



Teacher leadership for teaching improvement in professional learning communities

Frida Grimm

To cite this article: Frida Grimm (2024) Teacher leadership for teaching improvement in professional learning communities, Professional Development in Education, 50:6, 1135-1147, DOI: [10.1080/19415257.2023.2264286](https://doi.org/10.1080/19415257.2023.2264286)

To link to this article: <https://doi.org/10.1080/19415257.2023.2264286>



© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



Published online: 30 Sep 2023.



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



Article views: 4062



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 7 View citing articles [↗](#)

ARTICLE

 OPEN ACCESS



Teacher leadership for teaching improvement in professional learning communities

Frida Grimm 

Department of Education/The Centre for Principal Development, Umeå University, Umeå, Sweden

ABSTRACT

Teacher leaders are increasingly leading learning conversations in professional learning communities (PLCs) in schools in several parts of the world today, but there is little empirical knowledge of teacher leadership in PLC conversations. Thus, this article aims to enhance such knowledge, particularly the development of teacher leadership in PLC conversations. Empirical data were acquired in a study of three Swedish PLCs and consisted of six video observations and 24 interviews with teachers and teacher leaders (hereafter ‘first teachers’). The study particularly addressed how professional learning and teaching improvement was encouraged in teacher-led PLC conversations, what tended to be missing, and how the conversations influenced the teaching practices of participating teachers (self-reportedly). The results indicate that the teaching practices did not change in depth if the first teachers focused on acknowledging and sharing PLC conversations about concrete teaching methods. Instead, there seems to be a need for informed teacher leaders who consciously and systematically analyse and support teachers’ learning processes, and foster a habit of inquiry among their peers. It is suggested that this should include challenging norms and understandings about what it means to be a learning teacher and requirements to improve teaching practices in the long run.

ARTICLE HISTORY

Received 7 December 2022
Accepted 18 September 2023

KEYWORDS

Professional development;
professional learning
communities; learning
conversations; teacher
leadership; teacher leaders;
educational leadership

Introduction

For more than three decades, researchers have posited that organising professional development in professional learning communities (PLCs) can be a successful way to improve teaching in schools (Lomos *et al.* 2011, Vangrieken *et al.* 2017). According to PLC advocates, learning and solving problems collectively is more efficient and sustainable than traditional isolated professional learning (Hord 1997, Stoll *et al.* 2006). A central element in PLCs is learning conversations. However, meeting up in PLCs and talking about teaching do not automatically imply teacher learning and teaching improvement (Harris and Jones 2010, Hairon 2016). If the conversations never meet a deeper level of human behaviour, no professional learning will occur (Vangrieken *et al.* 2017). Without conscious and informed leadership, there is a risk that continuous PLCs might be held without improvement in pupils’ learning (see Riggins and Knowles 2020). Most research on leadership in relation to PLCs has focused on the importance of principal leadership (Hairon *et al.* 2015) – for example, principals’ responsibility to build a learning culture in schools and allocate resources for teachers to meet in PLCs (Stoll *et al.* 2006, Bouchamma *et al.* 2019, Admiraal

CONTACT Frida Grimm  frida.grimm@umu.se  Department of Education/The Centre for Principal Development, Umeå University, Umeå, Sweden

© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.
This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

et al. 2021). However, leadership in PLCs, which in several countries is distributed to teacher leaders, has been less explored.

Teacher leaders are teachers who take on additional leadership responsibilities outside the classroom (Wenner and Campbell 2017), such as leading learning conversations in PLCs (Grootenboer *et al.* 2015, Nguyen *et al.* 2020). A common claim in the PLC literature is that teacher leaders can influence professional learning processes by establishing trustful and constructive relationships, building teacher self-efficacy, and increasing interactions regarding teaching and learning (York-Barr and Duke 2004, Tschannen-Moran and Woolfolk Hoy 2007, Nguyen *et al.* 2019, Margolis and Strom 2020). However, it is still unclear if this is enough to ensure professional learning and teaching improvement among all participating teachers. The empirical knowledge of teacher leadership in PLC conversations is still scarce (Hairon 2016). In this article, I seek to contribute with deeper understandings that can fill this knowledge gap by exploring how to develop teacher leadership in PLC-conversations. The research questions are: a) how is professional learning and teaching improvement encouraged in PLC conversations led by teacher leaders, b) what tends to be missing, and c) what influence do teachers claim that teacher-led PLC conversations have on their teaching practices? I do this by an empirical study on PLC conversations led by Swedish so-called 'first teachers' (in Swedish *förstelärare*). The appointment as first teacher is bound to an assessment of being particularly skilled at teaching (Grimm 2020), which could make first teachers especially competent to lead for teaching improvement. Additionally, leading peers, for example in learning conversations, is a common and often recommended task for first teachers (The Swedish National Agency for Education 2022). On the other hand, being a skilled teacher does not automatically imply being skilled in leading peers for teaching improvement. Therefore, first teachers are a relevant example for a study about teacher leadership for professional learning and teaching improvement in PLC conversations.

The article is structured as follows. It starts by presenting previous research and theoretical underpinnings that have guided the study. Thereafter, the findings from the empirical study are presented. A discussion follows about these findings' implications for how to develop teacher leadership in PLC conversations to ensure professional learning and teaching improvement. Lastly, the main conclusions from the study are summarised, followed by suggestions for future research.

Previous research

The PLC concept

The PLC concept has no universal definition. It has been dealt with from several theoretical perspectives, has different meaning to different researchers and has been used for a whole spectrum of terms (Lomos *et al.* 2011). Broadly defined, PLCs comprise professionals who come together in a group (community) to learn (Hord 2008). However, some elements recur in the research literature as crucial for the constitution as PLC, such as collaborative norms and practices; shared values, visions, and goals; a collective focus on pupils' learning; reflective dialogues; de-privatisation of practice; and action enquiry (Lomos *et al.* 2011, Stoll and Kools 2017, Vangrieken *et al.* 2017). The PLC idea is built on the assumption that pupils' learning can be improved by improving teaching practices. Professional learning in PLCs can therefore be seen as a means to improve teaching with the aim to enhance pupils' learning and results.

With the PLC concept, professional learning is understood as a life-long process situated in day-to-day practices. It is suggested that by building their learning processes based on their experiences and practical needs, teachers can make joint decisions about how best to develop their teaching for their pupils (Hord 1997, DuFour and Eaker 1998). In learning conversations, the PLC participants expose their understandings and open themselves to others' influence (Senge 1990, Hairon 2016). Through reflective dialogues teachers can gain new perspectives, understand themselves better as

teachers, negotiate their understandings and develop agency to change and improve their teaching (Hord 1997, Earl and Timperley 2009, Hairon *et al.* 2015). Professional learning occurs when teachers learn together in ongoing, reflective, collaborative, inclusive, learning-oriented, and self-evaluative professional communities (Stoll *et al.* 2006). From this perspective, day-to-day practices are best understood through critical reflections with peers, which requires openness and trust (Dogan *et al.* 2019).

Teacher leadership for professional learning in PLC conversations

Teacher leadership occurs when teacher leaders influence their colleagues to improve teaching and learning practices (see York-Barr and Duke 2004). As leaders of learning conversations, teacher leaders play an important role in determining the outcomes of the PLC conversations, but their leadership practices are also influenced by their peers and the PLC situation (cf. Spillane 2006). Teacher leadership involves building collegial and collaborative relationships, developing teachers' learning, and changing teachers' teaching practices (Hairon *et al.* 2015). Creating and supporting trustful and sharing learning cultures and facilitating collaboration can be seen as a crucial first step to opening learning conversations. However, as already concluded, reflecting together with peers in a sharing and trustful teacher community does not automatically imply deep learning and teaching improvement. Teachers, like all human beings, tend to preserve and conserve current understandings, beliefs, and behaviours rather than embrace challenges. Therefore, there is a risk for activity traps and confirmation biases in the PLCs in which conversations take place but with little actual action and improvement in pupils' learning (Katz and Ain Dack 2014, Riggins and Knowles 2020). Teacher leaders therefore need to ensure that deep learning occurs to ensure changed teaching practices. To achieve this, trustful and sharing learning cultures need to be combined with challenged perspectives and a habit of inquiry.

To create *learning* conversations for teaching improvement, teacher leaders need to build PLCs in which teachers scrutinise and negotiate their current understandings of teaching and develop a habit of inquiry (Timperley 2011). Deep learning means seeing the world in a different way and altering the perception of reality, in other words, it means to change (Bowring-Carr and West-Burnham 1997, Katz and Ain Dack 2014). To learn efficiently and ensure improved teaching, teachers need to be engaged in learning cycles in which they reflect on own experiences, conduct reflective observations, use abstract conceptualisations, and make active experimentations (Kolb 1984, Earl and Timperley 2009). Teacher leaders can lead for change by challenging their peers based on identified learning needs (Fairman and Mackenzie 2015, Blossing 2016, Hirsh and Segolsson 2019, Liljenberg 2021) and ensure that the results of the conversations and activities in PLCs are critically examined (Earl and Timperley 2009, Timperley 2011, Katz and Ain Dack 2014). By identifying barriers, suggesting refinements, exploring evidence of change, and evaluating the impact on pupils' learning processes, deep learning can be stimulated (Stoll *et al.* 2017).

Teacher leaders can help their peers develop a habit of inquiry by modelling strategies for productive conversations and by helping their peers systematically investigate the results of changed perspectives and teaching practices (Nelson *et al.* 2010). When developing a habit of inquiry, teachers evaluate their current teaching practices and together find ways to solve problems and develop their teaching with the aim to enhance pupils' learning processes.

Three building blocks for professional learning and teaching improvement

Based on the previous research presented above, to ensure deep learning and teaching improvement in PLCs, teacher leaders need to a) *build trustful and sharing cultures*, b) *challenge current understandings of teaching and learning*, and c) *create a habit of inquiry*. These three conditions can be symbolised by three building blocks. All three are necessary to ensure a solid ground for deep learning for teaching improvement. For example, trustful and sharing cultures are necessary to

encourage teachers to have the courage to challenge their current teaching perspectives. Vice versa, without challenged perspectives, trustful and sharing cultures may end up in confirmation biases and activity traps. Also, a habit of inquiry is necessary to ensure challenges are pointed in the right direction to meet the pupils' learning needs. As school contexts differ, the extent of each building block might vary in and between schools. Therefore, to ensure deep professional learning, teacher leaders need to be aware of the function of each building block and use them responsively in relation to the teachers' and the pupils' learning needs.

In the current study, the three building blocks were used as theoretical underpinnings to explore how professional learning and teaching improvement were encouraged in teacher-led PLC conversations, what was missing, and what influence teachers claimed that the teacher-led PLC conversations had on their teaching practices. The point of departure was that to ensure professional learning and teaching improvement in the long run, all three building blocks needed to be present to some extent. The next section includes a presentation of the research design and how the building blocks were used in the analysis of the data.

Research design

Participants and context

The data was collected in a larger qualitative research project about first-teacher leadership in two Swedish municipalities. The current study was conducted from September 2021 to January 2022. By narrowing the focus to learning conversations on a micro level and exploring them in relation to the three building blocks presented in the theoretical underpinnings (trustful and sharing cultures, challenged understandings of teaching and learning, and a habit of inquiry), the study was meant to place learning processes in the foreground and PLCs' organisational aspects in the background. To enable studies from a short distance, schools already participating in the larger research project were asked if they had first teachers leading continuous PLC conversations. Three schools matched these requirements, and the principals suggested three PLCs (A, B and C; one from each school) to participate. In total, three first teachers (A, B and C; one from each PLC) and twenty-two teachers participated in the study.

The three PLC-contexts had both differences and similarities. The PLCs consisted of groups of teachers who met 6–10 times a year. Each PLC was led by a first teacher who had been appointed the task of leading a group of peers ($n = 6-8$) with various backgrounds and teaching subjects for professional development. The PLCs focused on instructional methods for the development of language in all teaching subjects to support pupils' learning processes. This has been a common topic in Swedish schools in the last few years, and the Swedish National Agency for Education has emphasised it as a theme for professional development. Some other domains occurred in the PLCs in parallel as well, for example cooperative learning in the classroom and how to better support boys' learning processes. The first teachers were all experienced, female teachers in Swedish compulsory schools (eleven to twenty-eight years of teaching experience). They also had experience from other teacher leader positions, such as teacher team coordinator. However, the first teachers worked in slightly different contexts. The time interval and their experiences as teachers and first teachers varied (two to twenty-eight years as teachers in the current schools, one to eight years of experience as first teachers). They also received different internal and external support as first teachers, had various thicknesses (see Wenner and Campbell 2018) in their identities as teacher leaders, and their schools had slightly different learning needs, school cultures, and ways to organise the first-teacher tasks. In school A the first teacher followed a programme designed by the Swedish National Agency for Education (in Swedish Skolverket). In school B and C the first teachers designed the PLCs in dialogue with other first teachers and the principal. First teacher B had a stronger teacher leader identity than the other two first teachers. She had also gained external support to develop the work in the PLCs. Despite contextual differences, previous research in the

project had shown that the first teachers tended to design and lead the PLCs in similar ways (see Grimm 2023). They all led the PLC conversations in ‘rounds’, where all teachers were encouraged to do share experiences of teaching and to explore specific teaching methods. Between the PLC-sessions the teachers were expected to do different tasks as trying out specific teaching methods in their own classrooms, reading specific texts or watching specific video-clips. The first teachers secured structure and relevance; built a supportive, sharing, and reflective community; and encouraged the use of new teaching methods.

Data collection and analysis

To gain deeper insights into how to develop teacher leadership for professional learning and teaching improvement in PLC conversations, a qualitative research design was utilised. Video observations and semi-structured interviews were combined to capture behaviours, activities, and understandings (Yukl 2009). The data was collected in three steps in each PLC. The procedure was then repeated once within 5 months. Each phase consisted of 1) an individual *pre-interview* with the first teacher approximately one week before the observation, 2) a *video-observation* of a PLC occasion, and 3) individual *follow-up interviews* with the first teacher and two participating teachers within five days after the observation. In the pre-interviews, the first teachers were given the opportunity to elaborate on their plans and goals for the up-coming PLC occasions. During the PLC occasions, a stationary video-camera was used to capture the activities in the PLCs. In the individual follow-up-interviews the respondents were asked to reconstruct the practices from the PLCs by writing them on sticky notes. The sticky notes facilitated and supported the respondents’ reflections and narratives (Grimm *et al.* 2021). The interviews included a dialogue about professional learning, for example about the aim of practices and conversations, what the respondents thought that they had learned during them and what could make them change their teaching practices in the future. The mix between video observations and semi-structured interviews in several steps enabled method triangulation (Tracy 2013, Cohen *et al.* 2018) and member checking (Birt *et al.* 2016).

All teachers and first teachers were observed during the PLC occasions. Thirteen of the teachers also volunteered to participate as respondents in the follow-up interviews (two from each PLC; originally twelve teachers, but in the second data collection one was replaced due to illness). In line with the Swedish Research Council’s guidelines regarding decent research practice, all respondents were informed about the research project and their rights regarding consent and anonymity (Swedish Research Council 2017). All participants gave their consent to participate in the study. In total, six video observations and twenty-four interviews were conducted. Table 1 summarises the data material.

All data material was anonymised and securely stored, following the European Union Regulation of General Data Protection.

Qualitative data analysis software (NVivo 12) was used to code and categorise the data. The interviews were anonymised and transcribed verbatim before the analysis. Thematic analysis with a reflexive approach (Braun and Clarke 2006) was conducted to explore patterns in, and influences of the teacher lead PLC conversations. Data analysis involved several elements: familiarisation with the material; coding; generating, reviewing, and developing themes; refining, defining and naming themes; and concluding themes (Braun and Clarke 2006). First, the

Table 1. Summary of data material.

	Respondents	Data material	In total
Pre-interviews	3 first teachers	6 interviews (30–40 min.)	3 hours
Interviews	3 first teachers, 7 teachers	18 interviews (50–95 min.)	24 hours
Video-observations	3 first teachers, 22 teachers	6 observations (40–137 min.)	8 hours

rich video material was narrowed to episodes in which the respondents talked about teaching and learning, for example instances in which teachers or first teachers initiated an activity, asked for elaborations, shared experiences, problematised a method or thesis, or described a current problem. This material was then assigned one of three codes based on the theoretical underpinnings: ‘building trustful and sharing learning cultures’, ‘challenging current understandings of teaching’ or ‘developing a habit of inquiry’. The coding process was repeated twice, enabling analyses of how and to what extent each block was apparent in the PLC conversations. Then, the interview material was added to the analysis process. This material was narrowed to excerpts in which the respondents described what activities in the PLCs made them change their understandings and practices of teaching, and how. The analyses of this material were then compared with the video material to identify patterns in how each building block tended to influence teachers’ understandings and practices of teaching. The patterns from the analyses of the observations and interviews were then used to answer the research questions regarding what learning processes were encouraged and missing in first-teacher-led PLC conversations and how these conversations influenced the respondents’ understandings of their teaching. Last, a selection of vivid, compelling extracts were chosen that exemplified the respondents’ practices and narratives.

Findings

In this section findings from the analysis of the empirical data are presented. The section is structured according to the three building blocks presented in the theoretical underpinnings: creating trustful and sharing cultures in the PLC conversations, challenging current understandings of teaching and learning, and creating a habit of inquiry. A short introduction to the activities in the studied PLCs precedes the presentation of the findings.

Introduction to the activities in the studied PLCs

Except for some small variations in how they distributed the speech space and ended the PLC occasions, the observations show that the first teachers led the conversations in similar ways. The participating teachers sat in a circle around a table, the first teachers invited all teachers to share experiences and reflections and the atmosphere was friendly and acknowledging. The procedure can be described as six phases: *setting the agenda*, *sharing experiences* of methods and theses, *evaluating* and *problematising* methods or theses, *gazing forward* and *sharing information* about the next PLC occasion. The participating teachers in the three PLCs reacted and were active in similar ways and to a similar extent. During the observed PLC-conversations the teachers shared experiences, thoughts, and difficulties but were less active in the problematising and forward gazing phases. Their reflections during the interviews were also similar and corresponded well with the observations.

Creating trustful and sharing cultures in the PLC conversations

Acknowledgement as a means to encourage reflections and agency

The trustful and sharing learning culture was to a large extent present in all three PLCs. During the observations, the respondents paid attention to, and acknowledged, each other. All respondents emphasised the importance of having a safe and supportive PLC culture. Barbro, a teacher in PLC B, explained in an interview how this culture was supposed to promote the courage to speak:

In this school you sometimes feel you’re not enough. [...] When you get in there, [in the PLC] you can get such a positive boost. Maybe you had a very bad day, and you just go in there and say that. Or you say, ‘This happened today’, and you get support and help with that too. And I think that’s important, otherwise, actually, you wouldn’t cope. [with the daily life of a teacher]

According to the first teachers a supporting culture was necessary to encourage the participants to share experiences and reflect on difficulties. First teacher A explained how building self-esteem could encourage her and her peers to change their teaching in the long run:

[As a teacher] you do things all the time without knowing why you do it. [...] [From the activities in the PLCs] you get acknowledgement that you can continue doing that. You don't have to have doubts about if you're doing it right. You think, 'This is how we do it'. And then, to get some new ideas. I like that, both from the texts and from the peers, that you can think in different ways.

When building up their self-esteem, teachers were expected to gain the courage to share experiences, think in new ways, and change their teaching practices.

During the conversations the first teachers encouraged the participants to share experiences from assignments and classrooms. The teachers appreciated the strength they gained from sharing ideas and receiving acknowledgement. In interviews they spoke of a profession under pressure. With acknowledgement and support, the first teachers and teachers felt empowered to keep teaching. Most of the teachers in the interviews mentioned examples of how they had received acknowledgement that they were teaching in the right ways. In this sense, the conversations reminded them of things that they already knew but sometimes tended to forget.

Challenging current understandings of teaching and learning

Reflections without changed understandings

By asking evaluative and problematising questions, the first teachers tried to make their peers reflect on opportunities and difficulties with different methods and teaching approaches. To have time to reflect on teaching was expressed as important by both teachers and first teachers in all PLCs. During the observed PLC-conversations, the first teachers made their peers reflect on what they were doing and why by asking for elaborations. One of the teachers in PLC B expressed in an interview how this encouraged her to motivate her actions and consider changing her ways of teaching:

Teacher: This gets you to re-think it all over again and it's very good to practice on motivating why you say or do something. We have worked a lot with this in our school in the last few years.

Interviewer: What happens when you work in this way?

Teacher: I think that you develop, you get more certain about why you do as you do.

[...]

Even if you have done these exercises before, you can recognize that you can have several aims with it, you might practice other things than planned. Sometimes you think: No, we don't need to do this.

According to the respondents, the conversations aimed at creating awareness of why they taught as they did and if something needed to change. In most cases, however, the teachers in the interviews concluded that their current teaching was good enough. Challenging questions were overall rare during the observed occasions. The first teachers were careful not to make their peers feel uncomfortable or questioned. They had ambitions to ask challenging questions, but in the interviews afterwards they concluded that they had asked fewer challenging questions than planned.

Several teachers raised the importance of not only talking about teaching but also changing teaching practices. However, when asked what they had learned during the conversations a majority of the interviewed teachers expressed that they had not learned something fundamentally new or changed their understanding of teaching. One of the teachers in PLC A reflected on what could have made him think in new ways:

Possibly if something had been new to me. However, I can't specify what that would be. But if it would be something that I hadn't heard of or made before, then maybe I would get an aha-experience. But I can't figure out what that would be right now.

Some of the teachers expressed that they had learned a specific tool or method to use in their classrooms. Several teachers, however, claimed that they were already familiar with the discussed methods. According to them they had not learned anything new but had gained insights about the need to use these methods more often. This was however nothing that they problematised during the observed PLCs or in the interviews.

Getting inspired, but not directed

The function as conversation leader was seen as crucial to creating learning conversations. The teachers claimed that they had a personal responsibility to learn and develop their teaching. The first teacher's role was to encourage them to keep up this process by facilitating the conversations, not by telling them how to teach. The autonomy to decide for themselves how to teach was expressed as important. One of the teachers in PLC B explained how the context and personal convictions decided whether she changed her teaching or not:

It needs to appeal to me. If [the first teacher] would say: 'Now everyone should do this' and I would think 'No, this is not my way', then it's difficult. Then it's more of a restraint. I think it's good that [the first teacher] reminds us that [a particular didactic approach] is important by talking about why and what we are aiming at, but that all of us can find our own structure for it.

According to all interviewed teachers it was favourable that the person who led the PLC conversations was a teacher in their own school. According to one of the teachers in PLC A this was crucial to build legitimacy in leading the work of the PLC:

For her own trustworthiness I think it is important. I think that is one of the most important things in any kind of leadership. That you have been there yourself.

That the first teachers had tried out methods themselves gave them legitimacy to lead the conversations. However, most teachers saw the first teacher position as irrelevant to the task. According to the teachers, any teacher in the PLC could lead the conversations if they were prepared to do so. When talking about the first teacher position, some even claimed that professions outside the school could lead the conversations if they had the competence to structure meetings.

Teachers stated that taking part in research was important for the conversations, but less influential than the teachers' own experiences. One of the teachers in PLC B express her opinion:

The research has not been done in my classroom and not by me. [...] It can evoke ideas, like the film. Maybe I can pick parts of it and maybe I can feel 'No, this won't work for me'. When you read an article and there are discussions about it, when you hear the other's thoughts and reflections about the article, this can create thoughts. Then I might think: 'yes, I can do that', but it's not the article in itself, but what comes between.

Overall, external input such as text or film was seen as less influential than the conversations. According to the teachers they changed their teaching if they got inspiration from other teachers in similar contexts who had used the method successfully. One teacher in PLC A elaborated on how he chose what method to use:

It needs to be relevant for me and I have to be able to take it with me to use in my teaching or in my classroom. If it works out for another person, it doesn't automatically work out for me in my class. [...] With that said, if someone has tested a thing in a way like we do it in my grade, then it would probably work. It needs to be reachable. Then I could change it.

For the teachers it was important to get assurance that a proposed method was doable in their own classroom context. The ability or willingness of teachers to translate the method or idea to their own teaching context varied. In every PLC some teachers gave examples of how they had understood the idea behind a method and adjusted the method or approach to their own teaching contexts. Others

concluded that the method did not suit them or that they had already used it. It was more about finding a method that suited the prevailing teaching than changing the way teaching was understood.

Creating a habit of inquiry

Basing the evaluation of learning processes on a gut feeling

In the PLC conversations, all teachers were expected to share experiences from trying out specific methods in their classrooms or from reading texts. During the observations, most teachers did this. The first teachers used their own examples to encourage their peers to share their thoughts and to try out specific methods. Here first teacher C uses her own teaching experiences when talking during an observation in PLC C:

I thought I would tell you what I've done with my eighth graders [showing instructions on the projector]. I've done this with all my eight graders, A, B, and C. I also did this with them in the seventh grade, the same activity. So, it's nothing new. It's about doing it repeatedly. The more they practice, the better they get.

First teacher C then described what she did and what benefits she saw with the method. The conversation continued with the teachers asking questions about the method and then planning to use it themselves. No specific instruments were used in the PLCs to follow up systematically on how the pupils experienced the use of specific methods. Instead, this was based on gut feelings.

All three first teachers concluded that the flow of discussions was a good sign of whether professional learning was created in the PLCs or not. First teacher B explained how she estimated the results of the conversations:

Well, with the feeling that there is a flow in the discussions. You read people and you hear 'I will try this out. I must try this. Can I borrow this?' And last time, when we talked about [the theme], when one of my peers said: 'Here I have something to improve'. Then I feel that this has landed in some way. But it's not like I'm sitting there and marking 'now they have reached this'. No. It's more about that feeling.

According to both teachers and first teachers the PLCs were successful when all teachers participated and were engaged in the conversations. No specific instruments or forms were used, whether formative or summative, to conclude whether the teachers had learned something new during the conversations or changed their teaching in the long run. The observations show that first teacher B, however, ended each PLC with a round where each teacher reflected on their experiences from the conversations. As a result, the teachers in PLC B reflected more on their learning process and what they took with them for the future than the teachers in PLC A and C. In the observed rounds and in the interviews, the teachers foremost highlighted that they appreciated the opportunity to share ideas and get inspiration. Some of them mentioned that they had learned a specific method or exercise, started to think more about a didactical issue or had become more aware of both the common and different understandings within their PLCs.

To sum up, the current PLC conversations stimulated teachers' individual reflections about teaching, gave them inspiration on methods to use in the classrooms, and, partly, built a collective language and understanding about teaching. The participating teachers were engaged, felt acknowledged and shared thoughts and experiences of teaching. The first teachers intended to ask challenging questions, but in the observations challenging questions were rare. When reflecting on what they could improve in their teaching, most teachers tended to come to the conclusion that their teaching was good enough. There was no systematic inquiry of the teachers' and pupils' learning processes. Instead, teachers and first teachers evaluated learning processes based on gut feelings.

Discussion

Leadership practices of the first teachers who participated in this study primarily focused on building trustful and safe learning environments within the PLCs. These practices strengthened their teacher peers' self-esteem, which may have positive indirect effects including increases in teacher efficacy and changes in teaching practices (Muijs and Harris 2006, Eells 2011, Kiliç *et al.* 2021). The learning culture that the first teachers fostered also encouraged teachers to share and explore specific teaching methods and reflect on their teaching experiences. However, the results show that this was not enough to ensure teacher learning and teaching improvement. Most of the participating teachers expressed beliefs that the PLC conversations had taught them that their teaching practices were already sufficient, and mentioned methods were not really new to them. This may have been partly because the teachers and first teachers mainly focused on exchanges of experiences and feasible practices in their school context rather than systematically considering how the PLC activities could improve the teachers' pupils' learning processes in the long run.

As leaders of PLCs, teacher leaders are responsible for ensuring that the conversations promote learning, in other words to ensure the quality of the PLC conversations. Teacher leadership is constructed in the interactions between teachers, teacher leaders, and their PLC situation (Spillane 2006). So, it is a complex process and the optimal teacher leadership practices may depend on the teachers, teacher leaders and various contextual factors. Accordingly, the results indicate that teacher leaders need competences in analysing the learning processes within the PLCs and robustly identifying appropriate leadership practices rather than basing them on gut feelings. The learning processes of both pupils and the teachers must be considered to optimise leadership practices. As suggested in the theoretical underpinnings, if one building block is too dominant or is applied in isolation, the learning processes may become unstable.

In the studied schools the first teachers refrained from asking challenging questions that could have deepened the learning processes and changed the teaching practices in the long run. They did this due to egalitarian and autonomous norms, teachers' high work pressures, and the risks of dropouts and resistance. These findings highlight the importance of schools addressing both norms and structure when developing the learning processes in PLCs. As the teachers and first teachers had little, if any, training to think in terms of teacher leadership, there was little meta-reflection about how to develop learning-promoting teacher leadership in the PLC conversations. The reflections mainly focused on the PLC form rather than quality aspects. Some teachers even claimed that anyone who could structure an effective meeting could lead the PLC conversations successfully. However, the findings show that structuring conversations is not enough to ensure learning and that leading in a manner that effectively fosters deep learning in PLCs is difficult. Teacher leaders need to manage individual and collective, concrete and abstract, affirming and challenging learning. For example, teachers need to be supported as individuals in their unique work situations, but also learn collectively to enable them to address, collaboratively, complex, and difficult challenges to improve teaching for all pupils. They need to develop concrete tools to use in their teaching, but also to learn abstractly to analyse patterns and learning needs. Finally, affirming learning environments are needed to enable teachers to have the strength, desire, and courage to reflect on, examine, and improve their teaching practices, but their current understandings must also be challenged to promote deep learning and development. An overly one-sided understanding and design of professional learning may limit opportunities for deep and long-term learning. New teacher- and teacher-leader roles may be needed in schools that challenge prevailing norms and understandings of leadership and professional learning. In this respect, the main focus of existent PLC literature on principals' leadership and the establishment of trustful, sharing learning cultures in PLCs may be problematic. I suggest there is a clear need for the practitioner-oriented PLC literature to provide more effective guidance for teachers, teacher leaders and principals to improve teacher leadership both generally and specifically in leading deep-learning PLC conversations.

Conclusions

My aim in this empirical study has been to contribute knowledge of ways to develop teacher leadership in PLC conversations. The results show that exploring concrete teaching methods in sharing and trustful PLC conversations is not enough to ensure professional learning and teaching improvement. It is concluded that teacher leaders need to develop competences in systematic analysis and support of the learning processes in PLCs. Competence in building a habit of inquiry among their teacher peers is also required. This requires abilities to promote the consideration and development of various concrete teaching methods, affirming learning cultures, as well as both collaborative and individual efforts to think abstractly, problematise reflectively, pose challenging questions, and collectively improve teaching. The study is based on a limited sample and does not allow identification of causal relations or generalisations. However, it contributes knowledge of the need for informed and conscious teacher leaders supported by their principals and peers to challenge norms and understandings of the practices required to be a learning teacher and improve teaching practices in the long run. This knowledge may be valuable for researchers and school practitioners when developing teacher leadership in schools. Finally, it is suggested that practitioner-oriented PLC literature and training programmes for teacher leaders need to address these issues more intensively to improve support for the development of teacher leadership for learning in PLCs.

Acknowledgments

I would like to express my gratitude to the Department of Education, the Centre for Principal Development, and the School of Education, Umeå university, for supporting my research project. Special thanks to my supervisors, Helene Årlestig and Ulf Leo, for fruitful discussions and comments.

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

Frida Grimm  <http://orcid.org/0000-0001-8286-8716>

References

- Admiraal, W., *et al.*, 2021. Schools as professional learning communities: what can schools do to support professional development of their teachers? *Professional development in Education*, 47 (4), 684–698. doi:[10.1080/19415257.2019.1665573](https://doi.org/10.1080/19415257.2019.1665573).
- Birt, L. *et al.*, 2016. Member checking: a tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health research*, 26 (13), 1802–1811. doi:[10.1177/1049732316654870](https://doi.org/10.1177/1049732316654870).
- Blossing, Ulf. 2016. “Practice among novice change agents in schools.” *Improving schools* 19 (1): 41–51. doi:[10.1177/1365480215610953](https://doi.org/10.1177/1365480215610953).
- Bouchamma, Y., April, D., and Basque, M., 2019. Principals’ leadership practices in guiding professional learning communities to institutionalization. *International studies in Educational administration*, 47 (1), 38–60.
- Bowring-Carr, C. and West-Burnham, J., 1997. *Effective learning in schools: how to integrate learning and leadership for a successful school*. London: Financial Times Pitman Publishing.
- Braun, V. and Clarke, V., 2006. Using thematic analysis in psychology. *Qualitative research in psychology*, 3 (2), 77–101. doi:[10.1191/1478088706qp063oa](https://doi.org/10.1191/1478088706qp063oa).
- Cohen, L., Manion, L., and Morrison, K., 2018. *Research methods in Education*. 8th ed. London, England and New York, USA: Routledge.
- Dogan, S., Yurtseven, N., and Şamil Tatık, R., 2019. Meeting agenda matters: promoting reflective dialogue in teacher communities. *Professional development in Education*, 45 (2), 231–249. doi:[10.1080/19415257.2018.1474484](https://doi.org/10.1080/19415257.2018.1474484).

- DuFour, R. and Eaker, R., 1998. *Professional learning communities at work: best practices for enhancing Student achievement*. Bloomington: National Educational Service.
- Earl, L.M. and Timperley, H., 2009. *Professional learning conversations. Challenges in using evidence for improvement*. Dordrecht: Springer. doi:10.1007/978-1-4020-6917-8.
- Eells, R.J., 2011. *Meta-analysis of the relationship between collective teacher efficacy and student achievement*. School of Education. Chicago: Loyola University.
- Fairman, J.C. and Mackenzie, S.V., 2015. How teacher leaders influence others and understand their leadership. *International journal of leadership in Education*, 18 (1), 61–87. doi:10.1080/13603124.2014.904002. Routledge.
- Grimm, F., 2020. The first teacher as the elephant in the room – forgotten and hidden teacher leadership perspectives in Swedish schools. *Research in Educational administration & leadership*, 5 (2), 454–483. doi:10.30828/real/2020.2.5.
- Grimm, F., 2023. How do teacher leaders lead in professional learning communities. Explicit and tacit negotiations. *International studies in Educational administration*, 51 (1), 34–51.
- Grimm, F., Norqvist, L., and Roos, K., 2021. Exploring visual method in the field of Educational leadership: co-creating understandings of Educational leadership and Authority in school organisations. *Educational management administration and leadership*, 49 (7), 1–20. doi:10.1177/17411432211030747.
- Grootenboer, P., Edwards-Groves, C., and Rönnerman, K., 2015. Leading practice development: voices from the middle. *Professional development in Education*, 41 (3), 508–526. doi:10.1080/19415257.2014.924985.
- Hairon, S., 2016. Facilitation for professional learning community conversations in Singapore. *Asia Pacific journal of Education*, 36 (2), 285–300. doi:10.1080/02188791.2016.1148855.
- Hairon, S., Wee Pin Goh, J., and Siew Kheng Chua, C., 2015. Teacher leadership enactment in professional learning community contexts: towards a better understanding of the phenomenon. *School leadership & management*, 35 (2), 163–182. doi:10.1080/13632434.2014.992776.
- Harris, A. and Jones, M., 2010. Professional learning communities and system improvement. *Improving schools*, 13 (2), 172–181. doi:10.1177/1365480210376487.
- Hirsh, Å. and Segolsson, M., 2019. *Skolutveckling som gemensamt projekt. Att organisera för och genomföra professionsdriven skolutveckling [School development as a joint project. To organise for and implement profession driven school development]*. Stockholm: Books on Demand.
- Hord, S.M., 1997. Professional learning communities: communities of continuous inquiry and improvement. *Leadership*, 40 (1), 58–59. doi:10.1177/1365480210376487.
- Hord, S.M., 2008. Evolution of the professional learning community. *Journal of staff development*, 29 (3), 10–13.
- Katz, S. and Ain Dack, L., 2014. Towards a culture of inquiry for data use in schools: breaking down professional learning barriers through intentional interruption. *Studies in Educational evaluation*, 42, 35–40. doi:10.1016/j.stueduc.2013.10.006
- Kılınc, A.Ç., Şükrü Bellibaş, M., and Bektaş, F., 2021. Antecedents and outcomes of teacher leadership: the role of teacher trust, teacher self-efficacy and instructional practice. *International journal of Educational management*, 35 (7), 1556–1571. doi:10.1108/IJEM-04-2021-0148.
- Kolb, D.A., 1984. *Experiential learning: experience as the source of learning and development*. 1st ed. Englewood Cliffs: Prentice-Hall.
- Liljenberg, M., 2021. Distribuerat Ledarskap. In: Å. Hirsh and A. Olin, eds. *Skolutveckling i teori och praktik*. 1st ed. Falkenberg: Gleerups, 113–122.
- Lomos, C., Hofman, R.H., and Bosker, R.J., 2011. Professional communities and Student achievement - a meta-analysis. *School effectiveness and school improvement*, 22 (2), 121–148. doi:10.1080/09243453.2010.550467.
- Margolis, J. and Strom, K., 2020. Assessing the success of teacher leadership: the case for asking new questions. *Professional development in Education*, 46 (4), 1–15. doi:10.1080/19415257.2020.1787200.
- Muijs, D. and Harris, A., 2006. Teacher led school improvement: Teacher leadership in the UK. *Teaching and teacher Education*, 22 (8), 961–972. doi:10.1016/j.tate.2006.04.010.
- Nelson, T.H., et al., 2010. Leading deep conversations in collaborative inquiry groups. *The clearing house: A journal of Educational strategies, issues & ideas*, 83 (5), 175–179. doi:10.1080/00098650903505498.
- Nguyen, D., et al., 2020. Exploring the relationships between instructional leadership and teacher competences: Singapore Primary school teachers' perceptions. *International journal of leadership in Education*, 25 (6), 919–940. doi:10.1080/13603124.2020.1731765.
- Nguyen, D., Harris, A., and David, N., 2019. A Review of the empirical research on teacher leadership (2003–2017): evidence, patterns and implications. *Journal of Educational administration*, 58 (1), 60–80. doi:10.1108/JEA-02-2018-0023.
- Riggins, C. and Knowles, D., 2020. Caught in the Trap of Plc Lite: essential steps needed for implementation of a true professional learning community. *Education*, 141 (1), 46–55.
- Senge, P., 1990. *The fifth discipline: the art and practice of the learning organization*. New York: Currency Doubleday.
- Spillane, J.P., 2006. *Distributed leadership*. San Francisco, USA: Jossey-Bass Inc.
- 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.

- Stoll, L., *et al.*, 2017. Teacher leadership within and across professional learning communities. In: A. Harris, M. Jones, and J.B. Huffman, eds. *Teachers leading educational reform*, 1st. London: Routledge, 51–71. [10.4324/9781315630724-5](#).
- Stoll, L. and Kools, M., 2017. The school as a learning organisation: a Review revisiting and extending a timely concept. *Journal of professional capital & community*, 2 (1), 2–17. doi:[10.1108/jpcc-09-2016-0022](#).
- The Swedish National Agency for Education, 2022. Förstelärarens Uppdrag [First Teacher Assignments]. <https://www.skolverket.se/skolutveckling/leda-och-organisera-skolan/leda-personal/forstelararens-uppdrag>.
- Swedish research council, 2017. “Good research practice.” <https://www.vr.se/english/analysis/reports/our-reports/2017-08-31-good-research-practice.html>
- Timperley, H., 2011. *Realizing the power of professional learning*. Maidenhead, England: Open University Press.
- Tracy, S.J., 2013. *Qualitative research methods - collecting evidence, crafting analysis, communicating impact*. Chichester, England: Wiley-Blackwell.
- Tschannen-Moran, M. and Woolfolk Hoy, A., 2007. The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and teacher Education*, 23 (6), 944–956. doi:[10.1016/j.tate.2006.05.003](#).
- Vangrieken, K., *et al.*, 2017. Teacher communities as a context for professional development: a systematic Review. *Teaching and teacher Education*, 61, 47–59. doi:[10.1016/j.tate.2016.10.001](#)
- Wenner, J. and Campbell, T., 2017. The theoretical and empirical basis of teacher leadership: a Review of the literature. *Review of Educational research*, 87 (1), 134–171. doi:[10.3102/0034654316653478](#).
- Wenner, J. and Campbell, T., 2018. Thick and thin: variations in teacher leader identity. *International journal of teacher leadership*, 9 (2), 5–21.
- York-Barr, J. and Duke, K., 2004. What do we know about teacher leadership? Findings from two decades of scholarship. *Review of Educational research*, 74 (3), 255–316. doi:[10.3102/00346543074003255](#).
- Yukl, G., 2009. Leading organizational learning: reflections on theory and research. *The leadership quarterly*, 20 (1), 49–53. doi:[10.1016/j.leaqua.2008.11.006](#).