

Reflective Practice



International and Multidisciplinary Perspectives

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/crep20

Teachers' reflections on proposals for change in situated teamwork

Julie Lysberg & Wenche Rønning

To cite this article: Julie Lysberg & Wenche Rønning (2021) Teachers' reflections on proposals for change in situated teamwork, Reflective Practice, 22:4, 459-473, DOI: 10.1080/14623943.2021.1915267

To link to this article: https://doi.org/10.1080/14623943.2021.1915267

9	© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.
	Published online: 18 Apr 2021.
	Submit your article to this journal $oldsymbol{oldsymbol{\mathcal{G}}}$
ılıl	Article views: 737
Q ^L	View related articles 🗗
CrossMark	View Crossmark data 🗗







Teachers' reflections on proposals for change in situated teamwork

Julie Lysberg n and Wenche Rønning

Faculty of Education and Arts, Nord University, Bodø, Norway

ABSTRACT

The purpose of this paper is to investigate what characterizes individual teachers' reflections on proposals for change in situated teamwork sessions and discuss the potential for professional development that lies in teachers' reflections. The teamwork sessions take place in the context of school-based professional development. Stimulated recall interviews (SRI) with teachers commenting on video recordings from their participation in teamwork form the empirical basis for the research. The sample consists of 17 teachers representing four teacher teams from different schools. We identified three primary types of reflection on proposals of change – comment and describe, extend and exemplify, and critical exploration. In the last type of reflection, when teachers critically explore, reflect and problematize existing practices whilst watching critical incidents that contain proposals for change, we identified tensions arising. The tensions emerged between teachers' established practices grounded in national regulations (ex. national tests, exams, documentation) and their basic assumptions, values, and beliefs.

ARTICI F HISTORY

Received 26 November 2020 Accepted 6 April 2021

KEYWORDS

Teacher reflection: teamwork: video-stimulated recall interviews: schoolbased professional development

Introduction

Educational policymakers, the general public and educational researchers agree that teachers' professional development is amongst the most encouraging strategies for improving public education (Darling-Hammond, 2010; European Commission, 2018; Hattie, 2009; OECD, 2018). The current paper focuses on how teachers' reflections, and, subsequently their professional development, can be stimulated through using authentic video-recorded situations as a starting point. We define professional development as a process professionals engage in within a formal or informal framework. The process is rooted in critical self-analysis of professional practice, and changes may occur when beliefs and assumptions about the profession change (Avalos, 2011; Smith, 2010). Research and policy documents point to teacher collaboration as crucial for teachers' professional development (Darling-Hammond et al., 2017; Norwegian Ministry of Education and Research, 2017; Timperley et al., 2007), and researchers argue that structured teacher collaboration has considerable potential to support teachers' professional development (Hermansen, 2018; Postholm, 2019). However, what potential for learning and professional development that actually exists in teacher collaboration, is debated

(Datnow & Hubbard, 2016; Hargreaves & O'Connor, 2017), and such collaboration, in itself, does not necessarily lead to learning and professional development (Horn & Little, 2010; Kelchtermans, 2006; Kvam, 2018). Previous research into teacher collaboration has mainly focused on the *organisation* of professional development and has to a much lesser degree zoomed in on other aspects of the collaboration (Mausethagen et al., 2018). Also, relatively few studies have examined how teachers reflect on teamwork and understand the processes involved in teacher collaboration (Dahl et al., 2016; Little, 2012; Webster-Wright, 2009).

In a case study of 5th grade teachers' reflections in the U.S., Steeg (2016) found that video-based reflection offered significant opportunities for teachers to reflect on their literacy instruction practices, and revise their practices. The study revealed rich potential and possibilities embedded in a video-based approach when structured around the questions, issues, and ideas that emerge from teachers' classrooms. In another case study of three teaching teams in Swedish schools, Ohlsson (2013) found that collective reflections function as links between the dynamic and discursive patterns within the team, and concrete actions in teachers' everyday practices. However, he found potential gaps between the team's agreed tasks and how individual teachers interpret and actually carry out the tasks. The current study aims at investigating what characterizes teachers' reflections on proposals for change that emerge during teamwork sessions. This is done through stimulated recall interviews (SRI), focusing on selected critical incidents from teamwork sessions. Through this we seek to contribute to understanding teachers' reflections in the context of school-based professional development (SBPD), leading to the following research questions:

- (1) When challenged through stimulated recall interviews, how do teachers reflect on proposals for change in teamwork sessions?
- (2) What potential for professional development lies in teachers' SRI-reflections on proposals for change?

Research literature uses several terms for teacher collaboration, such as team learning, to describe learning within and across schools (Jackson & Temperley, 2007), and knotworking, as a concept to capture a more elusive and improvised phenomenon in workplace learning (Engeström, 2006). Internationally, teacher collaboration through professional learning communities (PLC) has become one of the hallmarks of successful school development. PLC refers to a group of professionals who continuously ask questions about their practice in critical, exploratory ways (Stoll et al., 2006). Different concepts conceive of teacher collaboration through varied ontological and epistemological lenses. We use the more colloquial term teamwork to refer to teacher collaboration. Vogt (2002) defines teamwork as a group of people interacting and co-operating in work-related action. It involves hands-on working together, as well as processes of organisational planning, decision-making and development (Vogt, 2002).

Theoretical background – teachers' reflections

What is reflection, and how can teachers' reflections provide insight into SBPD contexts, and possibly lay the ground for change? These are important issues to address in the current context.

According to Dewey, reflection is a way of thinking, and he distinguishes reflective thought from other ways of thinking by linking it to belief, claiming that it consists of consideration of beliefs or knowledge based on the grounds that support them, and the conclusions they may lead to (Dewey, 1991, p. 6). Schön (1987, p. 31) extends Dewey's definition of reflection and focusses on reflective processes and defines reflective practice as a: ' ... dialogue of thinking and doing through which I become more skilful.' By linking reflection to development of quality, i.e. becoming more skilful, he pinpoints the potential that lies in reflection. Schön developed the concepts of reflection-in-action and reflection-on-action, where reflection-inaction represents the ongoing process of evaluation of and within the current practice. Reflection-on-action represents what happens after or outside the practice, individually or together with colleagues. Here, the current practice can be reflected on with the aim of considering whether it should be changed, whether the practitioner should make decisions about future work to qualify in new directions. Schön claimed to study how professionals reflect whilst executing their profession and has later been criticized by Eraut (1995) who argues that what Schön actually studied was only reflection-on-action, or, in the case reflection resulted in decisions about future activities, reflection-for-action.

Thompson and Thompson (2018, p. 11) makes use of Schön's concepts of reflection-inaction, and reflection-on-action through focusing on how, if interconnected, these forms of reflections can influence future practice: ' ... our reflection-on-action should refer back to what was going through our mind during the actual practical encounter (reflection-inaction 1), while the next time we are engaged in such practice, our reflection (reflection-in -action 2) should draw on our previous reflection-on-action.' In this way, they argue for reflection as a way to elicit change. Eraut (2004, p. 47) states that there are three meanings for reflection, including – (i) 'the action of turning (back) to or fixing our thoughts on some subject, (ii) recollection or remembrance of a thing and (iii) the mode, operation or faculty by which the mind has knowledge of itself and its operations ...'. Our use of the concept is linked to (i) and (ii) above, i.e. deliberately looking back at events to elicit reflection on collaborative sequences, and, in our case, on critical incidents that contained proposal for change. This understanding of reflection is in line with Dewey's concept of reflection where emphasis is put on learning from experience, in our case focusing on past events to learn from past experiences so as, potentially, to be better prepared for future actions and decisions (Eraut, 2004, p. 48). However, reflection, independent of how one understands reflection in, on, or for action, raises issues of unrest and trouble, something which Dewey (Dewey, 1991, p. 13) acknowledged and stated that: '... it involves overcoming the inertia that inclines one to accept suggestions at their face value; it involves willingness to endure a condition of mental unrest and disturbance.' To what extent, then, can reflection lead to learning, and, potentially, to change? In their meta-analysis of teachers' professional development Tomlinson et al. (2010, p. 751) list different perspectives on teachers' learning, and focus amongst others on the often intuitive and implicit nature of teacher know-how. Often, this knowledge does not need to be articulated because it is shared within the collective to a greater or lesser extent (Collins, 2010), which means that the teacher group(s), as a social collective, may share knowledge that is not brought to the table during meetings. Another perspective, however, focuses on the importance of teachers' explicit knowledge and conscious reflection about their own work, to make what is otherwise implicit and intuitive, explicit, since explicit awareness and knowledge may lay the ground for systematic efforts towards change and development (Tomlinson

et al., 2010; Webster-Wright, 2009). Husu et al. (2008) also highlight the importance of teacher reflection, but claim that until we learn more about methods to investigate and support systematic reflection and how they might be applied in different contexts, we remain in the dark with regard to the potential of teacher reflection to stimulate change and development. Looking back at previous events may offer opportunities for different levels of reflection, and thus different opportunities for learning, often referred to as singleloop and double-loop learning, both of which seek to challenge the standard meaning underlying our habitual responses (Argyris & Schon, 1974). In single-loop learning, when something is not going according to plan, most people look for another strategy that may work, but tend to look within their existing portfolio of approaches. In double-loop learning, however, these approaches, and associated values, are questioned and tensions arise, leading to the guiding values being reflected and changed as part of the learning process. (Argyris & Schön, 1978). When double-loop inquiry occurs, social discourse may be improved in at least two ways. Firstly, discourse can be improved momentarily so that the people involved can engage with each other in a productive way (Putnam, 1999). Secondly, the deeper causal factors that lead people to interact as they do can be influenced. In order to bring about fundamental and lasting improvement, practitioners need to reflect upon tensions and challenge the assumptions embedded in their existing behaviour and reasoning patterns (Raelin, 2009, p. 9).

Method

Context of the study and participating teachers

The overall objective of the larger research project that this article stems from is to examine teachers' teamwork in the context of School-Based Professional Development (SBPD). The project comprises data from four teacher teams in 9th and 10th grade from four different lower secondary schools in Northern Norway. Participating teacher teams were identified using an internal sampling approach (Silverman, 2014), resulting in a selection of 17 teachers. Together we mapped what they defined as meetings dedicated to professional development, excluding meetings focusing on logistical planning. The informants were deliberately chosen from schools with experience from SBPD, and were all qualified teachers. The empirical data was collected using video observation, stimulated recall interviews (SRI), and semi-structured interviews. The current article makes use of data from the SRIs.

Research approach

Stimulated recall interview (SRI) as a research method makes use of selected video sequences to support reflection and dialogue between informant and researcher. SRI is an advanced interview technique that encourages reflection and dialogue rather than recalling thoughts from the actual situation. The video is not the primary subject of analysis; focus is on the reflections the informants provide (Nind, 2021). This method brings informants closer to the actual situations in the video and gives them opportunities to listen to and look at themselves from the 'outside'. They recall memories from their 'inside' perspective and offer explicit explanations to the researcher (Dempsey, 2010). Using SRI helps infer interpretations, goals, and concerns that participants may have oriented towards during the teamwork session.

Teachers' reflections may clarify or explain aspects of teachers' collaboration that might otherwise remain unavailable to the researcher (Pomerantz, 2005). The interviews were recorded on audiotape and transcribed.

Conducting the interviews – critical incidents as a starting point for reflection

Critical incidents may function as a starting point for exploring teachers' teamwork indepth (Halquist & Musanti, 2010). Critical incidents are defined through the way we look at a situation and is an interpretation of an incident's meaning. Considering something as a critical incident is a value assessment we make, and the basis for this judgment is the significance we attach to the incident (Tripp, 2012). The first criterion for selection was that the teacher interviewed should be involved in the sequence. The second criterion was that the sequence contained proposals for change regarding problems of practice that needed to be solved. Each of the selected sequences lasted approximately two minutes. The proposals spurred teachers' exploration and negotiations of what to do next, and constituted as such critical incidents, in line with Tripp's definition (2012). Teachers from the same team were exposed to the same sequences, and the SRIs were conducted within two days of the initial meeting (Pitkänen, 2015).

Table 1 contains an overview and description of the critical incidents selected for the SRIs, for each of the teams A to D. Each teacher was exposed to two critical incidents, exemplified through team A, where one incident dealt with the school's local reading plan, while the other focused on students' results on national reading tests.

Each interview started with the researcher describing briefly the content of the first of the two critical incidents, before showing the video. Then the researcher asked the teacher to describe what happened and what he/she thought about it. In cases where the teachers left out a description of the sequence and instead explored issues relevant to the sequence, the researcher prompted them to elicit their thoughts (Tomlinson, 1989).

Ethical considerations

From a research perspective, we sought to treat teachers as experts of their own thoughts, reflections, and learning (Meier & Vogt, 2015). As far back as 1981, Calderhead (1981) assessed factors that may affect the significance or status of SRI-data; one of them is that viewing oneself on videotape can be stressful, something several of the teachers commented on in the interviews. The Norwegian Center for Research Data (NSD) approved the research project. All informants were informed that participation in this study was voluntary and that they had the opportunity to withdraw at any time. Teachers are given letters and numbers to enable de-identification.

Data analysis

Analysis of teachers' reflections about their teamwork

Initially, audio recordings were transcribed into text, and an open approach to the data was applied. Efforts were taken to avoid preconceived notions, to let the research question lead the way as far as possible: When challenged through stimulated recall interviews, how do

Table 1. Critical incidents in teachers' teamwork.

	TEAM A	TEAM B	TEAM C	TEAM D
Content/issue	The schools' local reading plan Students results national reading test Reading and learning strategies	Basic skills: literacy, numeracy, oral, ICT Reading and learning strategies	Formative assessment Grades or achievement of objectives	Reading and learning strategies Source criticism
Realizations about existing problems of practice	The use of the reading plan is too unsystematic. The results on NP reading showed that the students score poorly on close reading.	š	We give too many grades.	We have to train our students to work with reading strategies to acquire the subject matter when they take on a new text. Our students make statements in their texts that
(felt difficulty) Tensions emerging	How can we set up tasks which demand understanding? Close reading and in-depth learning. (reading for understanding).	learning strategies. Strong focus on measuring academic achievement	Formative assessment vs. documentation of assessment, grades, tests.	they cannot justify with credible sources. Preparing for exams vs. learning processes Documentation of assessment vs. support students learning
Proposals for change	More systematic use of the reading plan. Work differently with the subject matter and challenge the students to do more than skim reading. Be explicit about reading strategies in use.	Make students aware of their reading strategies. Teach our student to read to acquire the subject matter.	Fewer grades and more formative assessment and «goal achievement».	Carry out a teaching program on source criticism.

teachers reflect on proposals for change in situated teamwork? The inductive analysis is grounded in how the participants reflect, and not by deconstructing ready-made classes or categories (Derry et al., 2010; Heath & Hindmarsh, 2002; Rusk et al., 2015). We studied the transcripts to determine how teachers' reflections on proposals for change appeared in the data and what aspects they focussed on. The four meetings' focus and content varied, but typical for all meetings was that teachers engaged in discussions and negotiations related to decisions about what to do next to support students' learning (Lysberg & Rusk, under review).

Results

Types of reflection on proposals for change

When organizing specific codes into categories, we looked for distinctions consistent with the first research question. In particular, we were interested in the types of reflections that teachers offered related to the proposals for change, and we identified three primary types of reflections (see Table 2): 1) teachers comment and describe (CD), 2) teachers extend and exemplify (EE), and 3) teachers reflect critically to explore (CE) the proposals.

Comment and describe (CD)

The first type of reflection, CD, refers to the teachers' comments and descriptions of the sequences from the meeting including a close description stimulated by video and constitutes an almost mechanical reproduction. The individual SRIs contain several comments of this type. In the example from team A below, teacher A1 recounts the proposal on how to make the reading plan a useful tool in all subjects.

A1: It is discussed a little further there how this can be set up. The students can periodically work with a (reading) strategy in several subjects; a teacher suggests it. (...) this does not have to be a big project, but more a focus area for a limited period.

Table 2. Types of reflection in teachers' individual SRI.

Types of reflection

Comment and describe (CD)

- Describe literally
- Close description
- Automatic performance
- Little degree conscious thought

Extend and exemplify (EE)

- Confirm proposals relevance
- Need for the proposal
- Substantiates proposal: assessment motivation, learning

Critical exploration (CE)

- By asking questions
- Questioning proposals relevance
- Considering consequences: (e.g. less grades requires good guidance)
- Explore challenge number of grades -desire to learn
- Warns
- Reject
- Clarifies



Extend and exemplify (EE)

The second category, EE, refers to how teachers extend and exemplify their descriptions through broadening their comments about the sequence and drawing on examples from their own teaching experience. In this kind of reflection teachers typically extended the proposal through referring to students' motivation for learning. They re-evaluate their teaching views and modify and accommodate new perspectives in their pedagogical thinking and possible future actions. In the excerpt below the teacher supports a proposal to give the students fewer grades and substantiates through referring to why it is needed.

C1: And then at least I say that I think they should be told about goal achievement instead of getting a grade. (...) I have experienced many students who stress so much with the grades, and I am not sure that it is always involved in developing them so much further. Just getting the actual number grade is pure external motivation.

In this reflective statement teacher C1 explain with examples from a) teaching experience and b) pedagogical knowledge how assessment practice with frequent grading influences students' psychical health, motivation, and learning processes.

Critical exploration (CE)

In the third category, CE, we identified an enhanced analytic stance when teachers questioned and explored proposals for change, linking them to existing practice. In principle, the three categories are equivalent, which means that we do not sort them in terms of value. However, linked to the second research question, exploring which potential for professional development that lies in teachers' reflections on proposals for change, we identified such potential for professional development through double-loop learning (Argyris & Schon, 1974, 1978) in this category. When teachers questioned and explored proposals, we also uncovered tensions between the teachers' established practices and their values and beliefs that we wanted to investigate further. This explicit awareness and knowledge may contribute to systematic efforts towards change and development (Tomlinson et al., 2010; Webster-Wright, 2009). Based on these considerations, we zoom in on findings within the third category.

CE through reflective statements includes reported experiences that potentially may change what teachers do and how they feel about what they and their colleagues do. This included statements where teachers expressed readiness to test new methods, change their behaviour, or other commitment to action. Teachers typically reflected at a relatively general level and emphasized personal and joint future challenges, mentioning problematic aspects in their own and colleagues' actions that they needed to focus on in order to develop and improve. Some also described having started to test out and renew their teaching practices, referring to challenges caused by the ongoing curriculum renewal in Norway. In the following, we present examples of CE statements from two different content areas (see Table 1); reading and learning strategies and assessment practices. We present tensions identified in the empirical material when teachers problematize their practice.

In the critical incident that forms the basis for the reflection about reading and learning strategies below, team A is analysing data from National Tests in reading (NP), where results revealed that their students had challenges regarding interpreting, reflecting and

making use of close-reading strategies. One teacher proposes to design the tasks so that they demand close-reading. Another teacher problematizes skim-reading and pointreading and claims that the students don't learn that way. In the excerpts below, we can see that teacher A1 explores reading strategies for learning.

A1: You can understand that sodium and chlorine become sodium chloride, but if you get another example of other alkali metals and halogens, you have no idea what is happening. Then you have not understood.

In this comment teacher A1 gives an example of the problem of transfer of knowledge from one context to another. When challenged by the researcher, the teacher goes on to explore basic assumptions regarding learning, exemplified through critically exploring experiences from previous assessment practices, compared to expected levels of reading skills represented in national tests.

R: Yes, do you agree with what she said when she mentioned that students do not learn anything from point-reading. Do you agree with that, or do you think it is too unnuanced?

A1: It depends How, then, do we measure learning? I get into how we set up tests, and there has been some comparison with the national tests. I remember when the national tests came; why did they do so badly? If we compare ourselves with the rest of the results on which we assessed the students? We were wondering about that. We have gradually found that it requires more, and it takes quite good reading skills to manage the assignments in the national tests, which is the case for all three (national tests); literacy, numeracy, and English. So, there is guite a lot of text. So, unnuanced? Yes, they can certainly learn something from working like this, skimming and point-reading, but you only learn the basics. To get to a high level, if learning is to understand, be able to use it, and apply it and explain it, based on other examples than the ones in the book, no, then they may not have learned it.

Here, teacher A1 describes tensions that emerged when the teachers compared their own assessment practice with national test demands, and implicitly suggests that there is a need for teaching the students how to master close reading. This points to a potential for change, but whether it actually leads to efforts regarding close reading remain unanswered in this specific context and is beyond the scope of this study. The teacher makes use of knowledge about a) the subject (science), b) learning theories c) reading strategies and d) experience based knowledge about the national tests, when reflecting on the tension created between established practices and national tests.

Other teachers from team A also reflect on results from the national reading test. One teacher suggests that they depart from the textbook's traditional tasks and instead answer questions that require more of the students. Teacher A3 points out that teachers have started testing new methods, and that several teachers have changed the way they approach students' reading of texts, and they have realized that they have to focus on getting the students to understand the text. The teachers question existing teaching methods and explore how to work with subject matter to assist students' understanding, exemplifying how they apply knowledge about reading and learning to explore what to do next.

In a sequence from team D they are planning a midterm exam, and when the teachers watch the video, worries about their existing assessment practices are brought to the surface. Through this process of analysis tensions between teachers' established practices and their values and beliefs emerge (see Table 1).

Teacher D2 reflects around trying to reduce the number of assessment points, and argues that the students don't need the grades, but they need guidance on how to improve their work.

D2: (...) young people get tired. Because there is pressure all the time on them, and we do not have to wear them out more than they already are. So that is why we try to avoid having too many assessment points. (...) But they do not need to get a grade; they get guidance on how to get better, and that's really what they need. They do not need that number (grade) all the time. And we can, based on such small short sessions, say something about where they are going. There does not always have to be formal assessments to know that.

Here, teacher D2 explores assumptions on how assessment practices can support learning and how numerous assessment points cause stress for the students and do not promote their education. Making use of knowledge about a) the students and their needs b) assessment and learning c) experience based knowledge about how assessment practices affect the students, teacher D2 reflects critically on basic understandings of assessment practices to support students' learning.

The teachers described that they felt squeezed between exams and national regulations regarding documentation of assessment, and their beliefs and values as teachers. The teachers' conceptions of what they have to comply with regarding the regulations affect their students in various ways:

D1: I think that the most important thing (assessment) that happens is in the lessons. That you see there and then what they achieve and what they do not achieve, and that you then go directly in and guide while they are in the (learning) process, rather than waiting until you have finished working on a topic to give feedback. The problem is that there is no documentation of that, and you must have some documentation of what the students have learnt and what kind of guidance they have received. So that's the challenging part. I think many important things happen in the classroom and that students get useful advice, but you have no documentation, because there are requirements for that. (...)

I think it's twofold. The students shall learn, and then we also have to prepare them for the exam.

Teacher D1s reflections about assessment practices contain tensions. Through formative assessment the teachers aim to support the students during the learning processes, contributing to their learning, but at the same time there is an external expectation of formal documentation of students' learning. Teacher D1 also refers to another tension: As teachers, they need to balance two potentially conflicting goals; to support students' learning processes and prepare them for the upcoming exam.

Team B discusses students mastering basic skills as tools for learning across subjects. Teacher B4 below states that the intense focus they have had on basic skills has its drawbacks:

B4: But I also think it has a side that we may forget, and it becomes very focused on basic skills. And the human that is, we must remember that these are people who sit on all these chairs, and it is not always (...) that all the qualities are valued equally. And for those who do well at school, it may not be that important, but maybe for those who struggle the most, they need to hear that life is more than just these grades, I think. (...) there should have been space in today's school to see the type of person, type of personality and give them feedback on it. Because that is what society works for. As it has become, I feel that the academic pressure has caused constriction in recent years (...) I have lost a little of myself as a teacher in this.

Teacher B4 worries about the students by bringing in the human perspective in the critical reflections. National regulations focussing on basic skills, measured through national tests, displace other qualities students possess. As shown in the excerpts above, tensions arise when the teachers identify a mismatch between their existing pedagogical practice grounded in national policy and their basic assumptions, beliefs and values.

Discussion

Research states a need for explicit awareness and knowledge in systematic efforts towards professional development (Collins, 2010; Tomlinson et al., 2010; Webster-Wright, 2009). The current study used stimulated recall interviews as research approach to obtain teachers' reflections on authentic professional development situations. When teachers are challenged through stimulated recall interviews on proposals for change in teamwork sessions, we identified three primary types of reflection. In the first type of reflection, teachers comment and describe, secondly teachers extend and exemplify, and finally, teachers reflect critically to explore the proposals. The different types of reflection provide insight into how teachers think about authentic situations in SBPD and how this potentially may contribute to them changing their existing practices.

In our analysis of teachers reflections, we show how tensions emerge when teachers study authentic situations that they have taken part in. While watching the video, situations that have consciously, or unconsciously, 'bothered' them, are brought to the surface through the methodological approach. The video brings them back to the situations they participated in and stimulates them to recall thoughts about, and reflections on the situation (Dewey, 1991; Webster-Wright, 2009). Webster-Wright (2009) characterizes this as authentic professional learning. When teachers explore existing practices, tensions emerge between established practices grounded in national regulations (ex., national tests, exams, documentation) and their basic assumptions, values, and beliefs about teaching and learning.

Especially in the last type of reflection, when teachers critically explore, reflect and problematize existing practices whilst watching critical incidents that contain proposals for change, we identified tensions arising. Through video sequences, access is given to authentic primary experiences as stimuli for reflection; teachers are allowed to challenge their understandings and perceptions. In other words, video-stimulated recall provides access to authentic experiences that they can revisit. In the individual SRIs, the teachers raise essential issues and show a willingness to endure a condition of mental unrest and disturbance (Dewey, 1991). We also uncover an individual capacity to question and problematize existing teaching practices and how they affect their students critically. Potentially this may lead to what Argyris and Schön (1978) called double-loop learning, characterized by reflection on fundamental assumptions that cause the problem in practice. The teachers worry about their students when they experience adverse effects caused by national regulations and challenge factors framing their actions and reflect upon and alter the assumptions embedded in their behavior and reasoning patterns, something which reveals a potential for change (Raelin, 2009; Tomlinson et al., 2010; Webster-Wright, 2009). These reflections can potentially contribute to professional development and changes in teachers' instructional practices and teachers' support of students' learning processes.

When they reflect critically, tensions are revealed, and teachers challenge national policies that cause unrest in them (Dewey, 1991). They register unintended consequences such as stress and mental ill-health and express a worry for their students. The potential for development and change resides in these reflections.

To conclude, stimulated recall interview by way of video constitutes a powerful tool for stimulating reflection on conditions that otherwise often remain unrevealed. It may, therefore, be a useful tool for professional development. However, it is crucial to recognize that the method is resource-intensive and requires competence and diligence. The video-stimulated recall-interview method can be an alternative or supplement to similar methods such as lesson study (Fernandez, 2002) or action research (Stringer, 2008), which also uses video to recreate authentic situations in support of professional development and instructional change.

For schools, it becomes crucial to organize their SBPD so as to allow for teachers' critical exploration of existing practice, in line with Webster-Wright (2009) concept of authentic professional learning. We need to value and strive for openness to critical exploration as a crucial element in professional learning and development. The findings provide a basis for further research, and there is a need for approaches that allow for studying teachers over a longer period of time. It is also important to mention that further research using video-SRI enables exploration of the dynamics between teaching and team meetings. Such research could focus on the relationship between teachers' work 'frontstage', the actual teaching situations, and 'backstage', the planning and other activities before and after teaching (Tronsmo, 2019). Videotaping teaching (frontstage) to use in team meetings (backstage) could form a powerful starting point for professional development, and these processes can be researched through applying video-SRI on the teamwork as well as the teaching to investigate whether the potential for change results in actual changes in teachers' practices.

Note

1. Point-reading: used when you are looking for information in a text or a table. You do not have to read everything.

Disclosure statement

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

Funding

This work was supported by The Norwegian Research Council [project number 271722].

Notes on contributors

Julie Lysberg is a PhD student at Nord University, and school adviser and supervisor at the office for Primary School and Lower Secondary School in Bodø, Norway. Her work focuses on teachers' and school leaders' professional learning through school-based professional development.

Wenche Rønning is Associate Professor in pedagogy at Faculty of Education and Arts, Nord University, Norway. Rønning's research focusses on teachers' thinking and pupils' learning processes, in particular active learning approaches and place-based learning, but she has published within several research areas. Since 2007, much of her research has focussed on using video recordings to study practices in different educational settings.

ORCID

Julie Lysberg (b) http://orcid.org/0000-0002-6387-697X

References

Argyris, C., & Schon, D. A. (1974). Theory in practice: Increasing professional effectiveness. Jossey-bass. Argyris, C., & Schön, D. A. (1978). Organizational learning: A theory of action perspective. Addison-

Avalos, B. (2011). Teacher professional development in teaching and teacher education over ten years. Teaching and Teacher Education, 27(1), 10-20. https://doi.org/10.1016/j.tate.2010.08.007

Calderhead, J. (1981). Stimulated recall: A method for research on teaching. British Journal of Educational Psychology, 51(2), 211–217. https://doi.org/10.1111/j.2044-8279.1981.tb02474.x

Collins, H. (2010). Tacit and explicit knowledge. University of Chicago Press.

Dahl, T., Askling, B., Hegge, K., Kulbrandstad, L., Lauvdal, T., Qvotrup, L., Salvanes, K., Skrøvseth, S., Thue, F., & Mausethagen, S. (2016). Ekspertgruppa om lærerrollen Om lærerrollen: et kunnskapsgrunnlag [The role of the teacher: A knowledge base]. Fagbokforlaget.

Darling-Hammond, L. (2010). Evaluating teacher effectiveness: How teacher performance assessments can measure and improve teaching. Washington, DC: Center for American Progress.

Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). Effective teacher professional development. Palo Alto, CA: Learning Policy Institute.

Datnow, A., & Hubbard, L. (2016). Teacher capacity for and beliefs about data-driven decision making: A literature review of international research. Journal of Educational Change, 17(1), 7-28. https://doi.org/10.1007/s10833-015-9264-2

Dempsey, N. P. (2010). Stimulated recall interviews in ethnography. Qualitative Sociology, 33(3), 349–367. https://doi.org/10.1007/s11133-010-9157-x

Derry, S. J., Pea, R. D., Barron, B., Engle, R. A., Erickson, F., Goldman, R., Hall, R., Koschmann, T., Lemke, J. L., & Sherin, M. G. (2010). Conducting video research in the learning sciences: Guidance on selection, analysis, technology, and ethics. The Journal of the Learning Sciences, 19(1), 3-53. https://doi.org/10.1080/10508400903452884

Dewey, J. (1991). How we think. Prometheus Books.

Engeström, Y. (2006). From well-bounded ethnographies to intervening in mycorrhizae activities. Organization Studies, 27(12), 1783-1793. https://doi.org/10.1177/0170840606071898

Eraut, M. (1995). Schon Shock: A case for refraining reflection-in-action? *Teachers and Teaching*, 1(1), 9-22. https://doi.org/10.1080/1354060950010102

Eraut, M. (2004). The practice of reflection. Learning in Health and Social Care, 3(2), 47–52. https://doi. org/10.1111/j.1473-6861.2004.00066.x

European Commission. (2018). European ideas for better learning: The governance of school education systems. Brussels: Author. https://www.schooleducationgateway.eu/downloads/Governance/ 2018-wgs1-governance-school_en.pdf



- Fernandez, C. (2002). Learning from Japanese approaches to professional development: The case of lesson study. Journal of Teacher Education, 53(5), 393-405. https://doi.org/10.1177/ 002248702237394
- Halquist, D., & Musanti, S. I. (2010). Critical incidents and reflection: Turning points that challenge the researcher and create opportunities for knowing. International Journal of Qualitative Studies in Education, 23(4), 449-461. https://doi.org/10.1080/09518398.2010.492811
- Hargreaves, A., & O'Connor, M. T. (2017). Cultures of professional collaboration: Their origins and opponents. Journal of Professional Capital and Community, 2(2), 74-85. https://doi.org/10.1108/ JPCC-02-2017-0004
- Hattie, J. (2009). Visible learning: A synthesis of over 800 meta-analyses relating to achievement. Routledge.
- Heath, C., & Hindmarsh, J. (2002). Analysing interaction: Video, ethnography and situated conduct. In T. May (Ed.), Ouglitative research in action (pp. 97–115), London: SAGE Publications, https:// ebookcentral.proquest.com/lib/nord/reader.action?docID=254691&ppg=97
- Hermansen, H. (2018). Kunnskapsarbeid i lærerprofesjonen [Knowledge work in the teacher profession]. Universitetsforlaget.
- Horn, I. S., & Little, J. W. (2010). Attending to problems of practice: Routines and resources for professional learning in teachers' workplace interactions. American Educational Research Journal, 47(1), 181–217. https://doi.org/10.3102/0002831209345158
- Husu, J., Toom, A., & Patrikainen, S. (2008). Guided reflection as a means to demonstrate and develop student teachers' reflective competencies. Reflective Practice, 9(1), 37–51. https://doi.org/10.1080/ 14623940701816642
- Jackson, D., & Temperley, J. (2007). From professional learning community to networked learning community. In L. Stoll, & K. S. Louis (Eds.), Professional learning communities: Divergence, depth and dilemmas (pp. 45-62). New York: Open University Press. https://ebookcentral.proquest.com/lib/ nord/reader.action?docID=316325&ppg=68
- Kelchtermans, G. (2006). Teacher collaboration and collegiality as workplace conditions. A review. Zeitschrift für Pädagogik, 52(2), 220–237. https://www.pedocs.de/volltexte/2011/4454/pdf/ ZfPaed_2006_2_Kelchtermans_Teacher_collaboration_collegiality_D_A.pdf
- Kvam, E. K. (2018). Untapped learning potential? A study of teachers' conversations with colleagues in primary schools in Norway. Cambridge Journal of Education, 48(6), 697–714. https://doi.org/10. 1080/0305764X.2017.1418833
- Little, J. W. (2012). Understanding data use practice among teachers: The contribution of micro-process studies. American Journal of Education, 118(2), 143-166. https://doi.org/10.1086/ 663271
- Lysberg, J., & Rusk, F. (under review). Teachers' knowledge work in decision-making processes in situated teamwork. Teacher Development.
- Mausethagen, S., Prøitz, T., & Skedsmo, G. (2018). Teachers' use of knowledge sources in 'result meetings': Thin data and thick data use. Teachers and Teaching, 24(1), 37-49. https://doi.org/10. 1080/13540602.2017.1379986
- Meier, A. M., & Vogt, F. (2015). The potential of stimulated recall for investigating self-regulation processes in inquiry learning with primary school students. Perspectives in Science, 2(5), 45-53. https://doi.org/10.1016/j.pisc.2015.08.001
- Nind, M. (2021, April 15). Video stimulated recall, reflection and dialogue: Introduction to the method [Video]. National Centre for Research Methods: University of Southhampton. https://www.ncrm. ac.uk/resources/online/video_stimulated_research_methods/
- Norwegian Ministry of Education and Research. (2017). Meld. St. 21 (2016-2017) Lærelyst Tidlig innsats og kvalitet i skolen [Desire to learn, early intervention and quality in school]. Ministry of Education and Research.
- OECD. (2018). The future of education and skills: Education 2030 (OECD education 2030). Paris: OECD. Publishing
- Ohlsson, J. (2013). Team learning: Collective reflection processes in teacher teams. Journal of Workplace Learning, 25(5), 296-309. https://doi.org/10.1108/JWL-Feb-2012-0011



- Pitkänen, J. (2015). Studying thoughts: Stimulated recall as a game research method. In P. Lankoski & S. Björk (Eds.), Game research methods (pp. 117–132). Pittsburg, PA: ETC Press. https://doi.org/ https://dl.acm.org/doi/10.5555/2812774.2812785
- Pomerantz, A. (2005). Using participants' video stimulated comments to complement analyses of interactional practices. In H. t. Molder & J. Potter (Eds.), Conversation and cognition (pp. 93-113). New York: Cambridge University Press. https://doi.org/10.1017/CBO9780511489990.005
- Postholm, M. B. (2019). The teacher educator's role as enacted and experienced in school-based development. Teachers and Teaching, 25(3), 320-333. https://doi.org/10.1080/13540602.2019. 1587403
- Putnam, R. W. (1999). Transforming social practice: An action science perspective. Management Learning, 30(2), 177-187. https://doi.org/10.1177/1350507699302005
- Raelin, J. (2009). Seeking conceptual clarity in the action modalities. Action Learning: Research and *Practice*, 6(1), 17–24, https://doi.org/10.1080/14767330902731269
- Rusk, F., Pörn, M., Sahlström, F., & Slotte-Lüttge, A. (2015). Perspectives on using video recordings in conversation analytical studies on learning in interaction. International Journal of Research & Method in Education, 38(1), 39-55. https://doi.org/10.1080/1743727X.2014.903918
- Schön, D. A. (1987). Educating the reflective practitioner. Temple smith.
- Silverman, D. (2014). Interpreting qualitative data (5th ed.). SAGE.
- Smith, P. K. (2010). Professional development of teacher educators. In E. B. Penelope Peterson, & B. McGaw (Eds.), International encyclopedia of education (3rd ed., pp. 681-688). Amsterdam: Elsevier.
- Steeg, S. M. (2016). A case study of teacher reflection: Examining teacher participation in a video-based professional learning community. Journal of Language and Literacy Education, 12 (1), 122–141. https://files.eric.ed.gov/fulltext/EJ1101024.pdf
- Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature [journal article]. Journal of Educational Change, 7(4), 221-258. https:// doi.org/10.1007/s10833-006-0001-8
- Stringer, E. T. (2008). Action research in education. Pearson Prentice Hall.
- Thompson, S., & Thompson, N. (2018). The critically reflective practitioner. Macmillan International Higher Education.
- Timperley, H., Wilson, A., Barrar, H., & Fung, I. (2007). Teacher professional learning and development: Best evidence synthesis iteration (BES). Ministry of Education Wellington.
- Tomlinson, P. D. (1989). Having it both ways: Hierarchical focusing as research interview method. British Educational Research Journal, 15(2), 155–176. https://doi.org/10.1080/0141192890150205
- Tomlinson, P. D., Hobson, A. J., & Malderez, A. (2010). Mentoring in teacher education. In B. P. McGaw, P. L. Peterson, & E. Baker (Eds.), International encyclopedia of education (3rd ed., pp. 749–756). Amsterdam: Elsevier.
- Tripp, D. (2012). Critical incidents in teaching (classic edition): Developing professional judgement. Routledge.
- Tronsmo, E. (2019). Local curriculum development as knowledge work: A study of collaborative epistemic practices in the teaching profession (Publication Number 1564-3991). University of Oslo.
- Vogt, F. (2002). Teacher teamwork-supportive cultures and coercive policies? Annual Conference of the British Educational Research Association, University of Exeter, England. http://www.leeds.ac.uk/ educol/documents/00002159.htm
- Webster-Wright, A. (2009). Reframing professional development through understanding authentic professional learning. Review of Educational Research, 79(2), 702-739. https://doi.org/10.3102/ 0034654308330970