

Trustful Relationships and School Development

Ulf Jederlund



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Abstract

Methods other than averages from national tests, grades and levels of eligibility for higher education to evaluate the quality of education and school development are called for. In this dissertation is examined how a conscious effort to develop trustful relationships and mutual interaction among all actors in schools may contribute to increased well-being, community and strengthened learning processes for both students and teachers. 'Relational school development' is seen as particularly important for the large group of students who struggle hard in school every day to achieve the educational goals, and who are thus most dependent on a supportive environment to cope with learning. Trustful relationships and developed interaction and cooperation in schools are in the long run also assumed to have the potential to contribute positively to attainment. The overall aim of the thesis is to study the significance of relational aspects in school development.

In order to meet the thesis' aim, a relational school development initiative grounded in school development research and theories of relational pedagogy was shaped, which was implemented in five schools during five school semesters. The relational processes that the initiative generated in the five schools respectively were longitudinally studied, out from specified research issues. Parallel qualitative and quantitative data were collected from school leaders, teachers and students. Thematic analysis was used to develop a deeper understanding of conditions for and experiences of relational school development processes. Statistical analyses were performed to infer from the longitudinal student data collected with the 'Swedish TSR-SSE'-survey, which has been developed as a part of the studies.

The main results of the thesis reveal: i) organisational and relational preconditions at the system-, school- and teacher group level define which relational school development efforts can be carried out. Teachers need to feel trust in school development processes in order to become involved and be open with own challenges and to try out real changes in practice together with colleagues and students. As conceptualised here, 'Teacher trust' in relational school development encompasses three mutually interacting levels: collegial trust, collective trust in the teacher team and overall process trust in the school development process; ii) students' perceptions of teacher-student relationship quality (TSR) and students' self-efficacy within different domains of schooling (SSE) are confirmed as inter-correlated relational school factors and seem to be appropriate for use in longitudinal follow-up of teachers' relational school development efforts; iii) collective relational competence of teachers may develop through an increased joint awareness of how both implicit and explicit aspects of communication affect the teacher-student relationship continuously, and iv) students whose teachers appreciated a more successful collective learning process reported improved quality in the teacher-student relationship, and also expressed a raised sense of self-efficacy regarding own opportunities to succeed in school.

Keywords: *trust, school development, collective learning, relational competence, relational pedagogy, teacher-student relationship quality, student self-efficacy, school trust.*

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*to Mum and Dad, and
Skrammel-Nisse (Nils
Lindgren)*

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List of studies

Study 1

Jederlund, Ulf. (2019). Trust as a prerequisite for school development. A study of school development through collective learning in teacher teams. *Pedagogisk Forskning i Sverige*. 24 (3-4), p. 7-34. DOI:10.15626/pfs24.0304.01

Study 2

Jederlund, Ulf, & von Rosen, Tatjana. (2021). Teacher-Student Relationships and Students' Self-efficacy Beliefs. Rationale, Validation and Further Potential of Two Instruments. Pre-print.

Study 3

Jederlund, Ulf, & von Rosen, Tatjana. (2021). Changes in students' school trust as a reflection of teachers' collective learning processes. Findings from a longitudinal study. *Scandinavian Journal of Educational Research*. DOI: 10.1080/00313831.2021.1982764.

Preface

The basic argument of this research is that improved interplay, increased collaboration and trustful relationships, at all levels and among all actors at school, offer the potential to develop schools in ways that benefit all students. Most of all, this is assumed to benefit those students who struggle on a daily basis for their engagement, well-being and learning and who are largely dependent on the relationships with their teachers, as compared to better suited peers (Hattie, 2009; Hughes, 2011; Roorda & Koomen, 2011). Improved interplay, increased collaboration and trustful relationships within whole school organizations also offer prerequisites for sustainable development, thriving and collective learning among school staff (Hargreaves, Lieberman, Hopkins, & Fullan, 2010; Van Maele, Forsyth, & Van Houtte, 2014; Talbert, 2010; Timperley, Wilson, Barrar, & Fung, 2008).

The relational foundation with its different aspects of interpersonal communication permeates this thesis. The reason for this can be traced to my own professional background. As a social and music educator, music therapist, vocational teacher, supervisor and authorized psychotherapist, interpersonal communication has been my main interest, tool and focus during four decades of work. Regardless of being the music therapist playing together non-verbally one-to-one with an individual at the early communication level, or the school counsellor taking part in a teacher group conversation in a complex social school setting, there have always been a few basic relational competences that predicted my failure or success. To develop communication I needed to establish a trustful relationship, address invitingly, listen and observe carefully with all my senses and provide equal good opportunities for others to express themselves. Through processing my sensory perceptions and awoken emotions in each interactive situation, and supported by the recall of earlier experiences of similar situations, I can use my cognitive ability to make sense of the relational context and consider the ongoing communication: What are the expressions and intentions of the other(s)? What am I being told? What might be a suitable way for me to develop dialogue?

As conceptualized in this thesis, a relational stance to development in education starts with genuinely listening to other people's emotional states, perspectives, experiences, knowledge, actual ability and needs. The relational competence of professionals, in my words,¹ is about their ability to perceive, understand

¹ The concept of 'relational competence' is further outlined in section 3.2.

and respect those features of others and build on them collaboratively, whilst still being able to communicate their message and pursue professional intentions.

Listening, in this wider sense, guides helping, supervising and teaching, as well as professional learning. In teaching, relational competence guides teachers in the process of getting to know their students, as individuals and as learners. Through developed dialogues, teachers gather precious information of their students' expectations and emotional states in relationship to schooling –their self-beliefs as learners– and their current level of knowledge and understanding of the learning object. John Hattie (2009) speaks about the need for teachers to make learning visible and pictures that teachers must try to see learning through the eyes of the student. Already in 1855 Søren Kierkegaard, in a classical quote, argued for helping and educating in concordant ways:

If I want to succeed in leading a person towards a specific goal, I must first find her where she is and start right there. //...To help someone, I must understand more than she does, but first and foremost, understand what she understands. (Kierkegaard, 1855, p. 96)

Thus, if I as a teacher claim the objective to be helpful and guiding, I first must know the state of my students. Hattie (2009) underlines teachers' need to find out where students are in their level of thinking and then to challenge them beyond this level, in a process of cognitive acceleration. This is reasoning closely related to well-known principles in learning theory such as scaffolding, Vygotsky's zone of proximal development, or formative assessment (William & Leahy, 2016). Concerning formative dialogues, William stresses that "the only thing that matters about feedback is the response of the recipient" (in William & Leahy, 2016, p. 139), and he remarks that in order for feedback to be valuable, it is required that students can, and want to, receive it. To get close enough to provide feedback in such ways, teachers rely on relational competence. Finally, Greene (2014) highlights that teachers' empathic listening and genuine exploration of students' perspectives on challenges in learning are fundamental for sustainable prevention and mutual problem solving.

To listen widely to the states and positions of others also applies to teachers' collective learning processes, which take place in the everyday interplay and transaction with professional colleagues. Embedded in that interplay, there then might be a potential for learning and school development?

Abbreviations

CMC	Collaborative Mutual Communication
CFA	Confirmatory Factor Analysis
EER	Educational Effectiveness Research
EFA	Exploratory Factor Analysis
FA	Factor Analysis
NRI	Network of Relationships Inventory
PLC	Professional Learning Community
PPTS	Process Participating Teachers' Students
SCT	Social Cognitive Theory
SNAE	Swedish National Agency for Education
SSE	Student Self-Efficacy
SER	School Effectiveness Research
SIR	School Improvement Research
ST	School Trust
TRI	Teacher Relationship Inventory
TSR	Teacher-Student Relationship

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1. Introduction

1.1 Rationale

In the last decades the Swedish school system, as well as the majority of Western educational systems, predominantly focus on ‘measurable knowledge’ as a marker of school development; that is, on outcomes of high stakes testing connected to national standards of detailed knowledge requirements and related to international comparisons of outcomes in the PISA, TIMSS and PIRLS² investigations. However, despite structural reforms and various national professionalization programmes and policy initiatives imposed in order to promote schools to raise measurable results, Swedish schools continue to struggle with low achievement. In 2017, 17.5% of all graduates among Swedish secondary students were not eligible to apply for the national programmes in upper secondary school (gymnasium), the highest figure ever.³ In the latter part of the 1990s and in the 2000s, the corresponding proportion steadily remained around 10%, but it has risen in recent years (SNAE, 2017). These students to a small extent regain study performance later on. Neither does the gymnasium succeed in its task to teach all students. Among students who enter the national programmes, many fail. In 2014, only 67% of the students who completed a national programme were eligible for higher education, and as many as one third of all students quit their programme in advance (SNAE, 2014). Thus, the total exclusion from future higher education was as high as about 40% of all Swedish youths. Although specially adopted gymnasium programmes, folk high schools, adult education and other alternative study paths are possible ways back for some, an even larger group of low-educated young people face the increasingly qualified and competitive labour market without an appropriate education. Due to this, young people run the obvious risk of falling aside.

The failure of the education system to teach students to reach attainment is clearly linked to young people's generally deteriorating mental health. The association between school success and mental health is established in international research (O'Connor, Dearing, & Collins, 2010). School difficulties may manifest

² PISA; Programme for International Student Assessment. PIRLS: Progress in International Reading Literacy Study. TIMSS; Trends in International Mathematics and Science Study.

³This figure has improved somewhat to 15,6% in 2018 and 15,7% in 2019 (SNAE, 2019).

themselves for students in the form of internalizing behaviour, difficulties in peer relationships, absenteeism and challenges in learning. Symptoms may change over time and there is the risk that concentration difficulties, withdrawal, self-destructive or anti-social behaviour and school drop-out accelerate in higher school years (Vinnerljung, Berlin, & Hjern, 2010; Greene, Ablon, & Goring, 2003; Gustafsson et al., 2010; O'Connor et al., 2010). In turn, such conditions are positively associated to social exposure, unemployment, crime and long-term mental illness of young adults. A nationwide report from The Public Health Agency of Sweden⁴ concluded that deficiencies in schools have likely *contributed* to the substantial increase of mental illness among young people in the last decades (Löfstedt, Wiklander & Corell, 2018).

Low goal attainment and the threats to youth psychosocial wellbeing are crucial motives to study the ability of educational systems and schools to meet and teach their most vulnerable students. In addition, for many teachers, the ‘compensatory mission’ –to succeed in teaching and levelling life chances for the students possessing the weakest conditions– is the strongest drive for their work (Ballet & Kelchtermans, 2007). At the same time, Swedish (Lindqvist, Nilholm, Almqvist & Wetso, 2011; Matson, 2017) and international research (European Commission & OECD, 2009) reveals that school staff are unsatisfied with their own competence to teach students who challenge in learning, for example:

Teachers report the greatest need for development in teaching students with special learning needs, which might be a reflection of the trend towards inclusive rather than segregated education and the growing emphasis on equity. Other areas of particular need are IT teaching skills and student discipline and behavior. (European Commission & OECD, 2009)

A relational way forward

Taking account of the above findings and reports, it can be questioned whether or not the long-paved road of measurement and outcome-regulated school development is the best, or the only, way forward for educational improvement. Indeed, as a reaction to a one-sided emphasis on standardized subject teaching and test results, many researchers and practitioners stress an even more instrumental instruction tends to dehumanize education, rather than to develop it (Ashan & Smith, 2016; Au, 2007; Biesta, 2010a; Levin, 2012; Allodi Westling, 2013; Braun, 2017). According to such voices, teachers are turned away from their students as learning individuals and away from wider objectives of education. Seemingly, it has turned contemporary school development, and school debate, away from the understanding of education as a relational phenomenon, as something that take place in learning interaction.

⁴Folkhälsomyndigheten

In this thesis, a relational approach to school development is studied. Instead of starting with and concentrating on students' measurable outcomes, the main focus is directed towards educational relationships. The quality of teacher-student relationships, and their significance for students' perceptions of their possibilities to learn, thrive and grow, are studied as a target for– and confirmation of– school development. Improved interpersonal communication and interplay, at all levels in schools, are assumed to contribute to higher engagement and to improved learning for “large groups of low performing students”⁵.

The basic assumption of the research presented is two-fold: (i) Trustful professional relationships enable the collaboration and the collective learning among teachers needed to develop schools from inside towards (ii) trustful teacher-student relationships, built on mutual teacher-student communication, that enable teachers to see learning (and challenges in learning) through the eyes of their students in order to provide the most relevant support and instruction to all students at each time point.

1.2 Overarching aim and research issues

From the basic assumption, the research interest of the thesis is directed towards relational aspects of school development processes. The overall aim is

to study the significance of relational aspects in school development.

In order to meet the overall aim, the thesis deals in several steps with what is labelled a ‘relational school development’. First, school development research is reviewed from relational perspectives (Chapter 2). Second, a research base and a theoretical foundation for the study of relational school development processes are outlined (Chapter 3). In this chapter, research and theoretical perspectives are presented on the significance and function of trustful teacher-student relationships, as well as philosophical and pedagogical perspectives on teachers’ relational competence, within the framework of ‘Relational pedagogy’ (Aspelin 2018; Bingham & Sidorkin, 2004; Noddings, 2005; von Wright, 2000). Further, development of trustful professional relationships is talked over as a precondition for

⁵Helen Timperley (2011a) uses this summarizing wording to frame the large group of students that challenge the educational system more in learning. Students who challenge may be students from exposed families and/or families of weak academic backgrounds, students with disabilities, students with poor Swedish language skills, newcomers, students in social difficulties and students with mental health problems, or actually, any student that for any reason struggles hard in school to achieve the educational goals at the time given. In Sweden, in my estimation, this group comprises approximately a quarter of all students in primary-, secondary- and upper secondary education.

teachers' collective learning. Third, based on the former, a relational school development initiative was created, with the aim to develop trustful teacher-student relationships. It was implemented in five schools, through a counselled collective learning process in teacher teams (Chapter 4). Finally, based on longitudinal empirical data collected during a two-year process, four research issues are studied (Chapter 5–6):

1. How do different aspects in local school contexts condition teachers' relational school development efforts?
2. What significance does teachers' experiences of trust have for teacher collaboration and collective learning, within relational school development processes?
3. Can an instrument be developed for the monitoring of teachers' relational school development efforts by means of students' perceptions of teacher-student relationship quality and students' self-efficacy?
4. Do teachers' relational school development efforts impact on students' perceptions in beneficial ways?⁶ If students' perceptions are improved, what then has actually changed in the teacher-student relationship?

Issues 1, 2 and 4 are mainly investigated in studies 1 and 3 and are further elaborated on in the closing discussion (Chapter 6). Issue 3 is explored in study 2, which is a purely methodological study that describes the creation and validation of an assessment instrument. This instrument is then utilized in study 3, and, thus, is closely linked in the discussion to research issue 4 as well.

⁶Positive impact on students' well-being and learning are today widely considered to be the ultimate goal and a requirement of all school development.

2. School development through relational lenses

This thesis is situated within the field of school development and school development research. It draws on the general assumption that improved interplay and increased collaboration among all actors at school have the potential to develop local schools in ways that benefit all students. The selection of research and the aspects of school development discussed are filtered through my ‘relational lenses’.

2.1 School development and local responsibility

Local school development requires that professionals, within given national frames, experience a freedom to act in autonomous ways. This requires that neither the state nor the municipalities –or researchers– no longer regulate a school’s daily life in detail. With Berg (2015), this is expressed as meaning that local school development demands a “distinguishable free room” (p. 49) for professionals and school leaders to conquer, within the frames of the current curriculum, policies and school legislation. Thus, a basic assumption behind the idea of local school development as an improvement strategy is that school as an institution is decentralized and that individual schools are mandated to make their own decisions about their organizing and activity (Jarl, Blossing & Andersson, 2017).

Although the decentralization reforms in the 1990s expressively called for municipalities and schools to shoulder the responsibility for school development, this change appears to have been too large for it to be easily adopted. Larsson and Löwstedt (2014) point to the fact that despite the obvious intensions it was difficult to establish new strategies in Swedish schools. They note, that still in the latter part of the 1990s, efforts in municipalities to stimulate and utilize local initiatives to shape development processes in schools were uncommon. In a report investigating school development in 72 Swedish municipalities Larsson (1998) found less than one-fifth had completed projects based on local initiatives. Further in the report, school leaders expressed that locally initiated school development processes were something new and unfamiliar. To start local processes, school leaders stressed that enthusiastic prods among the staff were required, and that they, when available, rapidly became attractive in the marketised teacher labour market and easily lost. Other inhibitions for local development initiatives

were reported to be a lack of municipality support and financial cuts (Larsson, 1998). Vast budget cuts forced local leaders to prioritize all through the 1990s, and consolidation, rather than engaging in uncertain change processes, was a natural choice. Schools invested in school development just as much as centrally imposed reforms demanded, and small resources remained for local initiatives (Larsson, 1998).

In international school development research critical aspects of local responsibility are observed. Two such, are sustainability and teacher engagement. Hargreaves et al. (2010) stated that development initiatives generated lasting effects and sustainable improvement in schools only when teachers felt involved and engaged over time and could make local sense of the contents. This was regardless of whether the change initiative was externally or locally initiated. Ballet and Kelchtermans (2007) and Scherp and Scherp (2007) expanded on the '*local sense making*' reasoning by stressing that development initiatives only guided teachers' daily work when teachers embraced the overall aim of the initiative and interpreted it as directly benefiting their students. Further, *relational aspects* were observed. As teachers began to discuss and make their own change plans, the power relations within schools were influenced, and the roles taken for granted were disrupted (Granström, 2003). For example, school leaders felt left outside, or distrusted, and conflicting interests between different groups of personnel and between teachers came to the surface. Shared responsibility for the school's development, and for all students, required new forms of joint action, in which underlying conflicts, value differences, and different opinions on what kind of school development was hoped for, occurred (Berg, 2015; Havnes, 2009; Hopkins, Stringfield, Harris, Stoll & Mackay, 2014; Larsson, 2004; Larsson & Löwstedt, 2014). Despite the new teacher *interdependency*, Granström (2003) remarks that support for teachers' collective processes, by means of process counselling, was scarce.

2.2 School development research paradigms

Håkansson and Sundberg (2016) provide an overview of the developing research field of school development in the period of the 1980s through the 2000s. They distinguish four predominating schoolings: research on *school development*, *educational change*, *educational effectiveness* and *school improvement*, of which the first two are regarded as overarching concepts. *School development research* originates back to the 1950s when the concept was used in connection to broad ambitions to develop schools and entire education systems in order to educate democratic citizens and to promote inclusion and equity in societies (ibid, p. 92). Over time, the concept has come to refer to a variety of research on efforts made in order to develop one, several or many schools. School development research covers both quantitative and qualitative inquiry. Today, the concept is well anchored in the Swedish "school development vocabulary" (Håkansson & Sundberg, 2016, p.92), as well

as in vast Anglosaschian literature. Within *educational change research*, the main focus is on ‘change from outside’. The scholars have an interest in the consequences of societal and political policy changes imposed in educational systems and schools (Håkansson & Sundberg, 2016). The two latter schoolings are more easily identified, as characterized by a common interest in understanding why some schools are more successful than others when it comes to development capacity, and student performance. Nevertheless, different authors define the research topography in slightly different ways. Jarl et al. (2017), for example, refer to the two research schoolings as two interconnected subfields within the ‘Educational Effectiveness’ field: research on *school effectiveness*, and research on *school improvement*. These authors label it as a research field of “*school success*” (p. 17)⁷. In the present text, I will expand on Educational Effectiveness Research (EER) and School Improvement Research (SIR) separately; with a particular emphasis on SIR because of its orientation towards relational processes. It will be seen, however, that over time the two paradigms become more intertwined. Today they often converge and benefit from each other’s strengths. This appears not least in mixed methodology research when searching for a deeper understanding of relational processes and local school development.

2.2.1 Educational Effectiveness Research (EER)

EER, including the sibling concepts School Effectiveness Research (SER) and teacher effectiveness, is directed to the investigation of general factors within schools that make teachers, instruction and whole schools successful (Håkansson & Sundberg, 2016). Essentially, the basic assumption is that regardless of the context there are certain structural features or pedagogical practices, if implemented well, that can make schools effective. Effectiveness is understood as the measurable educational progress of all students, regardless of family background and economic status (Creemers & Reynolds, 2018).

In relationship to local school development and relational aspects of education, important examples of studied factors are classroom climate, school ethos⁸, teacher collaboration, school leadership and teacher-student relations (e.g. Goddard, Goddard, Kim, & Miller, 2015; Ramberg, Låftman, Almquist, & Modin, 2018). Other highlighted factors are teacher competence, early observation and support for students who struggle (Fukkink, Jilink & Oostdam, 2017; Reynolds, Temple, Robertson & Mann, 2001) and the establishment of common visions among professionals (Jarl et al., 2017). The latter is of relational importance at the group level within schools. Likewise, at teacher group level and of particular interest in the current work, are school effectiveness factors like ‘collective efficacy’ (Goddard et al., 2015; Tschannen-Moran & Barr, 2004), ‘collective trust’ (Gray, 2016) and ‘mature professional learning communities’ (Owen, 2016).

⁷ My translation from Swedish: skolframgång.

⁸ ‘School ethos’ was defined by Rutter as a “set of values, attitudes and behaviors which will become characteristic of the school as a whole” (in Grosin, 2003, p. 141).

Reading Jarl et al. (2017), the school effectiveness research has been criticized for a lack of theory development within the field that contributes to difficulties when it comes to explaining why, and *how*, specific factors become important, how they relate to one another in the process of making schools better and how they can be approached in local development (Hargreaves, 1997; Reynolds, Sammons, De Fraine, Townsend & Van Damme, 2014, in Jarl et al., 2017). To progress the field, researchers have recently put educational effectiveness research into systemic contexts that goes beyond specific characteristics or individual impact factors. For instance, Creemers and Kyriakides (2012, in Håkansson & Sundberg, 2016) have presented a “dynamic model for school improvement” involving four process levels: the student, teacher, school and system level. Factors *and* processes at school and system levels are measured and investigated in order to identify the weaknesses and needs for improvement and to develop plans and policies for teachers’ collective improvement work. School factors then, may be relational aspects like teacher cooperation, collective efficacy, joint development of common values and visions or teachers’ approach to students who challenge. Processes may include ongoing capacity building that aims to identify strengths and weaknesses and introduce improvements, at all levels. Using their model, the researchers intend to handle a broad set of factors and social relational processes that impact on local school development within one single framework (Håkansson & Sundberg, 2016). By this, they bring EER closer to SIR.

2.2.2 School Improvement Research (SIR)

In the 1990s, prominent scholars within the field of school development reacted to the global tendency to force educational change through centrally imposed reform and restructuring (Hargreaves, 1997). Hargreaves and Fullan alternatively emphasized the importance of improving internal interaction and the building of strong trustful relationships within schools (in Fullan, 1997). They claimed the need for *reculturing, rather than restructuring* schools (ibid, p. 4). The research interest was turned to how local schools might become places in which teachers and school leaders were stimulated and supported to develop and make changes themselves. By this, Hargreaves and Fullan clearly admitted to a relational perspective of school improvement. They stated:

How teachers work with teachers, we showed, affects how well they work with their students. It was clear for us, therefore, that cultures of teaching should be a prime focus for educational change. (in Fullan, 1997, p. 3)

As a central task for changing teaching cultures the development of “collaborative working relationships between principals and teachers, and between teachers themselves” was underlined (Fullan, 1997 p.3). The claim for cohesiveness in

teaching cultures challenged the autonomous professional culture that predominated in most schools,¹⁰ something that Hargreaves and Fullan were fully aware of. Therefore, they remarked, a certain degree of *risk taking* in school improvement was required if teaching cultures were to be changed. Mutual trust between colleagues, openness in practice, joint responsibility for students and both individual and *collective commitment* to continuous improvement were wished for features in the change strategies called for (Fullan, 1997). Additionally, there was an emphasis on the importance of teachers' and school leaders' *emotional engagement*: "What is worth fighting for in our schools is ultimately the needs of learning among and caring for students" (Hargreaves, 1997, p. 26).

The orientation towards reculturing teaching also marked an emphasis on change within classrooms through exploration and renovation of teachers' leadership and interaction with students¹¹ (Olsson, 2016). This was a natural consequence following the new generation of curricula, which aimed to transform the student role in learning from a mainly passive and 'knowledge-consuming' one into a social interactive and 'co-constructive-of-knowledge' one (Olsson, 2016; Håkansson & Sundberg, 2016). For teachers to invite and support students in new ways to approach learning, they also needed to transform their own roles as teachers; that is, to reculture teaching. This became a central challenge of local school development, and one main foci for SIR.

Hopkins et al. (2014) noted that the initial results from the school improvement research contributed to the emerging awareness among researchers to "humanize" schools, as places where human beings interact and that that interaction – to be functional in regard to the set goals of education – depends on trustful relationships and on a healthy¹² organizational climate. Consequently, *relational aspects of organizational development (OD)*¹³ became central to school improvement researchers, and local prerequisites for school improvement through teacher collaboration and organizational learning were highlighted. Several researchers started to investigate *schools as organizations*. Sarason (1982), for instance, earlier

¹⁰ Several organizational researchers have described the historically autonomous teacher profession as a challenge for all advocates of profound school change. One telling example is Weick (1976), who while analyzing schools as organizations found them to be "loosely coupled" systems and illustrated school staff in images like "a collection of individual entrepreneurs surrounded by a common parking place" (cited in Hopkins, 2015, p. 126).

¹¹ Internationally referred to as 'classroom management'.

¹² The concept of the "healthy organization" originates back to Miles (1967) and to the field theory of Lewin (1939). Here, the social interaction within school organizations ('the field') is regarded to shape the behaviour, thoughts and actions of students, teachers and leaders which together establish the organizational culture of schools.

¹³ Hopkins et al. (2014) note the two books "Organizational Development in Schools" and "Handbook of Organizational Development in Schools" written by Schmuck and Runkel 1971 and 1985 respectively as important contributions. Beside the socio-relational aspects of school lives, these books early highlight meta-skills in schools for problem solving and improvement, e.g. systemic self-evaluation and joint gathering of local data as the basis for collective action.

showed curriculum innovations needed to be paralleled with organizational change that promoted teacher collaboration (in Hopkins et al. 2014) if implementation was to succeed. Further, Larsson (2004) showed in a Swedish study on four schools participating in the same IT implementation programme that all schools came out different, despite equal input values and resources in the project. The different levels of attainment was explained by the schools' various pre-conditions to perform *collective learning processes* that really impacted on all teachers daily work (Larsson, 2004).

Hopkins and colleagues (2014) further picture how the international SIR field developed during the years around the millennium. As a consequence of the decentralization reforms, local schools' "ownership of change", processes of self-evaluation and new demands on school leaders were highlighted. Researchers focused on how local schools succeeded in the implementation processes of the national reforms, and of frequently imposed regional initiatives.¹⁴ At the same time, other researchers monitored various locally initiated *action research projects*, and from this work emanates the widespread concept of 'teachers as researchers' (Elliott, 1991, in Hopkins et al., 2014). Within the tradition of action research, important steps were taken in order to develop methods for gathering 'local data' within schools as a basis for school development (Jarl et al, 2017). Teachers' joint *local data* –obtained by sharing everyday practices, joint mapping of learning environments and joint exploration of students' learning, challenges and needs– and joint analyses of the data in order to underpin successive improvement, have ever since been increasingly emphasized content in local school development processes (Timperley et al., 2008).

To summarize, one may say that school improvement research during the 1980s and 1990s appears 'sprawling and wild'. In 2001, Hopkins and Reynolds note the period as "loosely conceptualized and under-theorised" (in Hopkins et al., 2014, p. 261). Due to this, school improvement research did not represent a coherent approach to school development during this period. From a relational point of view, however, the period must be considered a starting point of a new era, since teachers and school leaders became mutually interdependent, in completely new ways, as jointly responsible actors accountable together for the school development and for educational outcomes. In addition, because of the reformed curriculum teachers had to interact with students in more mutual, relational ways. To 'blame others' (like colleagues, students, parents, the state or the local authority) when achievement was weak, was no longer an option. Instead, to develop collaboration and joint action appeared necessary challenges.

School improvement and student performance

School improvement research has been criticized for not connecting its investigation of processes within schools more directly to student learning (Hattie,

¹⁴ According to Hopkins et al. (2014), regional initiatives based on SER, of 'what factors work', grew rapidly after the publication of the federal report "A Nation at Risk" in the US, in 1983.

2009; Hopkins, 2001; Jarl et al., 2017; Timperley et al., 2008). The criticism has accentuated as the attention on international performance comparisons has accelerated, especially in relationship to the OECD's recurring PISA investigation. Politicians and educational officials throughout international education systems claimed that school improvement, to be acknowledged as such, must affect students' wellbeing and learning. Hopkins and colleagues (2014) confirm that connecting relational school improvement research to achievement, has been, and still is, a big challenge for scholars of the field. However, today, a clear direction of school improvement initiatives towards improvement of instruction in ways that improve student learning and rise achievement is regarded necessary (Timperley, 2011a; Håkansson & Sundberg, 2016).

Through the focus on achievement, school improvement researchers have come closer to methodologies and discourses asserted within the educational effectiveness framework. For instance, social relationships, work processes and organizational learning processes within 'high performing/successful schools' have been studied (Jarl et al., 2017). Relational processes of schools' inner lives such as teacher collaboration and collective learning, interplay between school leaders and staff and teacher-student transactions are operationalized, measured and discussed within multi-level models (Goddard et al., 2015; Hughes, 2011; Louis & Lee, 2016; Louis & Murphy, 2017; Tschannen-Moran & Barr, 2004). According to my reading, this ultimately has the purpose to establish causal links between certain relational processes of importance and achievement. The striving for causal explanation in contemporary school improvement discourse clearly expresses the 'melting together' of SER and SIR.

The trend towards overarching systemic approaches to relational aspects of educational quality is also being questioned. Jarl and colleagues (2017), with Hopkins et al. (2014), remark that the humanistic heritage of the school improvement movement, that derives from Lewin and Miles' deeply socio-relational starting point in the interaction between individual human beings in unique local organizations, runs the risk of fading out "in favor of a reasoning about factors in highly efficient educational systems" (Jarl et al., p. 29). As Hargreaves (1997) stressed, a theory of educational change must possess not only a set of operationalized variables, but also some good ideas about how the different variables interact and how they may impact on students' wellbeing and learning. This '*how*' remains the challenge and must be studied in ongoing relational interactions within local schools. This is the ambition of the present thesis: to maintain focus on the study of relational processes in schools, but at the same time to explore the possibility to monitor the impact of such processes by operationalized measures of students' perceptions of relational qualities of education. By doing so, the thesis hopes to contribute to the bridging between SER and SIR research.

SER and SIR research findings of relational significance

To end this section, results of relational significance from the multi-level studies of recent years on school development in relationship to student outcomes are summarized. Due to a growing body of research findings, in general teaching cultures within successful schools are strongly learner-centered and characterized by common visions and values and by devotion among the whole staff to improve instruction, develop healthy work environments and to raise achievement (Jarl et al., 2017). Vast research reveals that high expectations for learning not only concern all students, but likewise teachers' continuous learning processes, leadership development and the learning within the whole school organization. Further are shown that mutual trust and professional relationships prevail between teachers and between teachers and school leaders (Edwards-Groves, Grootenboer & Ronnerman, 2016; Gray et al., 2016; Hallam et al., 2015; Louis & Lee, 2016). Groups of professionals and schools who possess these features are commonly labeled as learning organizations (Edmondson, 2002; Louis & Lee, 2016) or as "mature" Professional Learning Communities (PLCs)¹⁵ in the contemporary school development literature (Doğan & Adams, 2018; Owen, 2016). Within mature learning groups, both implicit and explicit learning of individual members are made into collective resources in on-going processes that take place in organized collaboration and joint action. Hence, the establishment, nurturing and monitoring of mature PLCs are significant parts of contemporary school development strategy internationally (Doğan & Adams, 2018; Gray, Kruse & Tartor, 2016; Hargreaves & Fullan, 2013; Hopkins et al., 2014; Talbert, 2010), as well as in Sweden (Assarson, 2015; Jarl et al., 2017; Scherp & Scherp, 2007; SNAE, 2011). However, the transformation of school culture from a predominately individualistic one into a predominately collective one has been a bigger challenge than policymakers thought (Kruse & Louis, 1997; Larsson & Löwstedt, 2014; Talbert, 2010).

2.3 Teacher teams and learning communities

To understand the substantial challenges and extended processes of establishing mature professional learning communities within schools (Granström, 2003; Larsson, 2004), we must first return to the historically institutionalized culture of the autonomous teacher profession, which is unaccustomed to collaborating (Berg, 2015; Hopkins, 2015; Little, 1990; Somech, 2008). Indeed, organization oriented school researchers were initially doubtful. In the Swedish context, Berg for example in 1987 envisaged the challenge by stating that because "supporting

¹⁵ The concept of 'professional learning communities' is often applied to groups of professionals within organizations, like teacher teams in schools, that engage in joint learning and collective development efforts. A closely related Swedish concept is the term 'genuine learning teams', as introduced by Larsson and Löwstedt (2010).

principles for collaboration is missing” in most school cultures “this presumably is an indicator that teacher individualism is a general, and not a contextual factor” (cited in Larsson & Löwstedt, 2014, p.50, my translation). Ever since, researchers continuously have observed various qualities and levels of collaboration within teacher teams. For example, Larsson & Löwstedt (2014) stress group organizing does not guarantee teacher collaboration change in ways that promote collective learning:

Teacher teams that mainly focus on solving and handling issues that lay beside instruction itself resolve certain practical problems and may provide teachers with social support in an exposed job, but they do not create the necessary preconditions for their own learning and school development. (Larsson & Löwstedt, 2014, p. 209, author’s translation)

When successful, however, several benefits with group organizing and collaboration are found. Kruse and Louis (1997), who draw on vast research during the 1980s and 1990s on the establishment of interdisciplinary teacher teams, and on their own qualitative inquiry in American middle school teams, pointed to a series of gains for schools in developing learning communities around issues concerning students and instruction. Teachers reported that collaborative communities offered them psychological safety and social as well as academic-intellectual support. Further, teams were perceived to provide new structures for work that moderated the institutionalized isolation in “1 teacher-25 kids” (Kruse & Louis, 1997, p. 262) settings. By teaming, teachers additionally come to know each other in deeper and more personal ways. This provided emotional support and enabled mutual feedback processes. Teams were experienced as places for trying out new ideas and methods and for common reflection to develop. The continuous collegial dialogues were reported to assist “risk taking and an increased sense of efficacy and increases motivation for the further individual learning and participation in group learning” (Kruse & Louis, 1997, p. 265).

Formal teams and genuine learning teams

Internationally, teacher teams have been established as part of educational policy (Hargreaves, 2007; Havnes, 2009; Kruse & Louis, 1997; Talbert, 2010). The development followed on from the emerging research evidence at around the millennium that schools developing PLCs (or developed *as* PLCs) provided “systematic and positive effect on student learning outcomes” (Hargreaves, 2007, p. 181, in Talbert, 2010, p. 555). Asserted goals with PLCs were promotion of collaborative teaching cultures, building communities for distributed planning and decision making, professional sharing of experience and organizational learning. The objectives however have not been easy to achieve. Kruse and Louis (1997) describe the difficulty for any ‘flourishing’ community to reach out to a whole

school, or beyond their own school. In some cases, sectarianism and protectionism have developed between various teams, or between strong teams and school leaders:

The team requires a focus on smaller work groups, whereas the school wide professional community demands broader ties between staff members than teaming can provide. Therefore, schools with a strong team focus are facing a series of dilemmas. (Kruse & Louis, 1997, p. 266)

Havnes (2009) summarizes a body of differing and sometimes contradictory research results on successes and failures while establishing PLCs. Supovitz (2002, in Havnes), for example, found more collaboration in team-based schools than in non-team-based schools but not more deeper professional dialogues or clear differences in classroom practices. Co-teaching for instance was no more common in team-based schools than in other schools. However, Supovitz reported students taught by teachers in teacher teams that possessed a “higher level of group instructional practices” (in Havnes, p.156) performed better than did other students. Huberman (in Havnes, 2009) expressed worries over that teacher collaboration primarily focused on the social organization of work and would “eat into time for ongoing instructional work” (Huberman, 1993, p. 12-13, in Havnes, 2009, p. 158), and Crow and Pounder (2000, in Havnes) were concerned that teaming would threaten teacher autonomy.

Talbert and McLaughlin (2002) compared ‘strong’ and ‘weak’ collaborative communities and found that in weak communities the most innovative teachers were demoralized by a lack of collegial engagement for students who challenged, while strong communities engendered commitment for improving practice through collaboration around students’ needs and the sharing of classroom repertoires. In a later study, Talbert and McLaughlin (2006) found that forming collegiality within teacher communities was difficult and sternly concluded that strong learning communities were uncommon in American schools. Finally, Talbert (2010) refers to 10 years of research on efforts to develop PLCs and to change school districts into learning organizations. She concludes that even when initiators of these change processes are well aware of the current research about learning communities, and control structural preconditions that may support, or hinder, the development of sustainable PLCs, they “lack guidance on ways of changing the professional culture” (Talbert, 2010, p. 556). Thus, offering certain system conditions is important but seemingly not enough. According to Talbert (2010), real change requires sustainable processes in which teachers are engaged collectively, feel secure and respected as professionals and successively internalize the “core relational principals” (p. 556) of mature professional learning communities: the *acceptance of shared responsibility* for all students, the *norm of collaboration in improvement of instruction* and the *joint focus on students’ wellbeing and learning*. In continuation

to the Talbert and McLaughlin (2006) study, Talbert (2010), five years later, still found such PLCs uncommon.

Apparently, transformation towards group organizing and collaboration has been far from obvious. Ideology seems to have proceeded faster than the preconditions in schools for realizing change ideas. With this in mind: besides formal aims and predicated advantages with teacher teams and professional learning communities,¹⁶ *the actual quality of the intended collaboration within teacher groups must be illuminated in this thesis*. Teachers' tangible experiences inside teacher teams – what actually is being sensed, said and done among and between teachers – become crucial. Communication and relationships within the team shape the boundaries for what development processes become possible. Such relational prerequisites for team collaboration and collective learning are expanded on in section 3.3.

¹⁶ Although the concept of 'professional learning communities' in the literature, according to my reading, is often understood synonymously as the concept of 'teacher teams', I separate them in the following. Teacher teams, then, are primarily understood as work groups in which collective learning *may* take place, while professional learning communities are groups in which *collective learning is expected to happen* and, finally, "mature" professional learning communities are groups in which collective learning continuously *actually happens*.

3. Relational perspectives

In this chapter, the research base and theoretical foundation for the thesis's study of relational aspects of school development are outlined. Research perspectives on relational interplay at both the teacher-student level and among professionals are involved. International research of the significance and function of trustful Teacher-Student Relationships (TSR) is initially presented. Next, inter-personal teacher-student relationships and teachers' relational competence are discussed according to the philosophy of 'Relational pedagogy', which is an important theoretical perspective in the thesis. Finally, teachers' collective learning is outlined as a collaborative process that takes place within trustful professional relationships.

3.1 Significance and functions of trustful TSR

A large body of research from different research traditions affirms the significance of relational constructs such as teachers' interactive actions and students' perceived teacher care and support and sense of social bond and belongingness in school (Hamre & Pianta, 2006). Many scholars make use of the concept 'Teacher-Student Relationships' (TSR) while exploring the quality of interplay between teachers and students, and the development of trustful teacher-student relationships and its implication for students' wellbeing and learning (Baker, 2006; Hughes, 2011; Pianta & Steinberg, 1992; Wentzel, 2012; Wubbels et. al., 2014). The significance of TSR quality has been widely studied. In the following, the research findings are summarized with reference to international overviews.

In Hattie's (2009) comprehensive meta-analysis of school factors that influence students' performance, trustful relationships and developed mutual dialogues in learning between teachers and students are pointed out as key factors. Remarkably, the study points out that the quality in the ongoing educational interaction between teachers and students is a stronger predictor of student performance than is the teacher's subject knowledge. According to Hattie (2009), at the side of the teacher, trustful relationships are built by teachers being warm and empathic, listening to and conceiving students' perspectives and sustaining high expectations for all students' learning. Nordenbo, Søgaaard Larsen, Tiftikçi, Wendt and Østergaard (2008) confirmed, in a more specific compilation of 70 studies targeting the essence of 'teacher competence', that beyond academic subject

knowledge, teachers' social competence, classroom leadership and didactic approach to students were the most significant predictors of successful teacher contribution to learning (Nordenbo et al., 2008).

Roorda and Koomen (2011) specifically investigated the associations between students' 'engagement' and achievement, and TSR quality, in a meta-analysis on 99 studies from pre-school to high school levels. Associations between both positively and negatively perceived TSRs and engagement were medium to large, while the associations with achievement were small to medium. According to the authors, the smaller associations with achievement suggest that the effect of TSRs on achievement is *mediated*, through students' engagement. The argument is in line with Hamre and Pianta (2006), who remarked that TSR quality is foremost a measure of social interplay and therefore would be more proximal to behavioural than to academic outcomes. Similar reasoning was made by Hughes, Wu, Kwok, Villarreal & Johnson (2012) who found that student-reported conflict in TSRs negatively affected math achievement and inferred that this effect was mediated through students' lowered self-efficacy. Likewise, Li, Hughes, Kwok and Hsu (2012) found significant associations between supportive TSRs and subject-specific self-efficacy but not to achievement. Roorda and Koomen (2011) further highlighted two repeated findings. First, truly relational teacher-centred variables, like 'empathy' and 'warmth', were in many studies more strongly associated with student performance than were other teacher variables (like e.g. subject skills). Second, several studies imply that in cases where negative aspects of TSRs predominate, this has an even stronger influence, and especially for younger students (Roorda & Koomen, 2011).

Of particular interest for a deepened understanding of TSR qualities, Witt, Wheelless and Allen (2004) in a research overview examined the associations between teachers' 'immediacy behaviours',¹⁷ and student learning. Drawing on 81 studies, they concluded that teachers' nonverbal behaviours – such as eye gaze, smiles, nods, relaxed body posture, forward leans, movement, gestures and vocal variation – showed “meaningful correlation” to measures of student-perceived learning and 'affective learning', and “slight correlation” to cognitive learning measures (Witt et al., 2004, p. 184).

Hence, a series of meta-analyses give evidence to the general value of high quality TSRs. Reading the literature at study level, evidence of the impact of TSRs on specific aspects of students' schooling is revealed. Despite variation in theoretical underpinnings (i.e. attachment theory, social support theories or ecological systems theories), researchers have identified one positive relational dimension (support) and one negative (conflict) while measuring teachers' and students' appreciations of interpersonal TSR quality (Roorda & Koomen, 2011; Li et al., 2012). Trustful TSRs, characterized by a high level of emotional support and low level

¹⁷Mehrabian (1969/1981) conceptualized immediacy as “those communication behaviors that enhance closeness to and nonverbal interaction with another” (in Witt et al., 2004, p. 184).

of conflict show association with student engagement, sense of belonging at school, cooperation in class, positive peer relationships, positive attitudes toward school, adaptive behaviour and academic self-efficacy and achievement. Distrustful TSRs, characterized by a low level of support and a high level of conflict show association with externalizing behaviour, risk for retention, peer rejection, truancy and school dropout (Hamre & Pianta, 2006; Baker, 2006; Hughes, 2011; O'Connor et al., 2010; Murray, Waas, & Murray, 2008; Roorda & Koomen, 2011; Wenzel, 2012). Provision of high quality TSR predicts improved academic performance also after controlling for individual characteristics such as prior academic performance and behaviours (Hughes et al., 2012). Finally, a high or low rating of TSR quality made by the teachers have different implications than high or low ratings made by the students. In a sample of 714 at-risk students and their teachers Hughes (2011) found large differences in perceived 'support' and 'conflict' within the same relationships. While students' appreciation of TSR quality uniquely predicted changes in student-perceived academic competence, sense of belonging at school and math achievement, the teacher's appreciation of TSR quality instead uniquely predicted e.g. teacher-perceived student behaviour and engagement (Hughes, 2011, p. 38). Such implications of teachers' and students' various perceptions of TSR-quality point to the importance of including the student perspective.

A secure base, social support provision and agency in learning

Vast research of teacher-child relationships is rooted in attachment theory (Bowlby, 1988; Hamre & Pianta, 2006), which posits that children in early relationships with significant others internalizes representations of interaction patterns and shapes self-views, which impact on their stance and expectations in all later relationships. These representations, or 'working models', are regarded as persistent patterns of relational expectations that students bring to school and repeatedly express by means of receptivity to teacher support, sense of belongingness and participation in social interplay (Baker, 2006). Most students can be assumed to enter school with a secure attachment as a foundation; thus with positive expectations on social belongingness and supportive teacher-student relationships. However, a considerable part of all students enter school with a more or less insecure attachment foundation, meaning a weaker trust in gaining teacher support and weak self-confidence for building social relationships. Drawing from attachment theory, students who appreciate their teachers as trustworthy, warm, empathetic and caring are more likely to endure difficulties and engage in learning because they use the teacher-student relationship as *a secure base* for social participation, daring to try and take on academic challenges (Hamre & Pianta, 2006). Within a mutually trustful teacher-student relationship, high expectations can be conveyed because risk-taking is possible. Difficulties and failures are perceived as met with respect and benevolence and therefore are endurable (Tschannen-Moran & Barr, 2004).

Based on Weiss' (1974) theory of social provision within interpersonal relationships, Furman and Buhrmester (1985) added on the implications of attachment theory in their theoretical model of teacher-student relationship. Beyond a dependable bond, security and warmth, they suggested functional social provisions for students to seek for in their relationships with teachers. In Furman and Buhrmester's (1985) model trustful TSRs are believed to enhance *sense of worth and companionship* (sharing of experience), *reliance on guidance* (tangible aid) and give *opportunity to nurturance and taking care* for others.

From social cognitive (Bandura, 1989) and social motivational (Furrer & Skinner, 2003) perspectives, experiencing high levels of support from teachers provides students with a sense of *positive school membership* and *stronger academic self-beliefs* that promote a student's efforts and persistence, as well as commitment to school norms and rules. Indeed, trustful teacher-student relationship relate to students' higher self-efficacy (Bandura et al., 1996; Hughes, 2011) and sense of belonging at school, less sense of futility and social participation (Van Maele et al., 2014). Students who do not experience trustful relationships with teachers are less likely to risk own vulnerability, for instance by raising their hand, expressing their thoughts or asking for support (Van Maele et al., 2014).

Finally, according to relational philosophy of education, caring teacher-student relationships *enable a more responsive instruction* (Bingham & Sidorkin, 2004; Noddings, 2005; Aspelin, 2018) through increased teacher-student interplay. Empiric research also provides evidence that teachers better monitor their students' development and learning while engaging in mutual collaborative communication and formative dialogues with individual students and in class (Hattie, 2009; William & Leahy, 2016; Greene, 2014). Through mutual teacher-student communication, teachers gain deeper insight into students' perspectives of learning and challenges at school. When students in turn experience their teachers as caring, benevolent and devoted to support, such experiences are expected to *strengthen students' agency* beliefs of schooling (Bandura, 1989; Klassen, 2010; Zimmerman, 1999).

3.2 Philosophy of 'Relational pedagogy'

According to a widespread model by Biesta (2010a), one significant general purpose¹⁸ of education is *subjectification*. This means the providing of relationships that enable children and young people to develop as unique and responsible individuals (Aspelin, 2017; Ljungblad, 2016). Subjectification can be seen as a democratic task, since it emphasizes that socialization runs the risk of just adapting individuals to collective norms, habits and roles, resulting in making everyone 'all the same' (Säfström, 2005). In line with this, Ljungblad (2016) notes, with Biesta,

¹⁸Two other general purposes of education in Biesta's model are *qualification* and *socialization*.

that “if instruction specifies in advance what the child must become, the possibilities for newcomers are limited” (p. 68, author’s translation). From a relational pedagogical perspective, diversity is sought instead. Then, education must be organized in such ways that each child can develop as unique and responsible subjects in relationships with others. Teachers need to direct their interest towards students as persons and engage with them in mutual –and to a certain extent uncertain– relationships, through genuine *pedagogical meetings*. Such meetings, however, are not obvious.

Pedagogical meetings

In a philosophic educational study, von Wright (2000) suggested a distinction between two possible perspectives for teachers while meeting students: one a ‘punctual’ stance, and one a ‘relational’ stance. The two setoffs entail different approaches. From the punctual point of view, the teacher perceives the student as “*what*”: a predetermined object that should be educated. From the relational point of view, the teacher refers to the student as “*who*”: an open, unpredictable subject co-involved in an on-going educational relationship together with the teacher (von Wright, 2000; Ljungblad, 2016). Aspelin (2017), signifies that teacher-student relationships develop in a sphere of ‘in-between’. This space occurs in the interface between two persons involved in mutual communication. Biesta (2004) has expanded on pedagogical meetings, and he stresses that one must consider the *interaction* between a teacher and a student as “absolutely seriously” (p. 12), and if one does it follows that

... education is located not in the activities of the teacher, nor in the activities of the learner, but in the interaction between the two. Education, in other words, takes place in the gap between the teacher and the learner. (Biesta, 2004, p. 12)

‘The gap’, as Biesta (2004) names the meeting between the teacher and the student, is not fully predetermined from outside of the interplay by any collective order, nor by any fixed features or intrinsic motivation of any of the parties. To a certain extent, pedagogical meetings are unpredictable. That means the gap is risky. On the other hand, when risking own vulnerability in mutual communication, true pedagogical meetings provide opportunities for students and teachers to express who they really are, and what they really need.

Relational pedagogy

Relational pedagogy, as conceptualized in this thesis, is about how teachers develop trustful relationships through pedagogical meetings in which students feel secure, comfortable to participate and able to express themselves, while also being open to the perspectives and provisions of the teacher and to learning. It must be noted, this is not easily carried out. Teacher-student relationships by nature are asymmetric and possess a large unbalance of power between an adult

teacher and a child student (Juil & Jensen, 2009; Ljungblad 2016). The responsibility to maintain trustful relationships rests with the teacher and may be conceived of as an ‘ethical demand’ (Løgstrup, 1997). Von Wright (2000) says teachers must step out of the invasive institutional teacher role of judging students’ actions and performances, and instead they should maintain a ‘relational look’ towards students in search of the person behind and in order to respond to students’ expressions in ways that strengthens, and not harms, a trustful relationship. This is about teachers’ relational competence.

Teachers’ relational competence

‘Relational pedagogy’ formed as a separate field of research from the mid-90s onwards (Aspelin, 2018). Since then, studies have shown the teacher-student relationship to be a central concept in the investigation and understanding of students’ well-being and learning. From the teacher perspective thus, how to build trustful TSRs becomes the focal point. Aspelin (2018) demonstrates how scholars have assigned various labels to teachers’ capability to build relationships with students: “relationship-orientation” (Schultz-Jørgensen, 2006), “relational professionalism” (Sandvik, 2009) or “relationship work” (Frelin, 2010). Aspelin (1999) wrote about “relationship-aware pedagogy” in his dissertation, but later, mostly uses the term relational pedagogy together with the concept of teachers’ *relational competence*. The latter is a frequent concept in today’s Scandinavian literature, especially in Denmark where it has become prominent in teacher education and school development contexts (Skibsted & Matthiesen, 2016). The concept originates from family therapists Jesper Juil and Helle Jensen (2009), who first defined teacher relational competence as:

The pedagogue’s ability to see the individual child on its own terms and attune the own behaviour accordingly without giving up leadership, as well as the ability to be authentic in the contact (the pedagogic *craftsmanship*). Additionally, the pedagogue’s ability and willingness for taking full responsibility for the quality of the relationship (the pedagogic *ethics*). (Juil & Jensen, 2009, p. 124, author’s translation)

The concept of relational competence gained greater scientific weight after Nordenbo et al’s (2008) research overview that uncovered it¹⁹ as one of three basic pedagogic competences of ‘successful teachers’, with the others being leadership and didactic competence (Aspelin & Jonsson, 2019).

In further conceptualizations, Aspelin (2018) builds on social psychologist Thomas Scheff and his ‘micro-sociological perspective’ on human interaction. Scheff’s theory deals with how *intersubjective communication* momentarily either

¹⁹In Nordenbo et al’s study, relational competence was defined as the teacher’s ability to support, activate and motivate students, as well as the ability to develop relationships characterized by values such as respect, tolerance, empathy and interest (Nordenbo et al., 2008).

strengthens or weakens social bonds and how the course of communication determines the quality of the relationship. Inspired by Stern and Bowlby, among others, Scheff asserts that mutual *attunement* and *regulation of proximity and distance* regulate on-going affective interactions between individuals, the “microsociology” of relationship.²⁰ A third relational foundation in Scheff’s model, which expresses something significant about the instantaneous quality of interplay, is the (type of) *activation of basic affects* – such as pride, shame, joy or fear – that the relational interaction elicits (Aspelin, 2018).

Aspelin (2018) proposed a model of three sub-competencies of a teacher’s relational competence based on the micro-sociological perspective. The three sub-parts of relational competence are here understood as: (i) *communicative competence*: the teacher’s ability to attune in the communication together with students, striving for a high degree of consonance and for mutual understanding and respect; (ii) *differentiation competence*: the teacher’s ability to regulate closeness and distance in the relationship to the student; and (iii) *socio-emotional competence*: the teacher’s ability to perceive and regulate emotional signals in the relational transactions with the student (Aspelin, 2018).

Relational competence in action

Lilja (2013) analysed teachers’ actions together with students, which aimed to “build and confirm trustful relationships”. A main theme she disclosed concerns the various ways teachers show students that they *care about* them. The teachers showed concern for their students both as a group and as individuals by addressing them with *genuine interest* in regard to the students’ current states and by expressing their trust in students’ ability and willingness to learn. One aspect of caring is the way teachers embrace the student’s ‘whole being’ by paying attention to emotions. Lilja (2013) exemplifies the various kinds of feelings that teachers had to care about: “Everything from students’ doubts about their own abilities to headaches or bleeding wounds” (p. 206) were so important for the students that everything else was pushed aside. By *listening, seeing and paying attention* to students’ feelings, the teachers assisted them in regulating strong emotion and made them feel safe so they no longer needed to focus on what bothered them and could instead redirect their energy to school work. Lilja (2013) tells of a girl who expresses herself loudly and with concern, during group work, about something unfair that has happened to her mother. The group work is disrupted. Just by approaching the group, the teacher confirms that he has heard that somebody is worried, and that he wants to be involved. He listens as the girl tells him about what is going on, and then he responds to her questions. Afterwards, the group is able to return to work. This episode also reveals how students’ life outside of

²⁰Scheff’s concept of micro-sociology builds on developmental theories of attachment and early communication. With Scheff, Aspelin is bridging the fields of affective communication and intersubjectivity with ‘Relational pedagogy’.

school is intertwined with school life, and how what happens outside affects students' ability to work. Consequently, Lilja (2013) remarks that *attentiveness to students' narratives* is a crucial part of teachers' striving to develop trust and to facilitate learning.

Frelin (2010) talks about teachers' 'relational work'. In her study, she interviewed teachers who described their conscious efforts to elaborate and maintain trustful relationships with individual students, on the one hand, and positive relationships between students on the other. These efforts emerge as continuous *negotiations* between teachers and students about authority and mutual trust. The teachers stated that the students gain confidence in them over time if they are perceived as *fair*, *benevolent* and *comprehensible*. Also contributing to teachers' trustworthiness was that teachers appeared *human*. Teachers felt they benefited from being perceived as "authentic, multifaceted people of flesh and blood" (Frelin, 2010, p. 206), who have a life outside of school and are fallible. Further, *nonverbal expressions* and *humour* were reported as important tools for the teachers' relational work. Disclosing humanity within relationships also includes teachers *showing their students an empathic understanding* when they are struggling with all that school requires. The teachers expressed that they wanted to relate closely with individual students in order to learn to know them better and to be able to *make reasonable demands* about what the student can do.

Within trustful teacher-student relationships, Frelin (2010) stresses teachers have the opportunity to pay attention to students' self-beliefs and to work consciously to *improve students' self-efficacy*. Her respondents highlighted the significance of students' positive self-efficacy for handling demands. With weak self-beliefs, students avoid or sometimes even refuse to do tasks, in fear of failure, even when they are actually capable of doing the tasks themselves or with support. Negative self-images thus hinder both current learning and negatively affect students' motivation for future attempts (Frelin, 2010). Therefore, the teachers reported that they actively supported students to dare to try, despite uncertain exits.

Ljungblad (2016), explores teachers' relational competence at the micro-sociological level. Drawing on Løvlie, she uses the concept *pedagogical tactfulness* (or *tact*)²¹ to understand processes there teachers open up for, and see, what interaction with students is really about: sensitivity in the teacher-student relationship, and finesse in interpersonal communication. She pays special attention to when the teachers must cope with new, uncertain and sometimes chaotic situations that

²¹Løvlie (2007) emphasizes that *pedagogical tactfulness* is founded in immediate sensory perception. He underlines the importance of what he calls the aesthetic experiences of interplay; the dynamics in gaze, rhythm, gestures, vocal sounds and images (compare Mehrabian's concept of *immediacy behaviours*, p. 23).

arise in practice. Then, tact can be understood as improvisation, or as *rapid interaction of impression and expression*, when “the teacher is receptive with both mind, thought, and heart, and seeks experiences in intense moments” (Ljungblad 2016, p. 132, author’s translation). In order to catch such instant details of teacher-student interplay, careful observation of interpersonal interplay is needed. In Ljungblad’s (2016) study, substantial *video documentation* of four teachers and their students in interaction during math class were analyzed. Here, two of Ljungblad’s micro-analyses²² are reused to illustrate how intersubjective regulation between teachers and students look like in close detail. The first episode occurs when a student faces difficulties in solving a math task:

... the student's insecurity appears in a more closed body posture, weaker voice and flickering eyes. In the same second, the teacher's response changes // the teacher's tone softens and glances change rhythm, the teacher leans her head to the side and looks for the pupil's gaze [in the analysis, this complaisance is understood as a “tact change”] // When the teacher challenges with a new mathematical pattern, a second tact change occurs where the voice is just as soft. It is followed by a silence that awaits the student // during a microsecond, an expression of vulnerability appears in the student's face. At the same time a new tact change happens when the teacher nods and responds with a tone that is *even* softer, and more cautious than before. The student's response is so silent that it is hardly heard, and again, the character of the teacher's response changes: With a dramatized happy tone, the difficulty is lifted from the student. (Ljungblad, 2016, p. 168, author’s translation)

Ljungblad summarizes the sequence saying “the teacher encounters a dilemma, a tension arises in the atmosphere that the teacher manages and regulates emotionally through improvised changes of tact” (Ljungblad, 2016 p. 168-169, author’s translation). The second episode tells about the teacher Ingrid who approaches a male student in the beginning of a math lesson after the break. Before the break, there had been a 20 minutes long conflict in the classroom that influenced this student a lot, even though the student was not directly involved. Ingrid reported that this circumstance caused her to be extra attentive while approaching him. In the micro-analysis the sequence was recorded as follows, but with my italics:

Pelle looks tired while he opens his math book. His head and his torso is bent. – ‘I almost thought we would start and just look at this’, Ingrid says, with a *cautious* voice. Ingrid *speaks calmly* as she *repeats* the volume of pyramids and cones. She is *constantly watching his face*, which is directed at the book. Ingrid *waits*, and every time Pelle *nods*, she *continues* the review. Then she summarizes with a formula, and *says soothingly*: – ‘We will come back to that. You *don't have to* know it now’. Pelle becomes *more active*, the *conversation flows*, and they fall into each other's speech. Pelle seems to understand and *starts working*. Ingrid *leaves* ... // . (Ljungblad, 2016, p. 182, author’s translation)

The transcribed video sequence encompasses a teacher-student transaction lasting about two and a half minutes. During this short period, in my interpretation,

²² In the quotes, I have omitted most of the researcher’s analytic comments, since I just aim to reflect the pure turn-taking in the on-going teacher-student interplay.

the teacher invites with caution, addresses (instructs) with respect and timing and stepwise regulates affect and the possible level of demands. In this way, she secures the student, helps him to regulate his emotional state, gets him to participate in learning activities and leaves him in confidence.

3.3 Collective learning based in trustful relationships

In this section, the relational searchlight is directed towards the interplay between adult professionals in schools. Relational preconditions for teachers' collective learning are discussed in terms of trustful collegial relationships and psychological safety in teams. First, however, a basic view on experience-based learning is clarified. Expanding on this, a further developed model for professional learning in school development contexts as elaborated by Timperley (2011a; 2011b) is illustrated, which is slightly adjusted by the author to accommodate the collective learning processes studied in this work. Then, is discussed the relational challenges in the realization of such collective processes.

Experience based learning

Individual experience based learning has been outlined by Kolb (1984) as a cyclic process consisting of four shapes of learning that interact: concrete experience, reflective observation, abstract conceptualization and active experimentation. This is illustrated in Figure 1 below.

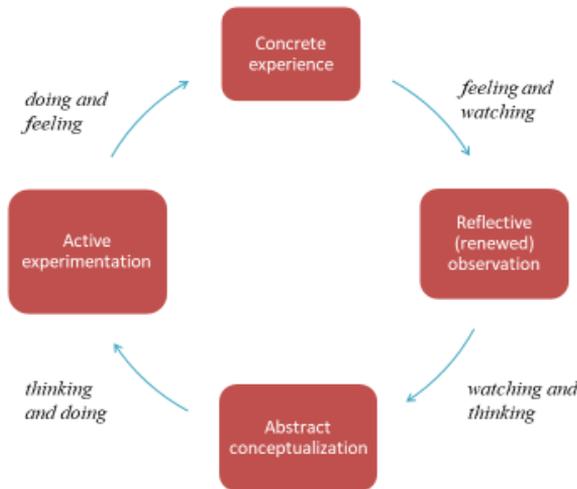


Figure 1. Model of experience-based learning based on Kolb (1984).

Two basic dimensions of learning emerge from the two opposite pairs in the cyclic model (Larsson, 2004). First, there is the pair of ‘concrete experience-abstract conceptualisation’ and, second, there is the pair of ‘experimentation-reflective renewed observation’. The first dimension embraces the different ways that we *build* experience through immediate sensory perceptions of events in the here-and-now and through mental representation and generalization of the experiences afterwards. Any perceived and felt event—Kolb’s ‘concrete experience’—first needs to be further processed to be fully visible and cohesive in order to establish enduring experiences (Olsson, 2016). In the interpretative and evaluating process, our individual history of earlier experiences is referenced to, as well as others’ shared perceptions of the same event and shared earlier experiences. The other dimension expresses two different ways to *transform* experiences into knowledge through new action (experimentation) and renewed, reflective observation. Deepened reflection implies thoughtfulness, cognitive elaboration and creativity in the sense of openness for new ways of embracing reality and for shaping of new ideas for experimentation (Simon, 2009). In sum, in accordance with Larsson (2004), experience-based knowledge can be comprehended as the result of building experience and processing and transforming it into “something that makes sense” (ibid p. 37, author’s translation).

Professional learning cycles

Within organizations, learning is more than an individual matter (Louis & Murphy, 2017; Senge, 1990; Weick, 2001). According to Senge (1990), in order to fulfill the common goals in an organization people must align and “continually expand their capacity to create the results they truly desire” (Senge, 1990, p. 3). This demands staff who appreciate shared responsibility and collaborate in deepened reflection and joint experimentation in order to improve shared practices and to resolve shared challenges (Meirink, Imants, Meijer & Verloop, 2010). Idealistically, a learning organization can be characterized as a place where people are continually “learning how to learn together” (Senge, in Gray et al., 2016, p. 877), and experience-based learning is made a collective matter.

Based on a comprehensive best-evidence-synthesis of teacher professional development and learning (Timperley et al., 2008), Helen Timperley (2011a) created a version of the experience-based learning cycle for teachers’ collective learning, which she calls ‘cycles of inquiry and knowledge-building’. Her model is illustrated in Figure 2 below, and adjusted by the author. The starting point for inquiry is always to identify the actual needs of students: What abilities and knowledge must students develop at the present time in order to achieve important educational goals? The identification of student needs is done collectively in teacher teams through thorough mapping and analysis of the student’s current experiences and results. Connected to the inquiry is also the identification of what knowledge and skills the teachers themselves need to develop in order to meet the needs of their students. In this in-depth professional learning step, an open and mutually self-reflective attitude is required where teachers together look at

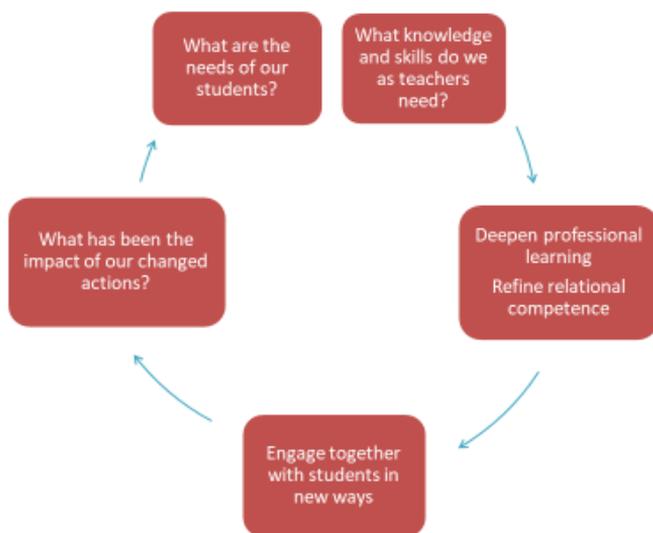


Figure 2. Cyclic model of teachers' collective learning as adapted from Timperley (2011a).

how hitherto used instruction methods and ways of approaching students actually work. Mutual visibility of practices is thus demanded, something that might be inconvenient. Sharing own challenges by inviting colleagues into class, replaying videos of own teacher-student interaction or discussing self-reflective questions like “in what way have I contributed to the weak student performance?” together with colleagues, can be intimidating for teachers accustomed to being autonomous professionals (Granström, 2003; Gray et al., 2016; Hallam et al., 2015). Further in the cyclic process come the joint creation of new ideas and the trying of new working methods together with students, which, eventually, reinforces outcomes. A full cycle in the ongoing process is being completed as the teachers evaluate “how effective has what we have learned and done been in promoting our students’ learning and wellbeing?” (2011b, p. 21).

Timperley (2011a; 2011b) emphasizes that students’ current development and results are the hub of the cycles of inquiry and asserts that the collective process of learning among school staff spins continuously. Teaching always needs to be adjusted for the needs of the specific students present in school at each time point. In their overview, Timperley and colleagues (2008) conclude that schools and teacher teams must be organized in ways so that collaboration, visibility and shared action develop. The authors stress this demands active support and involvement in collective learning processes by educational leaders, and that external counselling is involved to the required extent. The latter is required in order to support development of trustful and mature learning communities (Doğan & Adams, 2018; Owen, 2016) in which prevailing school cultures can be challenged.

Trust as relational precondition for collective learning

Experience based cyclic learning processes in teacher groups provide a potential for a deeper collective learning, given that teachers come together and embrace such ambition. However, even when organizing is at place and team members collaborate, a deepened learning process does not emerge automatically (Brücknerová & Novotný, 2017; Havnes, 2009; Larsson & Löwstedt, 2010; Talbert, 2010). In the following is highlighted how interpersonal relational processes and features of group social climate and dynamics either support or constrain a deeper level of teacher collaboration and learning.

Gíslason and Löwenborg (2003) suggest that the social climate in teacher groups is possible to grasp through teachers' answers to questions about what it feels like to be in the group and about what atmosphere there is. Is the atmosphere perceived as restrained and competitive, or as warm, permissive and creative? Do members sense unspoken demands to be 'good', or positive expectations to do their best? And, is there envy or suspicions in the group, or is the team characterized by generosity and benevolence? Ohlson (2013), who studied collective reflection processes in teacher teams, noted that through their way of approaching one another teachers in more mature learning teams established a "sacred space" (p. 297) in which professional growth was nurtured by the supportive warm atmosphere. Nevertheless, according to Ohlson, teacher teams not uncommonly emphasize psychological safety and cohesion rather than critical argumentation and the reculturing of teaching (Ohlson, 2013, p. 297), and they tend to preserve norms of 'low conflict' by avoiding diversity of opinions about students and instruction (Havnes, 2009; Ohlson, 2013). Similar to this, Brücknerová and Novotný (2017) observed how teachers maintained "problem-free relationships" (p.90) within the team as a way to avoid insecurity and unresolved conflicts.

The concept of 'psychological safety' emanates from Amy Edmondson (Edmondson, 1999), who studied what she calls 'learning behaviors' in work teams. She defined psychological safety as "a shared belief that the team is safe for interpersonal risk taking" (Edmondson, 1999, p. 354). In a study of 51 teams in a manufacturing company, Edmondson found that a team atmosphere characterized by respectful relationships and mutual trust was decisive for individuals to be willing to deepen collaboration; to give and receive feedback, share knowledge, personal experience and information and being open with own weaknesses and challenges. To be honest and open, as well as to dare to question prevailing cultures with their norms and values, requires a certain amount of safety. Without enough safety, the felt risk of team members of being looked upon as incompetent or troublesome, obstruct visibility and block vital communication (Edmondson, 2002). Hence, the available experience-based data for use in collective learning processes is delimited. As an example of this, Havnes (2009) describes how the communication within a studied teacher team remained

at the work coordination level while almost completely avoiding discussion about teaching and student matters:

...there seemed to be a social need, more or less, not to discuss the teaching and not to challenge each other about teaching and student learning. (Havnes, 2009, p. 170)

Hence, it is asserted that true collective learning requires a social relational climate characterized by trustful interpersonal relationships within schools. A growing body of international research confirms that feeling secure within the team and trusting personal colleagues with whom one is interdependent are prerequisites for teachers' readiness to risk own vulnerability – by being visible in own practice and open and honest in communication together with colleagues while participating in professional learning processes (e.g. Döös & Wilhelmsson, 2005; Edwards-Groves et al., 2016; Gray, 2016; Hallam et al., 2015; Li, Hallinger, Kennedy, & Walker, 2017; Van Maele et al., 2014; Tschannen-Moran & Hoy, 2000). *Trust*, then, emerges as an important concept in the understanding of relational preconditions for school development built on collaboration and collective learning. Trust building is of fundamental importance for relationships and learning at several levels.

Trust and school development

The pioneering sociologist Emile Durkheim outlined trust between individuals and groups as the foundation for social order in societies, organizations and groups and, likewise, as a basic precondition for the development of social relationships that support collaboration (Van Maele et al., 2014). Although trust is continuously understood by scholars as a certain quality of social systems, it remains somewhat intangible. Baier noticed that, “We inhabit a climate of trust as we inhabit an atmosphere, and notice it as we notice air, only when it becomes scarce or polluted” (in Van Maele et al., 2014, p. 1). Hence, trusting in others and being trusted is rather the ‘natural state’ and something that people who engage in social relationships initially risk and expect together with others. Hosmer (1995) regarded trust in organizations as the ability to rely on positive expectations of the outcome of uncertain events and on responsive communication from people one depends upon. Trust, then, has to do with *risk taking* and *vulnerability within interdependent relationships*. If trust expectations are violated, on the other hand, this has negative implications for both personal risk taking and collaboration. In the literature trust is linked to the effective functioning of whole organizations because the common goals of the organization bring mutual interdependence among members at all levels. *Trustworthiness* of leadership and processes in the organization (Hodson, 2004) together with *interpersonal trust* among members is regarded to positively affect open communication, flexibility and attitudes to change and to facilitate joint development efforts in work groups (Hosmer, 1995; Van Maele et al., 2014; Tschannen-Moran & Hoy, 2000). Shared new experiences

of improvement in turn strengthen collective efficacy (Goddard et al., 2015; Tschannen-Moran & Barr, 2004) and build *collective trust*.

In a comprehensive survey of trust related research within school contexts, and in connection to teachers' professional development, Tschannen-Moran and Hoy (2000) defined trust as "one party's willingness to be vulnerable to another party based on the confidence that the latter party is *benevolent, reliable, competent, honest, and open*" (p. 556). In Study 1, and in the Discussion, reference is made to these aspects of trust, as interpreted in Table 1 below:

Table 1. Five facets of trust (worked from Tschannen-Moran, 2000/2004).

Facets of trust	Definition
Benevolence	Empathizing, caring, respecting, supporting, expressing appreciation, being fair, guarding confidential information.
Honesty	Having integrity, consistency between what is said and what is enacted, telling the truth, keeping promises, honouring agreements, being true to oneself.
Openness	Engaging in open communication, interested in others' perspectives, sharing important information, delegating, sharing decision making, negotiating power in relationship.
Reliability	Being dependable to meet the needs of others (dependability combines predictability and benevolence), having dedication, being diligent.
Competence	Providing relational and matter specific skills required to do one's job, engaging in problem solving, fostering conflict resolution, role modelling, handling challenging situations, being flexible.

In schools, there are multiple relationships between 'parties' who need to mutually rely on each other in order to achieve the goals of education. Most primary, as emphasized throughout the thesis, are trustful teacher-student relationships. Secondly, as outlined in the previous paragraphs, trustful collegial relationships between teachers and mutual trust in the teacher team are required for development based on true collective learning to take place. In addition, at the school level the teachers depend on school leadership to provide organizing, vision and support for the collaborative learning and development efforts (Hallam et al., 2015) and, in turn, the school leaders depend on their teachers to teach all students in the best possible ways in order to attain the educational goals, which the school leaders are held accountable for (Louis & Murphy, 2017). The importance of trust at system levels also include caregivers, who must rely on teachers to educate their children, just as the teachers depend on the caregivers' engagement and support for their children's learning. Thus, in schools trust –or mistrust– is revealed both at the interpersonal level, group level and system levels. Teachers

in teams, or as a faculty, either trust or do not trust their educational leaders, school administrators and school politicians. School leaders, in turn, disclose large or weak trust in specific teacher teams, or, in the collegium. Students in general appreciate that they have good or bad teachers. And, of critical importance to outcomes (Hattie, 2009), the teachers as a collective may have strong or weak confidence in all students' willingness and ability to learn. Finally, individual actors and groups of actors within a school may have a strong identification²³ with the school as a whole and for its course of development, or not (Larsson & Löwstedt, 2014). Put otherwise, all members of the school organization may feel belongingness, and trust in continuous ongoing learning and the school development process, or not. To summarize, according to Van Maele et al. (2014):

The necessity of trust for the school organization is revealed then in the complexity of its primary task (i.e. educating a diverse range of students) and in the interdependence of groups whose efforts are indispensable to succeed in that task. (p. 2)

As regarded in the present thesis, and clarified in the five facets of trust, the necessary trust building among all parties in schools is to a large extent a relational endeavour that deals with interpersonal communication, developed interplay and strengthened relationships at all levels in schools.

²³Compare how this is referred to by different scholars in various ways, as for example 'shared visions' (Hargreaves et. al., 2010), 'collective sense making' (Weick, 1995) or 'joint organizational conception' (Larsson & Löwstedt, 2010).

4. Methodology

In this chapter is first commented on the overall research approach of the thesis: a longitudinal parallel mixed methods design. Next, the two-year school development initiative which is the empiric source of the three studies, is outlined. Descriptions of school selection, participants and data collection are included. A discussion of the methodologies used, and embedded research challenges, follows. Finally, ethical aspects are reflected on.

4.1 Pragmatic stance and mixed methodology approach

To start, this research is a subjective product formed by the author. The thesis is built on my own perspectives and my own perceptions and interpretations of the world outside. My own history, values, preferences and not least my earlier professional experiences from relational participation in schools are inevitably involved in shaping my research and presenting its outcomes. Further, I do not believe there is a school world out there that can be objectively described, or from which any ‘true knowledge’ can be generated, or that learning can take place uninfluenced by the interaction between the learner, the learning environment and the learning object. However, in making such a subjectivist epistemological and social ontological declaration I argue, drawing on philosophical pragmatists (Biesta, 2010b; Brendan-Hogan, 2009), does not necessary mean I am fully obliged to perform inquiry that seeks to understand, through interpretation, the intentions, actions and experiences of the participants in the relational process studied. I may –also– include inquiry that seeks to explain, through measurement, the correlations between the teachers’ actions and subjective process experiences, and their students’ assessments of relational qualities in education. Many regularities and correlations that exist within social relational domains are “actually achieved through interpretative acts” (Biesta, 2010b, p.104). This can be exemplified in educational research of relevance to this thesis. In a longitudinal study by Hughes (2011) on a sample of at-risk students and their teachers, students’ perceptions of TSR quality were found to predict change in students’ academic self-beliefs and sense of belonging at school. These associations were found through explanatory inquiry, but that does not mean that they were *established* in a mechanistic way (Biesta, 2010b). Rather, they were achieved in relational processes in which the students perceived, interpreted and, in ‘some way’, made sense of the teacher-student relationship. This ‘in some way’ also points to the

limitation of the explanatory approach. The correlations were found but not understood. Biesta (2010b) provides an argument for a mixed design, relevant to this thesis, while concluding that “to make sense of research that finds such correlations, one needs to bring in a social ontology, rather than a mechanistic one” (Biesta, 2010b, p. 104). In this thesis, when correlations are found, a deeper understanding of the relational processes that contribute to their establishment can take place. Here, such processes are assumed to be teacher teams’ collective learning and collaboration on improvement of teacher-student interplay. With longitudinal data from all students belonging to the team, it can be ‘known’ whether or not the teachers’ efforts influence on students’ perceptions of crucial aspects of their schooling. With the longitudinal approach, and with the described intention to collect different kind of data in parallel over time, I ended up with an overall design which can be labelled a ‘longitudinal, convergent parallel mixed methodology design’.

4.1.1 Convergent parallel design

The purpose of a convergent (or concurrent/parallel) mixed methods design is to simultaneously make both quantitative and qualitative inquiry, and then to weigh the two data sets together to broaden the understanding of the overall research problem (Guetterman, Fetters & Creswell, 2015). A basic rationale for this design is that one data collection form supplies strengths to offset the weaknesses of the other. Both datasets are separately analyzed with appropriate methods of the respective research paradigms. Then, the results are compared and interpreted as to whether they support, contradict or complement each other. The integration of the results derived from the two different kinds of data is said to provide a “convergence” of the sources. In Figure 3 on the next page is shown the flowchart of the research design.

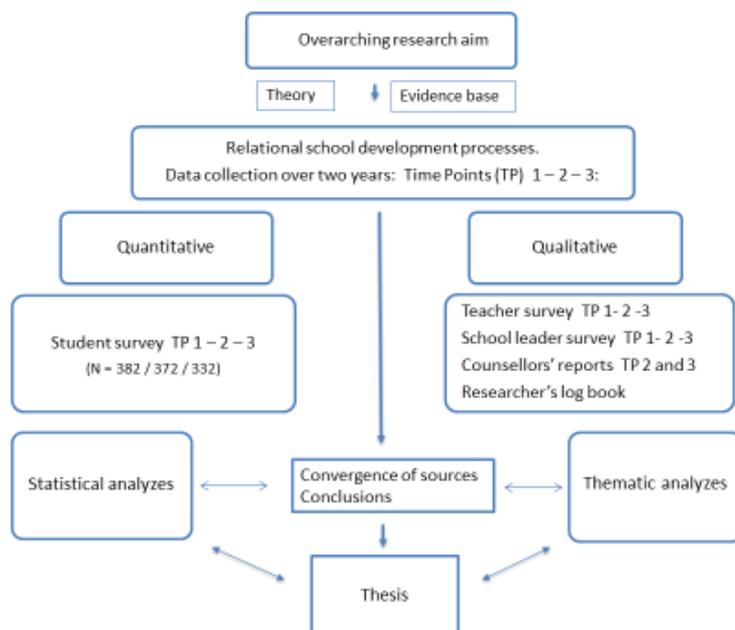


Figure 3. The convergent parallel mixed design of the research.

4.2 The school development initiative

The creation and accomplishment of a relational school development initiative is the continuous method used in order to respond to the overall research aim and research questions. The initiative can be described as an ‘intervention and research project’²⁴ that literarily contains two parts — one intervention, and research on the relational processes that it generates. Figure 4 below illustrates the full project, with its double nature of school development and research. Actions belonging to the research are coloured in blue, while actions connected to the implementation and evaluation of the school development project are coloured in green. The entire project was subjected to an ethical audit (Swedish Research Council, 2011). The ethical review process concerned both research matter and actions to be performed by teachers together with students, and hence it is placed between research and school development in the figure.

²⁴ The current research project is not labelled an “intervention project” or an “intervention research project”, since such concepts imply an experimental design (see e.g. Fraser & Galinsky, 2010)

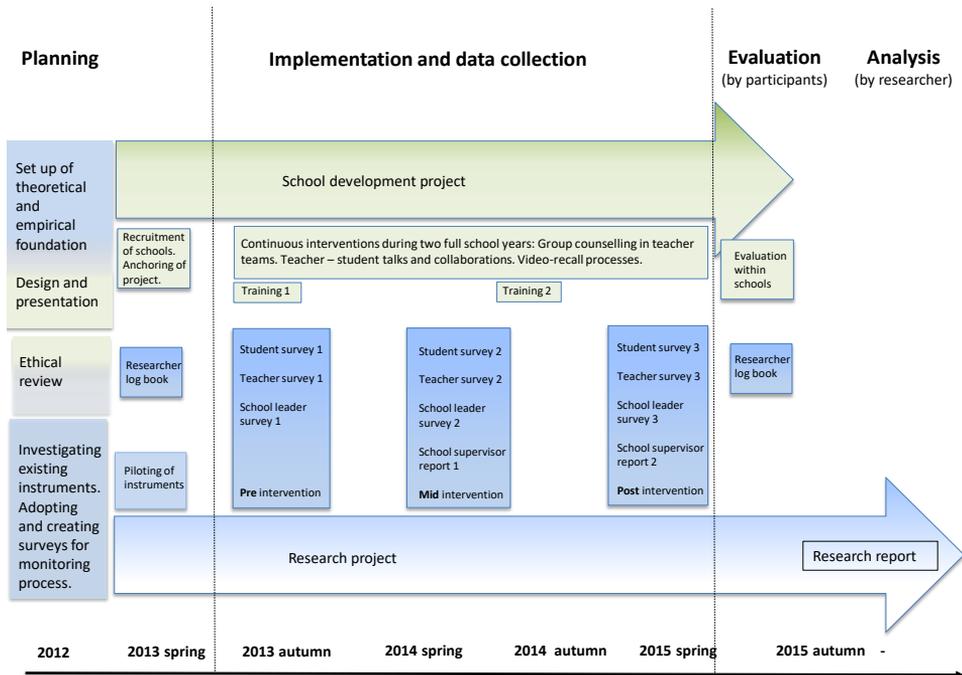


Figure 4. Project processes and activities over time.

4.2.1 Project contents and activities

The project is a relational school development initiative that aims to improve teacher team collaboration and teacher collective action in inclusive instruction generally and in the prevention and problem solving together with students who challenge in learning specifically. The model, labelled “Collaborative Mutual Communication” (CMC hereinafter) was created by the author in 2012 and 2013 as a response to current understanding of the overall challenges in Swedish schools²⁵, and in the absence of research based relational school development models targeting teachers’ work together with students who challenge. The CMC model is based on the theoretical and empirical foundation presented in Chapter 2 and Chapter 3. Additionally, to make the model relevant, up to date, and practically feasible to implement in local school context, its creation was informed by many conversations with teachers and school leaders in the professional field and with participants in further training programmes at the university. The main contents of the model are: (i) professional training; (ii) a longitudinal group counselling process; and (iii) collaborative teacher-student interventions consisting of collaborative teacher-student conversations and mutual improvement efforts.

²⁵Compare Introduction, section 1.1.

At the project start, before other activities started in the schools, all participating teachers and school leaders received a nine hour *professional training* course, which was delivered on three occasions at the university. Theory and research connected to an established project reference list was conveyed. The central themes concerned inclusive education and the meaning and impact of high quality teacher-student relationships to students' self-beliefs as learners, to performance and to all actors' wellbeing. In addition, research on various preconditions for successfully implementing an externally formulated school development initiative within local schools was discussed. The practical execution of the CMC model and the group counselling was talked over, and the participants were allowed to practice to lead 'collaborative mutual teacher-student talks'.²⁶

The *group counselling process* is the main drive and the most extensive feature of the CMC model. All through the project, group counselling was scheduled for two hours every other week. The collective reflection on daily experience was expected to relate to teachers' improvement efforts and collaborative actions in practice. *Collaborative teacher-student interventions* –the teacher-student conversations and the mutual improvement efforts that were intended to follow– were to be collectively planned, performed²⁷ and monitored. The teacher-student talks were intended to be videotaped in order to make teachers' practices visible to reflection, feedback and joint learning, and to make the teacher-student interventions subject to shared responsibility.

The outlined components of the CMC model linked together as one continuous process – teacher reports of everyday experiences and joint reflection/joint planning of teacher-student interventions/videotaped collaborative teacher-student conversation/video-recall and new reflection/ joint execution of improvement efforts/new reflection/joint monitoring of development and so forth – establishes a cyclic collective learning process concordant to that of Timperley (2011a), as described in section 3.3.

The school development project spanned over five school semesters (see Figure 4). Semester one constituted the information and recruitment phase, after which the implementation phase ran for two whole school years. The counselling process started in September 2013. Three schools completed the project as a whole, while two schools interrupted²⁸ the counselling process at the start of the second year.

²⁶A conversation model aiming to empathize with and exploring students' perspectives, and to enhance mutual improvement efforts.

²⁷Although a specific teacher-student conversation can be sometimes led by a single teacher, the preparation and the follow-up process were to be handled collectively.

²⁸The reasons behind the dropout are discussed in Study 1, and in the Discussion in chapter 6.

4.2.2 Recruitment of schools and school counsellors

The five participating schools were recruited through an information and recruitment process in several stages. In the first phase, a letter with the project presentation and invitation²⁹ to participate went out to all schools with students in grades four to eight in a Swedish large city county. The main criteria for application were outlined as interest in the development area, good anchoring, teacher participation in decision to enter project and school leaders' priority during two years by means of structural support and financing of group counselling.

Interested school leaders, teachers and other interested parties from 13 schools from 8 different municipalities then attended information meetings with the researcher (who also was the project manager). A decision-making time of three months was set aside to allow time for local discussion at the schools, visits by the researcher to the teacher teams and additional time for teachers and school leaders for consideration, time planning and budget planning. At the end of the spring semester 2013, five schools remained in the process. The other schools chose to drop out for various reasons, however, none of them considered themselves to meet all criteria. Five schools was judged to be an appropriate number of schools for the realization of the school development initiative, and for the intended research inquiry. Hence, the researcher/project manager neither needed to limit the number of participating schools, nor needed to actively search for (or 'persuade') any other schools to participate. Thereby, the outcome of the school selection process was fully due to a 'school's own choice' to enter into the project.

All five schools were public schools, located in four different municipalities outside of the large city (see Table 2 below). Although these four municipalities are identically classified as 'commuter municipalities' in public records,³⁰ it must anyhow be noted they were situated in quite different environments. One school (school 5) was geographically close to the city, while two schools (school 3 and school 4) were placed far away from the city but still centrally in the main location of the municipalities and, finally, two schools were located in the periphery and more rural parts of their municipalities. The two latter schools (school 1 and school 2) were also the smallest. A further socio-demographic comparison reveals both differences and similarities. Student performance varies, but not that much between several of the schools. School 5, which is the biggest and most urban, stands out in the comparison with higher parental education levels, the highest student attainment and the highest grade points of 9th graders. Two schools situated in the same municipality, school 2 and foremost school 3, revealed weaker statistics. A further observation is that in the small and more rural school 2, no students had a foreign background.

Lastly, all five schools were structurally organized in a similar way, based on teacher teams. In all five schools the teams were grade level based, with teachers

²⁹ Appendix A.

³⁰ Classification by Swedish Association of Local Authorities and Regions (SKR).

jointly responsible for a whole group of students in all classes of some school years; for example, all students in 4th–6th grades. In the small school 2, the teacher team’s responsibility included all grades from 4th–8th. All teams were mixed and composed of teachers from all subjects and teaching tasks.

Table 2. Participating schools and teacher teams.

school	participating teacher team (number of teachers)	number of students: entire school	number of students: participating teacher team	municipality type*	proportion of students (%) with foreign background**	proportion of care givers (%) with post upper secondary education	proportion of 9th graders (%) approved in all subjects	average grade points at 9th graders
School 1	interdisciplinary, year 7-9 (8)	366	55	commuter municipality close to big city	6	46	83	227
School 2	interdisciplinary, year 4-9 (8)	93	40	commuter municipality close to big city	0	46	80	202
School 3	interdisciplinary, year 4-6 (7)	495	83	commuter municipality close to big city	22	49	56	202
School 4	interdisciplinary, year 4-6 (7)	453	116	commuter municipality close to big city	11	52	77	205
School 5	interdisciplinary, year 7-9 (7)	643	81	commuter municipality close to big city	18	73	89	238

All data valid for year 1. Municipality classification by Swedish Association of Local Authorities and Regions (SKL). Statistics from Swedish National Agency of Education (SNAE).

* Commuter municipality: more than 40 % of the workforce commute to work in a big city or a municipality close to a big city.

** Foreign background: born abroad, or born in Sweden with both parents born abroad.

One teacher team in each of the schools finally chose to participate. They entered into the project on equal terms, with equal resources added,³¹ and with equal expectations for time spent in project activities. A written agreement clarifying reciprocal commitments was made between the principals of the schools and the researcher/university. Written agreements were also established between each principal and the respective counsellor, in order to secure safe frameworks for the group counselling over two years.

The project counsellors were recruited through an admissions process among school supervisors within professional networks.³² The requirements of the project counsellors were extensive. A relational perspective on students who challenge and to school development processes, as well as demonstrated interest in the CMC model as an external framework for the counselling process,³³ were the

³¹ Referred to resources offered are: the professional training programme, the counselling by a qualified external counsellor, the resources/methods provided within the CMC model and the administrative and pedagogical support offered by the project manager/researcher.

³² Including members of the association for authorized school supervisors (www.skolhandledarforeningen.se).

³³ With that said, it is also important to note that the professional autonomy of each of the project counsellors was trusted, so various ways to supervise and manage the process, within the CMC framework, at counsellors own discretion was supported. There was no explicit, manual method of supervising.

first requirements. Further decisive criteria were qualified counsellor degree, pedagogical education, experience of group counselling in schools and a broad general knowledge of Swedish compulsory schools ('cultural competence'). Three, all university external, of six applicant counsellors met the requirements and were hired for the project. All counsellors participated in the initial professional training course at the university, together with teachers and school leaders. They were then included in a 'counsellor pool' together with the researcher/project manager, who himself served as counsellor at one school.³⁴ The counsellor group met once or twice during the four project semesters. At the pool meetings there was room for collegial 'counselling on counselling', exchange of experience and discussion about the development of the school development project and the role of the counsellors in supporting the teacher teams' relational processes.

4.2.3 Participants and informants

At an overview of the whole intervention and research project, several groups of participants can be identified in different roles of participation. Some individuals participate both directly in the school development activities and as informants for the research inquiry. This applies for almost all teachers, for all school leaders and for the four school counsellors. In total, 36 teachers, 11 school leaders and four school counsellors participated in the school development activities that also were informants of the qualitative part of the data collection. In addition, a few teachers participated for shorter periods in the project activities, but they did not participate as informants. In Table 3, the numbers of teachers and school leaders that participated in the teacher and school leader survey are shown respectively.

Table 3. Responding teachers and school leaders at time points 1, 2 and 3.

<i>data:</i>	Teacher survey			School leader survey		
	time point 1	time point 2	time point 3	time point 1	time point 2	time point 3
	<i>n</i>	<i>n</i>	<i>n</i>	<i>n</i>	<i>n</i>	<i>n</i>
school 1	8	6	5	2	2	2
school 2	8	9	9	2	2	2
school 3	7	6	(2)*	2	1	-
school 4	7	7	5	2	2	2
school 5	6	7	(3)*	1	1	2
total	36	35	19 (24)	9	8	11**

*) Two teachers at school 3 and three teachers at school 5 participated as individuals at time point 3, even though their teacher team have quitted the counselling process in advance, after time point 2.

***) At school 1, both two resigned school leaders (after year 1), and two new signed school leaders (during year 2), participated at time point 3.

³⁴ This circumstance is discussed in section 4.4.1.

On the other hand, the majority of all students responding to the student survey, only participated in the role as informants in the quantitative part of the data collection. One exception to this was the group of students who were invited by their teachers and directly got involved in the collaborative teacher-student interventions. These students also possessed an active role in the relational processes of interest for the qualitative inquiry, but however they did not participate as informants in that part.

The whole group of students responding to the student survey can be divided into subgroups due to school affiliation, gender, age, and grade level. In addition, the full sample of students can as well be split into the two subgroups (i) students belonging to a project participating teacher team (PPTS group), and, (ii) students belonging to teacher teams that not participated in the project. This is further explained below, and in connection to the Table 4. However, first the recruitment and composition of the full sample needs to be outlined.

Table 4. All invited students, and survey participants by gender and grade level, PPTS groups* and attrition from PPTS groups.

School	Invited students in 4th-8th grades	Proportion "Yes" to participate in survey (%)	Participants in middle school (4th - 6th grade) (year 1)		Participants in secondary school (7th - 8th grade) (year 1)		Full sample time point 1	Full sample time point 2	Full sample time point 3	PPTS group* time point 1	Attrition in PPTS group time point 2	Attrition in PPTS group time point 3 (accum.)	Full school size	
			n	n (%)	n	n								n
			Girls	Boys	Girls	Boys								
School 1	175	27	17	17	7	6	47 (12%)	47	44	13	-	-1	366	
School 2	40	82	11	13	4	5	33 (9%)	33	31	33	-	-2	93	
School 3	194	43	28	32	19	5	84 (22%)	82	66	60	-	-15	495	
School 4	209	55	35	45	24	10	114 (30%)	109	94	80	-4	-16	453	
School 5	162	64	-	-	52	52	104 (27%)	101	97	27	-3	-2	643	
total	780	49	91	107	106	78	382 (100%)	372	332	213	-7	-36	2050	

* PPTS group: Process-Participating Teachers' Student group (students belonging to a project-participating teacher team)

For practical and ethical reasons, the recruitment of students to take part in the student survey was co-administered with the consent request concerning students' readiness/willingness to be invited by their teachers to get involved in the collaborative teacher-student interventions. All students in school grades four through eight in the five schools and their caregivers received a letter³⁵ with information about the project's aim and contents, including a description of the CMC-model with its teacher-student interventions. On an enclosed reply coupon, both the students and caregivers were asked individually to consent to the students' responding to the student survey on three occasions during the two-year project. They were also asked to consent to students' readiness to participate

³⁵Appendix B.

in teacher-student interventions in line with the presented CMC-model if they had been invited by their teachers.

As illustrated in Table 4, a total of 780 students and their caregivers received the participation/consent request letter. Of these, just over half replied.³⁶ Of all returned replies, a large majority were “Yes-to-participate” responses. In all, 382 students consented to respond to the survey, and almost all consented simultaneously to their readiness for participation in CMC-interventions, if invited. However, a few students answered “yes” to respond to the survey but “no” to eventually participate in teacher-student interventions, while a few other students answered “no” to respond to the survey and “yes” to readiness for intervention. Table 4 further shows that gender (197 girls/185 boys) and grade level (198 middle-school students/184 secondary students) distributions were close to equal. Moreover, the full sample of 382 students is divided into one group of students in the ‘PPTS condition’ (Process Participating Teachers’ Students, see Table 4, ninth column), and one group of all remaining students in a comparison condition. The two groups are respectively defined as follows. ‘PPTS’ group: all students belonging to a project participating teacher team, and, comparison group: all students belonging to a teacher team that did not participate in the project. This grouping was motivated because in the implementation of the school development initiative the teacher teams directed their improvement efforts only towards students belonging to their own team. This means that to be able to study any potential impact of teachers’ efforts to students’ perceptions of TSR and SSE, the appropriate student group to study is only the ‘PPTS’ group.

The proportion of invited students that consented positively to participation varied notably between the five schools (Table 4). Not least, questions were raised concerning the very small number of participating students at School 1. According to School 1 teachers’ and school leaders’ reports, two main reasons for the poor recruitment were “weak process engagement among some staff” and a school history characterized by “weak school-home relationships”. At schools 3, 4 and 5 the recruitment was also an issue for debate and reflection among the staff. Administrative problems, lack of time and difficulties in reaching out to caregivers were the most common explanations of school leaders and teachers for why around half of all students/caregivers never responded. No negative reactions to the invitation letter, or the project contents, were reported as a reason for students/caregivers not to respond. However, three caregivers contacted the researcher/project manager in personal communication with questions about the aims and proceedings of the project prior to their consent response, two of which were affiliated to School 1. The dialogues with the latter illustrated that these caregivers’ trust in school staff was limited.

³⁶In schools 1, 3 and 5 the handling of the consent letter was not easily carried out. Repeated oral and written reminders to students and caregivers by the teachers and caregiver-directed communication by principals meant that a certain amount of effort was taken in these schools.

Among the participating students, however, attrition from the survey over time points was small (Table 4), and for the most part caused by students having changed school. In fewer cases, attrition was due to temporary absence.

4.3 Data collection

The school development process was intended to be monitored longitudinally, from anchoring until end, in the same ways at all five schools. The five main sources of information collected are described in upcoming sections:

- researcher log book
- three-part teacher survey
- three-part school leader survey
- three-part student survey of TSR and SSE
- school counsellors written reports

The three-part teacher-, school leader- and student surveys jointly establish the main data, while the researcher log book and the school counsellors' written reports provide complementary process information of value for triangulation. Qualitative and quantitative data were obtained from participants/informants at three time points, and set in advance:

- time point 1: Before the start of group counselling and before any collaborative teacher-student intervention was initiated. In the beginning of project year one (Aug-Oct 2013).
- time point 2: Before, or in conjunction with, the ending of year one (May-June 2014).
- time point 3: Before, or in conjunction with, the ending of year two (Apr-June 2015).

All data collection was approved in the ethics review by the Regional Ethics Review Board (Swedish Research Council, 2011).

4.3.1 The researcher log book

The researcher log book was kept all through the project. The record started from the very first contact with schools before and in the information meetings with interested schools. It continued with documentation of dialogues and communication with teachers and school leaders in the anchoring and decision-making process prior to participation. Included were, for example, notations from the researcher/project manager's visits to each interested teacher team, notations

from conversations with school leaders and vast email correspondence. At the start of the project (August 2013), a further record was kept concerning participants' responses to the professional training programme and of organizational aspects in the schools' planning and at the start of the project activities. For example, the administration of the consent letter was one issue of concern, and the formation of counselling groups was another.

During the two school years of project implementation, records of events and communication with schools of interest for the monitoring of the local school development processes were continuously taken. Two examples were the discussions within two schools/teacher teams, during the first year, on whether or not it was appropriate that assistant principals were included in the counselling group, and the discussions in three schools/teacher teams, at the start of the second year, on whether the teacher team should continue or drop out from the counselling process. Further process notations were made based on continuous dialogues with the school counsellors.

More records were kept in the end phase of the project implementation (April-June 2015). In this phase, finishing conversations with all school leaders were planned and executed, and transliteration of recordings and/or notations from these talks were obtained. Likewise, comments and feed-back on the processes from communication with several participating teachers were documented; foremost of these were the teacher team leaders who served as the contact person for the researcher/project manager and with who contact was most frequent. Finally, notes were obtained from short conversations with some individual students in three schools, who had participated in CMC-interventions together with their teachers.

4.3.2 The teacher survey and the school leader survey

The respective three-part teacher survey and school leader survey questionnaires were designed prior to the start of the project in a longitudinal mixed design. The full questionnaires are attached in appendices C and D. The design of the questionnaires *in part* aimed to evaluate, from the participants' perspectives, project goal attainment and perceived impact at different levels in the schools of the relational processes carried out. For example, respondents were required to assess to what extent their own project's goals have been reached and to what extent the relational interventions, according to their appreciation, have impacted on teacher team collaboration and on the involved students. Such questions were given with response alternatives like "to very little/little/neither little or large/large/very large extent", and there was free space for further comments and information.

In addition, the questionnaires in part aimed to qualitatively explore the participants' perceptions of the ongoing relational school development process, in which they were active parts. Issues concerned teachers' and school leaders' interests and motives for applying to the project, their more explicit personal drives

and expectations and their experiences of and reflections and opinions about the actually performed relational processes. Likewise, participants' thoughts and feelings were asked for about the anchoring of the project and the current preconditions for their school and the teacher team to sustain development processes also after project ending. This part of the questionnaires consisted of open-ended questions, as well as questions with given response alternatives together with a space for comments. Examples of the latter were questions concerning what part of the project contents respondents found to be the most valuable, the most challenging and the least successfully implemented. For these, the response alternatives were "professional training/counselling/CMC-interventions/wholeness of project/other", and there was space left for additional information/comments.

Of importance is to see that the two described parts – the participants' evaluation and the development process exploration – were intertwined in the questionnaires design. Later, however, in the analysis, data belonging to the evaluation part and data appropriate for the process exploration are clearly separated. Of most concern for the overall aim and research inquiry of this thesis are the latter, process related, data. However, after the process analysis is committed, the results can be discussed in relation (also) to the teachers' evaluation.

Questionnaires

The surveys consisted of three printed questionnaires that were responded to by pen at the time points 1, 2 and 3 respectively. The longitudinal questionnaires were designed so that the informants could look back on their own answers in questionnaire 1 when questionnaire 2 was answered and on their answers in both questionnaire 1 and questionnaire 2 when questionnaire 3 was answered. In this way the participants were able to reflect on, and confirm or re-evaluate, their own views over time. The contents (the kind of process perceptions searched for) of the teacher survey and the school leader surveys are similar, and therefore they are outlined jointly in the text below.

The main purpose for applying response alternatives in the teacher survey was the intention to be able to conceive teachers' perceptions also at group level, alongside the individual responding teacher level. At group level, response alternatives were judged to give advantages while weighting whether or not different teachers' responses to the same questions are equal, or differ, as compared to weighting different free text responses. It is important to note, however, that all response alternative questions also allowed space for additional comments/information.

In questionnaire 1, teachers and school leaders were asked to answer open-ended questions about what aroused their interest in the project, about school development needs, and motivations to participate, about possible concerns, expectations and wishes and about anchoring, planning, practical preparation and the start-up phase of the project. Participants were further asked to specify three

project goals that they saw as the most important to achieve in advance. The teachers were allowed to choose their prior goals from a list of 15 pre-formulated goal alternatives,³⁷ of which one was “own option”. The school leaders stated their three prior goals in free text.

In questionnaire 2, the participants were first asked to decide to what extent their three most important project goals set have been achieved after one year. This question was given to teachers with response alternatives “not at all/to little/to some/to large/to very large extent”, with space for further comments. The school leaders were addressed in less specific formulation (“To what extent were these goals met after a year?”) and replied in free wording. Next, informants were to indicate again what three goals continued to be the most important to achieve in the upcoming year. Teachers were, moreover, allowed to comment on the project’s main elements (professional training/group counselling/collaborative teacher-student interventions/wholeness of project) and state which was the most rewarding, the biggest challenge and which has worked less well, and again there was free space for additional comments. School leaders were asked about the current position of (reactions/support) the school development activities in the school as a whole. Open questions about experiences from the first year of the project process, and a quest for proposals for change/improvement of project activities before the second year, completed the second survey.

In questionnaire 3, the highest valued actual results achieved through the project were first ranked by the participants. Teachers marked their highest valued results from a list with the same 15 response alternatives previously used in goal setting, while school leaders formulated their results in free text. Further the project’s most rewarding element, the greatest challenge and what has worked less well were again in demand. Next, a series of questions about perceived project impact at different levels at school – in the teacher team, of students directly involved in the CMC-interventions, of all students belonging to the team, and at school in general – followed. The teachers answered these questions on response alternatives, and in the space for additional comments/information, while school leaders again answered in free text. In open ended questions, the participants were asked to describe what they perceived as the most important thing that was achieved through the project, how and if any new working methods possibly developed in the teacher team, how the collaboration within the teams has developed (or not) and their beliefs about preconditions for the school development process to continue also after the project ended. The school leaders were asked about current conditions in their schools for the project experiences to lead to a lasting school development and about the potential and barriers that have emerged during the two project years for a sustained local school development. A question about other experiences and views completed the surveys.

³⁷ See Table 5, in section 5.4, for the 15 goals/results response alternatives.

4.3.3 Student survey for TSR and SSE

The student survey of TSR and SSE was developed as a combined tool for quantitatively investigating students' perceptions of teacher-student relationship quality (TSR) and students' self-efficacy (SSE) within different domains of own schooling. In contrary to the teacher and school leader surveys, the student survey questionnaire was identical at all three time points. Otherwise put, the students responded to the same survey on three different occasions. The student survey was created in the shape of a web-survey, which was to be responded to online with school computers and assisted by the researcher or any informed school personal.

The theoretical foundation, the development and the contents of the student survey, as well as its feasibility, functionality and validation, are outlined in the Study 2. Hence, refer to Study 2 for further information (see section 5.2).

4.3.4. School counsellors' written reports

The counsellors submitted process reports³⁸ after one year and after two years. The reports were prepared on the basis of a template with emphasis placed on: (i) structural data on the implementation of the group counselling (continuity, frequency, presence); and, mainly, (ii) longitudinal process information of the counsellors' perceptions of the school development process and the teachers' collaborative learning and actions. The asked for process information was for example how the group talked about students, how CMC interventions were carried out, and whether openness or reservation was developed in the group before new approaches and tryout of new working methods. The counsellors' perception of group dynamics and group climate,³⁹ and of their own feelings and perceptions as a counsellor in this specific group at different times were also asked for; likewise, the counsellors' ethical considerations and reflections over the three-fold position⁴⁰ that they have actually entered.

4.4 Discussion of methods used

In the analyses, the longitudinal mixed design and the data obtained from five different sources provided several options for triangulation and comparison of

³⁸Appendix E.

³⁹In order to frame these aspects of group relationships within a common discourse framework for the counsellors, the researcher provided the counsellors with a paper summarizing a few well-known theories/models for understanding and describing work group development.

⁴⁰The three different positions that the project counsellors simultaneously entered were: (i) the group counsellor of the teachers; (ii) the contracted consultant, in relationship to the school leaders; and (iii) the enabler of the research project, in relationship to the researcher.

data, something that strengthen the results and the made interpretations and arguments. Information obtained from the same individual teachers, school leaders and students at three occasions during two school years, enabled comparisons both within and between groups, and both cross-sectional and over time. It is possible to follow how the statements, narratives and appreciations change (or not change) of individuals and groups. Moreover, the design of the teacher- and school leader questionnaires that allowed the informants to look back on their own answers in former questionnaires, while responding to the current questionnaire, strengthen the validity of change interpretations, since the recorded change is preceded by the informant's own reflection of their earlier standpoints and judgements. The 'here-and-now' was consciously set in relationship to the 'there-and-then', while respondents formulated their responses in the second and third questionnaires. This was expected to extend and nurture the process/change-perspectives of informants in the data obtained.

One weakness in the design connected to the longitudinal questionnaires concerns written statements and narratives. As such, they provided limited information from those participants who wrote just a little and an unbalance in the obtained data since some informants wrote significantly more. On the other hand, all informants contributed to an equal extent by responding to the response alternative questions. An alternative method for the qualitative inquiry would have been open or semi-structured interviews (Kvale & Brinkmann, 2009), which inevitably should have given expanded information from each informant. However, due to the total amount of respondents (approx. 50) and the longitudinal design (three time points) such a procedure would have been extensive and the amount of data too demanding to handle within the frames of this thesis.

Another deficit, one may argue, is that no qualitative data from students is collected. This is true, in that it would have been of great value to get a deeper understanding of the relational processes from the perspectives of the students who were actively involved in the teacher-student interventions. However, the active choice not to do so was foremost based on the need for limitation. In addition, and as mentioned above, the students' assessments of relational qualities here-and-now when responding to the survey are understood as their interpretation of their current emotional states in relationship to their teachers' and in relationship to their self-beliefs. Thus, although quantitatively assessed, the outcome is claimed to reflect students' qualitative experience.

The main focus of the statistical analyses in this thesis is the investigation of association, or correlations, between students' perceptions of TSR and SSE. Correlation analysis explores the association between target variables, subscales and overarching constructs, and the strengths of these associations, but it cannot establish causal directions of the association (Borg & Westerlund, 2012).⁴¹ In this

⁴¹ If not undertaken as a randomized and fully controlled experiment. This, however, is hardly possible to provide within natural social complexities (Borg & Westerlund, 2012), like a school environment.

work, for example, inter-correlations of students' responses to items concerning perceived teacher support and students' response to items concerning confidence for self-regulation of learning, per se, say nothing about causation. It cannot be known if teacher support led to better self-regulation or whether students who experience a certain level of self-regulation of learning perceive a certain level of teacher support. The relationship is bi-directional. To be able to say anything about direction of association one must rely on theoretical and logical argument and on knowledge about the actual context in which the students have responded. Say, we 'know' – based on theory and previous research findings – that many students rely on vast teacher support in order to build good strategies and habits for learning, then we can *assume* that an increase of positively perceived teacher support leads to raised student self-confidence for self-regulation of learning. Given the focus of the current school development initiative – to develop teachers' relational competence in interaction with students – the assumption of direction is clear, but it is hardly evidenced. For example, it may as well be true that a student's self-beliefs change over two years due to other unknown or uncontrolled reasons and that such change may impact on a student's perceptions of the teacher-student relationship. Hence, it is difficult to draw a conclusion from correlation studies. However, validity of arguments about direction of associations can be strengthened. When several studies are carried out – with many informants, from various groups, in different environments – and show similar or different patterns of associations, these associations can be set in relationship to theory, actual context and change in context over time. Not least, when a predicted change in inter-relationship patterns of different variables can be confirmed, the argument is reinforced.

Finally, one issue of careful consideration in the planning of the school development initiative and for the validity of the research is the researcher's active participation as group counsellor in one school, which is expanded on next.

4.4.1 Researchers position.

For most part the researcher took an observational position in relationship to the relational school development processes in the schools, and in the overall research inquiry. This fully applies for all project activities committed in schools 1, 3, 4 and 5, and for all data collections from teachers, school leaders and counsellors.⁴²

On the other hand, at School 2 the researcher had an active role in the implementation process, due to being the group counsellor of the teacher team. Here the researcher's position was participative (Kemmis, 2008) by means of his guidance of the teachers' learning and improvement process in the counselling group.

⁴² Except the fact that the researcher administered the survey questionnaires with all schools through correspondence and held the ending talks with all school leaders.

Outside the counselling room, however, in the daily teacher-student transactions or in any teacher-student interventions, the researcher was never present.

The decision by the researcher to take part as a group counsellor in one school was consciously made in advance. The benefits were assessed to outweigh the disadvantages. During the two years of new forms of teacher collaboration and trying out new ways to interact together with students, the participating teachers were expected to face complex relational situations and to be part of processes that could not easily be perceived from outside. By following the relational processes that take place in one school and in one teacher team from inside, and by coming close to the teacher-student interventions, the researcher could gain a much deeper insight into communicative processes. This applies for the teachers' interplay in the counselling sessions, and not least for micro-level observations of teacher-student interactions available through the video-recall procedure. From inside, the researcher could make direct observations. Moreover, to be in continuous close contact with teachers and school leaders in one school during the full span of the project was supposed to extend the researcher's understanding of various preconditions that may impact on the implementation of a relational school development process in local schools. The closeness to the process was judged to benefit the researcher's ability to better interpret data and process reports also from the other schools.

The researcher taking active part in the process of study is inevitably problematic when it comes to trustworthiness of interpretation and credibility of assessment of outcomes. Even more so in a research project that the researcher himself initiated. Regarding interpretation, the deeper insight and understanding of the process in one of the schools, referred to above as beneficial, may bias the researcher's interpretation of records from informants in different ways. For example, with own background knowledge of the process, written and spoken statements from teachers and school leaders may be weighted differently as compared to statements from teachers and school leaders in the other schools. Further, the established 'supervisor-supervised' relationships between the researcher and the teachers, and the established 'project manager-school leader who initiated the change process in the school' relationship between the researcher and the school leaders, may influence how informants express themselves while responding to the questionnaires. Aspects that somewhat ease these problems can however be emphasized. First, the researcher's consciousness about his different positions in different schools made him extra careful and clear in informing all participants in School 2 to be forward and open in their responding, regardless of positive or negative experiences in relationship to the project as a whole or to the part of the counsellor/counselling process. Second, the multiple sets of longitudinal data give opportunity to afterwards compare School 2 teachers' own judgements over time and to compare their judgements to their school leaders' judgements and to the researcher's and counsellors' records taken during the whole two and a half year long process. By doing so, the risk for miss-interpretation of specific narratives and judgements decreases.

Finally, and important, these uncertainties to a less extent threaten the validity of this thesis because its overall aims are *not* to give evidence for the benefits of one specific school development model, or for that matter, a certain way of counseling. Instead, the overall interest is to explore *the various processes that actually occurred* and the eventual impact on students by these processes. For example, one main task is to investigate how differences in participant-perceived quality of the teacher teams' collective learning processes are reflected in the change trajectories of their students' perceptions of TSR and SSE. Hence, different preconditions for the teachers' processes, and different perceived project outcomes in different schools, were calculated rather than something one would like to avoid.

4.4.2 Methods of analysis

The purpose of the Study 1 is to contribute to deeper understanding of prerequisites for local school development based on collective learning and collaboration in teacher teams. In order to do so, the lived experiences of all participants in the five school development processes were studied. When investigating subjective experience, a qualitative approach is a suggested choice of inquiry (Biesta, 2010b; Yin, 2014), and thematic analyses a suitable method for analyzing data (Braun & Clarke, 2006; Fereday & Muir-Cochrane, 2006). For detailed information of the thematic analysis, see Study 1.

In the part Studies 2 and 3, several statistical methods are used in order to (i) validate the student survey instrument, (ii) investigate the inter-correlations between TSR and SSE, and (iii) monitor the students' change trajectories for TSR and SSE, and compare them between schools. The statistical analyses consist of descriptive analysis, correlation analysis and factor analysis in Study 2, and of multivariate analysis of variance (MANOVA), independent sample t-test for computed scale differences (delta, Δ), effect size calculation (Cohens d), reliability test (Cronbachs α), and case analysis of paired ordinal data, in the Study 3. The significance level for all analyses was set to $\alpha = 0.05$. Analyses have been run by SPSS, version 25, and supplementary with SAS, version 9.4. For all details of the statistical analyses, see Studies 2 and 3.

4.5 Ethical considerations

Implementing a relational interaction-based process in schools involving hundreds of students and adults raises a number of ethical issues. Some concern participation as such, where injustice or disagreement may have been experienced in several ways. Firstly, since only one team was involved in each school, the efforts were only directed to some students. For other students, no simultaneous effort was made, although the purpose of the project, and the school leaders' ambition, was that teachers' new experiences and knowledge would benefit all

students in the schools. Secondly, not all teachers in the teams were able to participate fully, and some teachers who wanted to join had to give up anyway due to organizational reasons. In one school, another participatory aspect was the low perceived proportion of students and guardians who responded to the consent letter, despite repeated communication from teachers and the principal. Discussions arose among the school staff where it emerged that lack of trust between the homes and the school had been deeply rooted for many years. It also emerged that some teachers were perceived to take too little responsibility in communicating with the caregivers. The fact that an externally initiated process in this way reveals relational challenges that exist in a school has ethical implications. First, it implies that there are challenges and actions to perform for the school staff, who need to improve school-home collaboration as well as collaboration among themselves. Second, the researcher and counsellors must consider how much they can, or should, 'push' for more students to be recruited, and, if it is possible to help the school staff in communicating with the caregivers without interfering too much. At one school, project participation early uncovered relational challenges at several levels. School leaders and teachers saw different goals for the school's participation in the project, and within the team teachers experienced different degrees of interest and commitment. If disagreement on goals and everyday work is elicited by the project, the counsellor and the project manager need to take responsibility by engaging in discussion in the most neutral and constructive ways possible.

The project's relational content provides both an opportunity for improvement – developing collaboration and strengthening social bonds – and is also a potential source of new relational challenges. Since the project is only running for a limited time, there is a risk that interpersonal processes are started but not finished. If strong feelings or underlying conflicts or conflicting interests come to the surface in the counselling process, or in teacher-student interplay, it needs to be taken care of professionally after the project is ended. This is a shared responsibility among counsellors, school leaders and teachers to continuously consider during the process. As for school leaders, they have a special responsibility to monitor the prevailing school culture and relational climate (Hargreaves, 2007) and to ensure that change processes are not initiated which the staff are not prepared for or have practical conditions to handle. In retrospect, it can be said that the school leaders in one school failed this responsibility (School 3, see Study 1). Responsibility also rests with the researcher (and other external actors) to continuously communicate and support sustainability in relational school development processes.

As teachers develop their listening to students, and penetrate deeper into students' perspectives, they will share students' thoughts, feelings and experiences. This requires respectful handling of personal information. It also demands teachers' ability to handle their own feelings towards students, and to act professionally

and seek support from others when called upon. The same applies to the teacher group in counselling. As teachers listen more to each other, and closely share relational practice, the collegial conversation will deepen and become more personal. To develop interest and respect for the thoughts, feelings and experiences of others is thus both the content of the project, and one of its ethical demands.

From an overarching point of view the presented school development and research project meet the ethical demands from Child right and Child sociology perspectives: it is planned and performed with a continuous intention to make students' voices heard and given importance (Quennerstedt, Harcourt & Sargeant, 2014). The core of the teacher's relational development efforts were collaborative mutual teacher-student conversations, and students' perceptions of relational qualities in education were important data for the research.

5. Results

In this chapter, the three part studies are summarized in sections 5.1, 5.2 and 5.3. In section 5.4, the participating teachers' project evaluations are summed up, with the intention to enhance the overall picture of teachers' various experiences in their relational school development efforts.

5.1 Summary of Study 1

“Trust as a prerequisite for school development. A study of school development through collective learning in teacher teams.” Jederlund, (2019). Published in: *Pedagogisk Forskning i Sverige*. 24 (3-4), p. 7-34. DOI:10.15626/pfs24.0304.01

Introduction

This article contributes to in-depth understanding of local conditions for relational school development processes by means of collective learning in teacher teams. The starting point for the study was the vast variation in teachers' appreciation for the outcomes of the collaborative learning processes, which were performed within the presented relational school development initiative (Chapter 4). Although the teacher teams in all five schools entered and participated in the initiative on comparable terms and with equal resources, the teachers assessed the project outcome in a great number of ways (see the full article, and the teachers' evaluation, in section 5.4) in the various teams.

The main purpose of the article is to explore *trust*, at different levels in schools, as a prerequisite for collective learning based on collaboration, visibility in practice, collective reflection and joint action for improvement. Teachers' experiences within relational school development processes are studied based on school development research and organizational theory. Two research questions were asked:

- (i) What characterizes teachers' experiences of trust in the school development process in the different teacher teams?
- (ii) What significance did the experiences of trust have for the collective learning, and thus for the school development process?

The studied school development processes included training, and a continuing group counselling process, in connection to collaborative teacher-student interventions. Teacher-student talks were to be videotaped in order to make teacher-student interplay and teacher practices visible to collective reflection. A longitudinal case study of the five school development processes was conducted based on qualitative data collected before, during and after the project. The main data source used was a three-part teacher survey, which was complemented by information from school leaders and project counsellors. In thematic analyses, three aspects of trust were identified as crucial for the teachers' experiences: *process trust*, *collegial trust* and *collective trust*.

Results

Process trust, operates at the system level. As defined in the article, it encompasses the teachers' overall confidence in the development process over time; its objectives, content and organizing, and the teachers' trust in their leaderships' ambitions and attitudes and trust within the counselling process.

Most teachers, in all five schools, expressed confidence in advance in the project contents and a certain engagement for its relational ambitions. Learning needs were expressed both for example as a desire to "be able to understand and respond to students with special behaviour" and that, "We want to be even better at reaching our students". When it came to the role of the school leaders, on the other hand, the experiences differed between schools. In one school, the teachers aligned with the principal, who asserted she had been "very driven" with her vision of a school with "safe students", "community among staff" and developed teacher collaboration, while, in another school, school leaders and teachers expressed contrasting aims for project participation. The different perceptions about objectives aroused doubts. Negotiations arose between the principal and individual teachers regarding special "conditions" and "compensation" for participation. Further, the ways and the extent to which school leaders took part, shared experiences and provided feedback to the teachers during the process varied and was something that impacted on process trust. In one school in which the teacher team quit the project in advance, the principal said, "If I had had the opportunity for a closer leadership towards the counselling, it might have been able to continue". Finally, trust in counselling, and confidence in the external counsellor, were reported as being strong in the teams that completed the full two-year project, whereas in two teams that quit after one year, perceptions of trust within the counselling process fluctuated.

Collegial trust refers to teachers' experiences of personal security and professional confidence in their relationships with their teacher team colleagues.

At the start, most of the teachers expressed the desire to develop a new student approach and working methods, but at the same time individual teachers disclosed uncertainty. Doubts about own ability meant insecurity in front of colleagues. Teachers described concern for "not daring to take the step fully" or for

“making mistakes”. Lack of collegial trust was openly expressed in a couple of teams. One teacher said that, “I don’t dare to be completely honest about my own classroom experiences”, and others expressed strong reluctance to participate in the film. Being visible to colleagues in direct teacher-student interplay, through video, emerged as especially trust demanding. However, when pursued, the video-recall procedure was commented on as being “inconvenient for the individual, but educational!” Further, perceptions occurred that some colleagues “needed the project more than others”, and that some of these teachers, who should participate, did not participate. Uncertainty and doubt could however be offset by increased collegial trust over time. “Community, and support” in the counselling process made individual teachers feel more secure and more involved. Collegial support was important for teachers daring to try, and for increased participation. Likewise, so was mutual professional confidence. One teacher wrote that, “I see how tremendously important it is to gain trust, manage it and collaborate around the problems”.

For *Collective trust*, trust is attributed to teachers’ psychological safety in the team, and teachers’ sense of collective efficacy, in terms of the team’s ability to mediate mutual support, collaborate and improve practice collectively. Experiences of the teacher team as mutually secure and supportive and as possessing a will for joint improvement were missing in one school. Here, the counsellor described a great range in the teachers’ postures to the project, from resistance to strong commitment. The image of a disagreeable team was painted by teachers who expressed that colleagues’ attitudes, or “self-insight”, were the biggest challenge. They stated that there was a lack of the “will to develop” and that some colleagues did not participate “with genuine interest”. The counsellor perceived the team as “uncertain and dependent on management”. A further aspect impacting on the sense of collective trust in the teacher teams was the extent to which colleagues took part. Participation in the counselling process was obstructed for individual teachers, for various reasons. Regardless of the reason, the absence/non-attendance was equally considered to impair the development process and weaken collective trust. Finally, in one of the teams that quit the project in advance, the organizing of counselling into two groups was considered to have “split” the team and deteriorated collective trust, as well as trust in the overall process.

Conclusion

General confidence in the school development process (process trust), and high-enough psychological safety and collective confidence within the group (collective trust) showed to be prerequisites for endurance of the teacher teams’ collective learning processes. Collegial trust – trustworthy interpersonal relationships and mutual professional confidence among the teachers in the group – showed to be a specific prerequisite for teachers’ visibility in practice, and hence for a deepening in the collective learning process. Collegial trust and collective trust

are concepts present in the organizational literature, while process trust is a concept suggested in this study. Collegial trust and collective trust appear, as in the literature, to be directly mutually affecting each other, and, underpin process trust. At the same time, process trust seemed to be able to be organized through a visionary organizational leadership, external counselling and perseverance in process — structures that in turn enabled collegial trust and collective trust to develop, through new collective experiences. Finally, limitations and implications are discussed. One difficulty is the fact that schools, despite external similarities and equal entry values in a project, also differ in ways that may affect outcomes. For example, School 2, in which the teachers experienced the most mature collective learning process and valued the project outcomes highest, was the smallest school. An interesting implication for further research would be to study how teachers' various experiences of trust in collective learning processes affect their students' self-beliefs and learning.

5.2 Summary of Study 2

“Teacher-Student Relationships and Students’ Self-efficacy Beliefs. Rationale, Validation and Further Potential of Two Instruments.” Jederlund, U & von Rosen, T. (2021). Pre-print.

Introduction

In this method study, a tool is developed that enables the investigation of individual students’ perceptions of teacher-student relationship quality (TSR) as well as students’ self-efficacy beliefs (SSE). Parallel measures of individual students’ perceptions of TSR and SSE provides a relational alternative to test results and grade points in the assessment of quality of learning environments and in monitoring relational school development efforts.

Trustful TSRs built on mutual interaction between adults and youth at school are recognized as a fundamental part of good education (Biesta, 2004; Hattie, 2009). Biesta (2004) stresses that education takes place in the interactional space between learner and educator. Education is perceived as a sense-making process that grows in mutual communication within a trustful educational relationship. In Hattie's comprehensive meta-analysis of factors influencing students’ school performance, relational aspects of teaching are key factors (Hattie, 2009). Within trustful relationships, teachers contribute to students’ positive identity as learners (Bandura, 1989; Hughes, 2011). Such an identity includes students’ global expectations and high self-efficacy for self-regulation of learning and social participation in school. In turn, students’ expectations and self-beliefs are highly associated with learning outcomes (Bandura et al, 1996; Hattie, 2009). Yet, only a few studies have investigated the relationship between TSR and SSE (Hughes, 2011).

This yields interest for future studies to expand knowledge on the associations between student-perceived TSR quality and SSE. The intention in this study is to combine two instruments in one tool in order to enable simultaneous measurement of individual students' perceptions of TSR and SSE. The aims of the article are:

- (i) to describe the development process of the Swedish "TSR-SSE Survey" with its theoretical and empirical backgrounds, and
- ii) to validate the new instruments and to reconfirm their latent factor structures.

Additionally, the empirical analysis explores the interrelation between Swedish students' perceptions of TSR and SSE.

Instrument development process

Searches in international databases revealed that no instrument existed, up until now, that can measure both TSR quality and SSE. However, the searches showed that there were a number of instruments related to the respective domain. Fifteen instruments were further evaluated for theoretical relevance, area of use and availability. From those, two American instruments were selected for the adaptation and development of a Swedish "TSR-SSE" survey.

The TSR part builds on Weiss (1974), who expands on attachment theory and social integration models in his theory of *social support provision* in interpersonal relationships. Weiss (1974) saw six basic social provisions that individuals seek out for in interpersonal relationships: *attachment, reliable alliance, reassurance of worth, companionship, guidance* and *nurturance*. Furman and Buhrmester (1985), later created the "Network of Relationships Inventory" (NRI) by adding two dynamic dimensions of interpersonal relationships: *relative power* and *conflict*. Hughes (2011) in turn, adopted the NRI for educational research in the "Teacher Relationship Inventory" (TRI) that investigates three dimensions of quality in the teacher-student relationship: *support, conflict* and *intimacy*. The SSE part builds on Social Cognitive Theory (Bandura, 1989) and various self-efficacy scales successively developed by several researchers based on the original items of Bandura's (1990) "Multidimensional Scales of Perceived Self-Efficacy". Three scales of direct relevance in the present work were *academic self-efficacy, self-efficacy for self-regulated learning* and *self-efficacy for peer social interaction*.

In total, 42 items were adopted in the Swedish tool, 20 in the SSE part and 22 in the TSR part. Together they comprised five subscales, intended to assess three underlying dimensions of SSE and two dimensions of TSR: SSE1 (Student Self-Efficacy for Self-Regulated Learning), SSE2 (Student Self-Efficacy for Social Interaction), SSE3 (Student Self-Efficacy for Global School-success), TSR1 (Teacher – Student Relationship – Support) and TSR2 (Teacher – Student Relationship – Conflict). For complete information on all items and subscales, refer to Study 2.

Methodology

Data were obtained from 382 students in fourth to eighth grade, attending five public schools in a big city county (for details, refer to Study 2). Confirmatory Factor Analysis (CFA) was used to test the hypothesized relationships between the survey items. Since it revealed that our student data did not fit well into the intended models representing five dimensions of SSE and TSR (3+2), model reconstruction with EFA (Exploratory Factor Analysis), item reduction and item moves, and a series of more CFAs were committed in order to find the best fitting models.

Results

Through continuous factor analysis, finally two models representing seven dimensions (4+3) were extracted that better fit the student data, see Figure 5 below (for all Goodness-of-fit indexes and statistical data, we refer to Study 2).

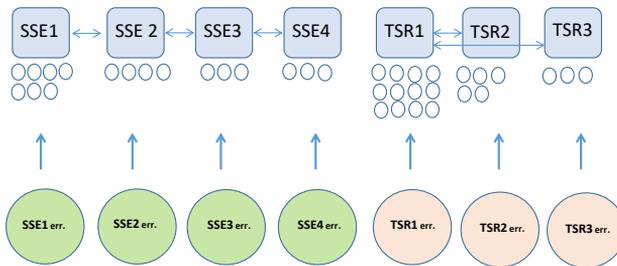


Figure 5. Re-specified models with four SSE-scales and three TSR-scales (37 items in total)

To investigate internal consistency for each of the seven extracted subscales, Cronbach's alpha was calculated. The results showed good to excellent α 's of 0.75-0.94. Finally, intra-correlations between all seven sub-factors were calculated, and substantial cross-associations between TSR-support and all SSE subscales ($r = 0.29$ -0.51) were found.

Conclusion

The adapted instruments establishing the Swedish TSR-SSE survey rely on solid theoretical foundations. All underlying dimensions of the original instruments were re-extracted as latent factors in the Swedish survey, despite the adaptations into a different school context. However, the fit of the models is *not fully acceptable* so far. Unsatisfactory modelling may be the results of too small n's, unbalance in subscale sizes and, possibly, confounding differences in students' interpretation of pairwise "look-alikes" among survey items. The two new factors, the SSE4

(self-assertiveness) and the TSR 3 (intimacy), emerged from two groups of items that respectively were stronger inter-correlated to one another than to the other items of intended subscales (SSE2 and TSR1). Both new dimensions are theoretically conceivable and mirror dimensions that repeatedly appeared in previous factor analyses on the original instruments (Hughes, 2011; Bandura, et. al. 2001). The two factors have similarities. Both express something about individual students' confidence in being self-assertive or comfortable being open with things that are more intimate in interpersonal relationships. A future deeper investigation of all constructs is needed. To end, the combined tool possesses seven reliable sub-scales that can be used to assess relational qualities of education. The overall association between TSR and SSE and its meanings for students' wellbeing and learning is a challenging target for further research. To further refine the TSR and SSE models, and to explore a plausible overarching construct (TSR+SSE), more analysis based on bigger samples are needed, and all disclosed problems within the presented models should be approached.

5.3 Summary of Study 3

“Changes in students' school trust as a reflection of teachers' collective learning processes. Findings from a longitudinal study.” Jederlund, U & von Rosen, T. (2021). Published in: *Scandinavian Journal of Educational Research*. DOI: 10.1080/00313831.2021.1982764.

Introduction

This study starts where Study 1 ends; in the differing levels of teacher-perceived trust in the relational school development processes. Following School 2 teachers' advantageous experiences of trust, and the superior process evaluation (Study 1, and section 5.4), here it is hypothesized that School 2 students' change trajectories for perceived TSR quality and SSE would deviate (i) from an expected general decline over time (Study 3) and, above all, (ii) from the change trajectories of students in the compared schools. The hypothesis springs from the basic assumption of the thesis (Introduction, p. 13) and is supported by research showing that teachers' mature collective learning processes and collaborative action, when working with students, together with external support (leadership support, counselling), may increase dialogues in learning between teachers and students and improve classroom interplay (Doğan & Adams, 2018, Owen, 2016; Tschannen-Moran & Barr, 2004).

To explore trajectories of student-perceived TSR quality and self-efficacy –which in the study together is discussed as students' ‘school trust’ – the Swedish TSR-SSE survey (see Study 2) was used. Expanding the discussion of TSR and SSE in relationship to one another reflects the assumption that the relational qualities in

the school environment are significant impact factors on the students' self-efficacy judgements, of which interplay with teachers and peers are central parts (Bandura, 1989; Wentzel, 2012). Trustful TSRs are decisive in sustaining good hope and engaging in adaptive self-regulatory and social actions that support learning, especially for students experiencing weak social support from outside (Baker, Grant & Morlock, 2008; Martin & Rimm-Kauffman, 2015). A few studies give direct evidence for the association between student-perceived TSR quality and SSE. Hughes et al. (2012), for example, found that student-perceived 'warmth' and 'support' in TSRs predicted positive change in students' academic self-efficacy beliefs.

The main aim of the study is to investigate whether and how teacher-perceived quality and attainment in collective learning processes are reflected in students' perceptions of TSR and SSE. Two research questions were asked:

- (i) How do students perceive TSR quality and SSE in general, and how do these perceptions correlate and change over two school years?
- (ii) How do changes over two school years in students' perceptions of TSR quality and SSE reflect their teachers' perceived quality and attainment in collective learning processes carried out during that same two-year period?

Results

Descriptives. In line with earlier research, students in all five schools scored high in general on self-efficacy (SSE), with subscale means ranging from 3.57 to 4.57. Likewise, as expected, students scored high on teacher-student relationship 'support' (TSR1) and 'conflict' (TSR2) ($m=3,21-4,58$) but remarkably weaker on 'intimacy' (TSR3) ($m=1,92-2,52$). In gender comparison, of interest was that girls scored lower than boys on all SSE-subcales, which contradicts the international findings. On the other hand, comparison between middle- and secondary-school students confirmed earlier results showing younger students perceive higher quality in TSRs and possess stronger self-beliefs in schooling, than do older students. In the correlation matrices between all subscales, sustainable associations were found between student-perceived TSR-support and self-efficacy for self-regulative learning and for global school success ($r = 0.43-0.51$).

As regards change trajectories, in line with the expectations, students' overall appreciation of TSR and SSE decline over time. The general trend was that 'it gets worse' (Figure 2, Study 3).

Hypothesis testing. First, we tested the hypothesis that School 2 students' change trajectories for TSR and SSE would deviate from the general decline. This comparison included the full sample, and all schools. The main finding was a crossover of trajectories for School 2 students in relationship to students' trajectories in the other schools. From being lowest at the start, School 2's trajectories came out highest at time point 2 and remained on top after two years. As exemplified with the trajectories of TSR (Figure 3, Study 3), the difference between the

change magnitude at School 2 as compared to the averaged change for all students is statistically significant (p -value < 0.0001) and represents a large effect size ($d = 0.99$).

Second, we tested the hypothesis that School 2 students' change trajectories would deviate from students' trajectories in other schools. This comparison was framed to students in the 'PPTS group' (process-participating teachers' students) in the three schools that completed the full process. When comparing change between PPTS students in School 2, and School 1 and School 4 respectively, the results are convincing. Change in mean estimates from time point 1 to time point 3 show a positive direction for all nine measures at School 2, while change in mean estimates both at School 1 and School 4 are negative for eight out of nine scales. The superiority of School 2 trajectories as compared to School 4 manifest in large effect sizes for TSR in total, TSR1 and TSR3 ($d = 0.81$ - 1.09), and medium effect sizes for SSE in total and SSE1 ($d = 0.57$ - 0.62). The superiority of School 2 trajectories as compared to School 1 yield large effect sizes for SSE in total, TSR2, SSE1 and SSE3 ($d = 0.82$ - 1.14), and a medium effect size for TSR in total ($d = 0.77$). For graph samples and all comparisons and effect sizes refer to Study 3.

Case analyses. In order to deeper examine the *nature of change* we performed a case analysis on all 33 individual School 2 students' responses to all variables in all measures, using rank order analysis on paired student data (Svensson, 2012). The largest individual changes over time appeared within the 'TSR-support domain. Here, 'most' (see Study 3 for categories) students perceive an increase of general quality of TSRs, appreciating higher teacher support in learning, and feel more secure and cared for. Concerning TSR-conflict, only 'some' students notably changed their perceptions, but for those who did, the change is of particular importance since they actually experience a vast decrease in conflicts with their teachers. The same may be conceived of for the improvement of 'some'/'several' students' perceptions of TSR-intimacy, and self-efficacy for social interaction and self-assertiveness. These changes appear mostly after two years, suggesting that developing deeper interpersonal trust and relational confidence takes time. In the self-efficacy for self-regulative learning domain, significant improvement appears for 'most' students, but of a somewhat less magnitude than for TSR-support.

Discussion

The main contribution of this article is the parallelism and consistency shown between teacher-perceived trust and appreciated outcomes in teacher team based relational school improvement efforts, and trends in students' perceptions of TSR quality and SSE. Further, the results extend earlier findings (Hughes, 2011; Li et al., 2012) of the association between student-perceived TSR quality and SSE. Associations appear both cross-sectional and over time. Substantial associations were found between TSR-quality, and self-efficacy for self-regulative learning and facets of self-efficacy in social interplay, as for example the ability

to concentrate, organize school work, ask a friend for help and stopping maltreatment. Thus, results support further use of students' perceptions of TSR and SSE as relational quality indicators of education and school development processes. The substantial associations found between TSR and SSE invite to deeper theoretical and empirical research on the relationship, and to exploration of the possibility to develop a combined model of TSR and SSE ('School trust').

5.4 The teachers' evaluation

In this section, the results of interest are compiled from the three-part teacher survey, which only to some extent can be read in studies 1 and 3. The data presented is as follows: (i) the teachers' highest ranked goals as set in advance, and highest ranked achieved results, as perceived afterwards; (ii) the teachers' perceived goal attainment and appreciated project impact at project end; and (iii) the teachers' judgements of which contents have been of the largest value, the biggest challenge and the least well implemented project part in the teacher team.

Prior goals and achieved results

In survey 1, teachers were asked in advance to specify the three project goals that they considered as the most important to achieve. Participants were allowed to select their three *prior desired goals* to achieve from a list of 14 pre-formulated goals plus one open 'own option'. In survey 2, after a year and before the second project year, teachers updated their goal ranking by confirming or changing the three prior goals. At the project end, in survey 3, participants were asked to specify the five *most important results* of the project, in their opinion, with the same response alternatives. In the left column of Table 5 below, all 15 goal/result response options are displayed. In further columns, teachers' compiled rank orders for prior project goals and experienced results, over all schools, are shown. In the right column, calculated rank points for each of the 15 response options are summarized. Rank points are the sums of all teachers' top-five rankings, with 5 points applied to the highest ranked option falling to 1 point for the fifth option.

When including all participating teachers, the response option (A) *Your own working methods/ attitudes as an educator have been developed* was the highest ranked goal in advance and after one year, and likewise it was the highest appreciated result afterwards. Ranked second, similarly consistent, was option (G): *The teacher teams' way of responding to challenging students has evolved for the better*. Thus, both goals and results expressing objectives at an individual teacher level (A) and on the teacher group level (G) were top ranked by many teachers, although the individually related option was superior. Further to be noted, option (C) *The teacher team has developed common working methods/ attitudes*, was before the project, and before the second year, clearly the third most desired goal, but in the result rank after two years it dropped to a significantly lower position (8th). The third and fourth most appreciated results, receiving an almost equally high rank point, were instead two

variables of a more general nature: option (E) *The teacher team has developed new knowledge about students in special needs*, and the option (B) *The teacher team has been developed as a working group*. These two results are also team related, but they do not tell whether the teachers have developed common working methods/attitudes or joint practices. For that matter, in relation to the result option (D) *The teacher team has developed new working methods/attitudes*, the single result option that clearly expresses that teachers have experienced direct change in joint teacher team practices, was ranked fifth, over all schools.

Table 5. Rank orders for all teachers' project goals before project and after 1 year, and for most important perceived results after 2 years.

Selectable response options for desired project goals, and perceived results	rank order before project start (n=36)	rank order after year 1 (n=35)	rank order after year 2 (n=24)		rank point after year 2* (n=24)
	counted on top-3 ranked goals	counted on top-3 ranked goals	counted on top-5 ranked results	counted on top-5 ranked results	counted on top-5 ranked results
A. Your own working method/attitudes as an educator has been developed	1	1	1	1	67
B. The teacher team has been developed as a working group	9	8	4	4	35
C. The teacher team has developed common working methods/attitudes	3	3	8	8	16
D. The teacher team has developed new working methods/attitudes	8	4	5	5	29
E. The teacher team has developed new knowledge about students in special needs	4	9	3	3	38
F. Student behaviour has changed for the better	5	4	11	9	11
G. The teacher team's way of responding to challenging students has evolved for the better	2	2	2	2	58
H. The school's way of working with students in special needs in general has been developed	7	11	10	10	13
I. There is a higher level of competence in the school around students in special needs	9	6	9	9	15
J. Your relationships with your students have improved	10	7	6	6	24
K. Participating students' goal achievement has increased	5	13	13	-	2
L. The prevention work on challenging behaviour at the school has improved	4	5	7	7	23
M. Climate and well-being among the students belonging to the teacher team have improved in general	6	12	8	9	16
N. Experienced stress level in your work has been lowered and your well-being at school has increased	10	10	12	-	4
O. Own option(s) _____	14	14	13	-	2

* The total rank point after year 2 is based on scoring values of 5/4/3/2/1 for the respective five highest ranked options in order.

Of interest, then, was to see if patterns of teachers' desired project goals and appreciated results were similar or varied between schools. The teachers' top-three ranking of prior goals in survey 1, and of important results in survey 3, in each of the five schools are displayed in Table 6 below.

The goal option (A), the development of teachers' *individual working method and attitude*, was top-ranked by teachers in four out of five schools at the start, and ranked second in one school (School 1). Second, after the individual learning objective, teachers' priorities concerned *team related* goals in Schools 2 and 5, while in Schools 3 and 4, *whole-school related* and *student related* goals appeared as well.

Table 6. The teachers' highest ranked project goals at start, and highest appreciated project results at end.

School	Top-3 desired goals to attain, as ranked at project start.	Top-3 most important results achieved, as appreciated at project end.*
School 1 n= 8/5	<ol style="list-style-type: none"> 1. The teacher team's way of responding to challenging students has evolved for the better 2. Your own working method/attitudes as an educator have been developed 3. Participating students' goal achievement has increased 	<ol style="list-style-type: none"> 1. The teacher team has developed new knowledge about students in special needs 2. Your own working method/attitudes as an educator have been developed 3. The teacher team has been developed as a working group
School 2 n= 8/9	<ol style="list-style-type: none"> 1. Your own working method/attitudes as an educator have been developed 2. The teacher team has developed common working methods/attitudes 3. The teacher team's way of responding to challenging students has evolved for the better 	<ol style="list-style-type: none"> 1. The teacher team's way of responding to challenging students has evolved for the better 2. The teacher team has developed new working methods/attitudes 3. Your own working method/attitudes as an educator have been developed
School 3** n= 7/2	<ol style="list-style-type: none"> 1. Your own working method/attitudes as an educator have been developed 2. The teacher team has developed common working methods/attitudes 3. E, G, H, M (four different options received the same compiled rank point) 	<ol style="list-style-type: none"> 1. Your relationships with your students have improved 2. Your own working method/attitudes as an educator have been developed 3. The prevention work on challenging behaviour at the school has improved
School 4 n= 7/5	<ol style="list-style-type: none"> 1. Your own working method/attitudes as an educator have been developed 2. The prevention work on challenging behaviour at the school has improved 3. The teacher team has developed new knowledge about students in special needs 	<ol style="list-style-type: none"> 1. Your own working method/attitudes as an educator have been developed 2. The teacher team has been developed as a working group 3. The teacher team has developed common working methods/attitudes
School 5** n= 6/3	<ol style="list-style-type: none"> 1. Your own working method/attitudes as an educator have been developed 2. The teacher team's way of responding to challenging students has evolved for the better 3. The teacher team has developed new working methods/attitudes 	<ol style="list-style-type: none"> 1. Your own working method/attitudes as an educator have been developed 2. The teacher team's way of responding to challenging students has evolved for the better 3. Your relationship with your students have improved

* The top-3 rank order are based on the rank points of the top-5 rank displayed above in the Table 5.

** Note: at schools 3 and 5 respectively, 2 and 3 teachers responded to survey 3 at their own choice, despite their teacher teams have quitted the project in advance.

After the project, two out of three of the teacher teams that completed the full process (School 1 and School 2) expressed team related results as the most important achievements, while in the third, School 4, individual learning (option A) remained on top as the most valued result. Option (D), *The teacher team has developed new working methods/ attitudes*, only appears in the top-three ranking in School 2. Finally, the five individual teachers from School 3 and School 5, in the teams that dropped out, ranked own development together with improved relationships with students (J) highest.

Perceptions of project impact and goal attainment

In survey 3, the teachers were asked for a series of assessments in order to evaluate the school development processes from a *change perspective*. That was, to what degree had collective activities actually impacted on targeted relational processes according to their perceptions? The assessments concerned teachers' perceptions

of *process impact at three different levels in the school*: (i) impact in the teacher team; (ii) impact for students who directly participated in the teacher-student interventions; and (iii) impact on all students, and on school in general. Also asked for was (iv) the teachers' perceived *project goal attainment* in relationship to their top-three set goals. In Table 7 on the next page, teacher-perceived project impact at the three school levels, and goal attainment, are displayed according to school. In the table, teachers' assessments are compiled as proportions and numbers of teachers who have experienced a "big or a very big" project impact and goal attainment for each of the (i) – (iv) categories. All individual questions' wordings are however displayed for information purposes.

A summarizing index of all assessments was calculated, using rank points 1 to 5, for five response alternatives given. Indexes showed vast variation between schools. At schools 1 and 4, the teacher-perceived project impact and goal attainment was neither big nor small (mean=2.98/3.00), while at School 2 the perceived project impact and attainment was big (m=4.10), see Table 7. The teacher teams in schools 3 and 5 quit the process in advance, and just a few teachers responded to survey 3. Therefore, assessments and indexes for these schools must be regarded as having very little significance. They are anyhow included, for the purpose of providing full information.

Appreciation of different process parts and process outcomes

In surveys 2 and 3, all teachers were to indicate which project content they found to be the most valuable, the most challenging and the least well implemented in their team. The selectable response alternatives given were: training/group counselling/teacher-student interventions/wholeness of process/other (the last, a free wording option). In survey 3, the teachers also reported in free wordings on what they saw as the most important project outcomes. All teachers' responses are compiled in Table 8, at page 77.

Some observations are made. First, the implementation of the collaborative mutual *CMC-intervention* (in the Table 8 denoted teacher-student interventions) *was regarded the largest challenge* by teachers in all schools. It was further regarded to be the less well implemented part of the process by two or more teachers in all schools, except for one. Second, the *group counselling was highly appreciated in the schools that completed the full two-year process* (schools 1, 2 and 4). In School 2, the majority of the teachers chose the response alternative "wholeness of process" as the most valuable part. Since the counselling was the most comprehensive process part, the counselling is assumed to have been positively appreciated here as well, together with other process parts. Third, in School 2, the teacher-student interventions were regarded as a big challenge as in the other schools, but it was not regarded as being less well implemented. Finally, reading the "most appreciated process outcome" column of the Table 8 gives information on qualitative differences between the teacher teams' perceptions of change. Only in School 2 were new practices and extended teacher collaboration clearly expressed.

Table 7. The teachers' evaluation. Assessed process impact in the teacher team, on students, in school in general, and assessed goal attainment.

Assessed process impact (after two years):	School 1 (n=5)*	School 2 (n=9)**	School 3 (n=2)***	School 4 (n=5)****	School 5 (n=3)*****
proportion of responses big /very big among response alternatives: very small - small - neither big or small - big - very big					
% (number of answers/possible answers)					
in the teacher team, 5 variables:					
How big impact do you think the project has had for your team in developing the ways of working together with students who challenge?					
How big impact do you think the project has had for your team when it comes to the development of skills for working with students in special needs?	56%	96%	0%	36%	20%
How big impact do you think the project has had for your team when it comes to your way of collaborating within the team?	(14/25)	(43/45)	(0/10)	(9/25)	(3/15)
How big impact do you think the project has had for your team when it comes to your way of collaborating with other actors?					
To what extent do you think that you will continue to work with CMC in your team after the project has ended?					
at the students involved, 3 variables:					
How big impact has the project had for the students who have been involved in CMC, in terms of their views on their opportunities to succeed in school, do you think?					
How big impact has the project had for students who have been involved in CMC, in terms of their ability to create and maintain good relationships with peers and staff at school, do you think?	40%	96%	67%	40%	22%
How big impact has the project had for students who have been involved in CMC, in terms of changing their challenging behaviour, do you think?	(6/15)	(26/27)	(4/6)	(6/15)	(2/9)
in the school in general, 4 variables:					
How big impact has the project had on the general climate among students and staff belonging to your team, do you think?					
To what extent do you feel that the project's experiences have benefited all other (i.e. the not directly involved) students belonging to your team?	20%	56%	0%	25%	8%
To what extent do you feel that the project has benefited students throughout the whole school?	(4/20)	(20/36)	(0/8)	(5/20)	(1/12)
To what extent have you perceived that colleagues in non-participating teams at the school have shown interest in the project?					
Goal attainment, 1 variable:					
To what extent have the expectations of your three highest ranked project goals set in advance been met?	40%	100%	50%	20%	33%
	(2/5)	(9/9)	(1/2)	(1/5)	(1/3)
Total index of Impact and Goal Attainment (13 variables)					
based on rank points 1-5 for response alternatives: very small (=1) to very big (=5)	2,98	4,10	2,50	3,00	3,35

* At school 1, two teachers dropped out in year 2 because they have quit school or changed team, and one teacher chose not to answer survey 3.

** At school 2, a teacher was added to the team during year 2.

*** At school 3, the team canceled the project after one year. Two teachers still chose to answer survey 3, after two years.

**** At school 4, two teachers canceled project participation in year 2 to be able to participate in other priority training, after agreement with school leaders.

***** At school 5, the team canceled the project after one year. Three teachers still chose to answer survey 3, after two years.

Table 8. The teachers' assessment of largest process value, biggest challenge and least well implemented project part by the team, and most appreciated outcome.

Highlighted process features in the teacher teams, after ending project				
	Most valuable part of process	Biggest challenge in process	Least well implemented part of process	Most appreciated process outcome
	as marked by (n) ≥ 2 teachers,	as marked by (n) ≥ 2 teachers,	as marked by (n) ≥ 2 teachers,	as reported by (n) ≥ 2 teachers of the teacher team (compiled from free wording responses)
	on the response alternatives: training - group counselling - teacher-student interinterventions - wholeness of proecess - other:			
School 1 (after two years, n=5)	Group counselling (4)	Teacher-student interventions (2) Wholeness of process (2)	Teacher-student interventions (2)	Dialogue in the teacher team (2) Improved views and attitudes towards challenging students (2)
School 2 (after two years, n=9)	Wholeness of process (5) Group counselling (2)	Teacher-student interventions (7)	Time for planning and organizing (3) "Nothing" (2)	Collective vision (7) New ways of talking with students (5) Extended collaboration (3) Community and safety in the team (3)
School 3 (after one year, n=6)	Wholeness of process (3)	Teacher-student interventions (3) Engagement at colleagues (2)	Wholeness of process (2) Teacher-student interventions (2)	-
School 4 (after two years, n=5)	Group counselling (5)	Teacher-student interventions (3) Time (3)	Teacher-student interventions (4)	More common views on students (3) Time for reflection (2) Dialogue around students (2)
School 5 (after one year, n=7)	Training (3) Dialogue in the teacher team (2)	Group counselling (3) Teacher-student interventions (2) Time (2)	Group counselling (3) Teacher-student interventions (2)	-

6. Discussion

In this chapter, the thesis' four research issues (RI 1-4) (see p. 14) are answered based on the research background and theory and on the empirical data obtained in the study on relational aspects in school development processes.

First, various aspects in local school contexts which condition teachers' experiences and actions in relational school development processes (RI 1) are discussed. Thereafter, the main result of Study 1 –the significance of teachers' experience of trust as the foundation for collective learning– is expanded on, and a model of 'Teacher trust' in relational school development is drafted (RI 2). Next, the link between teachers' relational development efforts and students' perceptions of TSR and SSE (RI 3) is considered. Finally, the 'Relational pedagogy' perspective is employed to discuss the 'what-has-actually-been-changed' aspect of the teacher-student relationship (RI 4) more deeply by using empiric teacher reports and student data.

6.1 Preconditions for relational school development

Within the frames of this thesis a two-year relational school development and research project has been shaped, implemented and studied in five schools. In overviewing all empirical data and the general process of implementation, an interest in deeper elaboration emerges, and not least due to the disparities between teacher teams and schools. Various aspects in school contexts seemed to condition the teachers' collective learning processes. As a response to RI1, a main finding is the *tangible confirmation of school development research that emphasizes how different preconditions in local schools impact on how school development processes proceed* (Larsson & Löwstedt, 2014). Conditions for teachers' relational school development efforts were formed by processes at both the system and school level as well as at the teacher group level. In the following, these aspects are discussed in terms of preconditions for relational school development.

System level

Two aspects of significance at the system level were overall *preconditions for schools' and teachers' commitment* in relational school development processes (available free room for relational processes) and *existing pressure for relational school development that became collectively accepted*.

The first aspect regards frameworks for participation. Only five schools, out of approximately 500 invited and 13 really interested, decided to participate in the project. With regard to documented moral drives (Ballet & Kelchtermans, 2007) and expressed needs of teachers for own development in the field (European Commission & OECD, 2009; Lindqvist et al., 2011), and likewise, in regard to the extensive pressure at the time on further training programmes in the university targeting students who challenge, one may conceive that the response to the project was unexpectedly weak. In communication with principal organizers and school leaders, it turned out, however, that the sensed free room (Berg, 2011) for relational development initiatives in many local schools was “non-existent”. A series of new central policies and stricter national control (Rönnerberg, 2014) that had lately been implemented had intensified (Ballet & Kelchtermans, 2007) teachers’ workload. In particular, according to school leaders, two centrally imposed national professionalization programmes⁴³ precluded any other local initiative. The high workload and the national training programmes impacted on the latitude and level of teacher participation also in the five schools that chose to participate. For instance, these were reasons why only one teacher team in each school signed up and why not all teachers belonging to the participating teacher teams could fully take part. The limited participation was reported in all schools to be a major hindrance for how the relational development processes developed (see Study 1). Drawing on these results, school leaders must balance the prevailing degree of central control and national ruling of school development by standing up for, and persistently adhering to, local development needs.

What then made five schools participate in the project? A main reason was the relational process orientation. In common were teachers’ and school leaders’ stressed need for improvement within the field, which was based on individual teachers’ and the schools’ failures with students (see Study 1). Local ‘systematic quality works’ have identified teaching of challenging students as an area of priority. Besides this internal pressure, schools had strong incitements because of external demands. Low achievement led principal organizers and school leaders to see the project as an option for the schools to improve. Some schools have received repeated and sharp criticism from caregivers and from the national school inspectorate for their work with social relational aspects in school, and for their work with individual adaptation of teaching and support for students in special needs. In retrospect, the impact of external pressure for improvement seems to have been a decisive precondition for vast effort to be invested in the development processes. This, however, required that school leaders managed to transform the criticism and deficits – and feelings of failure and low efficacy among staff – into a shared vision for improvement and collective commitment for the school’s development (Timperley, 2011a). This becomes the relational challenge of communication and trust building on the side of school leaders (see further discussion below).

⁴³‘The Mathematic Boost’ and ‘The Reading Boost’

School organization level

Several preconditions highlighted in the literature for local school development (Berg & Scherp, 2003; Larsson & Löwstedt, 2010; Talbert, 2010) were intended to be addressed in the design of the initiative and at the onset of the process. Due to the schools' own choice to enter the process, as well as local anchoring periods of a considerable and similar scope and equal information, preparation and external guidance and learning resources, important structural preconditions were comparable in schools. Additionally, investments of local resources like time spent, number of teachers engaged and financing were of similar magnitudes in all schools. Lastly, there were written agreements between school leaders and the researcher/university, and between school leaders and the counsellors, regarding two-year reciprocal commitments that aimed to create a strong framework for the process. Based on all of this, it may seem as if the schools entered the initiative based on conscious considerations of the local needs and circumstances and with confidence regarding the opportunities to implement the outlined process over two years. One could suggest that the school leaders and teachers had together identified and been ready to conquer a far-reaching free room for development (Berg, 2011). From a researcher perspective, this may have been seen as a developed actor preparedness (Berg, 2015), a joint organizational commitment (Larsson & Löwstedt, 2014) or an established culture of teacher collaboration and shared responsibility for all students (Talbert, 2010; Timperley et al., 2008).

However, while the highlighted preconditions seemed similar in advance, the teachers' experiences in the development processes, and the perceived project outcomes, appeared largely divergent afterwards (see Study 1, and the teachers' evaluation, section 5.4). *The actual free room for relational school development by means of collective learning and joint action was influenced by the communication and interplay that actually took place in the current context.* In this thesis, any room for teachers' collective development appears not only as a structural-physical space but above all as a relational space in which interpersonal communication and trustful relationships that enable collaborative action among school staff need to develop. This communicative and relational aspect of school development is more deeply elaborated on in section 6.2 below.

Teacher group level

Following research on mature professional learning communities (Doğan & Adams, 2018; Owen, 2016; Talbert, 2010; Timperley, 2011a), the initiative was built on, and presupposed, that two relational preconditions were in place in schools. First, the recognition among teachers of a shared responsibility for all students' performance, and second the norm of collaboration in action to improve teaching and develop work together with students. These relational preconditions of local school development have been pointed out (Talbert, 2010), formalized in political reforms and the curriculum (Lgr80-Lgr11), problematized, strived for

and developed in school development practices and research over several decades. Hargreaves and Fullan (in Fullan, 1997) spoke of collaboration as being the previous challenge connected to changing teaching cultures in the 1990s. Also drawing on more recent literature (e.g. Assarson, 2015; Brücknerová & Novotný, 2017; Edwards-Groves et al., 2016), and not least on the findings of this work (Study 1/teachers' evaluation), the *development of and support for collaboration in order to provide mutual visibility of teacher practices and establish collective action is a major issue in relational school development processes*. Berg's early doubts before the collaboration based reforms (1987, in Larsson & Löwstedt, 2014) that supporting principles for collaboration were missing in schools and that teacher individualism was deeply rooted and a general school condition still seem relevant in the 2010s. In the studied processes, it is found that none of the five teacher teams possessed in advance established routines for collaborative action together with students or habits for collegial reflection (Study 1). The relational conditions for the kind of openness asked for in the process, through visible sharing of own interplay with students, appeared to be weak or missing. Likewise, the mutual sharing and deepened collective reflection in an organized counselling conversation appeared to be 'news' for most teachers. A prevailing teacher individualism was further reflected in the teachers' a priori set learning expectations in which individual learning ("own working methods and attitudes") was the highest ranked goal (Table 5, Section 5.4). This occurred despite the collective project design being clearly outlined and discussed during the anchoring process, in the initial training and at the onset of the group counselling processes. Remarkable is that the same objective –own learning– was the most common "highest appreciated goal" also after two years among teachers in two of the teams that fulfilled the process (Schools 1 and 4). This observation is concordant with the lesser degree of collaborative action and mutual visibility reported from these teams when compared to School 2. In that team, the individual priority of learning objectives in advance was replaced by collective development as being the most appreciated result afterwards, and collaborative action and mutual visibility were the main features of the process implementation. In the thematic analysis in Study 1, School 2's teachers stood out as having developed trust in each other as personal colleagues, as well as trust within the teacher team and trust in a joint course for, and the organizing of, their school's development. In the next section the significance of teachers' experiences of trust within relational school development processes (RI 2) is discussed in-depth.

6.2 Trust as a foundation for relational school development

First, the three aspects of teachers' experiences of trust within relational school development processes that were identified in the qualitative analysis of Study 1 are elaborated on. Thereafter, these aspects of trust are put in relation to each other in a model for 'Teacher trust' in relational school development.

Collegial trust

In ongoing interplay, relational parties continuously share intense moments, regulate affect, adopt interpersonal actions and balance mutual influence (Stern, 2005; Tschannen-Moran & Hoy, 2000). Through affective interplay within shared experience, social bonds, empathy and mutual understanding develop over time. In trustful educational relationships, learning becomes a shared opportunity through true pedagogical meetings (Aspelin, 2017; Bingham & Sidorkin, 2004, von Wright, 2000). In Study 1, it was inferred that for trustful collegial relationships to develop, teachers needed to meet at an affective level of communication and emerge as visible and responsible subjects in relational transactions together with students and colleagues. However, without shared experiences trust building seemed hard. Weak trust was reflected by a lack of confidence in the benevolence, reliability and competence of colleagues, and in the personal doubts of individual teachers about being honest and open in front of others. In School 1 and School 4, weak trust hampered a deepened process, and in School 3 mistrust between colleagues occurred as one main reason for the dropout (Study 1).

A main contribution of Study 1 was the demonstration of *the importance of collegial trust in school development work where teachers are expected to learn collectively, deprivatize their own practice and collaborate in action*. This was especially true when it came to the visibility of teaching and the direct sharing of own interplay with students in video recall processes. Individual teachers, to a various extent, were ready to risk vulnerability by sharing relational practice at the micro-sociological level (Scheff, in Aspelin, 2018). In fact, a majority of the teachers avoided that kind of risk exposure during the two years, despite good foresight of the video-recall process being part of the project and seemingly secure structures for the sharing to take place in counselling. Withholding an autonomous position (Little, 1990; Berg, 2015), teachers avoided more personal transactions by simply omitting the video-recall feedback from the learning process. From outside, this may be conceived of as avoidance of shared responsibility and interdependency. Because it was possible to avoid getting close in relational transactions, basic fundamentals of trust building –risk taking within an interdependent relationship (Tschannen-Moran & Hoy, 2000)– were never at play. Instead of collective reflection built on shared experience of affective teacher-student interplay, teachers' conversations remained at a 'narrative level', a communication level where intersubjective aspects of teachers' relational interplay together with students –and the teachers' relational competences (Aspelin, 2018)– were left aside. Accordingly, conversations in counselling run the risk of simply repeating prevailing ways of working and ways of talking about students (Havnes, 2009), having a focus on problem solving and rules and consequences, rather than on exploration of new forms for teacher-student interplay and the development of teachers' relational competences (see School 4, in Study 1). By omitting more personal aspects of communication from the process, the true relational qualities of teacher-student interplay

became hard to grasp. Hence, true pedagogical meetings between teachers are not obvious, since intersubjective sharing of relational practices may threaten one's sense of personal security and professional self-esteem.

These results confirm the conclusions of others that the importance of mutual visibility and the sharing of practice in professional development is well known, but it still cannot be counted on (Larsson & Löwstedt, 2014; Talbert, 2010). In the studied teams, a mature level of practice sharing and collective learning and collaboration (Owen, 2016) fully developed only in School 2 and slightly began to develop in School 1. The teacher team in School 4 remained at sharing narratives. *It is an issue that for decades a deeper level of teacher collaboration has been inbuilt and taken for granted in school development reforms and initiatives, and it still seems arbitrary to what extent it happens.* Collegial trust and teachers' relational competences seem to have been taken for granted. The presumptions of teachers' joint responsibility for student and teacher collaboration in the development of instruction – in Sweden strongly asserted already in the SIA proposal⁴⁴ and formalized in the Lgr80 and all subsequent curricula – has not been followed by any systematic training or support for teachers' realization of new kinds of relational processes in schools (Granström, 2003; Hargreaves et al., 2010; Normell, 2002; Talbert, 2010). This is despite such processes standing in sharp contrast to the independently schooled profession.

Collective trust

In Study 1, trust at the group level was primarily attributed to the quality of the ongoing interplay among all teacher team members, and to teachers' perceptions of psychological safety. The communicative climate, or atmosphere, in a team may, or may not, be appreciated as honest, benevolent and safe enough for interpersonal risk taking to happen (Edmondson, 1999; Gíslason & Löwenborg, 2003; Ohlson, 2013). All team members bring their individual feelings of trust in relationships with each colleague into the group. Thus, a complex network of collegial trust (or distrust) relationships converge in the team. A shared appreciation of collective trust, then, becomes a complex task and cannot be taken for granted. In Study 1, *collective trust emerged as something that develops successively in relational processes over time.* For example, in School 1, distrust between several colleagues was expressed beforehand, and consequently the collective learning process was for long characterized by chariness. However, as prevailing relational challenges in the team were coped with in counselling, individual teachers' safety grew. During the second year, a few teachers took precedence in the development work by sharing video recordings of their own teacher-student interactions (Study 1). According to Tschannen-Moran and Hoy (2000), one can stress the significance of 'trusting prods' in teams. They speak of "elicitive trust" (p. 575) as one engages in trust acts, making oneself vulnerable in front of colleagues, in order to induce others to do the same. In School 2's team, elicitive trust was

⁴⁴ The SIA inquiry: "The internal work of schools" (Skolans Inre Arbete), SOU 1974:53.

clearly expressed as the teachers, one by one and inch by inch, came to actively participate in video-recall procedures. More insecure teachers were continually convinced, by the relational processes played in counselling, that the team was safe enough for risk taking.

In Study 1, collective trust is also attributed to teachers' confidence in the prevailing collective competence of the team and the sensed potential for joint development. Teachers' perceptions of common capacity –the team's ability to mediate mutual support, learn collectively and improve practice together in order to make all students attain the educational goals– is conceptualized in social cognitive literature as collective teacher efficacy (Goddard et al., 2015; Tschannen-Moran & Barr, 2004). Bandura (1997) claims collective efficacy beliefs impact on individual teachers' feelings, thoughts and actions in the team, as well as on general motivation and on change effort. In regard to relational school development processes, collective teacher efficacy becomes the summed confidence of the teacher team, or faculty, to develop new ways of approaching all students in mutual and collaborative ways of communication. According to Bandura (in Goddard et al., 2015), efficacy beliefs stem from four sources of 'beliefs-information': earlier mastery experience, experiences of others' (vicarious) mastery, support and social persuasion ("You can do this!") and, finally, the structural and emotional states of the group. In the studied processes, all teacher teams' previous mastery perceptions were weak, and as described earlier this was one main reason for entering the project. Vicarious mastery, on the other hand, became an important process part as trusting prods shared own teacher-student interventions to colleagues and made own progress a collective matter ("I could never have done this without the collegial support I gained"). *Trusting acts by individuals hence reinforced collective efficacy*. In regard to social persuasion, the role of school leaders, and counsellors to some extent, was crucial. School leaders who clearly communicated the message, "I want you to do this, and I know you can!" to the team, while also providing the necessary support, indeed strengthened teachers' sense of collective relational efficacy. Foremost, this applies to the process in School 2, where *collective trust and collective efficacy grew in reciprocity*: a team sense of 'we feel safe together and collaborate' developed hand in hand with the sense that 'we can make it together'. The emotional state of the group, or "the emotional tone" as Tschannen-Moran and Barr (2004, p. 190) put it, corresponds to teachers' affective experiences of the ongoing interplay as well as the sense of psychological safety in the teacher team.

In this work, collective trust is regarded as an intra-group phenomenon. In the research literature, collective trust also refers to between-group processes, like the whole faculty's trust in school leaders and students, and vice versa, and trust between groups like one teacher team's trust in the other teams (Van Maele et al., 2014). Trust, or distrust, between different role actors in schools, is here seen as something that is enacted in the local school culture by means of different

groups' shared (or disparate) views on school visions, daily practices and development needs (Larsson & Löwstedt, 2014). In the present discussion on relational aspects in school development, trust between different role actors is considered an integral part of overall *process trust*.

Process trust

In Study 1, the proposed term process trust builds on and add to concepts in the literature like shared visions (Hargreaves et al, 2010), joint organizational conceptions (Larsson & Löwstedt, 2014), collective sense making (Weick, 1995), institution-based trust (McKnight, Cummings & Chervany, 1998) and sense of organizational trustworthiness (Hodson 2004). Taken together, *process trust embraces the teachers' views on own and organizational goals, as related to their confidence in their colleagues' and school leaders' ambitions, and the course and organizing of ongoing school development*. In the five studied processes, whether and how common goals and shared ambitions to take action were developed was crucial. The teacher teams as well as individual teacher needed to identify with the global visions of the school, and new collaborative work methods, more than identifying as autonomous professionals, if sustainable development were to result. For such collective identification (Larsson & Löwstedt, 2014) to occur, a couple of conditions emerged.

First, *is there any clear and cohesive vision for the whole school to adhere to?* And second, when global visions *are* expressed, to what extent are they mutually elaborated on and communicated, thus *shared*, rather than enforced? In the two schools that stopped the process in advance, collective visions were seemingly weak. As the project proceeded, the main focus for these schools' local development work appeared to be re-organizing, restructuring of student groups, scheduling and, literally, rebuilding the whole school, rather than relational improvement (Study 1). In School 3, the teacher team's project participation was fraught with the school leaders' expectations of increased efficiency and re-organizing of teaching challenging students, in new ways not agreed on by the teachers. In School 5, the reason for the teacher team's participation was solely expressed by the principal as the "own will of the teachers", and it was thus loosely coupled (Weick, 1976) to any general collective goals. The project was fully 'owned' by the team, and accordingly, the team received little process feedback from the principal. On top of this, the 'lonesome teacher team' was split into two parts, something that further weakened the process trust (see Study 1). Weak coupling of the teacher team's purpose for participation and organizational visions was also found at School 4, and likewise there was an absence of mutual process feedback. Indeed, exchange between school leaders and teachers became an issue of controversy. The assistant principal planned to take part in the counselling group, but after teachers' worries about psychological insecurity with a leader included, the assistant principal remained outside. No alternative exchanges were created, and afterwards the school leaders expressively lamented their detachment from the development process (Study 1; researcher log-book; counsellor report).

Similar to McKnight et al.'s (1998) concept "institution based" trust, process trust requires that major events in an organization are sensed to be relevant in order for members to accept own vulnerability for change. In the studied processes, relevance was established (or not) in teachers' successive sense making of the process in relation to their appreciation of its direct value for their students (Scherp & Scherp, 2007; Hargreaves et al., 2010). The more direct connection to teachers' own interplay with students, the higher the sense of relevance and acceptance. In line with McKnight et al. (1998), process trust can be conceived as a relational condition, relying on formal structures that promote mutual communication at all levels within organizations. The search for mutual understanding of perspectives and mutual respect for each other's needs is of significance in leader-staff interaction, as well as in communication between individuals, and within teams. In Study 1, elaboration and maintenance of shared visions and mustering of collective engagement emerged to depend on communicative processes at the school level. The conclusion was that *leadership commitment and endurance in communicative processes, together with qualified process support, have the potential to develop process trust in the long run, and also where collegial trust and collective trust were weak or missing*. In School 1, well-functioning group counselling seems to have established new experiences for teachers over time, in the shape of true pedagogical meetings, in which initially distrustful collegial relationships successively transformed into more secure relations. As a result, mature collective learning processes started to develop after a year of counselling.

Further, the *teachers' trust in the competence, benevolence and honesty of their school leaders' ambitions needed to be strong enough in order to awaken teachers' genuine participation* (Study 1). This result is concordant with meta-analyses of school leadership significance in school development processes that show school leaders' encouragement for teachers' collective learning processes is the strongest leader contribution of all in regard to student performance (Robinson, Claire & Rowe, 2008). In several studies, teachers' collective actions are regarded as the main mediator between school leadership and student learning (see e.g., Goddard et al. 2015). To end with Leithwood and Beatty (2008), school leaders underpin organizational trustworthiness as they build mutual dialogues around vision creation and development, listen to teachers' thoughts and "tune into teacher's emotions" (cited in Li, Hallinger & Walker, 2016, p.21).

Teacher trust in relational school development processes

To summarize, three facets of trust are suggested to form teachers' general confidence in one's own, the faculty's and the whole school's capacity for development by means of collective learning and developed relational interplay. For general teacher trust in relational school development processes, interplay needs to be addressed at three levels. Figure 6 below illustrates the three-part interactive relationship between: (i) *collegial trust* (trustful interpersonal relationships and professional confidence between individuals); (ii) *collective trust* (psychological safety and collective efficacy in teacher teams); and (iii) *process trust* (trustworthiness of

leadership, shared visions and goals and confidence in the contents and the organizing of development processes).

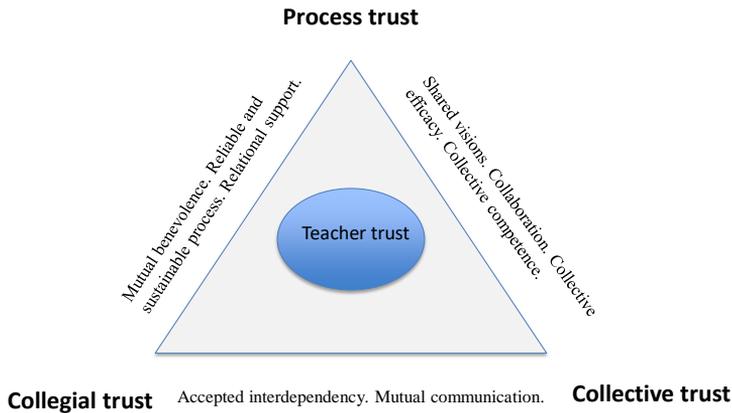


Figure 6. Model of 'Teacher trust' in relational school development processes.

As outlined in the sections above, collegial trust between individuals and collective trust in teams develop in parallel and are intertwined. Both crave acceptance of interdependency and vulnerability in relationships characterized by mutual communication. However, trustful relationships are not enough for general trust in school development processes. For change readiness, teachers and teacher teams also need to identify with the school as a whole and rely on the joint course of development. This requires sustainable processes in which school leaders and teachers continuously identify improvement needs and elaborate together on vision and goals. As argued here, such processes must be committed within a culture of mutual benevolence and need to be relationally supported. When performed as such, process trust in turn reinforces the development of trustful professional relationships.

When teachers experience trust that at all three levels is high enough, mature cyclic learning processes are enabled in which old practices can be jointly problematized and new practices can be explored together. In such processes, developed collective competence and collective efficacy build 'Teacher trust' in relational school development efforts and may have the potential to influence students' relational experiences and self-beliefs. This supposition leads us to further elaborate on RI 3 and RI 4.

6.3 The link from teachers to students

In order to explore the assumed pathway from teachers' relational improvement efforts to students' perceptions of TSR and SSE, the RI 3 was formulated and

Study 2 performed, in which *a combined tool was developed and validated for simultaneous assessment of student-perceived TSR quality and SSE*. The adopted tool, consisting of seven internally reliable subscales (Study 2), was then utilized in Study 3 for a longitudinal investigation of students' perceptions of TSR and SSE in relation to the teachers' experiences in their relational school development efforts.

The introduction part of Study 3 discusses the absence of research directly showing that teacher collaboration and collective learning affect students' perceptions of TSR and SSE. However, multilevel studies implied that there are associations between instructional school leadership and process support for teacher collaboration and collective learning, and collective teacher efficacy (Goddard, et al., 2015), student engagement, peer social interplay, developed formative teacher-student dialogues (Doğan & Adams, 2018; Owen, 2016) and achievement (Tschannen-Moran & Barr, 2004). Further, systemic relationships are found between SER-factors like teacher-perceived quality of 'school leadership', 'school ethos' and teacher 'cooperation and consensus', on the one hand, and student perceived 'teacher care' on the other (Ramberg, et al., 2018).

In Study 3, the assumed link from teacher collaboration and collective learning to students' perceptions of TSR quality and SSE was explored by means of the (eventual) reflection of the teachers' relational development efforts in students' perceptions. The development process targeted the teachers' collective capacity to develop trustful TSRs and in turn to strengthen students' self-beliefs (see the systemic model of school development in Study 3). The theoretical reciprocal interaction between TSR and SSE is outlined in Study 2 using Bandura (1989), who states that teachers' interpretations and responses to students' actions, successes and failures are either favourable or unfavourable to students' self-beliefs, and in keeping with Klassen (2010), who stresses the ways students think about themselves as learners, in turn, influences how they interpret their teachers' communication and how they respond in interplay with teachers. Further, empirical studies were referred to (Hughes et al., 2012; Li et al., 2012) that provided evidence for an association between student perceived TSR quality and SSE. *This association was clearly confirmed by the results based on the Swedish student data presented in Study 2 and Study 3.*

Based on the referred to research and supported by the findings of Study 2 and Study 3, in Figure 7 below a plausible link from teachers to students is suggested in the shape of a three-part interactive relationship between the following: (i) *Teacher Trust* (process trust/collegial trust/collective trust) in relational school development; (ii) *Teacher-Student Relationship* quality (student perceived support, conflict and intimacy in important TSRs); and (iii) *Student Self-Efficacy* (student's confidence in own capability for self-regulation of learning, in peer social interplay, and expectations of global school success).

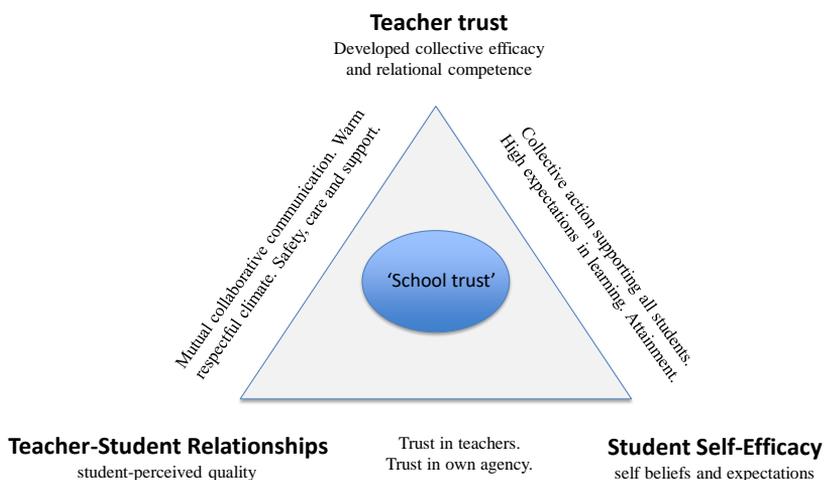


Figure 7. Proposed model for students' 'School trust' (ST) and Teacher trust.

In Study 3, student perceived TSR quality and SSE was tentatively discussed together as “students’ school trust” (here School Trust/ST). In Figure 7, ST is set in relation to teachers’ trust and collective efficacy within relational school development processes. As shown in Study 3, and in the results from School 2, *while mature, a teacher team based relational school development process may have the potential to positively impact on students’ appreciation of TSR quality and SSE*. Thus, as a response to the first part of the two-part RI 4, the searched for link from teachers’ collective action to students’ perceptions was supported. Here it is suggested that teachers’ developed collective relational competence, with new ways of mutually communicating with students, conveys a sense of security and being supported and cared for. Likewise, a sense of being better supported in learning makes the students more open to the teachers’ pedagogical intentions and more prepared to take on challenges. Teachers’ developed collaboration is further suggested to enable joint improvement of teaching, and the transference of collective high expectations to all students: ‘Yes, you can do this! And we all support you’.

To deepen understanding about *how* the suggested link may operate, exploration and discussion of *what* has actually changed in the TSRs as a result of the teachers’ relational improvement efforts is the next step that brings us to further elaborate on the second part of RI 4.

6.4 Relational competence and intersubjectivity

In the continuous school development discourse, and in school development research, relational concepts are frequently present, and mostly outlined as valuable

goals, generalized observations or operationalized measures (e.g. positive classroom climate, supportive leadership, teacher care). For example, in Nordenbo et al.'s (2008) valuable synthesis of studies exploring teacher competences the following summary of 'teacher relational competence' can be read. However, I have added interrogatives to the quotation in order to illustrate that questions like 'what does this look like?', 'what does this actually mean?' or 'what did the teacher really do?' are necessary to ask in order to explore deeper the relational aspects of teaching:

... the teacher's positive social interaction [?] with the pupils is based on a significant relational competence [?] that can promote pupil learning. Such a teacher demonstrates pupil-supportive leadership [?] with pupil activation and pupil motivation, ...//... The good relations between teacher and pupil are based on the teacher showing respect [?], tolerance [?], empathy, [?] and interest [?] towards the pupils. The teachers' view of pupils is that they all have the potential to learn and that they have an individual learning style. (p. 71)

With a 'Relational pedagogy' perspective it is important to 'go inside' relational transactions as it is important to expand on knowledge of what concepts like 'empathy' and 'respect', or 'mutual communication', really look like at the teachers' side of the relationship. How do teachers' continuous communicative actions impact on students' direct and long-term responses?

At the interpersonal TSR-level, the 'how' necessarily brings reflection down to the micro-sociological level of moment-to-moment interplay between teachers and students. Although this, the intersubjective level of pedagogical meetings (Biesta, 2004; Aspelin, 2018; von Wright, 2000), is only to a certain extent possible to grasp in the empirics of this thesis, the documented experiences and relational interactions in the studied processes can be somewhat expanded on – in a reasoning anchored in the philosophy of Relational Pedagogy and in relation to micro-analysis of teacher-student interplay carried out elsewhere (see Frelin, 2010; Lilja, 2013; Ljungblad, 2016). Here, the researcher's participative observation of on-going interplay within the teacher team in School 2, and, foremost, the direct experiencing of pursued teacher-student interactions through the video-recall processes connected to the CMC-interventions are beneficial. The following discusses the nature, or the kind of new relational actions carried out on the teacher's side of the TSR that may have contributed to positive change in appreciation of TSR quality on the students' side of the relationship as the result of developed interplay. The reasoning mainly focuses on the process in School 2, since this school was the only one in which positive changes in students' perceptions of TSR quality were found and, further, because this was the only school in which a substantial number of video-documented teacher-student interventions were collectively monitored in the counselling process.

According to most individual teachers' reports, to a large extent the expectations of change in the project concerned a desire to better understand and support the students who challenged them the most in daily teaching. During the counselling process at School 2 this was talked over as a will to 'learn to know students closer' and apprehended as a process of developing a way of patiently listening to students' perspectives on own schooling in general, on specific matter learning and on critical events in social relational interactions in classrooms and other school situations. Rooted in the expressed interest in their students' perspectives, and supported by the provided model for mutual teacher-student conversations, the main change in School 2 teachers' actions that emerge is that *the teachers started to pay attention to all students, and talk together with them, in new ways*. The wished for approach that the teachers expressed can briefly be described as being genuinely interested in students' experiences, asking curious questions and listening carefully and not trying to provide all answers themselves. Hence, daring to rest in uncertainty and waiting for, expecting and supporting students to express themselves. In the CMC-model, such an approach is conceptualized as teachers empathizing (Frelin, 2010; Greene, 2014) with their students, and balancing power by including students as equal and responsible subjects within the TSR (Bingham & Sidorkin, 2004; Juul & Jensen, 2009, Aspelin, Jederlund & Aneer, 2017), by inviting them to take part in mutual dialogues and joint improvement efforts.

In mutual dialogues, from a Relational Pedagogy-perspective, the parties attune to one another by listening throughout their whole beings and by using all their senses and modalities of non-verbal and verbal communication in order to momentarily regulate on-going interaction and to develop understanding of each other's states, needs and perspectives (Jederlund, 2011; 2017; Lilja, 2013; Ljungblad, 2016). For this to happen, parties need to genuinely meet (Biesta, 2004). In the studied school development processes, when teachers have invited a student to take part, and the student has accepted, the structured teacher-student conversation provided a secure pedagogical meeting in which mutual interplay may develop.

In the video-recall process, the moment-to-moment communication taking place in conversations between teachers and students was jointly reflected on regularly by the teachers. From the data obtained from School 2's teachers, school leaders and the counsellor, it is clear this process established new ways of talking with students and developed a new attentiveness on the teachers' side to their own contribution to the teacher-student relationship and to formative dialogues. In the reflection on the video-sequences of teacher-student interplay, both nonverbal and verbal aspects of communication were discussed, such as how questions were asked, how time was left for students to respond, whether voices were matched in tempo, pitch and intensity, how proximity and distance in the relationship was mutually regulated, and, how teachers perceived and managed affect and responded to emotional signals and cognitive information from students.

In line with theory, in the video-recall process it was observed that teachers' spontaneous responses to students' expressions may either strengthen or weaken the teacher-student relationship (Bandura, 1989; Aspelin, 2017). The teachers' 'changes in tact' (Ljungblad, 2016), were decisive for a mutual process to develop. When successful, teachers first attuned to immediate sensory perceptions and regulated interplay momentarily through aesthetic dynamics (Løvlie, 2007) of communication like gaze, tempi, gestures and voice sounds in order to regulate strong affect (Aspelin & Jonsson, 2019; Ljungblad, 2016) and to establish a sense of security (Hamre & Pianta, 2006). If successful, the students felt comfortable expressing themselves. When listened to, and respected and confirmed by the teacher, students were then more open to teachers' perspectives and to collaborating on improvement. The act of *balancing between attuning and listening to students' feelings and thoughts, on the one hand, and bringing forth own pedagogical intensions, on the other*, was crucial in the teacher-student conversations.

In the video-recall process teachers' pedagogical tactfulness by means of the ability to improvise (Ljungblad, 2016) in relational interplay surfaced. Hence, *teachers' relational competences were made visible for collective reflection*. In this sense, provided collective reflection takes place in a trustful community of learners (compare Study 1), video-recall processes can be regarded as being highly valuable as a means for development of teachers' relational competences.

In line with Aspelin (2018), the teachers strived to expand their understanding of their students' challenges through attuning with them closely in communication, while at the same time curiously exploring their experiences, thoughts and feelings. By being personally available (Frelin, 2010), inviting, and by showing genuine interest for students' perceptions, without being judgmental (von Wright, 2000), the teachers consciously aimed to develop and strengthen the teacher-student relationship. *To the extent the staged teacher-student interventions developed as true pedagogical meetings* (von Wright, 2000; Aspelin, 2018), *they established qualitatively new experiences for students*. In addition, the teachers said that they developed a more student-centred attitude in general by consequently exploring students' perspectives of learning in class, hence, developing formative dialogues (William & Leahy, 2016). The school leaders confirmed that the teachers have developed *higher expectations for students' learning* and reported that they have observed how teachers have made *direct adaptations in instruction* as a result of the teacher-student conversations. For example, the principle noted that, "English teaching has changed the most, with individual arrangements" (school leader survey 3). The new teacher approach and new experiences of reciprocity in teacher-student interplay, together with adaptations of instruction, are here assumed to explain the broad positive change in School 2 students' perceptions of TSR-support (Study 3, Figure 5a). As shown in Study 3, most students felt more liked and respected by their teachers, and they appreciated being better supported in learning after one year of intervention. Further, over two years students felt more secure and cared for in the TSRs. An interesting finding, in relationship to the latter, is that

School 2 students' increased assessment of care- and security- related 'TSR-support' variables, and likewise 'TSR-intimacy' variables, mainly appeared during the second year, while a major increase in TSR-support variables related to learning appeared during the first year together with improvement of students' perceptions of self-efficacy for self-regulated learning (Study 3). This implies that teachers may improve students' self-beliefs and support student learning during a relatively short time. Developing deeper aspects of the TSR, like experiencing more sustainable trust and intimate personal confidence, seems possible as well but requires a longer time.

At the intersubjective level of communication, teachers have the opportunity to support students to contain, regulate and even transform negative emotions and self-beliefs into more optimistic outlooks. How teachers by perceiving, listening to and affirming students' negative affect could ease emotional resistance and re-engage students in learning was exemplified in section 3.2, in the vignettes by Lilja (2013), Frelin (2010) and Ljungblad (2016). This type of affect regulation – *transformation of negative emotional states into more adaptive motivational strategies* – was observed in the video-recalled teacher-student interactions. In several interventions, the teachers focused on changing students' low confidence by elaborating together with them on the experienced challenges and on improvement of instruction and development of more adaptive self-regulated learning strategies.

Another crucial aspect of affect regulation has to do with resolving relational conflicts. Dealing with students' negative affects (and sometimes externalizing actions) and resolution of relational conflicts were frequent themes in the counselling process and in some cases were also the starting point for an intervention. Following the CMC framework in conversation, the teachers listened to and respected all students' negative feelings. However, at the same time, they made clear their own pedagogical intentions and mediated relational boundaries and expectations of appropriate social interaction. To be successful in such conversations it was crucial for teachers not to avoid the negative feelings, but at the same time they should not express strong emotions and instead stay calm, caring and structuring (Greene, 2014). By acting as role models in such ways, *teachers showed students that negative emotions are not dangerous, and that relational conflicts are possible to resolve in mutually satisfactory ways* (Stern, 2005; Greene, et al., 2003). Such new experiences of mutually resolving relational conflicts and repairing maladaptive teacher-student relationships is here assumed to explain the vast improvement of some School 2 students' perceptions of 'TSR-Conflict' variables (see Study 3, Figure 5b). As reported, for students experiencing high conflict in their TSRs at the start, the situation clearly improved during the first year. For example, some students having experienced "very much" troubles and discussions together with their teachers at the start, marked "not at all" on the same assessment one year later. Over two years, the same students also reported to have developed a higher confidence in their teachers, indicating they now could speak with them about important things if they wanted or needed to.

7. Conclusions

To end, first, the conclusions of the thesis are summarized, and then the general limitation is stated. Following this, the main methodological, empirical and theoretical contributions of the thesis are extracted, and implications for future school development in the field and new research are outlined.

7.1 Conclusions and limitation

The first observation is that teacher-team based relational school development is not easy to carry out. Despite seemingly similar (as perceived from outside) starting points and equal resources, the five studied relational school development processes had different results, with teachers in only one out of the five schools experiencing a more successful process. More precisely, the first conclusion is as follows: *organizational and relational preconditions at the system-, school- and teacher group level define which relational school development efforts can be carried out.* For instance, a sustainable room for teachers' collective processes – with trusting school leaders, process support and time available – emerged as an organizational precondition, and prevailing habits and maturity of teacher collaboration emerged as critical relational preconditions.

In keeping with international research on teachers' collective learning, the present relational development initiative required mutual visibility in practice and direct collaboration in action, as well as accepted collective responsibility for all students. However, the state of such relational conditions varied between schools. The degree of mutual benevolence and confidence within professional relationships set limits on teachers' readiness to risk own vulnerability and to collaborate on real change of pedagogical attitude and improved teacher-student interplay. The second conclusion is as follows: *Teachers need to feel trust in relational school development processes in order to experience meaning, become involved and be open with own challenges and to try out real changes in practice together with colleagues and students.* As conceptualized in this thesis, 'Teacher trust' in relational school development processes comprises three levels: interpersonal trust (collegial), trust in the team (collective) and an overall trust in the school's orientation and its organizing of school development processes. When teachers experience trust at all three levels, mature collective learning and developed collective relational competence are enabled, which may have the potential to positively impact students.

In order to monitor how teachers' relational school development efforts impact on students an instrument has been developed to measure student perceived TSR quality and SSE. The instrument, 'The Swedish TSR-SSE Survey', is an adaptation and translation of two established American instruments that are used simultaneously in order to study students' perceptions of TSR quality in parallel with their perceived self-efficacy. In this thesis, *the association between TSR quality and SSE is pointed to as a plausible link between teachers' collectively developed relational competence and students' well-being and learning*. The analyses based on data collected with the new instrument confirm a significant correlation between student perceived TSR quality and SSE. It is proposed that the basic assumption of the thesis (Introduction, p. 13) is supported: that conscious relational efforts in schools not only have the potential to develop trustful TSRs but also may improve students' self-perceptions of own opportunities to learn, thrive and grow in school. Students' self-beliefs in turn are strongly associated with goal attainment. These inter-relationships imply great interest in more deeply exploring the teachers' relational competences and how these develop and are expressed in on-going teacher-student interplay.

The teachers in School 2 may exemplify what a developed collective relational competence means. As a team, these teachers were determined to better understand their students' experiences and perceptions of schooling by showing a genuine interest in the students' perspectives through new forms of teacher-student interaction. The teachers together sought to familiarize themselves with the whole situation and the challenges of their students through a changed, closer, more empathetic and personal way of talking and listening. In conversations, teachers sought, more than before, to include students' strengths and challenges as well as their social and personal well-being. By coming together in the group counselling and reflecting on their own ways of interacting with students also at the micro-sociological level -through joint analysis of video recordings of teacher-student interplay- the teachers' personal ways of meeting, listening to and talking with students were noted. *An increased awareness of how both implicit and explicit aspects of communication affect the teacher-student relationship was developed*. For instance, the teachers developed the ability to tune emotionally in to students by consciously regulating physical closeness and distance and adjusting the pace and manner of speaking. In this way, the teachers more clearly conveyed their care for the students and supported them better in regulating negative emotions in the face of challenges. By asking open and curious questions, and giving plenty of time for students to respond, teachers developed an extended way of listening to students' perspectives. The students' thoughts and experiences then, together with the teachers' pedagogical intentions, formed the basis for common change implementation. *The more empathetic and explorative attitude of the teachers and the mutual improvement interventions meant qualitatively new experiences for the students*. The increased feeling of being seen, cared for, understood and supported by their teachers is

proposed to explain the positive changes in the perceptions of School 2's students.

Limitation

In this thesis, relational aspects of school development processes are studied and discussed in regard to empiric data from five schools. Thus, all the reasoning and arguments made need to be looked upon by taking into consideration this profound limitation, and only as the author's suggestions, even though they are based in scientific inquiry and related to theory. Any generalization of the results to processes or individuals in other schools must be tentative and made with caution and openness for reconsideration. However, the conclusions may be valid in regard to the studied relational school development processes and the participating informants of the five schools.

Further methodological limitations are discussed in Chapter 4, and in the respective part studies.

7.2 Contributions, implications and the last word

Regardless of the limitation in making generalizations, the thesis gives methodological, empirical and theoretical contributions to the study of the significance of relational aspects in school development.

Methodological contribution

The performance of the multilevel convergent mixed design of this research contributes to the *bridging between SIR and SER research* by means of qualitatively exploring relational processes in schools in parallel to quantitatively assessing student-perceptions of relational 'school factors'. As such, the thesis contributes to explaining why, and how, relational aspects are important, and how they can be approached in local school development efforts.

The validated TSR and SSE instruments provide *relational alternatives while evaluating quality of learning environments and in monitoring local school development*. However, in future studies the theoretical models can be further improved, and the proposed compiled construct of ST (Study 3) can be further worked out theoretically, and modeled. In the educational field, the elaborated CMC model for relational school development efforts based on collective learning and collaborative teacher-student interventions can be re-used, modified and developed.

Empirical contribution

The performed project is, to the author's knowledge, the first longitudinal study in Sweden that focuses on local school development processes through developed relational interplay in schools. As such, it provides new experiences and knowledge. Here, three significant findings are highlighted. First, a free room for teachers' relational school development was hard to conquer. When conquered,

however, two taken for granted preconditions for collective learning were weak: sense of shared responsibility and habits for deepened collaboration. Second, the significance of teachers' sense of trust in the relational school development process, as a prerequisite for the deprivatizing of teaching and relational practices and for commitment in development processes, was brought to the fore. Third, the vast associations between TSR quality and SSE found in the Swedish student sample add to previous findings. The associations between TSR-quality –something teachers can impact on in transactions with students every day –and students' agency-beliefs in learning and social interplay (SSE) suggest schools should emphasize the development of teachers' relational competences. One efficient way to proceed, as judged from this work, is to use video recall processes for the teacher team to collectively reflect on teacher-student interplay, which is brought out from direct shared experiences. Importantly, such relational collective processes may need qualified, and sustainable, process support (counselling).

Theoretical contribution

The first theoretical contribution of this work is the application of the philosophy of 'Relational pedagogy' in the understanding of development of trustful educational relationships. Moment-to-moment affective regulation in mutual teacher-student interplay is regarded as decisive for TSR development, as are both the sharing of experiences through mutual dialogues and the repair of the relationship, when hurt. As theorized here, the same relational principals apply to teachers. In order to develop trustful collegial relationships and collective trust, teachers need to interact at an affective, and thus more personal, level, share practices (for good or bad) and resolve interpersonal controversies when they appear. A second contribution to theory is the proposed concepts of 'process trust' and 'teacher trust' in relational school development. And a third theoretical input is the reasoning around the link between teachers' collective actions and students' appreciations of 'school trust', as proposed in the triangular relationship in Figure 7.

Prospects for extended research

In the systemic relational model of school development based on collective learning in teacher teams, illustrated in Study 3 (p. 5), student achievement was included as a possible 'last part' in the mutual influence between teacher trust, teachers' joint action together with students and students' appreciations of TSR and SSE. Through the thesis, an assumed main direction of influences is pointed to: Teacher trust and collective action → TSR quality → SSE → goal attainment. This pathway is supported by previous research and somewhat further by the results of Study 1 and 3. The last link, to goal attainment, was not an object of inquiry in the latter two. However, afterwards, it gained some preliminary support as teachers, school leaders and some individual students reported (in the teacher evaluation and in ending conversations) increased learning and higher grades. This evidence is very weak but may inspire future research. In comprehensive

longitudinal studies on relational school development it would be of great value to perform the following: (i) to expand exploration of the link between teachers' collective relational development efforts and students' experiences. This could preferably be made through adding analyses of teacher-student interplay at the micro-sociological level and by including qualitative data of students' voices; and (ii) to connect measures of achievement in the model for analyses.

The vast correlations found between TSR and SSE in Study 2 and 3 invites further investigation. While using the created "Swedish TSR-SSE survey" in relational educational research, new student data also can be used for model improvement. Although internal consistency of the instruments' seven sub-scales are strong (Cronbach's α 0.85-0.97, Study 3), the interrelatedness between all survey variables and between the latent factors need further investigation (Study 2).

General implications for school development

If school administrators, school leaders and teachers want to draw on the results of this thesis, the main consequences for local school development would be as follows, according to the author: (i) to maintain consciousness of prevailing organizational *and* relational preconditions for collective processes to develop; (ii) to promote process trust through painstakingly gathering the staff in collective processes around identifying development needs, elaborating on joint visions and goals, and the action of improvement; (iii) to provide qualified process counselling for teachers in order to challenge prevailing school cultures, and to develop collegial and collective trust within teacher teams; (iv) to hold on to the significance of mutual visibility of practice and direct collaboration in action together with students; (v) to organize processes for continuous feedback between school leaders and teachers; (vi) to possess endurance in prioritized processes, and above all; (vii) to organize schools so that space is given for teachers to get to know their students both as individuals and learners through continuous teacher-student dialogues.

...

In this text students' voices are indirectly heard through their appreciation of relationship quality and self-efficacy judgements. However, a student's voice can also be heard directly, as is the case in the quote below about participation in mutual teacher-student conversations:

Everyone probably needs such a conversation some time. It's just nice to talk about it like to talk about what difficulties you have, and everything... like that ... In that way, it feels good.

List of Appendices

- Appendix A Invitation letter to schools
- Appendix B Project information letter to students and caregivers
(as approved by the Regional Ethics Review Board).
- Appendix C Three part teacher survey
- Appendix D Three part school leader survey
- Appendix E Template for group counsellors' process report

All appendices A-E are available online, published at the DiVA-portal:

<http://urn.kb.se/resolve?urn=urn:nbn:se:su:diva-198193>

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Tillitsfulla relationer och skolutveckling

Bakgrund, syfte och frågeställningar

Avhandlingen undersöker hur en medveten strävan att utveckla tillitsfulla relationer och ömsesidigt samspel bland skolans aktörer kan bidra till ökat välbefinnande, större gemenskap och förstärkta läroprocesser för såväl alla elever som skolans personal. En sådan ”relationell skolutveckling” ses som särskilt viktig för den stora grupp elever som kämpar hårt med skolarbetet varje dag för att uppnå utbildningsmålen, och därmed är som mest beroende av en stödjande omgivning för att klara skolan. Tillitsfulla mellanmänniska relationer och utvecklat samspel och samarbete i skolor antas i förlängningen också kunna bidra till generellt förbättrade skolresultat.

En utgångspunkt för studien är de svårigheter den svenska skolan brottats med under 2000-talet och framåt. Här avses bland annat den ökande andel elever som går ut grundskolan utan tillräckliga betyg och därmed inte är behöriga att antas till ett nationellt gymnasieprogram, och som löper risk att exkluderas från såväl högre utbildning som framtida jobbchanser. Andra problemmarkörer i utbildningssystemet under perioden är svenska elevers försämrade kunskapsresultat i internationella jämförelser som PISA, TIMSS och PIRLS, och den minskade likvärdigheten med konstaterat växande resultatglapp mellan olika elevgrupper, och mellan skolor. Tillgång till god utbildning och god undervisning förefaller inte vara given för Sveriges alla elever. En andra utgångspunkt för studien är den utveckling som framtonat parallellt med de ovan nämnda skolsvårigheterna och berör barns och ungas psykiska ohälsa, som ökat markant under samma tidsperiod. Forskning har länge visat att barns och ungas skolupplevelser har betydelse för deras välmående, men nyare rapporter visar även på ett orsakssamband där skolans misslyckande i att utbilda och rusta unga inför framtiden direkt bidrar till psykisk ohälsa bland unga.

Låg måluppfyllelse och hotet mot barns och ungas psykosociala välbefinnande är två bärande motiv för att studera skolors och lärares strävan att bättre möta och undervisa sina mest utsatta elever.

Avhandlingen ansluter sig till ett kritiskt perspektiv på huvudtrenderna i de utbildningspolitiska reformer som syftar till att bemöta de beskrivna skolsvårigheterna, i såväl Sverige som jämförbara länder. Här avses till exempel en allt starkare

detaljstyrning av undervisningen riktad mot enkelt mätbar kunskap, mer frekventa nationella test med fokusering på resultatpoäng, utökad summativ bedömning och utökade krav på dokumentation av lärares arbete. Sammantaget uppfattas detta av många forskare och praktiker som att skolutvecklingen driver fram en allt mer ”instrumentell” utbildning. Skolor fokuserar framförallt på hur lärare så effektivt som möjligt kan leverera mätbara kunskaper till elever, som i sin tur har som främsta uppgift att i individuella provresultat påvisa huruvida kunskapen levererats eller inte. Kritiken menar att en orimligt stor del av lärares arbete åtgår till att förbereda, genomföra och utvärdera standardiserade test och att skolledares arbete i för hög grad upptas av att dokumentera och rapportera skolresultat. Lärares praktik uppfattas som alltmer fjärrad ifrån eleverna som individer, som växande barn och unga personer stadda i utveckling. Utifrån ett *relationellt pedagogiskt perspektiv* framhålls att ensidig betoning av mätbar kunskap begränsar utrymmet för skolans personal att också arbeta med skolans sociala fostransuppdrag och demokratiuppdrag, liksom med uppdraget att möjliggöra för varje elev att utvecklas optimalt utifrån sina egna förutsättningar.

Rådande skoldebatt och utvecklingen mot en allt mer instrumentell utbildning under 2000-talets första årtionden har styrt bort skolutvecklingen ifrån förståelsen av utbildning som ett relationellt fenomen, som något som äger rum i tillitsfullt samspel människor emellan.

I föreliggande arbete studeras vad som benämns en ”relationell skolutveckling”. Intresset riktas mot utvecklingen av tillitsfulla relationer bland skolans aktörer. Ett tillitsfullt skolklimat präglad av ömsesidigt samspel och samarbete förväntas bidra till engagemang och förstärkt lärande för både lärare och elever. Hög kvalitet i lärar–elevrelationer, och dess betydelse för elevers uppfattningar om sina möjligheter att lära, vara delaktiga och lyckas väl i skolan, utforskas både som *mål för* och *bekräftelse på* skolutveckling. Grundantagandet bakom avhandlingens studier är tvådelat: (i) tillitsfulla professionella relationer möjliggör det samarbete och det kollektiva lärande som krävs för att utveckla skolan inifrån, mot (ii) tillitsfulla lärar–elevrelationer präglade av ömsesidigt lärar–elevsamspel som möjliggör för lärare att bättre uppfatta sina elevers lärande och utveckling, och därmed kunna forma undervisningen optimalt efter elevernas behov.

Forskningsintresset riktas mot relationella aspekter av skolutveckling, och avhandlingens övergripande syfte är

att studera relationella aspekters betydelse i skolutveckling.

För att svara mot syftet studeras relationell skolutveckling i flera steg. Först beskrivs och diskuteras svensk och internationell skolutvecklingsforskning ur ett relationellt perspektiv (kapitel 2). I steg två tecknas en forsknings- och teoribakgrund för studiet av relationell skolutveckling (kapitel 3). Här presenteras forsk-

ningsresultat om och teoretiska perspektiv på betydelsen av tillitsfulla lärar–elevrelationer, liksom filosofiska och pedagogiska perspektiv på lärares relationskompetens. Det senare understött av en framväxande begreppsvärld inom forskningsfältet ”Relationell pedagogik”, liksom av teorier om intersubjektivitet. Vidare beskrivs utvecklingen av tillitsfulla relationer mellan skolans professionella som förutsättning för skolutveckling baserad på lärares kollektiva lärande. I steg tre, och förankrat i det föregående, designas ett relationellt skolutvecklingsinitiativ vars syfte är att utveckla tillitsfulla lärar–elevrelationer (kapitel 4). Initiativet genomfördes på fem skolor under två år, i form av en handledd kollektiv skolutvecklingsprocess i lärarlag. Slutligen och baserat på longitudinella data insamlade under den tvååriga skolutvecklingsprocessen, studeras och diskuteras fyra forskningsfrågor (kapitel 5–6):

1. Hur påverkar olika förhållanden i lokala skolkontexter lärares arbete med relationell skolutveckling?
2. Vilken betydelse har lärares upplevelser av tillit för deras samarbete och kollektiva lärande i arbetet med relationell skolutveckling?
3. Kan ett instrument utvecklas för uppföljning av lärares relationella skolutvecklingsarbete, baserat på elevers uppfattningar om kvalitet i lärar–elevrelationer och elevers känsla av självtillit i skolan (”self-efficacy”)⁴⁵?
4. Påverkar lärares relationella skolutvecklingsarbete elevernas uppfattningar på ett fördelaktigt sätt? Om elevernas uppfattningar har förbättrats: vad har då faktiskt förändrats i lärar–elevrelationen?

Forskningsdesign och metod

För att besvara forskningsfrågorna valdes en blandad forskningsdesign med både kvalitativa och kvantitativa inslag, eller mer precist en ”konvergent parallell mixad design”. Strategin innebär att över tid samla in såväl kvalitativa som kvantitativa data i den studerade processen, för att i efterhand sätta kvalitativa respektive kvantitativa resultat i relation till varandra i en övergripande analys och på så vis utvidga förståelsen för forskningens övergripande problemställning. I figur 3, på sidan 44, illustreras studiens design.

Utformande, genomförande och longitudinell dokumentation av ett relationellt skolutvecklingsinitiativ är den övergripande metodologi som använts för att möta avhandlingens syfte. Skolutvecklingsinitiativet beskrivs som ett ”skolutvecklings- och forskningsprojekt” som bokstavligen består av två delar: en lärarlagsbaserad

⁴⁵ ”Students’ Self-efficacy” översätts ibland som ”elevers självförmåga”. Jag väljer översättningen ”självförtroende” för att fånga just elevers *tillit till* (”confidence in”) den egna förmågan och möjligheten att lyckas väl inom olika domäner av sitt skolliv.

skolutvecklingsprocess och forskning, i form av studiet av de relationella processer som initiativet genererar. I figur 4 (s. 45) illustreras projektet med sin dubbla natur av skolutveckling och forskning. Projektet i sin helhet har granskats och godkänts i etikprövning vid regional etikprövningsnämnd.

Initiativet utformades som ett tvåårigt skolutvecklingsprojekt syftande till att lärare i arbetslag skulle utveckla samarbete och gemensamma arbetssätt i undervisning och elevbemötande, med en särskild tonvikt på de elever vars lärande eller agerande uppfattas som mest utmanande av lärarna. Att förbättra viktiga lärar-elevrelationer och att stärka elevers tro på sin egen förmåga att klara av skolan, med stöd av sina lärare, var centrala målsättningar. Skolutvecklingsmodellen, som benämns CMC (Collaborative Mutual Communication/samarbetsbaserad ömsesidig kommunikation), innehåller tre delar: kompetensutveckling, kontinuerlig grupphandledning i lärarlag och samarbetsbaserade lärar-elevinterventioner. Inledningsvis genomförs kompetensutveckling vid tre träffar för deltagande lärare, skolledare och handledare där forskningsresultat om inkluderande lärmiljöer, ”elever som utmanar”, lärar-elevrelationers betydelse för elevers självtillit och skolresultat, samt organisatoriska förutsättningar för skolutveckling förmedlas. Introduktion ges i CMC-modellen, med tillfälle att träna på att föra samarbetsbaserade ömsesidiga lärar-elevsamtal. Därefter följer en tvåårig process med kontinuerlig grupphandledning om två timmar varannan vecka. Handledningens kärna är gemensam reflektion runt frågeställningar formulerade utifrån lärares upplevda utmaningar i elevarbetet, med koppling till samarbetsbaserade lärar-elevinterventioner. ”CMC-interventioner” inleds alltid i handledningen, med gemensam kartläggning och analys av lärares och elevers upplevda utmaningar och samspelskvalitet. Därefter planeras och genomförs samarbetsbaserade lärar-elevsamtal, och uppföljande förbättringsförsök som utformas tillsammans av lärare och elever. Ett centralt inslag i handledningsprocessen är reflektion baserad på videospelade lärar-elevsamtal. Filmade samtal syftar dels till att synliggöra elevers perspektiv och till att konkretisera lärares ”synlighet i handling”, dels till att möjliggöra analys av lärar-elevsamtal på intersubjektiv (”mikro-sociologisk”) nivå.

Omfattning och deltagande

Skolutvecklingsinitiativet genomfördes i ett arbetslag på vardera fem skolor och löpte över fem skolterminer. Termin ett utgjorde informations- och rekryteringsfas, varefter genomförandefasen löpte över två skolår. Lärarlagen vid tre av skolorna fullföljde projektet i sin helhet. På två skolor avbröts handledningsprocessen av arbetslagen vid upptakten till år två (se Studie 1).

Deltagare rekryterades genom en inbjudan till samtliga grundskolor i ett storstads-län. Kriterierna för skolors deltagande var lärares delaktighet i planeringen, god förankring av utvecklingsområdet på skolan, samt egenfinansiering av handledningen. Totalt deltog fem arbetslag, 37 lärare, 13 skolledare och fyra handle-

dare i implementering av det relationella skolutvecklingsinitiativet. På de fem skolorna deltog därutöver totalt 382 elever genom att besvara en elevenkät. Drygt hälften av dessa tillhörde ett deltagande lärarlag, och från den gruppen deltog ett mindre antal elever även direkt i processen, genom att bli delaktiga i CMC-intervention efter inbjudan av sina lärare. För information om deltagande skolor, arbetslag och informanter, se tabell 3 och tabell 4 i avsnitt 4.2.3. Projektets handledare hade pedagogisk utbildning, skolbakgrund och kvalificerad handledarutbildning med inriktning mot skolan. Därutöver rekryterades de utifrån intresse för CMC-modellens arbetssätt. Projektledaren/forskaren fungerade själv som handledare på en skola.

Datainsamling

Den longitudinella dokumentationen av skolutvecklingsprocesserna utgörs av en pedagogenkät och en skolledarenkät, processrapporter från projektets handledare, samt loggboksanteckningar förda av forskaren under projektets rekryteringsfas, uppstartsfas och i avslutande samtal med skolledare, lärare och elever. Parallellt med insamlingen av kvalitativa processdata genomfördes en elevenkät för att fånga elevernas uppfattningar om kvaliteten i viktiga lärar–elevrelationer, och deras upplevelse av självförtroende inom olika delar av sin skolgång. Pedagogenkäten, skolledarenkäten och elevenkäten utgör studiens tre huvudkällor. Data upptogs parallellt vid tre förutbestämda tidpunkter under den tvååriga skolutvecklingsprocessen: ”tillfälle 1” i inledningen av år 1 (innan grupphandledning och lärar–elevinterventioner påbörjats), ”tillfälle 2” vid slutet av år 1 och ”tillfälle 3” vid slutet av år 2 (i samband med handledningens avslutande).

Analysmetoder

Syftet i Studie 1 var att bidra till fördjupad förståelse av förutsättningar för skolutveckling baserad på kollektivt lärande i lärarlag. Deltagarnas subjektiva upplevelser av och tankar om skolutvecklingsprocesserna eftersöktes, varför en kvalitativ ansats blev ett naturligt val. Både datadriven och teoridriven tematisk analys användes för att systematisera, tolka och dra slutsatser från skriftliga data (för närmare detaljer, se Studie 1).

I Studie 2 och Studie 3 används statistiska metoder för att bearbeta kvantitativa elevdata som insamlats med den enkät som utvecklades i Studie 2. Studie 2 syftade dels till att utveckla och validera den ”svenska TSR-SSE-enkäten”, dels till att genomföra en första undersökning av samband mellan svenska elevers uppfattningar om kvalitet i viktiga lärar–elevrelationer (TSR) och elevers upplevda självförtroende i skolan (self-efficacy, SSE). Sambanden mellan TSR och SSE undersöktes vidare i Studie 3, men här gjordes framförallt analyser avseende hur elevers uppfattningar om TSR-kvalitet och SSE förändrats över tid. Detta i syfte att kunna ställa observerade förändringar i elevers uppfattningar i relation till lärares och skolledares erfarenheter i relationella skolutvecklingsprocesser. Statistiska metoder som använts är: deskriptiv statistik, korrelationsanalys, faktoranalys och reli-

abilitetstest (Cronbachs alfa, α) i Studie 2, och multivariat variansanalys (MANOVA), oberoende t-test för beräknade skalskillnader (deltas, Δ), beräkning av effektstorlek (Cohens d) samt fallanalys av ”parade (individuella) elevdata” i Studie 3.

Metoddiskussion och etik

Två aspekter av de använda metoderna problematiseras speciellt i avhandlingens avsnitt 4.4. Den första avser det faktum att forskaren själv handledde lärarnas skolutvecklingsprocess i en av skolorna och därmed intog olika positioner i förhållande till de olika studerade processerna. Ett förhållande som riskerar att underminera trovärdigheten i avhandlingens resultat. Fördelarna med att forskaren själv handledde i en skola bedömdes ändå väga tyngre. Genom att komma nära lärare och skolledare i processen erhöles kontinuerlig inblick i och fördjupad förståelse för lokala förutsättningar för att implementera ett skolutvecklingsinitiativ så som presenterats. Den regelbundna närvaron i en skola gav möjlighet att föra en rad informella samtal med flera berörda aktörer som elever, skolledare och övrig skolpersonal. Genom att handleda lärarlagets kollektiva lärande och förbättringsförsök hade forskaren nära inblick i hur relationellt samspel och samarbete i ett lärarlag kan utvecklas över tid. Och, av särskild betydelse här, i handledningsprocessen fick forskaren själv direkt erfara det pågående lärar–elevsamspel som var föremål för reflektion, i form av videoinspelade lärar–elevsamtal och uppföljningar av lärar–elevinterventioner.

Den andra metodashäkten som problematiseras gäller den statistiska analysen av elevernas skattningar av TSR och SSE, som i huvudsak utgörs av korrelationsanalys och därmed inte ger möjlighet att dra slutsatser om påverkansriktning mellan de två faktorerna. I avhandlingen görs emellertid grundantagandet att lärarens utvecklade relationskompetens, med ett utvecklat samspel mellan lärare och elever och tillitsfulla lärar–elevrelationer som resultat, kan påverka elevers självförtroende i skolan i positiv riktning. Då grundantagandet beskrivs som väl förankrat i både teori och empirisk forskning, och då skolutvecklingsinitiativet designats just i syfte att stärka utmanande lärar–elevrelationer, argumenteras för att ett resonemang om huruvida önskad påverkan (kollektivt lärande/höjd kollektiv relationskompetens \rightarrow höjd TSR-kvalitet \rightarrow stärkt SSE) har skett ändå är rimligt att föra, utifrån resultatet i Studie 3.

Ett relationellt skolutvecklingsinitiativ innebär etiska överväganden. När lärare utvecklar sitt lyssnande till elevers perspektiv kommer de att få ta del av elevers tankar, känslor och upplevelser på ett mer personligt sätt än tidigare. Detta väcker frågor om gränser för lärarens ansvar och om respektfull hantering av personlig information. En större närhet i dialogen med eleverna ställer krav på lärarens förmåga att hantera egna reaktioner och känslor som väcks i mötet med eleverna, liksom krav på att agera professionellt, och vara öppen för att ta hjälp av andra vuxna när så behövs. På motsvarande sätt får ett fördjupat samspel konsekvenser för relationerna inom lärarkollektivet, här mer specifikt för lärarna som deltar i

handledningsprocessen. När lärare förväntas lyssna närmare till varandras erfarenheter och synliggöra sitt arbete för kollektiv reflektion i lärarlaget, fördjupas det kollegiala samtalet och blir mer personligt. Ömsesidig öppenhet och respekt för varandras erfarenheter, arbetssätt och utmaningar förväntas råda i lärarlagen, men är inte en förutsättning som kan tas för given. Att utveckla intresse och respekt för andras tankar och upplevelser kan sägas vara den relationella skolutvecklingens mål, såväl som dess inneboende utmaning.

Resultat

Avhandlingens resultat redovisas i tre delstudier som sammanfattas i det följande.

Studie 1:

Tillit som förutsättning för skolutveckling. En studie av skolutveckling genom kollektivt lärande i arbetslag.

Studien bidrar till fördjupad förståelse av lokala förutsättningar för skolutveckling genom kollektivt lärande i arbetslag. En longitudinell fallstudie genomfördes av skolutvecklingsprocesserna i fem arbetslag på olika skolor som deltog i ett identiskt, externt utformat, utvecklingsprojekt. Projektet innebar en handledd läroprocess där lärarna förväntades utveckla gemensam kunskap och kompetens genom kollektiv reflektion, baserad på synliggjord praktik i form av kollektivt genomförda elevinterventioner. Interventionerna bestod i kartläggning av skolsvårigheter, filmade samarbetsbaserade lärar-elevsamtal och uppföljningar av dessa, med anpassningar i undervisning och elevarbete. Utfallet av projektet, såsom skattat av lärarna efter två år, varierade stort mellan skolorna. Variationen i utfall, trots att arbetslagen deltagit på jämförbara premisser och med likvärdigt tillförda resurser, är artikelns utgångspunkt. Intresset riktas mot lärarnas upplevelser i utvecklingsprocessen. Analysen bygger på kvalitativa processdata insamlade före, under och efter projektet. I tematisk analys urskildes tre aspekter av lärares upplevelser av tillit i skolutvecklingsprocessen som centrala för ett framgångsrikt relationellt skolutvecklingsarbete: *processstillit*, *kollegial tillit* och *kollektiv tillit*. Övergripande processtillit (accepterad förändringsvision, tillit till skolledares ambitioner och support och tillit till organisering och handledning av skolutvecklingsprocessen) och kollektiv tillit (psykologisk säkerhet och känsla av kollektiv efficacy i lärarlaget) framstod som förutsättningar för arbetslagets uthållighet i utvecklingsarbetet. Kollegial tillit – tillitsfulla interpersonella relationer och professionellt förtroende lärarna emellan i arbetslaget – framstod som en särskild förutsättning för att lärares praktik skulle synliggöras, och att ett fördjupat kollektivt lärande därmed skulle kunna äga rum. Kollegial tillit och kollektiv tillit är begrepp som återfinns i organisationslitteraturen, medan processtillit är ett begrepp som föreslås. För utförligare beskrivning av studiens bakgrund, metod och resultat

och diskussionen om kollegial tillit, kollektiv tillit och processtillit hänvisas direkt till Studie 1, som är skriven på svenska.

Studie 2:

Lärar–elevrelationer och elevers självtillit i skolan (self-efficacy). Motiv för, validering av och möjligheter med två instrument.

Tillitsfulla relationer mellan lärare och lärande byggda på ömsesidig respekt och samarbete kan betraktas som en grundsten i god utbildning. Gert Biesta, liksom en rad andra författare inom forskningsfältet Relationell pedagogik, framhåller att utbildning och lärande framförallt äger rum i interaktionen *mellan* elev och lärare. Interpersonell kommunikation och relationellt samspel blir då brännpunkter i studiet av relationell skolutveckling. I John Hatties omfattande metaanalys av faktorer som påverkar elevers skolresultat pekas relationella aspekter i utbildningen ut som nyckelfaktorer. Inom ramen för lärar–elevrelationen (TSR) påverkar lärare kontinuerligt sina elevers identitet och självtillit i skolan. Det gäller såväl elevernas globala tro på att kunna lyckas väl i skolan, som deras här-och-nu-upplevelser av social tillhörighet och agens i lärandet. Elevers självtillit i skolan (SSE) är i sin tur en stark prediktor för skolresultat. Ändå har sambanden mellan TSR och SSE tidigare undersökts i liten utsträckning. I studien eftersöks kunskap om detta samband bland svenska elever. Studiens syfte är dels att beskriva utvecklingsprocessen för den svenska TSR-SSE-enkäten, dels att validera det nya instrumentets delskalor. I tillägg ger den första datainsamlingen med det nya instrumentet möjlighet att analysera samband mellan svenska elevers uppfattningar om TSR och SSE för första gången.

Instrumentutveckling

Den svenska TSR-SSE-enkäten är utvecklad utifrån två etablerade amerikanska instrument. Dessa valdes efter utvärdering av ett femtontal instrument som hittades vid sökningar i internationella forskningsdatabaser.

TSR-delen härrör från Robert Weiss teori om olika former av socialt stöd som individer åtnjuter inom ramen för nära interpersonella relationer. Weiss teori om ”social support provisions” i relationer grundas i anknytningsteori och i teorier om social inkludering. Weiss beskriver sex basala sociala stödfunktioner som mellanmännsliga relationer erbjuder. Dessa är anknytning, tillförlitlig allians, bekräftelse av egenvärde, kamratskap, vägledning och känsla av att vara behövd. Furman och Buhrmester adderade två dynamiska dimensioner – relativ makt och konflikt – till Weiss modell då de på 1980-talet utvecklade The Network of Relationships Inventory (NRI). Ungefär tio år senare anpassade Jan Hughes i sin tur NRI för skolforskning, och skapade The Teacher Relationship Inventory (TRI). Med TRI undersöks tre dimensioner i lärar–elevrelationen: upplevelser av *support, konflikt* och *närhet*.

SSE-delen bottnar i social kognitiv teori (SCT), och härrör ifrån självtillitsskalor avseende barn och unga som utvecklats utifrån Albert Banduras Multidimensional Scales of Perceived Self-Efficacy. Ett sammanhållet instrument utarbetat av Fertman och Primack innehållande tre SSE-dimensioner valdes som utgångspunkt för anpassning i den svenska enkäten. De tre anpassade dimensionerna var *global self-efficacy i skolan*, *self-efficacy i självreglerat lärande* och *self-efficacy i socialt samspel och kamratrelationer*.

Den anpassade svenska TSR-SSE-enkäten avsågs fånga två dimensioner av TSR ("närhet" inkluderades i "support") och tre dimensioner av SSE. Den innehöll 42 frågor som utformades med fem svarsalternativ (5-poängs Likert-skala), och konstruerades för att besvaras av elever online. För statistisk utvärdering insamlades data från 382 elever fördelade på fem skolor. Data analyserades med avseende på korrelationer mellan elevers uppfattningar av TSR och SSE, de två teoretiska modellernas hållbarhet i svensk kontext, liksom delskalornas reliabilitet.

Resultat och diskussion

De statistiska analyserna bekräftade tidigare forskning som visat på samband mellan stödjande lärar–elevrelationer ("supportive TSRs") och elevers self-efficacy. Exempelvis fanns påtagliga korrelationer mellan delskalan TSR-support och delskalorna för elevers självtillit i självreglerat lärande ($r = 0,51$) och globala förväntningar på egna möjligheter att lyckas väl i skolan ($r = 0,45$).

De två teoretiska modellerna utvärderades och anpassades i flera steg genom såväl konfirmativ som explorativ faktoranalys. Korrelationer mellan samtliga variabler granskades, varvid några variabler vars korrelation med andra variabler i samma dimension/delskala avsevärt försämrade modellen togs bort, eller flyttades till en annan dimension om detta kunde motiveras både empiriskt och teoretiskt. Modellmodifieringen avslutades med ett resultat där tre underliggande dimensioner av TSR ("närhet" återtogs som egen dimension) respektive fyra underliggande dimensioner av SSE ("själv tillit i socialt samspel och kamratrelationer" delades i två) visade starkast passning för data. Resultaten är emellertid inte fullt tillfredsställande, med Comparative Fit Index (CFI) = 0,91 för SSE och 0,88 för TSR (att jämföras med önskvärda 0,95). Nya studier baserade på större data är därför nödvändiga för att förbättra modellerna ytterligare i svensk kontext. De sju delskalorna (TSR 1-2-3 och SSE 1-2-3-4) visade däremot "god till utmärkt" intern reliabilitet (Cronbachs $\alpha = 0,75\text{--}0,94$), vilket talar för skalornas fortsatta användande, och för en rimlig hållbarhet av de anpassade instrumenten.

Korrelationen mellan TSR och SSE inbjuder till fler studier av sambandet mellan elevers upplevelser av TSR-kvalitet och SSE i skandinavisk kontext, liksom till utforskandet av en möjlig kombinerad teoretisk modell (TSR + SSE). Kan elevers sammanvägda skattningar av TSR-kvalitet och SSE i olika aspekter av skollivet tänkas uttrycka elevers övergripande upplevelse av tillit i skolan?

Studie 3:

Förändring i elevers upplevelser av skoltillit som återspeglar av lärares kollektiva lärprocesser. Resultat från en longitudinell studie.

I Studie 3 fullgörs avhandlingens konvergent-parallell mixade design. Studiens forskningsfrågor berör dels förändringar i elevers uppfattningar av TSR-kvalitet och SSE över tid, och korrelationen mellan de två faktorerna, dels, och framförallt, hur elevers ändrade uppfattningar av TSR och SSE över två år återspeglar deras lärares upplevda kvalitet och måluppfyllelse i en kollektiv lärprocess som genomförts under samma tvåårsperiod. Eleverna på de fem skolor som deltagit i det presenterade skolutvecklingsinitiativet besvarade den svenska TSR-SSE-enkäten vid tre tidpunkter över de två skolåren: före skolutvecklingsprocessens start, efter ett år och efter två år i samband med processavslut ($n = 382/372/332$).

Studiens huvudresultat återfinns i jämförelser mellan elever i de fem skolorna som visar att förändringsbanorna ("trajectories") i elevers skattning av TSR-kvalitet och SSE i Skola 2 – den enda skola där lärarna beskrivit en mer framgångsrik kollektiv lärprocess – skilde sig markant ifrån förändringsbanorna för elever i jämförda skolor (skillnaderna motsvarade stora effektstorlekar, $d = 0,81-1,14$).

För att bättre förstå *vad* i Skola 2-elevernans uppfattningar som verkligen förändrats, gjordes individuella analyser av samtliga ($n = 33$) svar på samtliga variabler vid varje svarstillfälle. Störst förändring återfinns i TSR-supportskalan. En majoritet av eleverna upplever konkret förbättrat lärarstöd redan efter ett år, och uttrycker att de känner sig tryggare med sina lärare och att deras lärare bryr sig mer om dem än tidigare. I TSR-konfliktskalan ändrar färre elever sin skattning över tid, men för de elever som gör det kan förändringen vara särskilt viktig då de upplever en markant minskad konfliktnivå i relation till sina lärare. På samma sätt kan högre skattning av flera elever i TSR-skalan gällande upplevd närhet i lärarrelationen, liksom flera elevers högre skattningar i SSE-skalorna för socialt samspel och kamratrelationer och "självhävdelse" ("self-assertiveness") tolkas som uttryck för elevers förhöjda känsla av agens i socialt samspel. De senare förändringarna uppträdde framförallt efter två år, vilket tyder på att det tar tid att utveckla djupare relationell tillit, och relationskompetens. Också i SSE-skalan för självtillit gällande självreglering i eget lärande förbättrades de flesta elevers skattningar över tid, men i mindre utsträckning än för TSR-support. På den globala självtillitsskalan uttrycker de flesta elever generellt gott hopp om att lyckas väl i skolan, och var tredje elev uttrycker ökad tillit sin egen förmåga att koncentrera sig på lektionerna. En sista viktig observation är att flera elever rapporterar en betydande ökning av globalt skolhopp redan efter ett år.

Återspeglade förbättringar på elevnivå redan efter ett år av lärares kollektiva skolutvecklingssträvanden väcker särskilt intresse. En förklaring föreslås kunna

vara den påtagliga förändring i lärares förhållningssätt och bemötande som eleverna mötte från en termin till en annan. Samarbetsinriktade lärar–elevsamtal, lärares empatiska utforskande av elevernas perspektiv på utmaningar i lärandet och inbjudan till delaktighet i ömsesidigt planerade och genomförda förbättringsförsök i undervisningen innebar helt nya erfarenheter för många elever. Sådana nya erfarenheter av samspel och samarbete med sina lärare kan tänkas förklara elevernas ökade känsla av skoltillit, också efter en så relativt kort tid som ett läsår.

Diskussion, slutsatser och konsekvenser för skolutveckling

Avhandlingens första forskningsfråga gällde hur olika förhållanden i lokala skolkontexter påverkar lärares relationella skolutvecklingsarbete. Baserat på resultaten i Studie 1 och på deltagande lärares, skolledares och handledares rapporter kan som summering sägas att lärarlagsbaserad relationell skolutveckling förefaller vara enklare sagt än gjord. Trots till synes liknande utgångslägen i de fem skolorna, och trots lika omfattning av tillförda resurser i processen (avsatt tid, antal deltagande lärare, kompetensutveckling och handledning), blev utfallet av de fem relationella skolutvecklingsprocesserna högst varierat. Bara i en av skolorna upplevde lärarna en mer framgångsrik skolutvecklingsprocess. En första slutsats är att *organisatoriska och relationella förutsättningar på system-, skol- och lärarlagsnivå definierar vilka relationella skolutvecklingsinsatser som kan genomföras*. Exempelvis framstod upprätthållande av ett frirum för lärares kollektiva lärande som en viktig organisatorisk förutsättning. Att döma av föreliggande arbete kan ett hållbart frirum skapas av tillitsfulla skolledare som organiserar lärares kollektiva processer utifrån höga förväntningar om förändring, och med engagerad återkoppling, kvalificerat handledningsstöd och tillräckligt med avsatt tid för lärarnas kontinuerliga förbättringsarbete. Ett annat lokalt förhållande av betydelse för utvecklingsarbetets utfall var rådande vanor och ”mognaden” i lärares samarbete. I linje med internationell forskning om framgångsrikt kollektivt lärande (”mature PLCs”) förutsatte skolutvecklingsinitiativets design lärares ömsesidiga synlighet i direkt elevarbete och samarbete i handling, grundat i ett accepterat kollektivt ansvar för alla elever. Dessa förgivettagna relationella förutsättningar saknades emellertid på skolorna, eller uppfylldes bara i viss utsträckning. *Graden av öppenhet, ömsesidig respekt och välvilja i de kollegiala relationerna i lärarlagen och mellan lärare och skolledare, satte gränser för lärares beredskap att riskera egen sårbarhet genom att samarbeta kring verklig förändring av egna pedagogiska förhållningssätt och sätt att samspela med elever*. Ett svar på avhandlingens andra forskningsfråga formulerades: *Lärare måste känna tillit i relationella skolutvecklingsprocesser – för att uppleva mening och vilja vara delaktiga, och för att vara öppna med egna utmaningar och vilja pröva verkliga förändringar i praktiken tillsammans med kollegor och elever*. I avhandlingen kontextualiseras ”lärares tillit i relationella skolutvecklingsprocesser” som beroende av tillit på tre nivåer: i interpersonella relationer (*kollegial tillit*), i lärarlaget (*kollektiv tillit*), och på övergripande skolnivå med tillit till skolutvecklingsprocessens syfte och organisering (*processstillit*). Här

argumenteras för att först *då lärare upplever tillit på alla tre nivåer möjliggörs ett fördjupat kollektivt lärande och en förhöjd kollektiv relationskompetens kan utvecklas*, som i sin tur har potential att förstärka elevernas skoltillit.

För att kunna studera om och hur lärares relationella skolutvecklingssträvanden påverkat deras elevers känsla av självtillit i skolan utvecklades den svenska TSR-SSE-enkäten. Instrumentet fångar samtidigt elevers skattning av TSR-kvalitet och SSE (forskningsfråga 3 och 4). I avhandlingen pekas på sambandet mellan TSR-kvalitet och SSE som trolig länk mellan lärares relationskompetens och elevers välbefinnande och lärande. Analyser av de elevdata som samlats in med det tvådelade instrumentet bekräftar en *befydande korrelation mellan elevers skattade TSR-kvalitet och SSE*. Resultatet ger stöd för avhandlingens grundantagande att medvetna relationella skolutvecklingssträvanden har potential att utveckla tillitsfulla lärar–elevrelationer, och att dessa i sin tur kan bidra till stärkt självtillit hos eleverna gällande deras möjligheter att trivas, lära och lyckas väl i skolan. Elevers förväntningar och tro på det egna lärandet är i sin tur en skolfaktor tydligt korrelerad med måluppfyllelse i internationella metaanalyser av olika faktorerers effekt på skolresultat. *De beskrivna sambanden manar till närmare studier av lärares relationskompetens: hur den kan utvecklas, och hur den tar sig uttryck i interpersonella lärar–elevrelationer och lärar–elevsamspel.*

Lärarna i det lärarlag som beskrev en fördjupad och mer framgångsrik lärprocess (i Skola 2) exemplifierar vad en utvecklad kollektiv relationskompetens kan innebära. Lärarna här uttryckte redan från start beslutsamhet i att tillsammans som arbetslag bli bättre på att förstå sina elevers upplevelser i skolan, genom att visa dem genuint intresse och ge utrymme för deras perspektiv i nya former för lärar–elevsamspel. *Genom ett närmare, mer empatiskt och personligt sätt att prata med och lyssna på sina elever i samarbetsbaserade ömsesidiga samtal fick lärarna nya insikter om varför, när och hur utmaningarna i elevers skolvardag och lärande uppstod*. I uppföljande kollektiv reflektion och planering av förbättringsförsök kunde lärarna sedan fokusera mer precist på elevernas styrkor och upplevda utmaningar liksom på deras sociala och personliga välbefinnande, snarare än på deras problemskapande beteende. Att döma av Skola 2-elevernas individuella enkätsvar har lärarnas förändrade bemötande bidragit till en påtaglig känsla hos majoriteten av att vara bättre stöttade i lärandet, mer sedda och lyssnade på, och respekterade och omhändertagna i skolan. På gruppnivå upplevde eleverna också en minskad konfliktnivå och större närhet i relationerna med sina viktigaste lärare.

I kollektiv reflektion runt elevbemötande och lärar–elevsamspel på intersubjektiv ("mikro-sociologisk") nivå – utifrån gemensamma analyser på handledningen av videoinspelade lärar–elevsamtal – synliggjordes och förhandlades varje lärares personliga sätt att möta sina elever. *En ökad medvetenhet utvecklades i lärarlaget om hur både implicita och explicita – ickeverbala och verbala – aspekter av samspelet påverkade kvaliteten i lärar–elevrelationerna momentant.*

Konsekvenser för implementering av relationell skolutveckling

Om skoladministratörer, skolledare och lärare vill inspireras av resultaten i denna avhandling är följande viktigt att ha i åtanke, enligt författaren: (i) Beakta såväl rådande organisatoriska som relationella förutsättningar i skolan för kollektiva läroprocesser att kunna fördjupas; (ii) Främja processtillit genom att delaktiggöra lärare i kollektiva processer av kontinuerlig identifiering av utvecklingsbehov, målsättande och utformning-genomförande-uppföljning av förbättringsförsök; (iii) Tillhandahåll kvalificerad extern handledning i relationella skolutvecklingsprocesser, såväl för att utmana rådande skolkulturer som för att säkra kollegial och kollektiv tillit i lärarlag; (iv) Planera processer för lärares 'synlighet i praxis' och 'samarbete i handling'; (v) Organisera utvecklingsarbetet med kontinuerlig återkoppling mellan skolledare och lärare; (vi) Prioritera och var uthållig; och framförallt, (vii) Organisera skolor så att utrymme ges för lärare att lära känna alla sina elever väl, både som personer och som elever, i ömsesidiga samspel och kontinuerligt utvecklade lärar–elevdialoger.

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