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A community's practice: A case study of professional development among vocational and arts teachers

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Abstract

Since considerable resources are invested in the professional development of teachers, there is an urgent need to investigate various models. In Sweden, schools often use thoroughly structured continuing professional development packages for teachers – with pre-set goals, methods, and questions to discuss. The aim of the present study is to gain knowledge about how professional development is constituted in a specific teacher community, within the context of teaching and assessing practical knowing. A group of arts and vocational teachers at a Swedish upper secondary school voluntarily engaged in a year-long developmental Teacher Community (TC), in which explorative talk about teaching is central. Podcasts created in teams of two after peer observations and group meetings are analysed at multiple levels to identify what they talk about and how. Based on the analyses of the explorative discussions, we used the theory of Communities of Practice to understand specific features of the practice of the teachers' professional development. The main result is that, while the teachers are building a strong common platform for professional development through their TC, the learning processes are solitary journeys and their individual professional responsibility. One of the characteristics of the interaction within the TC is the absence of critical approaches to peers, which is often prompted as a prerequisite by previous research. Instead, with esteem as characteristic for the explorative discussions, the TC demonstrates complex reasoning on professional identity and an eagerness to learn more from others about teaching practical knowing. Finally, we suggest alternatives to overly structured CPD packages with pre-set goals and methods.

Keywords: teacher community (TC), continuing professional development (CPD), vocational teachers, arts teachers, practical knowing, development, community of practice

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Introduction

Since considerable resources are invested in the professional development of teachers – often with the framing of structured, uniform packages with pre-set goals, methods, and questions to discuss (cf. Cochran-Smith & Lytle, 1999; Desimone, 2009; Kennedy, 2005; OECD, 2019; Skolverket, 2024) – there is an urgent need to investigate various models. In Sweden, schools often use thoroughly structured continuing professional development (CPD) packages for teachers which have been provided by Skolverket (National Agency for Education) or by companies offering professional development courses. In this article, we investigate a case of a locally organised professional learning community which did not use a pre-designed CPD package. We strive to gain knowledge about how professional development is constituted in a type of teacher community (TC) well aligned with the form Vangrieken et al. (2017, p. 52) describe as 'using the teachers' practical experience as the main resource, [which is] of significant importance for the success of a TC as it provides a focus on the participants' needs.'

We address what a group of teachers make a focal point in terms of teaching and assessing practical knowing in explorative talk. Here, *practical knowing* is a concept that refers to subject-specific capabilities within the vocational and aesthetic subject domains (more than knowledge in terms of specific subject matter), in a similar vein to Carlgren et al.'s (2015) definition of practical knowing. We analysed the teachers' verbal interaction to identify *what* they talk about and *how* they position themselves in relation to topics and to each other. Taking the analysis one step further, we relate the results to the theoretical framework of Communities of Practice, CoP (Lave & Wenger, 1991; Wenger et al., 2002), to draw a conclusion about the specific features of the practice of the community's professional development.

The year-long TC under study was initiated by the current school's leadership in response to vocational teachers expressing dissatisfaction with a shift towards predominantly assessing practical knowing in written tests at the expense of assessing domain-specific physical action. The current teachers enrolled in the TC voluntarily based on their interest in assessment and grading of practical knowing. The TC consisted of four vocational teachers, representing different programmes, and three teachers from the Arts programme. One of the authors, who is employed at the school and affiliated with a regional university, was asked to moderate the TC.

It is important for the understanding of this study that the TC would have progressed without the research. The idea of linking practice-based research to the ongoing TC grew during the initial meetings, during which research literature on practical knowing and assessment was discussed. The other author (also affiliated with the regional university) was invited to participate. The idea

was to pave the way for a study that included both an insider and an outsider perspective on the ongoing process. The research project initially addressed what aspects of practical knowing the teachers highlight in professional development of their own assessment practice. In the TC meetings, the researchers kept a low profile when guidelines were outlined regarding what the teachers would discuss. We facilitated activities rather than directing them, which involved measures such as allocating turns, affirming, managing practical matters, and asking for explanations and examples. It can be assumed that the researchers' low profile contributed to creating an open climate in the TC that enabled teachers to highlight what was central to their own practice (see *Method discussion*).

The research context

The TC met 14 times over two semesters. The first semester included literature studies and explorative talks focusing on possibilities for unveiling aspects of subject-specific practical knowing. At stake were attempts to articulate professional viewing (Goodwin, 2018) of pupils' domain-specific physical action, such as holding the fillet knife at a specific angle to the backbone of a fish. The correct angle is audible in terms of a proper 'filleting sound'. During the second semester, we (the researchers) initiated cross-programme peer observations. For instance, an arts teacher observed a vocational teacher and vice versa. Each of the observation pairs produced a podcast in which they discussed what caught their attention in the observations. The guidelines were: 'you can freely choose what you consider most relevant to talk about for 20 minutes, aligning with the concerns of our TC'. Everyone then listened to all the podcasts and reflected on them collaboratively in two meetings. Finally, the teachers planned a smaller or larger intervention in their own practice linked to their TC experiences so far. The interventions were reported and reflected on collectively in the last two sessions.

At an early stage of our analytical undertakings, it was obvious to us that the TC's focus had widened, from assessment and grading to relational issues in class, pupils' motivation, domain-specific language, plans for future collaborative projects, and – strikingly often – esteem for each other's attitudes towards pupils and didactical choices which was linked to ideas for one own's future teaching.

The widening of interests in the TC align with a bottom-up type of professional learning community (Skolverket, 2024), where the teachers 'provide much of the learning content on their own' (Vangrieken et al., 2017, p. 48). The investigated TC can also be understood in terms of Cochran-Smith and Lytle's (1999) form of teacher learning, which assumes that teachers are experts in their own contexts and can learn from their own actions and reflections.

We became interested in the characteristics of a professional learning community centred around the experiences and practical needs of the teachers, *instead of* being based on pre-designed professional development models. We discerned a research problem with the vantage point of the current teachers sharing a generic didactical understanding within practical knowing, while at the same time not sharing a common ground regarding domain specifics. Given the teachers' common background of experiencing the master's view on the novice's acquiring of practical knowing, we wanted to gain insight into *what* they put forward as essential in their own professional identity and development within the context of teaching and assessing practical knowing, and *how* they do that. Such questions attune to Sülau (2019), who states (with the support of others, e.g., Darling-Hammond & Richardson, 2009; Little, 2002; Meirink et al., 2007)[1] that more research is needed on *how* teachers' development is supported by teachers' professional communities, not just *what* they learn. Sülau argues that research with micro-analytical perspectives, such as ours, can contribute to insights needed in those questions.

Aim and research questions

The aim of the present study is to gain knowledge about how professional development is constituted in a specific teacher community, within the context of teaching and assessing practical knowing. This aim is pursued by asking the following research questions:

1. What topics do the teachers highlight?
2. How do the teachers position themselves in relation to the highlighted topics and to the other members of the teacher community?
3. What insights about the teachers' professional learning emerge when the teacher community is regarded as a community of practice?

Previous research

Teacher communities

Learning environments that promote good school development outcomes are described in the international literature as Professional Learning Communities (PLC), Teacher Learning Communities (TLC), Teacher Communities (TC), or other concepts signalling teachers' professional learning and development in groups. We have chosen to use the term TC in this article and have largely used Vangrieken et al.'s (2017) research review and Sülau's (2019) dissertation to create a research context for our own study. Timperley (2019) has also compiled what characterises successful learning communities among teachers. She describes six

key factors, namely a clear goal and common focus on student learning; basic trust between teachers that enables openness, dialogue, and critical examination of each other's practice; intensive interaction between teachers who share, explore, and debate their ideas and practices; leadership and structure; different types of sources of knowledge; and adaptation to the local school's needs coupled with a connection to curriculum and overarching school policy. TCs frequently play a central role in teachers' CPD, making research from this field relevant to our study.

Previous studies on vocational teachers' professional development show, among other things, that the professional development project must take place in a learning and development-oriented culture (Leonardsen, 2021) and that individual driving forces are crucial when vocational teachers assess the value of competence development activities (Andersson et al., 2018). Other studies on teachers' participation in professional development activities present two kinds of motivating factors: intrinsic (personal interest, curiosity, and passion) and extrinsic (acknowledgement from others, accountability, and external rewards) (OECD, 2019). Aamodt et al. (2016) suggest that vocational teachers generally collaborate less with other teachers, despite articulating a greater need for it. They are less satisfied with their professional practice, but have high confidence in their own teaching ability (Aamodt et al., 2016). At the same time Wermke (2013) argues that Swedish teachers, who have a lower degree of professional autonomy than German teachers, are less critical of the sources of knowledge that are used as the basis for CPD. Due to stronger governmental teacher control in Sweden, the teachers do not have to take the same (collective) responsibility. Instead, the exchange between colleagues that focuses on personal experiences becomes at least as constructive for the teachers to take part in. In other words, discussions with colleagues are a way to develop professionally, and vocational teachers generally express a need for this.

The relational interaction in the group of teachers is the most crucial factor predicting whether the participants in a TC change their understanding and practice (Vangrieken et al., 2017). Teachers' willingness to cooperate and conduct activities together, and to let other teachers into their classroom and their thoughts on teaching, is dependent on emotional support provided by the group and on the teachers creating a context in which they can share experiences and thoughts more deeply than just surface level. In Sülau's (2019) study, the teachers learn and develop by sharing experiences from their teaching practice and support each other by asking questions and being supportive in the verbalisation of thoughts and reflections.

There are several potential problems with this kind of cooperation and trust. Vangrieken et al. (2017) highlight a cautionary note regarding the use of peer observation as an evaluative tool for participants' teaching practice, as it might

create tensions in the group and negatively impact the functioning of the group. In Langelotz's (2014) study on group interaction within a CPD project, the teachers admonish each other and position each other as good or bad teachers. Conflicts can arise based on personal dislikes as well as on different individual perceptions of what a skilled teacher does.

At the same time, researchers (Brodie, 2014; Sülau, 2019; Vangrieken et al., 2017) warn that completely conflict-free collaboration does not lead to development. 'Questioning or challenging each other's positions, attitudes or experiences is part of the collegial form that gives teachers the opportunity to develop' (Sülau, 2019, p. 137 [our translation]). In Sülau's (2019) study, the teachers confirmed, encouraged, *and* questioned each other's views. This occurred both in relation to the studied CPD's predetermined topics of conversation and in relation to the other participants. In summary, the delicate interplay between safety and challenge seem to shape a fertile ground for professional growth and transformative learning experiences.

Theoretical perspective: Communities of Practice

The results of the present study are interpreted through the lens of *Communities of Practice, CoP* (Lave & Wenger, 1991). The CoP framework understands learning and development as social and situated, intertwined with the participants' heightened involvement in the practice of a community. A CoP can be defined as 'a group of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis' (Wenger et al., 2002, p. 4).

The identity of a CoP is constituted by (i) a shared *domain* of interest, in which the members form (ii) a *community* by engaging in joint activities that develop their competence in relation to a specific (iii) *practice*, for example teaching (Wenger, 2011). In the present study, the teachers share domain, community, and practice to a large extent (i.e., work at the same school, teach practical knowing, and meet in the TC). The CoP framework, which is common in the educational field (Vangrieken et al., 2017), was applied here to understand the features of the current community in relation to professional development. To reach such an understanding, we used some central concepts: *mutual engagement, joint enterprise,* and *shared repertoire*, suggested by Wenger (1998) to constitute the foundation of an effective CoP.

Mutual engagement refers to processes of learning and development as ongoing and evolving, in which relational links between individuals and subgroups in the community play a crucial role. The individuals share professional experiences, for example from teaching. Mutual engagement involves the mutuality of *social learning,* a concept embracing the course of appropriating knowledge and skills

through engagement in social interaction among the members of the CoP. Participants take on roles as *master and novice,* where the master is positioned as a more experienced member. For example, it can be expected that a teacher who visits a programme they have never visited before (i.e., a *legitimate peripheral participation*, speaking with Lave & Wenger, 1991) will take on the role of a novice, as determined by the newcomer's limited horizon of understanding of what is going on. The standard pattern is that the novice picks up ideas from the master on how to perform in the community. However, development through the activities of the CoP might involve any member, not just novices (Wenger et al., 2002; Wenger, 2011).

Joint enterprise is related to the members' commitment to their professional development process, why negotiation and renegotiation of ideas and performance come to the fore. Thus, collective undertakings shape the CoP. All members are invited to contribute to the building of new knowledge (Wenger, 1998), which makes it relevant to examine social positioning and the construction of professional *identity* in TCs of the sort at hand. According to Wenger (1998), building identity in CoPs implies that a member sees themself as a specific character linked to the ways the member indulges in the developmental processes of the community.

Shared repertoire refers to the members providing and unpacking domain-specific knowing to the community that can support professional development. For instance, teachers might share teaching ideas and materials and highlight something that was previously not given much attention. In unpacking knowing and developing shared repertoires, *shared meanings* evolve. This concept embraces stages of negotiation about meaning in the community (Wenger, 1998). For example, shared meanings about teaching could emerge from discussions after teachers' observations in each other's classrooms.

Materials and methods

The results of this study are based on multiple analyses of transcripts from the recordings of six hour-long meetings with seven participating teachers and three podcasts in which the teachers reflect on pair-wise peer observations. In this article, the excerpts are translated from Swedish with readability as the main guideline.

Our general research approach is phenomenographic in terms of an interest in how a group of people understands a phenomenon (Marton, 1981). The phenomenon in this case is the TC as a form of teachers' professional development. An assumption in the present study has been that how the teachers interact and what they discern, highlight, and discuss about teaching and assessment of practical knowing reflect their conceptualisation and understanding of the phenomenon.

The analytical steps in the present article move from a fairly descriptive level of what the teachers say and how they position themselves and others in relation to what is said to a more theoretical understanding of the phenomenon by perceiving the TC as a community of practice. In line with our general research approach, we stick to a second order analysis in terms of focusing the participants' views, however without using the traditional phenomenographic tool box.

The first analytical step embraced *what* was talked about in the TC. We used a theoretically informed content analysis (Saldaña, 2021) of the transcripts, which consisted of identifying prevailing topics in the teachers' discussions about teaching by using Dimenäs and Taflin's (2018) *teaching-in-action* model as a framework. The model was originally developed as a guide to discuss the teaching work of student teachers in their workplace-based learning, including the following topics: *Teaching Object, Organisation, Contextualisation*, *Generalisation*, *Communication, Challenge,* and *Assessment*. We conducted the coding in parallel processes with frequent evaluations, and initially used the same data to calibrate the interpretations. We added the topic of *Relationships* to highlight a specific and frequent theme within the topic of communication. The concepts are presented in more detail when operationalised in the results.

The second step of the analyses encompassed a more inductive interpretation (cf. Alvinius, 2023) on how the teachers interacted with the identified topics and with the other participants – however, without any theoretical frame. The analytical questions concerned three themes. They included positioning towards: a) discussed topics, b) being a learning professional, and c) building relations. We used a general content (thematic) analysis of the empirical material, including systematic coding, reflections on the results, refined coding, and examination of relationships between the main clusters (Rapley, 2011), conducted in parallel processes with frequent evaluations of the researchers' interpretations regarding positioning as follows:

a) **Discussed topics**: How do the teachers position themselves towards the topics identified in step 1? Are there any critical inquiries into their own practice or abilities?
b) **Being a learning professional**: What do the teachers express as new or as generating new thoughts? If the teachers express meta-reflection of their own learning or a wish to develop their own teaching, how do they do this?
c) **Building relationships**: Confirmations of the didactical choices of other participating teachers, general confirmations of others or critical inquiry into the practice or ability of others – when, who, what, how? If they express a desire to cooperate with others, how do they do this?

Thus, the second analytical step embraced aspects of *how* the teachers talk.

Finally, by interpreting our material through the CoP lens, we strived in our analyses to gain further insights into how the teachers interactionally construct their community to understand the prevailing learning. This is an important step, from *what* is said and *how,* to what meaning this interaction has for the teachers' professional development.

We have adhered to the ethical principles set forth by the Swedish Research Council (Vetenskapsrådet, 2017) to protect the participants and to ensure high-quality research. For example, informed written consent was obtained when the development project transitioned into the research phase. Furthermore, data is securely stored behind login access, restricted to authorised personnel. Notably, the data does not contain sensitive personal information, and the handling of the data followed the GDPR guidelines.

External anonymity has been maintained by avoiding the identification of individual participants in the results. However, we have chosen to quote their descriptions of their teaching in cases where specific details were relevant for the analysis, even though this could occasionally conflict with the internal anonymity. We are aware that balancing these considerations can be challenging, especially in studies where participants themselves may recall what was said by whom (cf. Vetenskapsrådet, 2017).

Regarding the role of the researchers in the ongoing TC, we refer to *Method discussion* for details.

Results

The results are presented in three sections, corresponding to the three research questions and the three different analyses used. In the excerpts, P indicates podcast, and M indicates meeting (e.g., M1, 10:21, means that the quote starts 10 minutes and 21 seconds from the beginning of the first meeting).

Section 1: Prevailing topics in the teachers' discussions about teaching

Section 1 offers an overview of what content the teachers make central in the TC. The teachers cover a lot of topics. We categorised a total of 129 instances of verbal interaction in line with the eight topics of *Teaching in action*. The diversity of topics is greater in the initial meetings, where they share their free reflections after listening to the podcasts. In the last three meetings, the focus is on the teachers' individual interventions. This decreases the interaction between the teachers as well as the diversity of topics discussed. The topics are presented in order of frequency, where the four first presented topics clearly dominate the discussions.

Communication includes how the teaching object and the learning process are communicated, as well as the role of language. The teachers talk about language as a carrier of culture both in the classroom and within the pupils' future

professional practice. The relationship between language and practical skills is discussed extensively. For example, a need to develop the relationship between speech and physical action surfaces: 'to train to express myself so that I can explain to the pupils better with words and not just hold their hand' (M1, 15:17). Another teacher suggests that, in practical subjects, words can be given meaning through physical action so that pupils experience them sensually as part of the cognitive learning:

> It is not that they know all the words […] but there are certainly a lot of words, and they hide the fact that they do not understand. But the more they work with the things, the more it also clicks in their brains with the words. (M3, 43:28)

Both art teachers and vocational teachers highlight verbal group reflections with the pupils about what kind of problems they have encountered in class and what solutions seem possible. This aspect of communication seems to play an essential role in the classrooms. For example, one teacher positions another teacher as a role model for classroom talk about how the pupils have taken care of 'the time, the product and the planning' (P1, 13:27).

Organisation encompasses how lessons are organised, and what teaching methods are used. Our material shows that it is common to engage in discussions about didactic trade-offs, like whether theory and practice should be separated or not, and about when pupils need detailed step-by-step instructions before a difficult exercise, like 'mixing plaster or glaze, then you can't just wing it' (M1, 50:56).

Two teachers express different needs to create more energy and pace in their teaching. They delve into questions such as structure versus creativity, for example what differs between exercises that require rule following and products that are assessed more based on aesthetics.

The teachers' diverse backgrounds from different domains sometimes call for an explanation of ideas behind their didactical choices. These passages are relatively short, but it sometimes seems difficult to deepen the discussion related to backgrounds. One example is a description of a flavour pairing class, where one of the teachers ends up answering questions from the other teachers on cooking procedures instead of getting to the point of how to teach pupils how to pair food and beverage flavours (M4, 7:00).

A few times, the teachers mention an organisational aspect related to the role of hearing what is going on in studios and shops a bit away from where they are positioned. Being able to hear but not view what is going on, they gain information about how the pupils solve specific tasks. Both drilling and frying are mentioned as examples.

Assessment includes both talk about what is being assessed and how it is done. The teachers elaborate on assessment several times, however not so much from

the perspective of subject-specific grading, rather from a more general perspective of assessing practical knowing, captured by one teacher through: 'Foremost, it feels as if we have more in common than I expected, which does not necessarily mean that I understand the assessment per se, more the way we think around it' (M1, 19:08). Similarities between assessing in different domains is oriented towards the processes of assessing. The teachers also agree that being able to reflect verbally and to use technical language about production processes is necessary to receive a high grade, for example: '[Pupils] might not have the insight into why they act in a specific way, but if there is someone who can explain why they do it like that then they have reached a higher level' (M1, 1:02:33). Several teachers state that assessing pupils' practical knowing on the spot in class is an effortless undertaking, for example: 'I don't need to stand beside someone to see what they do. You can see from several metres away whether it turns out well or not' (P3, 17:04).

Relationships focus on how student–teacher relationships are perceived and discussed. Discussions about classroom relationships primarily focus on building trust and motivation. The observing teachers typically praise a warm classroom atmosphere and informal talk with individual pupils, for example: 'A guy turned up a bit early and you chatted before class. It felt as if you had a good relationship with the pupils' (P1, 01:43). A situation which catches attention in the TC is the possible benefits of approaching pupils in a ruff way with a 'sort of harsh tone' (M1, 25:43), and then changing to a gentler tone. 'The tone is rough but hearty, like saying bullshit or such expressions [… but also] you have a very soft demeanour when you speak with them individually' (P2, 01:43).

Even if esteem of hearty and close classroom relationships is the predominant picture, other stories also emerge, such as displays of uncertainty regarding relationships. In a self-revealing passage, one teacher talks about being perceived as boring 'like boring them stiff if we, well, do the same stuff' (M1, 31:57).

Moving to topics with lower frequence of appearance, we find *Challenge,* which relates to how the pupils are challenged to reach new levels of understanding. We noted dialogues about challenging design of lessons, and how new equipment can challenge what is already known by the pupils. In a tone of esteem, a vocational teacher, after observing an arts teacher's class, reflects as follows: 'I think what you do with your pupils is super awesome. They discover themselves in a very different way than many other pupils do. I think they reach genuine self-understanding' (P2, 10:57).

Teaching object embraces subject-specific content answering the question 'What are the pupils supposed to learn?' In several TC meetings, the teachers engage in unpacking the complexity of practical action in their own domain in order to explain domain-specific content to colleagues that share a profound interest in teaching practical knowing but are newcomers to each other's domains.

Furthermore, the teachers delve into complex reasoning about understandings of specific teaching objects, for instance intertwined aspects of aesthetics and feasibility in the creation of material products, which seems to be relevant in cooking, electrical installation, and producing art.

Contextualisation comprises how the teaching object is framed by references to the surrounding society or the pupils' future profession. We noticed this topic foremost in discussions on links between workplace-based learning and classroom activities.

Generalisation includes how the teaching object is made relevant in other situations than the present one, for example pupils' transfer of subject-specific knowing from one exercise to a new one. One teacher describes a classroom situation 'when we revisit old knowledge or consider what knowledge works anew in a different context or exercise' (M2, 28:53).

Analytically, we conclude that, within the current TC, there is a careful and detailed search for pieces of didactical understanding. The teachers explore each other's methods and weave a rich web of educational matters that stand out as important to them. They achieve a breadth of aspects within the topics above. However, the possibilities seem limited to talk about a few certain aspects within some topics. We relate such limitations to the fact that the teachers represent different domains. We have also shown that, when the teachers elaborate on a great number of other aspects within the topics, they can reach considerable depth, for example the didactical use of the sound of practical skills and the interwoven aspects of word and physical action.

Section 2: Positionings in the TC

The teachers position themselves in relation to the discussed topics, fellow participants, and their roles as learning professionals. The following analysis aims to delineate and emphasise these nuanced positionings.

Positioning towards the discussed topics

All the teachers, at least once, position themselves as experts (secure or self-assertive) in relation to the topics of communication, organisation, and assessment. All but one teacher position themselves as experts in relation to the topics of teaching object or challenge. However, the teachers also position themselves as learners (uncertain or humble), though two teachers never position themselves as learners. The rest of the teachers position themselves as learners at least once – if they previously positioned themselves (or have been positioned by others) as an expert – in relation to the same topic.

The teachers all seem very confident in their knowledge of the teaching object and assessment in their own domain. In relation to the teaching object and to the

culture of the programme they visit, almost all of the teachers position themselves as learners.

Positionings towards the other teachers

The tone of the discussions is often strikingly enthusiastic and appreciative regarding both the TC project and each other's teaching. While peer observations are highly valued, the podcasts also receive favourable reviews (in terms of both creating them and listening to them). Occasionally, some teachers express criticism of the undertaking in the end of the TC project, relating the critique to a stressful workload, especially towards the end of the school year.

All participants express significant benefits from the TC, and four teachers specifically express their desire to continue collaborating with colleagues from the group after the project concludes. These invitations focus on collaboration between arts subjects and vocational subjects, based on common themes in teaching content.

The teachers praise each other's teaching after the peer observations. Most extensively explicit esteem towards other teachers is related to the topics of organisation and relations. Everyone receives praise at least once and esteem is given in all topics discussed.

Direct criticism of one another is rare. However, an indirect comment about pupils not appearing to keep up with the teaching during the peer observation may serve as a form of critique. When the teacher in charge explains the situation, any potential criticism is defused. During the discussions, they seldom contradict each other, but there are instances of challenging someone else's statement. This is done smoothly, where they initially agree and then add a supplementary point (which sometimes involves disagreement).

The teachers do not explicitly ask for their colleagues' comments on their teaching. However, self-reflection and critical inquiry of their own practices occur frequently. Virtually all of them find areas in their own practice that they aim to enhance. The positioning of the teachers can be summarised as professionals in development, yet highly skilled.

Positionings as a learning professional

The teachers describe themselves as reflective practitioners, recognising that their role as teachers necessitates a perpetual engagement with problem-solving and continuous improvement of their teaching.

The peer observation experience initiates several new thoughts. This is deemed valuable by all, regardless of their level of engagement in subsequent discussions. Additionally, there is an overarching meta-level discussion about their individual learning and development as teachers. Many of the teachers describe a perpetual motion – a continuous commitment to learning and

developing, which might require time for digestion: 'Things need to mature within me – afterwards – and it might take some time' (M1, 17:18). The time aspect is also expressed in: 'It's somewhat challenging to articulate the thoughts I currently have. The difficulty lies in expressing what is simmering in my mind … it's not straightforward' (M2, 31:08). Statements like these, which underscore the non-linear nature of learning and developmental processes, hold relevance, since they indicate that outcomes of development projects continue to emerge even beyond the project's scope.

Beyond these specific instances, the analysis reveals that teachers' motivation to participate in the TC is intrinsically driven by their personal commitment to self-improvement. As one teacher expressed: 'I believe I am here to develop myself, and I feel I have got some new views' (M1, 8:44). In summary, while the TC serves as a collaborative platform, the professional learning and development remains an individual pursuit.

Section 3: The features of the community

With the results in section 1 and 2 as a point of departure, here we illuminate our understanding of the TC related to the theoretical frame: Communities of Practice. Through three themes, we highlight the main features of the current community of practice: i) *learning and development,* ii) *professional identity,* and iii) *relationships*. Within these themes, we try to understand the results as an ongoing construction of a CoP by using the concepts *mutual engagement*, *joint enterprise,* and *shared repertoires* (Wenger, 1998).

Learning and development

Often, and in various ways, the teachers talk about their community as deeply engaged in learning and development, which can be understood as ongoing mutual engagement. As shown, several teachers describe new insights and new ideas for their own teaching gained through the project. However, when asked to link their development to certain occasions or texts in the project, the answers are a bit vague, for example:

> For sure, I have used what we talked about. I think we are influenced and things happen without being aware of it when we talk about pedagogy and view other perspectives and suddenly realise, well, shit, that's the way it is in my class too, even if we teach entirely different subjects, so I think that we have appropriated a lot in that way even if it is hard to make that out perhaps. (M3, 32:52)

Identifying the precise origins of our thoughts and articulating the triggers that bring awareness to specific aspects of teaching practice can be an impossible task. However, referencing to each other serves as a touchpoint for ongoing reflection and development, for example when the teachers relate their plans for changing their own teaching to some kind of sociality in the community. Peer observation

and the collective reflections on it are used as the stepping stone for a cycle of classroom exercises based on a list of technical terminology in the observing member's domain. One teacher claims that, through this cycle, the pupils reach 'an entirely different and deeper understanding' and master the current practical knowing better in coming exercises (M3, 39:00).

The members of the community repeatedly talk as if they take on the CoP roles of *novice* and *master.* An evident novice positioning is that all the observing teachers in the peer observations talk as newcomers in an unfamiliar culture. The language, the classroom relationships, and the artefacts are described as new and sometimes hard to understand. A typical example is that: 'when I visited [name], it is my perspective on everything because I don't come from this context, so it is difficult for me to see what [name] discovers among the pupils' (M1, 15:43).

The concept of novice can include a peripheral but legitimate participant's insight about what they can change in their own practice. There are many mentions of shortcomings in one's own teaching compared to what was observed in the organised peer observations, for example: 'It was obvious that I had no structure for my session [… while] you had a very transparent structure' (P2, 13:10). The previous example also illustrates a tendency of positioning others as masters, someone to look up to and perhaps imitate, in CoP terms: a joint enterprise.

In the spectrum of novice–master, another tendency is for the teachers to unanimously talk about themselves as experts when it comes to assessment of pupils' practical knowing in their own domains. For example, we interpret it as a master's voice when one of the teachers says: 'While a pupil certainly may fool me with skilled speech after having studied some theory, when we move on to practical tasks, it will prove [what the pupil knows]' (M3, 45:04).

A master's voice can also be noted as the teachers describe in detail what physical action is needed to manage what is to be known in their own practice. For example, the members can indulge in describing how to cook asparagus, or how to connect electrical cables safely *and* visually attractively, or how to fold selected pieces of paper into a book shaped as a carousel. We understand such contributions to the community as building shared repertoires of practical knowing – a joint enterprise. As underscored, the members represent different domains. This premise seems to call for the explicit making of domain-specific tacit knowing in interaction about what is to be known in certain classroom exercises.

Professional identity

The community members describe themselves as reflective practitioners, which we interpret as building professional identity in a CoP sense. The teachers position themselves as specific characters who indulge in the community's

development process, notably foremost for individual purposes, as underscored earlier. However, the professional identity also encompasses development of a more collaborative nature, such as plans for future collaborative projects between vocational and arts teachers. Thus, the members seem to develop shared repertoires about something that previously went somewhat unnoticed. At the same time, they construct a professional identity in the sense of seeing themselves as a character involved in an ongoing developmental journey, lasting even after the specific TC has come to an end.

Yet another aspect of constructing professional identity is the cultivation of shared repertoires about the members' (excellent) competence of assessing pupils' practical knowing in their own domains. Even if there are limits for a detailed understanding of the subject-specific assessment on a cross-programme basis, the overall picture is something like 'We know how to assess'.

Several mentions that indicate awareness of differences between the local culture of the programmes represented in the community can also be interpreted as building professional identity, from the perspective of learning more of co-existing cultures at the same school. An example is that in the culture of arts classes (according to vocational teachers), the pupils seem to take greater pride in their own products than what vocational pupils do, which is elaborated on as follows:

> The product was something that they had evaluated and questioned, and through that owned their own product in a completely new way, signalling some sort of culture with historic roots … some tacit knowing and things you have mediated to them before. (P1, 12:29)

Finally, part of cultivating a professional identity in the present community is the focus on language, in which the members develop shared meanings of the importance of teaching domain-specific terminology.

Relationships

While it is possible to find examples of criticism oriented towards the planning of the project, the heads of the school, or Skolverket, it is very rare to find examples of direct criticism of one another's teaching. Instead, esteem is strikingly common. We see the building of relationships through esteem as another key feature of this CoP. Esteem can be addressed to the community in general, as in this summary of the podcasts: 'It really sounds like everyone is passionate about their subject and it must be like gold for the pupils' (M1, 18:32). Pretty often, esteem is oriented towards the project and its potential for development, which is captured in ideas like: 'really fun to see other practices and then so fantastically fun to realise that there are quite a lot of similarities' (M1, 05:33). In other words, through observation of the strange you can gain new perspectives on your own practice. Esteem can also be addressed individually,

as in 'You were so good at promoting [every single pupil] because there was perhaps differing levels of quality in what had been produced' (P1, 13:51).

Summary of results

To summarise our results, the members of the TC seem to be involved in an ongoing construction of a CoP, where the teachers focus on their individual development scaffolded by collective thinking. The teachers position themselves as specific characters who indulge in the joint enterprise of professional development. When given freedom to choose topics and elaborate on them, the community embraces complex reasoning on professional identity, interwoven aspects of language and practical knowing, and the overarching importance of classroom relationships. It is striking that in the community under study, the teachers do this without challenging someone else's statement or questioning each other's practice. Specific features of the CoP are also an interchangeability of novice–master roles, including the master's expertise in assessment of domain-specific skills. Furthermore, the mutual engagement for the development of teaching practices seems to be ongoing, even after the TC has come to an end. A cornerstone in the ongoing construction of this community of practice is esteem of each other's competence.

Discussion

The aim of the present study is to gain knowledge about how professional development is constituted in a specific teacher community, within the context of teaching and assessing practical knowing. In the present chapter, we start by discussing methodological issues before moving on to discussing the results.

Method discussion

Our ambition is to present a study with good quality, in line with Larsson (2005). We have strived to give a rich presentation of our case, while at the same time presenting our results in a structured manner. This balance is visible in the various approaches to the different kinds of analyses used. For example, the most inductive part of the study (step 2) has a more thorough presentation of the questions used for analysis. A rich description has sometimes been prioritised over structure. This is a consequence of the need for the study to have a solid empirical foundation to prevent our conclusions – especially when contradicting previous research – from seeming vague. Larsson (2005) argues that a solid empirical foundation could create tension with the pragmatic validity of the study. We argue that our study has both a thick description and enough pragmatic validity to be of some relevance for changes in the professional development going on at schools.

Consideration was given to what roles we, as researchers, would play in the meetings with the teachers before the study commenced. There was a deliberate strategy to focus on the teachers' own thoughts about teaching and to strive for equality between teachers and researchers in the meetings. We have been genuinely interested in learning what the teachers themselves choose to discuss. Our role in the discussions was intentionally limited in pursuit of high validity for the study. One of us primarily had an insider perspective and a chairing role in the meetings, that is, allocating turns, affirming, and managing practical matters. The other had an outsider perspective, asking for explanations and examples, and promoting in-depth discussions without introducing new perspectives while doing so. Such promotion occurred rarely and were connected to the researcher's sense that the discussion was moving within areas that are relatively unexplored in previous research, such as the use of the five senses in teaching. However, the general picture is that the teachers willingly discussed among themselves with very few guidelines from us.

The role of the moderating researcher was positively reinforcing, while there are teacher statements which suggest that the other researcher's role was sometimes perceived as more questioning or critical. For instance, 'Yes, that's how I do it. Any questions, [researcher's name]?' (M1, 26:33). This comment was made in a playful tone, reflecting the positive discussion climate. However, it also highlights that participants might have perceived inequality in the relationship between the teachers and researchers in questions posed by the researchers. They may have felt obligated to respond (akin to an interrogation). We saw no further signs of this kind of inequality beyond this comment, but we are aware that power dynamics always pose a risk to the trustworthiness of participants' statements (Annerberg, 2016; Göthberg, 2019; Hammersley & Atkinson, 2007).

We have aimed to enhance trustworthiness and reliability through transparency in our analytical procedures. Our initial analytical approach, based on predefined concepts in Dimenäs and Taflin (2018), has been both rewarding and limiting. Specifically, the two categories (topics) of contextualisation and generalisation required repeated discussions among us researchers before we comprehended and used them equally. Also, the more inductive content analysis (Alvinius et al., 2023) in the second step of the analyses of how teachers relate to one another was employed to capture phenomena that were occasionally evident during ongoing meetings, but necessitated systematic exploration using transcriptions as a foundation. Through this analysis, patterns emerged that could be further explored through the theoretical lens of CoP.

Discussion of the results

By delving deeply into what a specific teacher community discussed and how they did so, and viewing this through the theoretical lens of Communities of

Practice, we aimed to explain the processes involved. Overall, we have achieved our objective to generate new insights about a professional teacher community's practice through our case study. While general conclusions cannot be drawn from a single case, our findings – in comparison with previous research – suggest that there is reason to question the organisation of professional development initiatives for teachers. We will discuss our findings in relation to previous research through three issues: *i)* the absence of critical inquiry towards others, *ii)* individual responsibility for professional development, and *iii)* the design of the TC project. We recommend continued research in all these areas and note that Skolverket's report (2024) supports our questioning of the design of professional development for teachers that has dominated Swedish schools in recent years.

Previous research asserts that critical inquiry is essential for driving development (Brodie, 2014; Sülau, 2019; Timperley, 2019; Vangrieken et al., 2017). However, criticism or questioning of each other's practice is absent in the studied TC. Instead, the teachers are appreciative and seek connections, and identify desirable teaching methods and approaches in their colleagues' teaching. They find the peer observations highly rewarding, a perspective supported by extensive research (e.g., Cochran-Smith & Lytle, 1999). The cautionary note on the risk of using peer observation (Vangrieken et al., 2017) is not relevant in this TC, with esteem as an important feature. From this, we conclude that the pleasant tone, regardless of its origin, does not hinder the teachers' learning and development. 'I want to excel at this, just as I see you excel' seems to be a unifying stance. An example of the complexity of teaching explored within the TC is represented by one teacher's report of how interwoven relationships between the word and the action were staged in the classroom. The teacher spoke of how to enact the dialectic influence that action has on the word and the word has on the action in the organisation of teaching. Hence, the results of our study do not fully align with the research cited initially in this paragraph on prerequisites for deepened collegial discussions, since our study clearly shows that critically inquiring into other teachers' teaching is not a requirement for development in the current TC. Beyond demonstrating this, we also posit that the friendly tone may serve another clear agenda: creating a platform for unpacking teachers' experiences. We want to underscore that this community met for a semester before the actual data production started. It can be assumed that the discussions then, in which individual mastering of practical skills surfaced, contributed to the respectful atmosphere we outline.

Wermke (2013) problematises the strong government control of Swedish teachers' work, and argues that strong control emphasises teachers' own experiences as a source for CPD. The same reasoning can explain why our teachers value peer observations. Wermke goes on to say that strong government control reduces the need to act as a unified collegium in terms of didactic

decision-making. In the present case, all participants contribute to creating a community in which they can act as a master as well as a novice, and act independently in didactic decision-making.

Our study demonstrates that the teachers take responsibility for their individual learning and development, but not for that of others. A possible explanation is that the individual driving force and motivation is crucial for teachers' professional development (Andersson et al., 2018; OECD, 2019; Vangrieken et al., 2017). Peer observations provide concrete role models, which can enhance motivation for the change of teaching practices, since there is an option in terms of what to appropriate, compared to being told by someone else what you need to change. In a similar vein, comparing with the results of Aamodt et al. (2016), which state that VET teachers collaborate less with other teachers and have higher self-confidence, a community that lets the teachers maintain their mastery status may very well be conducive to learning and development. Even if the community members occasionally adopt a novice stance, their self-confidence is never threatened.

A second possible explanation relates to the prevailing perception that the teaching profession equals continuous improvement. Teachers' individual *professional accountability*, for example the expectation to continuously improve, can be traced back to the New Public Management discourse (cf. Annerberg, 2016; Englund & Solbrekke, 2015). However, the expectation of continuous improvement do not go without challenges. It can create stress. In our study, while responding to accountability demands, the teachers critically distance themselves. They say that change requires time, and act accordingly, which could be considered a stand more adapted to *professional responsibility*, at some distance to the stressful perpetual wheel of development. The present study provides substantial evidence that the teachers demonstrate great responsibility in relation to their own development through their discourse about being on an ongoing journey, their voluntary participation in the project, and their expressed curiosity about the teaching practices and didactic ideas of others. This drive for development may override the need for predefined discussion questions or an agenda formulated by someone other than the teachers themselves.

Our results also tentatively suggest that the heterogeneity of the group in terms of domain has been beneficial. Previous research states there is a risk associated with too much heterogeneity, as it may conflict with the vulnerability needed to engage in development (Vangrieken et al., 2017). Our results indicate that, with practical knowing as a fruitful lowest common determinator, the teachers' level of vulnerability is sensitive to the tone of esteem and the enabling of master positions within the TC.

Beyond esteem, autonomy, and personal motivation, there are other aspects of the current model of professional development which we want to emphasise.

This study does not aim to evaluate methods used in CPD, but we still want to comment on the use of peer observations and podcasts as methods to capture teachers' classroom experiences. The approach is based on theoretical reasoning by Alvunger and Adolphsson (2016), where we have replaced written texts with podcasts. Our study illustrates that these methods are effective in stimulating reflection and development. The current community provides a learning and development-oriented culture in line with Leonardsen (2021).

Although the literature read during the initial phase of the project was carefully selected and had specific content, the start of the second phase (when data production started) allowed teachers considerable freedom to discuss topics relevant to their observations. This relative autonomy distinguishes this study from most others presented in previous research. A concluding remark concerns the design of teachers' professional development projects. We suggest considering alternatives to overly structured, uniform CPD packages with pre-set goals, methods, and questions to discuss.

Endnote

[1] Sülau refers to:

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