenda. In these cases, consequences for the processes of professional development were twofold. On the one hand, this limited teacher educators' ability to open up and critically question their assumptions about good teacher education since this could endanger the 'niche' they had created in which they practiced primarily according to their personal values, rather than those set out in the curriculum policy. On the other hand, it intensified existing tensions that put them in conflict with their colleagues and, as a consequence, the dissemination of the resulting understandings and insights failed to occur. These studies were merely being 'tolerated,' very similar to Anderson-Patton and Bass' experiences that 'institutional politics allowed [their] experiment because both [their courses] are marginalized courses' (2000, p. 10).

In facilitating processes of professional development, it is important to be aware that supporting teacher educators' development potentially puts them into conflict with their colleagues and teacher training institute. These tensions are rooted in commitment and belief on the one hand, but also loyalty on the other. Diverging or critical points of view of individual teacher educators do not necessarily imply that they no longer want to loyally engage with their colleagues or the operating curriculum. But given the fact that professional development inevitably makes explicit these tensions, which is potentially an emotionally demanding situation for teacher educators, it is important to create the space for voicing these ideological conflicts (English 2009) in the facilitation process.

5.2.b. Because of the possible conflicting relationship between the individual's professional development and the practices and normative beliefs of the teacher training institute, it is often difficult for the teacher educators to leave the safe environment of the peer group and go public on the findings of their self-study (and their professional development). This is a sensitive issue that carefully needs to be dealt with in a step-by-step process

Making public one's normative assumptions about teacher education in professional development projects potentially puts teacher educators in a vulnerable position since these assumptions are always contestable. Within the collegial and trusting forum of the research group, it is fairly easy to manage potential differences in opinion. But leaving the safe environment of the research group and going public on the findings of the study (and thus one's professional development) is a very sensitive issue that carefully needs to be dealt with in a step-by-step process. This need is more marked if the individual's practices and beliefs are at odds with the collective practices and normative beliefs of the teacher training institute. Picking up John's case, for example, the tensions between his task perception as a teacher educator and that of his institute became very explicit when we organized a small conference for colleagues from the participating institutes to present the preliminary findings of the self-studies (internal symposium; see Figure 1).³ When presenting his work in a

more public forum, John was facing a loyalty conflict: being loyal to the collective project of the institute or to his deeply valued personal assumptions about teacher education, which were clearly evidenced in his self-study. This caused intense feelings of stress and self-doubt. He ultimately decided to dramatically rephrase his research interest, taking out any critical reference to the competency-based approach to avoid public conflict. By doing so, however, he actually gave up his original research interest, as well as the authentic learning processes he had previously engaged in.

5.3. Amendments to the third proposition

As facilitators, we actively tried to support the collegial environment as described in the normative principle of the professional learning community. However, the interpretative analysis has shown that these positive and supportive collegial relationships, paradoxically, might also hinder professional development as they limit the ability to challenge and critically question the normative beliefs and practices. This finding was analytically refined in three amendments.

5.3.a. The quality of the collegial relationships amongst the peers in the research group needs to be actively guarded and stimulated because they constitute a crucial supporting factor in the risky process of self-study and professional development

Trusting, collegial relationships formed a central aspect of the professional learning community and proved to be functional – in different ways – to the teacher educators’ individual professional development.

First, the teacher educators benefited from this collegiality at the practical level in that they shared curriculum materials and exchanged tips and tricks for practice.

Second, all teacher educators emphasized how the positive climate in the group also provided a sense of emotional support that helped them to deal with the challenges, self-doubts and uncomfortable feelings of self-exposure implied in the critical reflection on personal beliefs (see also DuFour and Eaker 1998). ‘We’re in this together. All vulnerable, all naked. Thankfully,’ Carter stated (group meeting). On a similar note, Louis described the positive and appreciative collegial relations in the research group as an important precondition for engaging in this ‘somewhat masochistic effort’ (focus group interview), referring to the self-critical and public nature of the self-study research group.

Third, the research group operated as an important standard from which to judge and legitimize personal assumptions. After an extensive discussion of his research proposal in a research group meeting, for example, John commented: ‘I’m glad to see people share my opinions. I always thought I held a minority position. But as it turns out, more people are thinking along the same lines. That’s just brilliant. Apparently, I’m more normal than I thought.’ John’s comment demonstrates how a feeling of being respected in one’s educational beliefs was an essential prerequisite for teacher educators to be willing to open up and engage in a critical discussion of personal practice in the research group.

5.3.b. Paradoxically, collegial relationships based on trust and acceptance that are too positive or too supportive might be counterproductive and hinder professional development, as they make it difficult to challenge and critically question normative

beliefs and practices. The latter remains an essential condition for professional development

The interpretative analysis revealed a tension between, following Darling (2001), the values and commitments of a community of compassion – collegial relationships in which ‘taking care of’ and ‘supporting’ is the prime goal – and a community of inquiry in which the different members of the community ‘argue their positions with conviction, and make judgments about the worth and truth of others’ claims’ (2001, p. 16). Darling has shown how a unilateral focus on care and acceptance may go at the expense of professional development and being critically challenged as a constitutive element of it. In that case, emphasis is placed on ‘individual flourishing (at least in the sense of offering protection), but it is not the agent of, or catalyst for, growth. At best, community is the backdrop that makes it possible (...) to pursue learning’ (2001, p. 12). Our analysis confirmed Darling’s observation and has shown that it is not in the safe, collegial environment that the community’s full potential for professional learning was developed.

An interesting signpost for interpreting the social dynamics in the group is the lens of normalizing responses or exchanges ‘that [define] a problem as normal, an expected part of classroom work and teacher experience’ (Little and Horn 2007, p. 81). More specifically, facilitators should attend to the ways in which normalizing responses move the conversation either ‘away from the teaching or toward the teaching as an object of collective attention’ (2007, p. 82). In the former scenario, the teacher educators convey assurance, sometimes add pieces of personal experience and advice, and then move on. In the latter, the expected and normal character of the problem is taken as the starting point for a detailed discussion of the specific case as it relates to more general principles of practice. Illustrative is the group meeting in which Louis presented the provisional findings of his study. He started by voicing an old sore: his tendency to interpret student-teachers’ experiences for them and offering concrete tips for improved action instead of stimulating student-teachers’ reflective analysis about their internship experiences:

I just cannot repeat past mistakes. [...] At a certain point, I simply cannot contain myself anymore and ‘whoops’, off I go: ‘I will tell you what that lesson should have looked like’. And then I start my argument. I really don’t feel comfortable in that role anymore.

As during other meetings, the research group immediately met Louis’ concern with reassuring voices. John stated that Louis held himself accountable to very high standards and that, depending on student-teachers’ specific needs, his approach might actually be very conducive to student learning. Ellen confirmed this analysis: ‘I don’t know if that’s necessarily negative for the student.’ The collective response of the group was one of support and approval: they put between brackets the feelings of guilt or considered it irrelevant. It very effectively installed feelings of self-confirmation and reassurance and further developed the feeling of group solidarity. At the same time, however, critical reflection was absent from the conversation. The ‘normal’ character of the problem could easily have served as the starting point for a detailed discussion of the specific case as it relates to more general principles of teacher education practice.

As was evidenced in the focus group interview, the normalizing impact of the collegial relationships resonated with the teacher educators’ experiences in the

research group. Louis, for example, recognized this mechanism to be at play during the peer-feedback conversations in the second year of the project (see Figure 1) as well: ‘Ellen was nice to me. Maybe a bit too nice.’

5.3.c. As the ‘relative outsiders,’ facilitators can and should problematize the development of counterproductive collegial relationships and their normalizing impact. This is a difficult task in a sensitive area, but is essential in order to safeguard the research group’s potential for the participants’ professional development

Facilitators need to actively stimulate and monitor the quality of the collegial relationships among the peers in the research group if we expect teacher educators to open up and critically question their practice. However, at the same time, it is essential to systematically organize dissent in that safe environment as an essential condition for professional development. As highlighted by Pedretti (1996), facilitators can use their position as a relative outsider to problematize the potential normative impact of the collegial relationships in the learning community. From a position of relative outsider, the facilitator problematizes normalizing responses and elicits further analysis and detail. This role is illustrated in Geert’s response to Louis’ initial concern after the conversation had stalled:

Louis, I think it might be very interesting to look at the question of ‘what happens when I do the debriefing in such a way?’ in more depth. Firstly, there is the question of effectiveness. ‘I want them to learn certain things’. But underneath that is, I believe, also a relational level of what actually happens when you do these conversations in such a way. One of my hypotheses is that that message of enormous involvement – that you do care – can be very intimidating to students. ‘I will definitely not argue with him because he means well’. Secondly, kind of feeling overwhelmed. ‘It’s just crazy the amount of things that I still need to learn’. And thirdly, I believe students can assess very well if someone cares and that creates a very big eagerness to please you.

This response again freed Louis from personal blame, but kept the responsibility of the situation with him as the teacher educator and raised the expectation that he continuously judges on the most adequate approach based on his reading of the situation.

This is a difficult task in a sensitive area, especially considering the goal of complementary competence. Enacting this role of the relative outsider might inadvertently install a hierarchy between the teacher educators and the facilitators. However, we still believe that problematizing these counterproductive collegial relationships and their normalizing impact is essential in order to safeguard the research group’s potential for participants’ professional development. We noticed how modeling this role also enabled teacher educators to allow for productive disagreement to take place.

5.4. Amendments to the fourth proposition

The final proposition defined our normative stance regarding the character of the collaborative partnership between the teacher educators and the facilitators in the research group, arguing that these needed to reflect the idea of complementary competence. The different expertise of both parties in the research group was explicitly acknowledged in its own right, but also positively valued and purposefully sought. Nevertheless, a hierarchy between the diversity in expertise developed, in which the

academic, theoretical and methodological expertise took a higher position on the ladder than teacher educators' experiential knowledge.

5.4.a. Even when working from the idea of complementary competence and equally valuing the diversity in expertise, the group process may still install relationships of hierarchy and dependence. When this happens, these relationships are very hard to discuss and overcome

Our actual facilitation practices aimed to explicitly elicit and strengthen teacher educators' expertise in the process. For example, each research group meeting started with a moment where teacher educators could share their recent experiences in working on their self-study, including the successes experienced and the problems encountered. These stories were shared and annotated by the other members of the group and subsequently used as the starting point of our preparation for the next group meeting. This allowed us, for example, to thoughtfully select relevant literature or examples of self-study research they could draw on for their support. In spite of these intentions and the evidence for this proposition in the research literature, our analysis clearly showed that, nevertheless, a clear division of labor developed. The teacher educators felt primarily responsible for and focused on their teaching, while the facilitators focused on the research, with neither group of participants feeling completely comfortable on the others' terrain. As a consequence, a relationship of dependence of the teacher educators developed that clearly impacted the learning processes in the group. It is important to emphasize that this was not a question of idleness of the teacher educators or of the intention of the facilitator to take control (which has been well documented in research; Fletcher 2005, 2007, Blackler 2011). Rather, it was a question of how the actual facilitation tools, roles and routines, as these developed, created a sense of dependence that justified an attitude of dismissing one's ownership and – even more importantly – one's individual responsibility for getting the work done.

This theme figured vividly in the facilitators' debriefing sessions and logbooks. We struggled with a leader–member dichotomy (Jenlink and Kinnucan-Welsch 2001) and felt a growing discomfort with our role as it actually developed:

It is clear that we are considered to be the experts. [...] In a sense, the biggest compliment would be that they don't need us anymore. [...] It's their task to define what they want to know and value strongly. We can only try to build an environment which feels comfortable enough to take risks, question themselves, strive for the ideal, and postpone the urge for quick fixes. (Eline, log entry)

Our way of facilitating inadvertently functioned very similarly to that of a scaffolding relationship with learners. It was essential to not only make the experience successful or worthwhile, but also feasible and sufficiently safe for the teacher educators, protecting the integrity of both the group and its individual members.

Once installed, these relations were very hard to discuss and overcome. For example, as a consequence of this awareness and discomfort, we opted for a radically different approach during the second year of the project. The number of group meetings was drastically reduced and we installed a peer-review process in which the teacher educators were expected to comment on each other's work in pairs (see Figure 1). This approach did not raise much enthusiasm, as was evidenced in Ellen's comment:

We really didn't understand the problem. I know you guys felt frustrated about the way things were going. But that structure was good for us. When it wasn't there, nothing really happened and we were at a complete loss about what to do next. (Focus group)

We have not found an adequate answer to this dilemma in the project. Based on the work of Jenlink and Kinnucan-Welsch (2001), a suggestion might be to more clearly define the group norms and expectations by the different group members from the outset.

6. Conclusion and discussion

We started this study by outlining a rationale for a pedagogy of facilitating teacher educator professional development, informed by the relevant research literature. This rationale consisted of four pedagogical principles that served as the theoretical background for the actual facilitating actions and interventions. This was highlighted by formulating these principles as a series of propositions providing clear guidelines for our interventions (see Table 2). The interpretative analysis served as an analytical refinement of these propositions, resulting in a number of amendments to the original phrasing in terms of conditions for successful facilitation of professional development on the one hand and possible pitfalls or unintended and counterproductive side-effects on the other. The amended propositions are summarized in Table 3. This study offers interesting implications for future research and practices of facilitating teacher educators' professional development.

First, facilitators need to bear in mind that teacher educators' primary concern and commitment lies with their practice, its smooth evolvment and improvement. Combining this commitment with the agenda of reflective practice and scholarship is not self-evident, because it demands time and energy that cannot be spent on teacher educators' core business. The tension between both agendas is not new, is not surprising in itself and cannot be easily resolved. For a pedagogy of facilitating professional development, the conclusion is that facilitators need to be aware of this inevitable tension in order to properly 'read' potential resistances and find ways to insert it into reflective conversations in order to negotiate a realistic balance between both agendas, without ever giving up one for the other.

Second, although teacher educators' professional development is always motivated by their personal aspirations, goals and beliefs, they inevitably also involve their teacher training institute. Teacher educators have a clear sense of what is important for them as valuable working conditions (in terms of, for example, the collegial relationships), but also of possibly conflicting normative ideas about good teacher education. In facilitating processes of professional development it is important to constantly and explicitly attend to the situated character of teacher educators' work and thinking, since this may constitute an important source of political and normative tensions that may strongly interfere with the purposes of professional development.

Third, although often argued to be valuable – and even indispensable – for professional development, close collegial ties might hinder authentic and open discussions in which the participants can constructively engage in the exchange of different viewpoints (see also de Lima 2001, Achinstein 2002, Molle 2013). As outcomes of learning communities have been frequently reported as disappointing (for example, Schuck 2003, Little and Horn 2007), we contend that this side-effect of

Table 3. Amendments to the original propositions to facilitate professional development.

Original propositions	Amended propositions
<p>If we want professional development to result in qualitative changes in both teacher educators' actions and thinking, then we need to support them during the process in making their normative views on teaching and teacher education explicit, as well as critically evaluating them (through discussion with peers and others).</p>	<ul style="list-style-type: none"> ● Systematically reflecting on mirror data from teacher educators' practices, as well as thoughtfully introducing relevant theoretical frameworks, facilitates the public sharing and critical discussion of normative beliefs. ● Systematically reflecting on one's practice in order to become aware of and make explicit one's normative beliefs implies that teacher educators have to engage simultaneously in two very different agendas, and this can be a source of tension. ● These tensions need to be made explicit, since they may result in acts of resistance on the part of the teacher educators. For facilitators, it is important to be able to 'read' and interpret that behavior properly in order to avoid it jeopardizing the process of professional development. ● Teacher educators' professional development in terms of their practices and normative beliefs is affected by and will in turn affect the collective practices and normative beliefs of the organization (organizational culture). This can facilitate as well as inhibit individual teacher educators' professional development. Facilitators need to be aware that supporting teacher educators' development might bring them into conflict with their colleagues or teacher training institute. ● Because of the possible conflicting relationship between the individual's professional development and the practices and normative beliefs of the teacher training institute, it is often difficult for the teacher educators to leave the safe environment of the peer group and go public on the findings of their self-study (and their professional development). This is a sensitive issue that carefully needs to be dealt with in a step-by-step process. ● The quality of the collegial relationships amongst the peers in the research group needs to be actively guarded and stimulated because they constitute a crucial supporting factor in the risky process of self-study and professional development.
<p>If professional development results from the meaningful interaction between the individual teacher educator and his/her professional working context, then the individual experiences, issues or questions of the teacher educators need to be interpreted and understood against the background of the structural and cultural working conditions in the teacher training institute.</p>	
<p>If professional development is set up through peer group meetings, then the meetings should exemplify the concept of a professional learning community, characterized by making explicit, publicly sharing, and critically interrogating one's</p>	

(Continued)

Table 3. (Continued).

Original propositions	Amended propositions
actual teacher education practices in order to improve them.	<ul style="list-style-type: none"> ● Paradoxically, collegial relationships based on trust and acceptance that are too positive or too supportive might be counterproductive and hinder professional development, as they make it difficult to challenge and critically question normative beliefs and practices. The latter remains an essential condition for professional development. ● As the ‘relative outsiders,’ facilitators can and should problematize the development of counterproductive collegial relationships and their normalizing impact. This is a difficult task in a sensitive area, but is essential in order to safeguard the research group’s potential for the participants’ professional development.
If teacher educators and academic researchers collaborate in a research project aiming at professional development, then this collaboration should happen from a perspective of complementary competence in which the different expertise of both parties is mutually acknowledged and positively valued.	<ul style="list-style-type: none"> ● Even when working from the idea of complementary competence and equally valuing the diversity in expertise, the group process may still install relationships of hierarchy and dependence. When this happens, these relationships are very hard to discuss and overcome.

social relations applies to multiple collaborative learning environments that explicitly seek to develop a sense of group membership as a condition for success. As a facilitator, it is important to create the preconditions for trust, but also organize for productive discomfort. An interesting signpost is explicitly interpreting the social dynamics in the group through the lens of normalizing responses (Little and Horn 2007). This equally applies to the relationship between the facilitator and participants (Blackler 2011). Facilitators need to ask themselves the question: should I concentrate on maintaining a comfortable and smooth relationship with participants, or should I confront them with different points of view?

Finally, notwithstanding the explicit efforts to work from the principle of complementary competence, a clear division of labor might nevertheless develop. The teacher educators felt primarily responsible for and prioritized their teaching, while the facilitators focused on the research and the professional development initially aimed for. Neither party felt completely comfortable on the others’ terrain. This limited teacher educators’ sense of ownership and responsibility toward the process. As Fletcher (2007) rightfully warned, there is a thin line for facilitators between offering solutions because it is useful or because one is tempted to take over the control. And even solutions given from the former motive might paradoxically contribute to the latter. This does not dismiss the idea that collaborations might benefit from diversity in expertise, but rather that finding and maintaining a constructive balance

between both sets of expertise is a crucial condition that needs to be constantly negotiated and an explicit element of ongoing conversation in the research group.

Taken together, our findings demonstrate that straightforward principles or rules of thumb cannot, by definition, do justice to the complexities of designing and supporting processes of professional development. But by documenting and understanding these complexities, as well as phrasing the theoretical principles in a more balanced and refined way, we can still build an evidence-based knowledge-base to guide facilitators' actions. Contextualized analyses of cases such as ours provide exemplary illustrations of what the enactment of general principles from the literature in particular instances of practice might look like and what factors influence that enactment and the possible outcomes. As such, the knowledge-base helps to understand what is happening in such practices, but also serves as an analytic-reflective tool to analyze and improve them.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This research was funded by the Research Foundation – Flanders.

Notes

1. Flanders has a dual system in higher education, with universities offering research-based academic training, and different institutes for higher education (i.e. higher education colleges and centers for adult education) providing programs for professional training. Although the institutes for higher education have recently started to develop research expertise, this expertise mainly consists of applied forms of research, while their core business remains the education of teachers. Fundamental and theory-oriented research has traditionally occurred within the universities. As such, teaching and research in Flemish teacher education have been historically and institutionally separated and conducted by different people with different backgrounds and expertise. But even in systems where teaching and research in teacher education were structurally integrated, combining both was found to be difficult and a source of tension (e.g. between the different agendas and the required skills and knowledge). An example is the work of the Arizona Group (for example, Guilfoyle 1995, Guilfoyle *et al.* 1995) whose members found themselves confronted by an ongoing difficulty in understanding the unspoken rules for tenure in academia (i.e. the hierarchy in different forms of research, with specific pedagogical research on teacher education practices featuring very low on that scale). Clearly then, a subgoal and an important precondition for the success of this project was developing participants' research skills and nurturing an interrogating stance to practice. However, their development as researchers falls beyond the scope of this article.
2. This definition of professional development is to be situated in the teacher-thinking research tradition (Clark and Peterson 1986, Richardson and Placier 2001), which has highlighted how teachers' acting can only be adequately understood (and hence developed) when taking into account their thinking (knowledge and beliefs).
3. All participants received five 'invitation wild cards' that they could give to colleagues from their teacher training institute. In this way we assembled an audience of about 40 people that operated as an *ad interim* audience between the research group meetings on the one hand and the more general, open public on the other.

References

- Achinstein, B., 2002. *Community, diversity and conflict among schoolteachers. The ties that blind*. New York/London: Teachers College Press.
- Altrichter, H., Posch, P., and Somekh, B., 1993. *Teachers investigate their work: an introduction to the methods of action research*. London: Routledge.
- Anderson-Patton, V. and Bass, L., 2000. How well did we structure and model a self-study stance? In: J.J. Loughran and T.L. Russell, eds. *Exploring myths and legends of teacher education. The proceedings of the third international conference of the self-study of teacher education practices*. Kingston, ON: Queen's University, 10–14.
- Berry, A., 2007. *Tensions in teaching about teaching. Developing practice as a teacher educator*. Dordrecht: Springer.
- Blackler, F., 2011. Power, politics, and intervention theory: lessons from organization studies. *Theory & psychology*, 21 (5), 724–734. doi:10.1177/0959354311418146.
- Borko, H., 2004. Professional development and teacher learning: mapping the terrain. *Educational researcher*, 33 (8), 3–15. doi:10.3102/0013189X033008003.
- Brody, D. and Hadar, L., 2011. “I speak prose and I now know it.” Personal development trajectories among teacher educators in a professional development community. *Teaching and teacher education*, 27 (8), 1223–1234. doi:10.1016/j.tate.2011.07.002.
- Bronkhorst, L., 2013. Intended unexpected findings: insights developed in formative intervention research. In: L. Bronkhorst, *Research-based teacher education. Interactions between research and teaching*. Enschede: Ispkamp Drukkers, 55–75.
- Bullough, R.V. Jr and Pinnegar, S.E., 2001. Guidelines for quality in autobiographical forms of self-study research. *Educational researcher*, 30 (3), 13–21. doi:10.3102/0013189X030003013.
- Clark, C.M. and Peterson, P.L., 1986. Teachers' thought processes. In: M.C. Wittrock, ed. *Handbook of research on teaching*. New York, NY: Macmillan, 255–296.
- Cochran-Smith, M. and Fries, M.K., 2001. Sticks, stones, and ideology: the discourse of reform in teacher education. *Educational researcher*, 30 (8), 3–15. doi:10.3102/0013189X030008003.
- Cochran-Smith, M. and Lytle, S., 1999. The teacher research movement: a decade later. *Educational researcher*, 28 (1), 15–25. doi:10.3102/0013189X028007015.
- Darling, L.F., 2001. When conceptions collide: constructing a community of inquiry for teacher education in British Columbia. *Journal of education for teaching*, 27 (1), 7–21. doi:10.1080/02607470120042519.
- Darling-Hammond, L., 1997. *A right to learn: a blue print for developing schools that work*. San Francisco, CA: Jossey-Bass.
- Darling-Hammond, L., 2010. Teacher education and the American future. *Journal of teacher education*, 61 (1–2), 35–47. doi:10.1177/0022487109348024.
- Day, C., 1995. Qualitative research, professional development and the role of teacher educators: fitness for purpose. *British educational research journal*, 21 (3), 357–369.
- Day, C. and Sachs, J., eds., 2005. *International handbook on the continuing professional development of teachers*. Buckingham: Open University Press.
- DuFour, R., 2004. What is a professional learning community? *Schools as learning communities*, 61 (8), 6–11.
- DuFour, R. and Eaker, R., 1998. *Professional learning communities at work: best practices for enhancing student achievement*. Bloomington, IN: Solutation Tree.
- English, B., 2009. Who is responsible for educating English language learners? Discursive construction of roles and responsibilities in an inquiry community. *Language and education*, 23 (6), 487–507.
- European Commission, 2010. *Teachers' professional development: Europe in international comparison. A secondary analysis based on the OECD's Teaching and Learning International Survey*. Luxembourg: Office for Official Publications of the European Union.
- Feldman, A., 2003. Validity and quality in self-study. *Educational researcher*, 32 (3), 26–28. doi:10.3102/0013189x032003026.
- Fletcher, S.J., 2005. Research mentoring: the missing link. In: F. Bodone, ed. *What difference does research make and for whom?* New York, NY: Peter Lang, 177–190.
- Fletcher, S.J., 2007. Educational research mentoring and coaching as co-creative synergy. *International journal of evidence-based coaching and mentoring*, 5 (2), 1–11. Available

- from: <http://ijebcm.brookes.ac.uk/documents/vol05issue2-reflections-01.pdf> [Accessed 8 January 2015].
- Guilfoyle, K., 1995. Constructing the meaning of teacher educator: the struggle to learn the roles. *Teacher education quarterly*, 22 (3), 11–27.
- Guilfoyle, K., et al., 1995. Becoming teachers of teachers: the paths of four beginners. In: T. Russell and F. Korthagen, eds. *Teachers who teach teachers: reflections on teacher education*. London: Falmer, 35–55.
- Hargreaves, A., 1994. *Changing teachers, changing times*. New York, NY: Teachers College Press.
- Hargreaves, A., et al., eds., 2010. *Second international handbook of educational change*. Dordrecht: Springer.
- Hoban, G.F., Butler, S., and Lesslie, L., 2007. Facilitating self-study of professional development: researching the dynamics of teacher learning. *Studying teacher education: a journal of self-study of teacher education practices*, 3 (1), 35–51. doi:10.1080/17425960701279818.
- Jenlink, P.M. and Kinnucan-Welsch, K., 2001. Case stories of facilitating professional development. *Teaching and teacher education*, 17 (6), 705–724. doi:10.1016/s0742-051x(01)00025-7.
- Kelchtermans, G., 2004. CPD for professional renewal: moving beyond knowledge for practice. In: C. Day and J. Sachs, eds. *International handbook on the continuing professional development of teachers*. Buckingham: Open University Press, 217–237.
- Kelchtermans, G., 2006. Teacher collaboration and collegiality as workplace conditions. A review. *Zeitschrift für Pädagogik*, 52 (2), 220–237.
- Kelchtermans, G., 2009. Who I am in how I teach is the message. Self-understanding, vulnerability and reflection. *Teachers and teaching*, 15 (2), 257–272. doi:10.1080/13540600902875332.
- Kershner, R. and Hargreaves, L., 2012. Student teachers' distinctive contributions to research on primary school children's beliefs about knowledge and knowing. *Journal of education for teaching: international research and pedagogy*, 38 (3), 275–293. doi:10.1080/02607476.2012.668332.
- Kitchen, J., Ciuffetelli-Parker, D., and Gallagher, T.L., 2008. Authentic conversation as faculty development: establishing a self-study group in an education college. *Studying teacher education*, 4 (2), 157–171. doi:10.1080/17425960802433637.
- Knight, P., 2002. A systemic approach to professional development: learning as practice. *Teaching and teacher education*, 18 (3), 229–241. doi:10.1016/s0742-051x(01)00066-x.
- Korthagen, F.A.J. and Lunenberg, M., 2004. Links between self-study and teacher education reform. In: J.J. Loughran, et al., eds. *International handbook of self-study of teaching and teacher education practices*. Dordrecht: Kluwer Academic, 421–449.
- Lave, J., 1993. The practice of learning. In: S. Chaiklin and J. Lave, eds. *Understanding practice*. New York, NY: Cambridge University Press, 3–32.
- de Lima, J.Á., 2001. Forgetting about friendship: using conflict in teacher communities as a catalyst for school change. *Journal of educational change*, 2 (2), 97–122. doi:10.1023/A:1017509325276.
- Little, J.W., 1993. Teachers' professional development in a climate of educational reform. *Educational evaluation and policy analysis*, 15 (2), 129–151. doi:10.3102/01623737015002129.
- Little, J.W. and Horn, I.S., 2007. 'Normalizing' problems of practice: converting routine conversation into a resource for learning in professional communities. In: L. Stoll and K.S. Louis, eds. *Professional learning communities: divergence, detail and difficulties*. Maidenhead: Open University Press, 79–92.
- Little, J.W. and McLaughlin, M.W., 1993. Perspectives on cultures and contexts of teaching. In: J. Warren-Little and M.W. McLaughlin, eds. *Teachers' work. Individuals, colleagues, and contexts*. New York, NY: Teachers College Press, 1–8.
- Louden, W., 1992. Understanding reflection through collaborative research. In: A. Hargreaves and M. Fullan, eds. *Understanding teacher development*. New York, NY: Teachers College Press, 178–215.
- Loughran, J.J., et al., eds., 2004. *International handbook of self-study of teaching and teacher education practices*. Dordrecht: Kluwer Academic.

- Lunenberg, M.L., Korthagen, F.A.J., and Zwart, R., 2010. Critical issues in supporting self-study. *Teaching and teacher education*, 26 (6), 1280–1289. doi:10.1016/j.tate.2009.11.007.
- Lunenberg, M.L. and Samaras, A., 2011. Developing a pedagogy for teaching self-study research: lessons learned across the Atlantic. *Teaching and teacher education*, 27 (5), 841–850. doi:10.1016/j.tate.2011.01.008.
- McCutcheon, G., 1995. *Developing the curriculum: solo and group deliberation*. New York, NY: Longman.
- Measor, L., 1985. Critical incidents in the classroom. Identities, choices and careers. In: S. Ball and I. Goodson, eds. *Teachers' lives and careers*. London: Falmer, 61–77.
- Miles, M.B. and Huberman, A.M., 1994. *Qualitative data analysis*. 2nd ed. Thousand Oaks, CA: Sage.
- Molle, D., 2013. Facilitating professional development for teachers of English language learners. *Teaching and teacher education*, 29, 197–207. doi:10.1016/j.tate.2012.10.002.
- Pedretti, E., 1996. Facilitating action research in science, technology and society (STS) education: an experience in reflective practice. *Educational action research*, 4 (3), 307–327. doi:10.1080/0965079960040303.
- Reeves, J. and Forde, C., 2004. The social dynamics of changing practice. *Cambridge journal of education*, 34 (1), 85–102. doi:10.1080/0305764042000183142.
- Richardson, V. and Placier, P., 2001. Teacher change. In: V. Richardson, ed. *Handbook of research on teaching*. 4th ed. Washington, DC: American Educational Research Association, 905–947.
- Richmond, G. and Manokore, V., 2011. Identifying elements critical for functional and sustainable professional learning communities. *Science teacher education*, 95 (3), 543–570. doi:10.1002/sce.20430.
- Ross, J.A. and Regan, E.M., 1993. Sharing professional experience: its impact on professional development. *Teaching and teacher education*, 9 (1), 91–106. doi:10.1016/0742-051x(93)90017-b.
- Schuck, S., 2003. Getting help from the outside: developing a support network for beginning teachers. *Journal of educational enquiry*, 4 (1), 49–67.
- Sikes, P., Measor, L., and Woods, P., 1985. *Teacher careers: crises and continuities*. London: Falmer.
- Stoll, L., 2000. School culture. *Professional development*, 3, 9–14. Available from: <http://www.educationaleaders.govt.nz/Culture/Understanding-school-cultures/School-Culture> [Accessed 8 January 2015].
- Stoll, L., et al., 2006. Professional learning communities: a review of the literature. *Journal of educational change*, 7 (4), 221–258. doi:10.1007/s10833-006-0001-8.
- Strauss, A. and Corbin, J., 1998. *Basics of qualitative research: techniques and procedures for developing grounded theory*. Thousand Oaks, CA: Sage.
- Van Looy, L., Goegebeur, W., and Vrijnsen, M., 2000. *Zelfstandige, reflecterende leraren. Van opleiding naar beroep* [Independent, reflective teachers. From training to profession]. Brussel: VUB Press.
- Vanassche, E. and Kelchtermans, G., 2015. The state of the art in self-study of teacher education practices: a systematic review. *Journal of curriculum studies*. doi:10.1080/00220272.2014.995712.
- Wermke, W., 2011. Continuing professional development in context: teachers' continuing professional development culture in Germany and Sweden. *Professional development in education*, 37 (5), 665–683. doi:10.1080/19415257.2010.533573.
- Whitehead, J., 1993. *The growth of educational knowledge: creating your own living educational theories*. Bournemouth: Hyde.
- Winkler, G., 2001. Reflection and theory: conceptualising the gap between teaching experience and teacher expertise. *Educational action research*, 9 (3), 437–449. doi:10.1080/09650790100200168.
- Zeichner, K.M., 1999. The new scholarship in teacher education. *Educational researcher*, 28 (9), 4–15. doi:10.3102/0013189x028009004.
- Zeichner, K.M., 2002. Teacher research as professional development for K-12 educators in the USA. *Educational action research*, 11 (2), 301–325. doi:10.1080/09650790300200211.