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More than mundane matters: an exploration of how schools organize professional learning teams

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ABSTRACT

Organizational tasks and processes are preconditions for organizing professional learning teams but are often neglected in research. In nine schools, we examined which organizational tasks and processes were set up for lesson study, a form of a professional learning team, and in what way. Schools set up three organizational tasks and processes: recruiting participants, giving credit for time-investment, and scheduling meetings. Recruitment of participants was sometimes difficult when potential participants worked autonomously within their departments or teams. Credit for time-investment was often constrained as schools gave credit in a way that made lesson study an additional workload. Scheduling meetings was very challenging. The scheduled meetings were considered satisfactory in only one school. Here, the school leader collaborated and communicated with her teachers to plan useful and uninterrupted meetings in the timetable. Our results show that organizational work is not mundane and simple but complex and vital for embedding professional development in schools.

Introduction

Educational research shows that professional development (PD) practices that are long term and school-based are more effective than one-off courses and workshops organized external to the school (Desimone, 2009). This has led to increasing interest in organizational structures in the form of professional learning communities (PLC), such as lesson study and data use (Coburn & Turner, 2011; Lewis & Perry, 2015). However, organizing these types of PD in schools remains a considerable challenge (Hubers et al., 2017; Giles & Hargreaves, 2006; Takahashi & McDougal, 2016). Research suggests that one of the reasons for this is that when initiatives are implemented, the relevance of the organizational context is hardly taken into account (Borko, 2004; Bryk, 2015; Hill et al., 2013) and organizational preconditions for organizing professional learning teams are often underestimated (van Driel et al., 2012). For example, Bannister (2018) argued that in the PLC literature there has been a tendency to assume that as long as teachers are motivated, teacher learning communities will arise and become sustainable, thereby largely underestimating the organizational work and restructuring that is needed to embed these new

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initiatives. Additionally, it has been argued that the educational literature more generally overlooks and underestimates the preconditions for implementing new initiatives, namely the fundamental restructuring of teachers' work needed to set up new practices and to ensure that new initiatives do not merely intensify teachers' workload (Bryk, 2015; Gitlin & Margonis, 1995). As such, while organizational tasks and processes are vital for organizing professional learning teams most studies do not engage in detail with these preconditions for setting up new PD initiatives.

Our work aims to contribute to the literature by exploring the organizational tasks and processes schools set up for organizing professional learning teams, by focusing on one such practice, namely lesson study. Lesson study is a form of teacher inquiry. Small groups of teachers go through PDSA (plan-do-study-act) cycles, each of which contains five general phases: goal setting, planning and conducting a research lesson, conducting a post-lesson discussion, and reflecting on the entire lesson study process (Fujii, 2014; Lewis & Perry, 2015). Lesson study originates in Japan and came to international attention after the publication of *The Teaching Gap* (Stigler & Hiebert, 1999). Lesson study is a rather new form of PD in Western countries. However, it contains strong similarities with other, longer-established forms of PD such as action research and action learning cycles (Norwich, 2018), indicating a long-term interest in professional learning teams.

Recently, schools have been analyzed through the lens of organizational routines to understand how to organize and sustain PD (Wolthuis et al., 2020; Huguet et al., 2017; Kallemeyn, 2014). Organizational routines are generally defined as 'a repetitive, recognizable pattern of interdependent actions, involving multiple actors' (Feldman & Pentland, 2003 p. 95). By examining the general script of PD and the performance of its activities, it is possible to investigate to what extent the PD practice becomes an embedded practice – an organizational routine – in the school (Hubers et al., 2017). However, for PD initiatives to become an organizational routine requires other organizational preconditions need to be arranged. Applied to our context, if lesson study becomes an organizational routine in a school, the practice becomes a repetitive, recognizable pattern of interdependent actions, involving multiple actors. The required organizational preconditions for this to be able to happen (Ermeling & Graff-Ermeling, 2016; Takahashi & McDougal, 2016) will be the focus of this study.

Schools in the present study have been part of a four-year long, cross-school Professional Learning Network (PLN) in the north of the Netherlands in which they worked with lesson study. The purpose of the PLN was to develop teacher learning and to introduce lesson study in the schools after the PLN ended. We apply the concept of coupling (Hautala et al., 2018; Weick, 1976) to explore how schools set up organizational tasks and processes to organize professional learning teams.

Theoretical background

First, we present an overview of the concept of coupling. Then, we discuss how coupling is relevant to understand how schools set up lesson study. While we consider coupling terms to be useful, we acknowledge that coupling terms have also been criticized for their ambiguity and varying definitions (Hautala et al., 2018) and different researchers use different interpretations of what loose or tight coupling features entail (Pang, 2003). As

such, we explicitly discuss what we consider coupling to involve for each specific area relevant for lesson study.

The concept of coupling

Coupling is assumed to offer a useful lens to examine how organizations operate (Dimmock & Tan, 2013; De Lima, 2007). Generally, coupling refers to how connected different areas in an organization are which is indicated by calling coupling between areas loose or tight. When there is loose coupling, activities can be performed in the absence of mutually agreed rules, coordination, inspection, feedback, and interdependence, characteristics of tight coupling (Weick, 1976). Instead, when there is loose coupling, people can and need to perform the work independently. Tight coupling is characterized by strong bureaucratic control features, strict rules, regulations, and monitoring (Hautala et al., 2018). In educational research, studies initially focused on coupling between the school-level administration and classroom-level instruction (Shen et al., 2017). In 1976, Weick famously portrayed schools generally as being loosely coupled in this regard. However, increasing bureaucracy and accountability pressures on education have led current research to suggest that administration and classroom instruction are becoming more tightly coupled (Buchanan, 2015; Spillane et al., 2011). Moreover, research has increasingly focused on the coupling between other areas than administration and teaching, expanding research to, for example, teacher-teacher, teacher-parent, teacher-pupil, and teacher-material coupling, revealing that coupling can vary within and between schools (Hautala et al., 2018).

Coupling of the Dutch educational system

Coupling can vary within and between schools, and, more broadly, between different educational systems (Hargreaves, 2006). The Dutch school system is characterized by high levels of autonomy on both school and teacher level (Hooge, 2017). Dutch school boards have the highest level of autonomy compared to any other country in the world, with the government making only 14% of the decisions and school boards 86% (OECD, 2012). This contrasts heavily with countries such as Germany and Norway where school boards make 23% and 18% of the decisions, respectively. This shows that in the Netherlands, compared to other countries, the coupling between government and school boards is loose.

In the Netherlands, there is no common curriculum and teachers have the freedom to decide how and what to teach as long as they teach toward very generally formulated core curriculum standards (Nieveen & Kuiper, 2012). This contrasts with countries with a national curriculum, which can have detailed learning goals specified to the lesson level. In the Dutch context, teacher-material is more loosely coupled. Dutch teachers have a task policy specifying their tasks, which can relate to four different domains: teaching tasks, general school tasks, specific school tasks, and PD. All teachers have teaching tasks and general school tasks, which include making lesson planners and having meetings with parents. Teachers can have specific school tasks, such as organizing sports days, surveilling exams, and being a class mentor. Teachers receive task hours for

specific school tasks and these tasks are determined at the start of the school year. Regarding PD, teachers have, when teaching full time, 83 hours and 600 euros annually to spend on PD.

As such, compared to other educational systems, the Dutch school system is generally loosely coupled. People working at various levels have substantial freedom to decide how they work and, compared to other countries, there is less accountability pressure and monitoring.

Coupling of organizational tasks and processes

A coupling lens can also be applied to examine how organizational tasks and processes are set up. This can be *tightly* coupled when tasks and processes are controlled by administrative orders and set up in a top-down manner (Shen et al., 2017) Organizational tasks and processes can be *loosely* coupled when school leadership delegates responsibilities to teachers (Pang, 2003), which is more in line with bottom-up organization (Hautala et al., 2018). Organizational tasks and processes have *balanced* coupling when school leadership collaborates and communicates with teachers, making the organization a combined effort of the people involved. (Hökkä & Vähäsantanen, 2014). As such, organizational tasks and processes can have tight, loose, or balanced coupling.

While there is very little research examining organizational tasks and processes for setting up lesson study, practical handbooks on lesson study do offer some recommendations. They suggest schools need to set up ways to arrange participation, schedule lesson study meetings, give participating teachers credit for their time-investment in lesson study, arrange space for teachers to meet, and create ways to consolidate and share findings, and assign roles and responsibilities (e.g. De Vries et al., 2016; Ermeling & Graff-Ermeling, 2016; Stepanek et al., 2007). Additionally, handbooks suggest schools should create special teams that are responsible for setting up lesson study (Ermeling & Graff-Ermeling, 2016; Takahashi & McDougal, 2016). Takahashi and McDougal (2016) suggest 'developing a master plan for the school research; scheduling and leading meetings to find strategies to address the school's research theme based on the ideas of the teachers; planning, editing, and publishing school research reports' (p. 522). Another suggestion, by Ermeling and Graff-Ermeling (2016), is to make an inventory of all the current work and assess which practices are necessary and which can be handled more efficiently so that time is freed-up for lesson study. This time needs to be undisturbed, protected, focused, and supported.

The coupling literature indicates that understanding organizational arrangements also requires examining how they are experienced by educators (Hautala et al., 2018; Hökkä & Vähäsantanen, 2014). To better understand how organizational tasks and processes are set up, we therefore also examine how they are experienced by the actors involved.

Coupling in different areas of the school organization

The coupling that exists within the school is important as this can have an influence on the extent to which new initiatives succeed. If a school is loosely coupled in key areas, efforts to improve may fail as they slip into the structural gaps between the loosely coupled elements (De Lima, 2007). At the same time, loose coupling also has benefits as it

is connected to job satisfaction and commitment to work. Below, we discuss two specific areas relevant for setting up collaborative PD such as lesson study through a coupling lens, namely departments or teams and PD in the school.

Departments or teams

One important area is coupling of the departments and teams as a lesson study group is made up of subject department colleagues or team colleagues depending on whether the lesson study group is based on subject or cross subject. Coupling in departments or teams can differ depending on the extent to which teachers collaborate or are isolated from one another (De Lima, 2007; Siskin, 1997; Witziers et al., 1999). Tightly coupled departments collaborate often, whereas loosely coupled departments work more individually. Research shows that if teachers are comfortable and used to collaborating this contributes to embedding and sustaining initiatives (Vangrieken et al., 2015).

Professional development

Lesson study is introduced by a professional learning team. Therefore, the coupling of PD in the schools will also influence how lesson study can be set up. Coupling of PD depends on the extent to which PD is individually or collectively organized. If PD is loosely coupled, PD is an individual responsibility of teachers and there is little coordination, inspection, or mutually agreed rules on how PD is done. When PD is tightly coupled, there are mutually agreed rules, coordination and feedback regarding PD. Whether schools have a developed policy on PD and hold their staff accountable for individual PD hours indicates the type of coupling of PD. In the Netherlands, school boards have the freedom to develop and execute PD policy in their school. In many schools, it is common that the school board decides on half of the PD hours by organizing developmental afternoons for their entire staff. Teachers can decide themselves how they spend their remaining individual PD hours. Assessment from inspection (Inspectorate of Education, 2013), reveals that half of the secondary school boards in the Netherlands do not systematically steer teachers' individual PD hours and do not have clear norms toward what is expected in terms of teacher PD. Not every school requires their teachers to account for their individual PD hours and a substantial part of the teachers do not use this time at all (Inspectorate of Education, 2013). This suggests that half of teachers' PD hours is generally tightly coupled in the form of mandatory developmental afternoons while their individual PD hours can be more loosely coupled and, in practice, can be unregulated and optional.

The present study

For this explorative study, we aim to investigate the organizational work to set up organize professional learning teams, namely lesson study, and explore how the organizational work is set up. Coupling theory is assumed to provide a useful lens to investigate and understand this. First, it enables an exploration of how new organizational tasks and processes for lesson study are set up. Second, it provides insight into how the school

organization, specifically the organization of departments or teams and PD in the school, influences how lesson study's organizational preconditions can be set up. The following research questions inform our study:

(1) Which organizational tasks and processes did schools set up and how were they coupled?
(2) How did the set-up of organizational tasks and processes proceed?

Method

The context

Schools in this study participated in two Professional Learning Networks (PLNs) for four years (2014–2017). These networks were part of a project for (cross-school) lesson study PLNs launched by the Dutch Ministry of Education (Hubers et al., 2017). The PLNs were set up to develop teacher learning, prepare teachers to become lesson study facilitators, and introduce lesson study in the schools. During the four years, teachers participated in six lesson study cycles. The last cycle was organized at each respective school, enabling teachers to introduce lesson study to their colleagues. Meetings were held several times per year for school leaders from the respective schools to update and inform them about the lesson study progress. Closing conferences were held at the end of the year where lesson study teams presented their findings to colleagues and school leadership. After four years, the PLN ended and university support and funding were withdrawn. Schools could decide for themselves if and how they wanted to continue with lesson study in their own schools. Teachers and school leaders were approached for an interview and signed informed consent to participate in the research.

Data collection

Between 2017 and 2018 semi-structured, open-ended interviews were held with teachers (former PLN participants) and school leadership, which included 10 school leaders and 15 teachers (N = 25). See Table 1 for participant characteristics. From one of the nine schools, the school leader did not respond to the invite for an interview. For this school only the

Table 1. Sample descriptions.

School leaders	Descriptive	Data
	Male/Female	5 male (50%)/5 female (50%)
	Age (in years)	*M*= 55,2 *SD* = 7,1 (range: 42–63)
	leadership experience (in years)	*M* = 14,7 *SD* = 8,1 (range: 7–30)
Teachers	Descriptive	Data
	Male/Female	2 male (13, 3%)/13 female (86, 7%)
	Age (in years)	*M*= 42.9, *SD* = 11,9 (range: 27–59)
	Teaching experience (in years)	*M* = 15,1, *SD* = 10,1 (range: 5–35)
	Teacher qualification	M.Ed.: *n* = 7 (46, 7%)
		B.Ed.: *n*= 8 (53, 3%)
	Main teaching subject	Dutch *n* = 9 (60%)
		Math *n* = 6 (40%)

Table 2. Characteristics of the nine case study schools.

		Interviews (N)		
School[1]	Size	School/Team leaders	Teachers	LS groups formed
Greenfield	1316	1	1	1
Park West	281	2	3	1
Bakersfield	1361	1	1	1
Mayfair	305	1	1	1
Adams	920	1	3	3
Franklin	1100	1	2	1
Palmdale	1381	2	2	2
Inglewood	1004	0	1	4
Glendale	2051	1	1	1

[1] School names are all pseudonyms

teacher at this school provided data. Schools varied in size (see Table 2). Interviews were done by phone and had an average duration of 60 minutes. Although in-person interviews are considered the gold standard in qualitative research, this might be an unjust bias (Cachia & Millward, 2011). Various studies report advantages of phone interviews such as permitting more anonymity and privacy to participants and the ability to make notes unobtrusively (Novick, 2008). Questions had a general focus on how lesson study was organized and experienced. By asking about the contributing and inhibiting factors, we indirectly asked about the nature and extent of the coupling in the schools. Examples of interview questions include the following: 'How is lesson study organized in the school?' and 'What is going well and less well in organizing lesson study?' and 'Who is involved in organized lesson study and how are tasks and responsibilities divided?' Interviews were audio-recorded. Additionally, we asked teachers and school leaders for policy regarding lesson study at their schools.

Data analysis

The interviews were transcribed in verbatim. Summaries were created for each school to identify which organizational tasks and processes were set up and how they were coupled, coupling of PD in each school, and coupling of the department or team of lesson study participants.

We explored the coupling of organizational tasks and processes in each school. We examined the coupling and experience of organizational tasks and processes, the coupling of departments and teams, and the coupling of PD in the schools (see Table 3 for how each aspect was operationalized). All relevant quotes related to the aspects were selected. Subsequently, the segments were summarized and analyzed per interviewee to understand how setting up the organizational tasks and processes had proceeded in each school and how this related to coupling. Tentative interpretations were shared and critically discussed amongst the research team. We found no connection between the creation of organizational tasks and processes and characteristics of the participants in the study, such as age, gender, and main subject. None of the schools had policy regarding lesson study, so no data analysis could be done regarding policy documents in the schools. To illustrate the results, quotes from the interviews were translated from Dutch into English.

Table 3. Operationalizations of the aspects of data analysis.

Data analysis aspects	Operationalization
Tightly coupled organizational tasks and processes	School leadership controls tasks and processes by administrative orders and sets them up in a top-down manner (Shen et al., 2017).
Loosely coupled organizational tasks and processes	School leadership delegates setting up the organizational tasks and processes to teachers and refrains from being involved (Hautala et al., 2018).
Balanced coupling of organizational tasks and processes	School leaders and teachers are both involved and communicated and collaborated how to set-up the work (Hökkä & Vähäsantanen, 2014).
Positive experience of organizational tasks and processes	School leaders and teachers are satisfied and content with the set-up of the organizational task or process
Negative experience of organizational tasks and processes	School leaders and teachers are not satisfied and not content with the set-up of the organizational task or process.
Tightly coupled departments or teams	Department or teams collaborate frequently
Loosely coupled departments or teams	Department or teams work in isolation
Tightly coupled PD	Schools hold teachers accountable for PD hours and there was a PD plan for the staff
Loosely coupled PD	Schools do not hold teachers accountable for PD hours and there is no PD plan for the staff

Results

We first give an overview of which organizational tasks and processes were set up and how. Second, we discuss each organizational task and process in more detail. Here we elaborate on each organizational task and process and answer our second research question on how the set-up in schools proceeded. Results for all nine schools are described together.

Organizational tasks and processes set-up in schools

Organizational tasks and processes

Schools were all engaged in setting up three organizational tasks and processes: recruiting participants, credit for the time-investment, and scheduling meetings. In one school, Adams, school leadership had also arranged a new organizational role, namely PLC coordinator. This role was given to one of the former PLN teachers. She was responsible for keeping an overview of the different lesson study groups and other collaborative learning activities in the school. However, recruiting participants, credit for the time-investment, and scheduling meetings were the ones all nine schools set up. Schools set them up with tight, loose, and balanced coupling (see Table 4). As mentioned, none of the schools had developed any policy regarding lesson study and its organization within their schools.

Table 4. Overview of coupling of organizational tasks and process in the nine schools.

School	Recruitment of participants	Credit for time-investment	Scheduling meetings
Greenfield	Loose	Tight	Loose
Park West	Tight	Tight	Tight
Bakersfield	Loose	Balanced	Loose
Mayfair	Loose	Balanced	Loose
Adams	Tight	Tight	Tight
Franklin	Loose	Balanced	Balanced
Palmdale	Loose	Tight	Loose
Inglewood	Loose	Tight	Loose
Glendale	Loose	Balanced	Loose

Set-up of recruiting participant

The coupling of recruitment of participants was either loose or tight.

Loose coupling

In most schools, seven in total, recruitment of participants was loosely coupled. In these schools, school leadership was not involved in the recruitment and former PLN teachers were solely responsible for finding participants. In this arrangement, participation of colleagues was voluntary and based on their motivation and interest. School leadership in these seven schools did not put pressure on teachers to form groups. They explained it was their main job to express support and enthusiasm for lesson study, not actively organize teachers' participation.

Tight coupling

In two schools, Park West and Adams, the set-up of recruiting participants was tightly coupled. In these schools, school leadership took charge and put expectations and demands on their teachers. In Park West, school leadership obliged former PLN teachers to recruit colleagues to form lesson study groups. The school leader had told the PLN teachers that given that they received credit (task hours) to do lesson study she required them to form a group and perform the lesson study cycle. In Adams, school leadership recruited mandatory participants. School leaders used lesson study as a means to improve collaboration in specific departments. School leadership organized the recruitment of participants by selecting departments that were working autonomously with the aim to make them work more collaboratively.

Proceedings

There was considerable variation in how recruitment of participants proceeded. Altogether, the former PLN teachers attempted to set up 18 lesson study groups of which eleven groups were easy to set up and seven groups were very difficult to set up. How setting up recruitment of participants proceeded depended on department or team coupling. Teachers in departments or teams with tight coupling were all both able to recruit participants and were positive about recruitment. By contrast, teachers working in loosely coupled departments or teams had much more difficulty. They were either unable to recruit their colleagues or negative about the recruitment if it had succeeded. For example, at Franklin, one teacher from a department with loose coupling had not managed to get enough colleagues interested in lesson study. The other former PLN teacher had managed to bring together enough colleagues for a lesson study group but the loose coupling within the department made the arrangement precarious. She indicated that in the absence of interest in and willingness to collaborate, both her own and her colleagues' enthusiasm for a future lesson study cycle was low.

When recruitment of participants was set up tightly through administrative orders it was still mediated by department coupling. For example, at Park West, only the teacher working in a tightly coupled, collaborative department had been able to follow the order from school leadership to recruit her department colleagues. Two teachers working in loosely coupled departments did not succeed in recruiting participants as their colleagues resisted recruitment. Additionally, at Adams, while it had been possible to recruit

participants as departments had been mandatorily assigned to the former PLN teachers, only the teacher assigned to a tightly coupled department was positive about the recruitment. Only her lesson study team was enthusiastic about collaborating and enjoyed participating. The other teachers had been assigned to loosely coupled departments. They were negative about the recruitment of their lesson study groups and reported the teachers they worked with were not enthusiastic about participating in collaborative learning.

Set-up of credit for time-investment

Credit for time-investment was organized with either tight or balanced coupling.

Tight coupling

In six schools, credit for time-investment was tightly coupled. This meant that school leadership determined what kind of credit was given and teachers had little say in the matter. In these schools, credit for time-investment was a unilateral decision by school leadership. School leaders decided on giving credit (predominantly) in the form of individual PD hours.

Balanced coupling

In three schools, credit for time-investment was set up with balanced coupling. In these schools, school leadership communicated and collaborated with teachers on how to set up the credit for time-investment. This led to a variety of arrangements. In one case, at Glendale, the former PLN teacher received a reduction of her workload. She was given one less class to teach for that school year. The school leader and teachers explained that this was a somewhat precarious arrangement made possible only by the fact that they had a teacher who was reintegrating after a burnout and able to start with taking on that class for the semester. In Mayfair and Bakersfield, the school leader and former PLN teachers had discussed credit together and had decided on a combination of task hours and individual PD hours. At Franklin, the same combination of credit was given with the addition that all lesson study participants also received release time from departmental afternoon.

Proceedings

How credit for time investment proceeded and was experienced depended on both coupling of PD and coupling of credit for time-investment. Setting up credit for time-investment was difficult when PD in the school was loosely coupled and school leaders gave individual PD hours. In these cases, only the school leaders were positive about the set-up. They considered lesson study to be individual PD and therefore saw giving credit for time-investment in the form of individual PD hours as most fitting. By not giving task hours, this arrangement meant that their teachers were still available for other tasks and lesson study did not threaten staffs' involvement in existing activities. However, teachers in these schools unanimously experienced the arrangement as negative. They explained that receiving individual PD hours would make lesson study come on top of the work. One teacher elaborated: 'It will lead to jealousy because it [lesson study] is a time-investment. Colleagues who do not do this do not have that time-investment and they

do not have to report what it is they do' (B8, p23). Because teachers in these schools were generally not held accountable for individual PD hours, credit in the form of individual PD hours made lesson study an additional workload. When PD was tightly coupled, which was only the case in Palmdale, teachers did not resent or resist receiving credit in the form of individual PD hours. Due to the tightly coupled PD, teachers already had to account for these hours, which meant the credit was not seen as an additional workload. As such, many schools gave credit for time-investment in the form of individual PD hours but this was only experienced as a satisfactory form of credit for time-investment by teachers if coupling of PD in the school was tight.

Balanced coupling generally made arrangements more satisfactory. The communication and collaboration involved in balanced coupling led to favorable arrangements for all involved. For example, in Mayfair and Bakersfield school leaders and teachers both discussed that teachers would experience individual PD hours as an additional workload due to the loosely coupled PD in the school. Consequently, they decided that giving former PLN teachers and participants (some) task hours would be necessary for credit to be experienced as actual compensation. At Franklin, the school leader also recognized the resentment that receiving PD hours would evoke amongst potential lesson study participants. She explained: 'most teachers will not experience this as compensation because those professional development hours are already in their possession. If teachers receive task hours or release time from meetings people generally experience that as better credit' (E1, p. 6). As such, the school leader had also arranged for release-time to ensure that lesson study participants would experience the credit for their time-investment as useful. Both the school leader and the teachers at Franklin experienced the credit for time-investment positively.

Overall, setting up credit for time investment proceeded with more difficultly in some schools than in others. Five schools set up credit for time-investment with ease. This was because they either had tight PD coupling, making individual PD hours a satisfactory form of credit for teachers or because they set up credit for time-investment through balanced coupling, which meant school leaders and teachers communicated about what would be experienced as useful credit for lesson study. Four schools did not set up credit for time-investment that was satisfactory for teachers. Teachers in these schools resisted or resented arrangements as the credit for time-investment they received was experienced as an additional workload rather than an actual compensation for their work.

Set-up of scheduling meetings

Coupling of scheduling meetings varied between schools and was either tight, loose, or balanced.

Loose coupling

In six schools, scheduling meetings was loosely coupled. In these schools, school leadership did not engage with the scheduling and considered scheduling meetings teachers' tasks. Specifically, they explained they did not want to engage in planning fixed moments in the schedule for lesson study. Instead, they thought teachers themselves should schedule meetings in their existing weekly timetable around the scheduled lessons and other activities. Teachers struggled to do this. They reported

difficulties with scheduling due to full time-tables, resistance from parents when lessons were canceled, pressure from their school leaders to attend other planned activities when planning lesson study would be convenient, high amount of part-timers, the Dutch teaching culture that does not require teachers to stay after their lessons have been taught, and pressure from school leadership to not have any lesson cancellations. In most cases, the combination of these factors made it very challenging, sometimes impossible, to find time to schedule meetings for lesson study during which all group members could be present.

Tight coupling

In two schools, Adams and Park West, scheduling meetings was tightly coupled. In these schools, school leadership decided on and arranged scheduling meetings for the lesson study groups. In Park West, the school leader ordered teachers to find five afternoons to do lesson study. Subsequently, she would cancel teachers' lessons during those hours. At Adams, school leadership told teachers to use the time designated for department meetings to do lesson study.

Balanced coupling

In one school, Franklin, school leadership and teachers planned meetings together in the regular schedule. They did so by looking at the schedule and deciding together which moments would fit well for each lesson study group. The school leader collaborated with the scheduler to ensure that lessons could be canceled or rescheduled to enable all lesson study group members to be present during meetings.

Proceedings

Most schools had difficulties scheduling meetings and teachers were often unsatisfied about the arrangements. Only at Franklin, where meetings had balanced coupling, schedule meetings went well and both school leadership and teachers were positive about the arrangement. In the other eight schools, it was either not possible or very difficult to schedule meetings. Additionally, rarely were both school leadership and teachers satisfied with the arrangement. When scheduling meetings was loosely coupled, teachers did all the work. School leadership was generally positive about this arrangement, but teachers had a hard time scheduling meetings and were very unsatisfied with the lack of involvement and support from their school leadership. They felt abandoned by their leadership and resented having to do all the scheduling themselves. When scheduling meetings was tightly coupled, leadership was satisfied with the arrangement but teachers were not. For example, at Park West, teachers were asked to select afternoons for which their lessons would be canceled. However, teachers did not want to have so many lesson cancellations as that would put more pressure on them to finish the curriculum on time. As a result, all teachers indicated they would not follow their school leaders' order and refused to select afternoons. Instead, they were aiming to schedule shorter moments that would not require so many lesson cancellations, but they had not succeeded yet in doing so. As such, scheduling meetings had not been set up. At Adams, school leadership was pleased with scheduling meetings for lesson study during department meetings, but teachers were not. Teachers explained that this arrangement meant they still had to do departmental work later, which made lesson study come on top of

their work. In these schools, planned meetings were not useful for teachers as they added to or complicated their work.

By contrast, balanced coupling at Franklin meant the school leader was both involved and aware of creating useful and protected time for her teachers. She explained, 'It is of the utmost importance that teachers have good, decent moments to come together. So, I really think that creating conditions and arranging that it is done well, is what I need to do' (E1, p1). The school leader commented that planning lesson study during fixed lesson-free afternoons would not be helpful for her teachers because these moments were already booked with various activities that teachers would need to attend, such as one-on -one student supervision or department meetings.

Scheduling meetings was very difficult to set up as in all schools there was no weekly designated time for teacher PD. In the absence of such a preexisting organizational structure, schools had to create this time, which was severely complicated by various factors such as full time-tables, part-timers, and the Dutch teaching culture in which teachers are not expected to be at school after their lessons have been taught. As a result, most schools did not succeed in setting up this organizational takes in a way that was experienced positively by both school leaders and teachers. Only one school did manage this. Here the school leader collaborated and communicated with her teachers to ensure that they had scheduled time that would be experienced as useful and protected.

Discussion

The present study aimed to explore organizational tasks and processes for organizing professional learning teams. We applied the lens of coupling to understand how schools set up the organizational tasks and processes for lesson study and how the set-up proceeded (Hautala et al., 2018; Weick, 1976). Below we discuss the specific organizational tasks and processes schools set-up, the overall set-up of organizational preconditions, and the limitations of this study and avenues for future research.

The organizational tasks and processes

Schools set up three organizational tasks and processes: recruitment of participants, giving credit for time-investment, and scheduling meetings. The coupling needed to successfully set up each process differed: for recruitment of participants tight department or team coupling was key, for credit for time-investment and scheduling meetings balanced coupling was key. Tight department or team coupling made teachers willing to participate in lesson study, whereas balanced coupling was necessary to ensure organizational preconditions were set up in a way that was functional and useful for teachers. Without balanced coupling, lesson study ended up being an additional burden on teachers' already heavy workload. Below we discuss how finding for each organizational task and processes ties into the literature

Tight coupling of departments and teams enabled the recruitment of participants. This ties in with the literature in which good group dynamics and interactions are a known factor contributing to the success of PD initiatives (Vangrieken et al., 2015). Additionally, our findings underscore that loose coupling makes improvement efforts fall in the empty spaces dividing teachers (De Lima, 2007).

Regarding credit for time-investment, setting up this process up with balanced coupling meant school leaders were willing to meet teachers' experience of the individual PD hours as an additional workload. While all Dutch teachers formally have the requirement to spend some hours on individual PD, the reality is that many schools do not formally arrange this, meaning these hours are then unaccounted for (Inspectorate of Education, 2013). Therefore, when credit for time-investment was given in the form of individual PD hours, hours, hours which the school generally did not demand teachers to work, this made lesson study an additional workload. In schools where setting up credit for time-investment proceeded well, school leaders organized credit in a way that made teachers' time-investment actually compensated. A possible explanation could be the divide found in earlier research between school leaders that are aware of and involved in creating conditions for teachers learning and those that are not (Educational corporation, 2016).

The most challenging organizational task to arrange was scheduling meetings. Only one school managed to arrange it in a satisfactory manner. In this case, the school leader was very aware of the complexity of scheduling and actively engaged in helping to schedule meetings by communicating with her teachers and working with the school scheduler. By contrast, six of the nine school leaders explicitly renounced involvement in scheduling, considering it teachers' task to arrange meetings (and frequently finding participants as well). This ties in with the literature which shows Dutch school leaders often refraining from facilitating and 'pursuing collaborative working and learning with sufficient vigour' (OECD, 2016, p. 127). Recent research has shown that school leaders' involvement in adjusting the schedule to allow for meeting time has a substantial influence on establishing PD as an organizational routine. Research by Huguet et al. (2017) showed that when a school leader created useful time, this was a major enabling factor in establishing and developing a PLC routine in a school and if they did not, the implementation and development of a PLC routine were considerably constrained. This suggests that lesson study becoming an organizational routine might be critically restricted in the eight schools were school leaders did not create or protect teacher collaborative time.

Overall set-up of organizational preconditions

Setting up organizational tasks and processes with balanced coupling led to the most satisfactory arrangements. Only one school, Franklin, set up most of the organizational tasks and processes in this way and seemed to have the most success in setting up the organizational prerequisites for lesson study. Here, school leaders and teachers made time to communicate and collaborate about the organizational work and carried shared responsibility for setting up the organizational tasks and processes. This meant that school leaders were both able and willing to listen to their teachers and what organizational preconditions they needed for engaging in lesson study. In many schools, however, the overall set-up of organizational tasks and processes lacked balanced coupling and was shown to be difficult.

Applying a coupling lens was particularly useful in revealing the complexities of setting up the organizational preconditions. It revealed that many factors influence if and how successful organizational tasks and processes can be set up. What works

in one school (for example, credit in the form of individual PD hours) does not work in another. In the case of recruitment, how participation was arranged, either mandatory or voluntary, did not seem to influence the success at all. Here, the contextual factor of the coupling of the department or team determined whether recruitment was successful. This suggests that there is not a one-size-fits-all guideline for setting up the organizational work to organize professional learning teams. Instead, a successful organization will be influenced by both the existing realities within the school and how the organizational work is set up (Bryk, 2015). Overall, our results show that setting up organizational tasks and processes to organize professional learning teams is far from mundane but vital and complex. Specifically, when aiming to sustain PD practices such as lesson study in schools – developing them as an organizational routine – requires organizational tasks and processes to be thought through and set up well.

However, our results also suggest some patterns in what was more likely to lead to satisfactory arrangements. In many cases, organizational tasks and processes were set up loosely, which generally led to unsatisfactory arrangements for teachers. They were responsible for carrying out most of the work and received little support from school leadership. When organizational tasks and processes were set up with tight coupling, it was also experienced as unsatisfactory for teachers as school leadership was very controlling about the arrangements. In these cases, teachers had little opportunity for input and were required to follow orders from school leadership. Lesson study, in these cases, was mostly used as a management strategy by school leadership to reach their own goals and vision rather than as a PD practice for teachers. This took away teachers' ownership of their own learning process, which is an important factor when implementing new initiatives in general (Ketelaar et al., 2014) and lesson study in particular (Akiba et al., 2019). Regarding lesson study, research showed that when districts supported school ownership of lesson study this enabled embedding lesson study in the schools. Our study indicates that at the school level it is also important teachers do not lose ownership of lesson study and school leaders do not use lesson study to serve their own ends.

In most schools, many organizational tasks and processes were loosely coupled, leading to relatively little change in the organizational structure of the school. Previous studies on sustaining innovations show that often little actually changes in the schools (Cuban, 2013; Hargreaves & Goodson, 2006). Specifically, Hubers et al., (2017) showed that regarding a data use, intervention in terms of policy and practice, schools did not develop or sustain much of the data use practice. One possible explanation for this is that the organizational preconditions for setting up the PD in schools were not met. As such, our study could provide a possible explanation for the many problems, the literature reports on sustaining PD as it points to the underlying organizational requirements that are necessary for organizing professional learning teams that might often not be met.

While in Franklin balanced coupling enabled the most successful set-up of organizational tasks and processes. Nevertheless, even here, there were troubles. The absence of department coupling made it difficult for both former PLN teacher to form or maintain lesson study teams. This shows that for lesson study to be organized well, many factors

need to be aligned. The success of the set-up of lesson study should therefore not be seen as finding a silver bullet but as a chain that is only as strong as its weakest link.

Implications for educational policy

The present study illustrates that more attention should be paid to understanding and appreciating the complexity of the organizational work when staring with new PD initiatives. One of the main findings of our paper is that there was little consensus within schools about how the work should be done and by whom. The literature suggests that one of the important steps in organizational change within a school is establishing coherence about what the new work entails and requires (Wood, 2017). One of the implications, therefore, is that when schools start with new PD initiatives, organizational requirements and the division of tasks and responsibilities need to be discussed that would be needed to create satisfactory conditions for everybody involved. Specifically, none of the schools developed any policy regarding lesson study. An important implication, therefore, is that it would be beneficial if schools develop policy in which they think-through and develop a plan toward lesson study and its organization within their school. Moreover, few school leaders were aware of the importance of their involvement in creating the organizational preconditions for their teachers to be able to engage in lesson study. This suggests that more awareness needs to be created amongst school leaders about the vital role they play in creating the conditions for teacher learning within their school.

Limitations and future research

The present study had several limitations. The study provided a momentary picture, preventing an investigation of how the organization of lesson study developed over time. One fruitful line of further research would, therefore, be tracking the development of the organization of lesson study over time. Moreover, the present study focused on the organizational tasks and processes to organize PD in the school, not on teachers' sensemaking of the PD itself. How teachers and school leaders make sense of the PD might deeper explain if and how they will organize the practice in their schools (Coburn, 2001; Luttenberg et al., 2013). Specifically, research has shown that the way in which teachers perceive lesson study influences their willingness to engage in the practice (Wolthuis et al., 2020). As such, a potentially fruitful next question would be to examine how teachers and school leaders conceive of lesson study and how this connects to their willingness to create preconditions for its performance in their schools. Additionally, our findings reveal the influence of what is called the 'situational factors' or 'noise' (Kennedy, 2010). Examples of noise during classroom teaching are telephones ringing, public address announcements, unexpected visits from central office personnel, students coming from or going to special classes (Kennedy, 2005). Generally, noise refers to the reality of the day-to-day life which is often unpredictable and unintended. For example, many different elements influenced scheduling meetings, even when meetings were planned often whether other activities did or did not require teachers' presence at the last moment influenced to what

extent participants were all present. Examining the noise during the set-up of PD could contribute to a greater understanding of which factors contribute to the complexity of embedding new initiatives in schools.

Conclusion

Organizational tasks and processes are preconditions for organizing professional learning teams but are often neglected and considered mundane. We examined how nine schools set up organizational tasks and processes for lesson study, a professional learning team. Setting up organizational tasks and processes with balanced coupling, in which school leaders communicated and collaboratively organized lesson study, led to the most favorable organizational arrangements. However, this was only done in one of the nine schools. In all other schools, setting up organizational tasks and processes through both tight and loose coupling proved to be very difficult. Our study showed that the organizational tasks and processes are much more than mundane matters, but both complex and vital for the organization of professional learning teams.

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