

## Chapter 9

# School Development in Tough Times

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**Abstract** In schools in Sweden today, researchers are encouraged, through national policies that highlight the importance of research in the profession in relation to school development, to work with school teachers in local development projects. One way to implement school development is to use action research. For action research to be effective in supporting school development, a number of conditions need to be met. Drawing on an action research project in a municipal public-sector comprehensive school (Swe. Grundskola), I examine what happened to school development and ongoing action research when the school as an organisation was put under pressure from the impact of economic restructuring. I use the theory of practice architectures in the analysis to describe what enabled and constrained participation amongst teachers, the school principal, and the researcher. Cultural-discursive, material-economic, and social-political arrangements within the school, which were shaped by global and national economic factors, are shown to have played an important role regarding research possibilities.

In schools in Sweden today, school development has become an important part of school life. Action research has been central to many school development projects because it offers tools for creating conditions in which the practitioners and researchers have a collective responsibility to develop and improve educational practices (Carr and Kemmis 1986). In action research, the theory and practice addressed by the researcher(s) are related to the practice that researchers, and those they research with, want to develop and change. Action research is also about generating knowledge of how change takes place, and what happens during the process. The relationship between the conduct of practice and understanding what is going on is a key issue.

Action research is believed to contribute to better professional practice as teachers engage in the learning processes that action research involves (Carr and Kemmis 1986). However, for action research to be effective in the development of professional practice, a number of conditions need to be met (Tyrén 2013). These conditions include continuity of participation and access to the field, along with time for

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reflection and the possibility of developing stable social relations and critical friendship groups (McNiff and Whitehead 2002). Also required are commitment from school staff, support from leadership, and the presence of organisational arrangements that provide teachers with the time and support necessary to engage in research-based development work. Supportive policy at the national and the regional level is also important, and, while national policies supporting the use of research for school development work do exist, the role of policy is somewhat contradictory: supportive policies are contradicted by the presence of policies of economic restructuring and New Public Management. These latter policies have impacted negatively on the time and space teachers are given to engage in reflective activities in relation to their working duties and professional responsibilities (Tyrén 2013). According to current policy, Swedish teachers are required to conduct school development programs and contribute to the development of knowledge within their schools. Yet, at the school level, organisational changes have not always occurred in ways that support these new responsibilities for teachers and their professional action.

In this chapter, based on research I conducted at a school that I refer to as Tower School, I examine the issues associated with contradictory education policies. I look specifically at what happened to an ongoing action research project and school development program when the school as an organisation was put under pressure from the impact of economic restructuring. I attempt to account for what happened both practically and theoretically in relation to organisational changes, especially changes in the material-economic and social-political arrangements of the school.

The theory of practice architectures was employed to understand and interpret the teachers' situation in the specific school development practices. The theory helped to grasp analytically how practices are constituted and interlinked, and what opportunities and barriers existed and arose in the development of practice in Tower School.

From the outset of the research, three key concepts were considered fundamental: time, organisation and technology. In this chapter I pay particular attention to time, but I also show how an unstable organisation affected teachers, the researcher, and the on-going empirical study in terms of how we were able to participate in, and implement, action research-based school development as had initially been planned. The discussion highlights some of the main implications for practices within the school, including from a social justice perspective, and shows how staff were able to overcome some obstacles because of their commitment and interest in school development. I conclude the chapter with a discussion of the theoretical and practical utility of the concept of practice architectures when it comes to examining action research as a way to implement school development at Tower School.

## The Context and Case of Action Research and School Development at Tower School

Practices may be described in different ways, depending on the theoretical perspective one adopts. This study is based on the description of a practice offered by the theory of practice architectures. Kemmis et al. (2012) describe practices as embedded in practice architectures, which are the arrangements that enable and constrain practices and their characteristic sayings, doings, and relatings. Sayings, in the study reported here, relate to how the teachers talked about, and what they said about, professional education work, with me and with each other. Doings relate to what was done in education work, including how we could use action research in school development at Tower School. Relatings concern relations between people and between people and things in education work, including how we could connect activities and people and things in the action research project. Relatings include how teachers relate to each other and to political documents (Kemmis et al. 2014).

On this view, practices are not shaped solely by the people who participate in them. Practice architectures provide practices with meaning and significance through sayings in the language; through doings in actions and activities; and through professional fellowship and solidarity among participants in their relatings, in the medium of power. Thus understood, a practice is an interactive space in which people meet, act, and interact with each other (e.g., Kemmis and Grootenboer 2008; Schatzki 2002).

### *The Nature of the Study*

In Sweden, national policies have highlighted the importance of research for school development for many years now, at both national and local levels. As an educational researcher, I was contacted by one of the teachers at a local school about my willingness to participate in a project on the use of computers as tools for learning to read and write for children aged 6–9 years. Tower School is a municipal public-sector comprehensive school (Swe. Grundskola) with about 710 pupils from 6 to 16 years and about 100 members of staff. Class-teachers, pre-school class (reception class) teachers, and leisure-time teachers<sup>1</sup> working with Grades 1 and 2 were involved in the school development study. In total, 18 teachers in eight classes participated in the study, which was conducted between 2008 and 2010.

Initially, the aim of the project was to describe and analyse the educational value of computers for school children aged 6–9 years as a tool for learning to read and write in Tower School. The study was not based on a desire to change the practice of others, but rather to change things together with others (Reason and Bradbury 2008). Given their aim of school development, teachers formulated a particular

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<sup>1</sup> Teachers with a specialisation in leisure/recreation activities.

analytical interest regarding their own practice, and this interest, as it unfolded, directed the development process (Tyrén 2013).

As a researcher, I took on different roles. My first role was to encourage participating teachers to look at their own, and at the pupils', development and to consider the changes and improvement of education in relation to what was happening in the classroom, especially with regard to changes brought about through the pupils' usage of the computer. My other role was to study the development process itself – along with my own part in it.

## Before the District-Level Economic Restructure

The initial phase of the project at Tower School went more or less according to plan in the first year, 2008/2009. The staff and the Principal at the school supported the project and most conditions necessary for reflective action were in place. The cultural-discursive, material-economic, and social-political arrangements comprising the practice architectures of research, leading, and educational practices in the school supported or made possible commitment of staff to the project; time and space for individual and collaborative reflection; positive relationships between staff, and between staff and me as a researcher; and productive exchanges between the teachers and me.

Among the enabling material-economic arrangements were those created or used by the Principal (through her leading practices) to allow or provide time for reflection, a necessary condition for action research (McNiff and Whitehead 2002). The Principal made commitments to supply some timetable space for participating teachers. The timetable space meant that all teachers had the opportunity to participate, and had the time available for diary writing. Teachers were able to research their own practice and draw on that research to consider how they might improve their teaching. They had time to reflect on their professional roles. Making such an arrangement was in line with the Principal's mandated responsibility to lead the school's development towards national targets, to create conditions for teachers to engage professionally with each other, and to support the learning of each pupil. The national targets are formulated in the Swedish curriculum for preschool (Lpfö98) and primary school (Lgr 11).

The Principal also established organisational routines that enabled teachers to implement plans for school improvement and for me to follow what happened. I followed and documented the development process, inquired into the procedures employed, and met regularly with the teachers. Overtime pay was made available to support meetings after school-hours. This allowed meetings to be scheduled in the evenings when all teachers were free from teaching and other activities. The Principal additionally allowed us to use the school premises for our meetings.

These organisational arrangements (i.e., timetable allowances for reflection, the scheduling of evening meetings, overtime pay, and new organisational routines) were enabling material-economic arrangements that resulted in *good working*

*relationships*. Action research is dependent on social relationships. In fact Grant et al. (2008) have pointed out that good relationships are central to the successful implementation of action research. This includes relationships between the researcher and practitioners if the researcher is an outsider. Where the researcher is an outsider, he or she has the responsibility to gain the trust of the participants in an action research study (Grant et al. 2008). Things like the evening meetings created the conditions for necessary positive relationships, and allowed me to spend time with the teachers, building trust.

Such positive social-political arrangements made it possible for us to make significant progress. During the first year, 2008/2009, we could see that the action research project enabled school development. However, this would soon be tested by changes at a school and regional level brought about by economic change at a national level.

## **Changing Conditions for Action Research and School Improvement at Tower School**

In Sweden, a much-publicised economic crisis hit hard at the municipal level, and cutbacks in school activities across municipalities ensued. Many municipalities were forced to review their finances, and savings measures were introduced, leading to material-economic arrangements that constrained educational activities. In the region where Tower School is located, educational restructuring resulted in significant changes within the organisation of comprehensive schooling. The region was obliged to save four million Swedish Kronor.

For Tower School, this meant that about 14 staff positions were to be withdrawn. Although not all services were teaching posts, these cutbacks were still significant for the working conditions of teachers. The Principal also now had responsibility for a reduced budget. The budget dictated what school activities were possible. The Principal's mandate was to support the best possible educational activities and try to save teaching positions, but she had to operate within the school's budget. To keep the school budget in financial balance, she had to prioritise, make decisions, and take actions that had consequences for the educational activities and teachers' work situation. Directives by the Principal saved the action research and school development, and made it possible to continue, but not exactly as initially planned. The Principal was forced to revise school operations and reallocate funds, both of which, as I will show in this section, constrained the action research project and school development.

Changes to material-economic arrangements at Tower School in the wake of the economic restructuring were immediately obvious. The school year 2009/2010 began with changes to staff and staff teams. Several of the teachers did not have permanent contracts and some lost their jobs. Others were moved around to other parts of the school, which meant they were teaching new classes and had new duties

and new working relations to establish with new sets of parents. In this period, some teachers came back from maternity leave, others chose to try working in other schools, and supply teachers were not given extended employment. The school as an organisation now lacked stability and the group constellation changed.

These changes affected working conditions for teachers (through redundancies and transfers), the pupils (through changed teachers), and the researcher (through the changed conditions for conducting action research). As some participants in the action research study had to leave, there were difficulties trying to replace them. There were changes in who participated in the project and why. So, the project too was destabilised by the new staff arrangements.

An impact of the reduced budget was that the Principal could not support an organisational arrangement regarding teachers' time (especially time for meetings) on the same scale as before. Meetings had to be fitted into a much tighter schedule or carried out on a voluntary basis (meaning that some of the teachers participated without financial compensation from the school). Also, overtime was no-longer allowed for primary school teachers, which had a detrimental effect on the design of our evening meetings. It became clear that if no time could be set aside for joint meetings, and there were no opportunities for common conversation, it would be difficult, if not impossible, to organise, initiate, and monitor long-term change, and improve and develop educational activities. Time was made for meetings during the day, but it was restricted and it did not suit all teachers. As one participant noted,

Our hope is that we can meet on Tuesday afternoons, instead of in the evenings as we have done. ... But it's not so easy with the preschool classes (Participant comment, evening meeting, 2009-08-12)

The implications of this for staff relatings are discussed shortly.

Reduced funding for resources also affected school development. It limited the possibility of purchasing materials to continue developing the use of computers as writings aids, a goal linked to implementation of the school development plan. Classroom practice was directly impacted by this.

Changes to the social-political arrangements were also very obvious, and again, these impacted negatively on the school development program and action research project. The changed meeting times prevented certain groups of teachers from meeting at the same time. Specifically, the preschool teachers and leisure time teachers had less time in the classroom, which impacted on their capacity to undertake work associated with the school development project. Additionally they could not attend meetings in the afternoons. They were therefore, in effect, excluded from the school development project. This hindered the professional work of the pre-school and leisure time teachers, and disturbed the relations between the different groups of teachers. Less opportunity for joint planning meetings constrained the potential for collegial cooperation as manifested by the school development project, and affected the way we carried out the action research and how we could develop school activities. The duties of the teachers in the classrooms were altered, and commitment to the school development project across different groups of staff was affected as a result.

Being removed from the school development project also meant that the pre-school teachers and leisure-time teachers were no longer able to participate on equal terms with other groups of teachers. Different conditions now applied for different professional groups within the same school. Varying employment contracts and varying opportunities for participating in staff activities can put relations among different groups of teachers to the test. This is what appeared to happen.

It is in social space that relationships – or relations in the terminology of the theory of practice architectures – are created. This includes relationships between teachers, between teachers and the Principal, as well as relationships between the participants and the researcher. The social space at Tower School had changed significantly. The instability of the organisation and the altered social-political arrangements discussed affected relationships. Relationships among teachers and between teachers and the Principal became particularly strained when certain groups were excluded from meetings. The Principal had used her powers to make decisions that led to this exclusion; it was not a decision that the teachers were able to influence.

For me, as a researcher, relations in the action research project meant becoming a well-known person to the teachers during the first year in the project. The teachers experienced me as a person who was involved in their action research project and school development program, and who was interested in the changes taking place in their practice. I was an outsider who had the responsibility to gain the trust of the participants in our action research project (Grant et al. 2008). However, my relations with teachers were tested by the staff changes that came with the restructure.

When new participants come into an on-going action research project they might not have the same cause to accept participation as their predecessors have. One of the new teachers who participated in the action research project was Jessica.<sup>2</sup> She had been on parental leave for a year and a half. Jessica was more or less thrown into the on-going action research project. It was assumed by the Principal that Jessica would be familiar with the methodology and approach from the outset, but this was not the case. Jessica did not receive any significant background information about the school development program and was therefore understandably hesitant and uncertain about the process. Jessica expressed her concern about the purpose of the school development project and about my role and presence at the school:

I only know that it will be so much a question mark, then I do not know what it means. So, Lena, what is your role in this? I do not know why we have meetings or so.

If teachers do not feel part of an action research project, it is difficult to create good relationships and commitments in the project. Jessica was not comfortable with the project and felt like she was not part of it. Later she reflected:

Yes, I think it's a bit tough when you do not know. ... I needed to know why you do it. The purpose of it all before I can feel comfortable about it. So it's a bit tough. But now I feel more secure. Because I know ... why we have meetings and why they meet there and stuff. I found it hard in the beginning when I didn't know.

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<sup>2</sup>The names that are used in the study are pseudonyms and not the teachers' real names.

Talking to Jessica, I came to appreciate some other difficulties she experienced when she returned to the school that might also account for her initial reaction to me and the project. Firstly, Jessica had reacted against the major changes that had taken place at the school during the time that she had been on leave. She described her amazement at how fast an organisation can change, and it became quite clear during our conversation that stability was important to her. When I asked “How important is a stable organisation?” she replied:

Very important. Security is everything. I wasn't actually that sure things could change so much in a year and a half as it had done when I came back. A lot of people felt bad about this. I did not think it was so important before but it is very important. All problems and decisions you take, it is so much better if you know you have someone behind them. It's really important.

Jessica's comments signal what several researchers highlight (e.g., Fullan 1991; Huberman and Miles 1984) as one of the most important factors for change and improvement in school activity, i.e., a confident school management and stable teaching staff.

The second difficulty that Jessica raised with me related to her participation in the project. Zeichner (2001) argues that voluntary participation is important for action research; the research question should be based on the participants' own interests and their own practice, and hence their interest in school development. Unfortunately, Jessica felt that the Principal had ordered her to participate without giving her a choice:

It was how it seemed. ‘This is the action research project, please join in’. We do not know what it means and you do not know how much work it involved for us. But when you buy into it so, and begin to believe in it so we will also understand the benefits of it. But we must come to that realisation. And that took almost six months I think.

Care was clearly needed to ensure that teachers did not feel forced into participating.

Changes to cultural-discursive arrangements were more subtle, but, along with the changing economic and social-political conditions, they had important effects. Economic language, for instance, became part of the way people talked about changes that were happening at Tower School. The changes to the meeting arrangements, for instance, were an ‘economic necessity’ in the words of the Principal. Elsa, a teacher in grade one (2008–2009) described the altered conditions after an observation session in her classroom. We talked about how she would like to develop computer writing the next academic year. She said:

I think it feels a little difficult now, for various reasons ... we have no money ... And so I do not know if we will be able to afford ... to continue ... in the way I had hoped for ... you know we will have to save four million here at school now. Fourteen posts ... must go ... These changes affect the course.

Elsa's sayings here describe changing material-economic arrangements, but they also highlight how concerns for cost-saving shaped the discourses used to talk about teaching practice.

The way that *time* was conceptualised and talked about in the semantic space at Tower School is another example. Teachers expressed their awareness about having



*dedicated* time to meet for discussion and reflection so that they could talk to each other about what was happening in the school and discuss changes to improve teaching practice. After the economic restructure in the municipality, time was treated as a cost rather than a professional and pedagogical resource. It was shifted discursively into something to be *allocated, regulated, or saved* rather than dedicated.

## **Continuing School Development and Action Research in Tough Times**

Although the action research and the school development program were negatively affected by the changes happening in the organisation, the project continued and there were ways in which the school development process and the action research made it possible for teachers to cope and to maintain their commitment with the ‘tough’ conditions they were experiencing. Elsa, who was the union representative for one of the unions at the Tower School as well as a Year 1 teacher, explained how involvement in the project helped her. At one point, Elsa lost motivation for teaching in general and the action research project in particular:

Of course a lot has happened at the school that I’m involved in and creates extra pressure on certain occasions. You know I’m union-engaged and then it will be that I will take a lot of the others’ concerns. Sometimes you can put it on the side but it does not always work. I feel that I got new energy after the last meeting when we could talk about all these pesky things ... It gave me new energy to continue working and go on.

Elsa emphasised the benefits of meeting colleagues to vent emotions about what was happening and to seek strength and inspiration to go on. Elsa appreciated the exchange with colleagues at our joint meetings. Talking with colleagues was important to her because it provided the opportunity for people in the teachers’ team to help and support each other. Elsa said that teachers give each other the knowledge and power to move forward in the social space where relationships are given the opportunity to develop. Several teachers similarly described the value of support from each other and the importance of giving each other the knowledge, confidence, and strength to go on.

When the Principal gave new directives, and financial savings ensued, my fear was that our cooperation would be forced to cease. Our meeting times were, however, adjusted to fit in with the new meeting schedule at the school and I found new forms of co-operation with some of the teachers who gave me continued access to the teachers’ practice. We arranged opportunities for informal talks and observations in some of the classrooms instead of joint meetings. It gave me the opportunity to meet the teachers in new constellations.

I continued to have access to practice and to have the confidence of the staff since I was a person everyone was familiar with by the time the changes began. The first year had been very important. We had created trust and good relations. As mentioned

earlier, this is an essential requirement in every action research study (cf. Grant et al. 2008), and social-political arrangements established through our initial year together prior to the changes enabled continuous positive relatings. It would have been less simple for a newcomer to engage in the school's activities at such a difficult time.

## Discussion

One of the clear contributions that the theory of practice architectures can make to action research and school development as a socially just practice is to foreground and render visible the inherently political nature of school development; i.e., as a practice bound up with power through its enmeshment with cultural-discursive, material-economic, and social-political arrangements. It was evident that the pressure to make financial savings, stemming from external material-economic pressures, restricted the Principal at Tower School in terms of providing resources for school development with the support of action research. When the school budget became seriously limited, the Principal had to make decisions that were not always appreciated, and that in some ways contradicted her commitment to school development. Some decisions had negative consequences for staff participation; staff relations; the learning process; and quality outcomes.

It is easy to put the blame on the Principal when there are economic cutbacks, but the Principal of Tower School was only performing a mission to reallocate resources in response to contradictory political decisions that were made elsewhere. That said, there are implications here for leading practices. Leadership has to be committed to a school improvement process that can be supported by action research. The realisation of professional responsibility should not be driven by financial savings or economic efficiency measures.

*Time* turned out to be crucial to the success of the school development project at Tower School. This is not surprising, as lack of time is considered to be the greatest obstacle for undertaking action research successfully (e.g., Megowan-Romanowicz 2010); time is clearly a prerequisite for teacher participation. The findings of the study showed that, if school development is to generate change and improvement, teachers need to have dedicated time (as an opportunity and as a resource) to meet for conversation and reflection. At Tower School, time was key to teachers being able to reflect on and manage school development, and therefore also to conduct an action research study. It was important that arrangements for extended time, and time to meet, talk, discuss, and reflect on common issues and concerns, were in place.

A tension emerged for the school staff and the project, however, because of the subjection of time (as a commodity or a cost) to economic control. The political decision to couple time with economic arrangements such as budgets is a tradition superseding the project by centuries (Winther 1998). Winther (1998) commented that budget decisions often lead to teachers' time being increasingly viewed as

merely a cost. A time limit is introduced to generate 'efficiency'. This in turn tends to reduce the scope for professional development and creativity and thus the opportunity to engage in school development with the support of, for example, action research. This occurred at Tower School when economic concerns shaped how time was understood and spoken in people's sayings, allocated or dedicated in people's doings, and regulated in people's relatings. The heavy regulation of teachers' time meant that teachers had less control over how their time was used, while the language about time reinforced the notion of time as a cost. Thus, cultural-discursive, material-economic, and social-political arrangements around time can be significant in terms of what enables and constrains an action research project and school improvement. Treating time as a cost is counterproductive when it creates conditions that unnecessarily inhibit efforts towards school improvement. The commodification of time is a problem when economies tighten. This has repercussions in terms of the availability of commodified labour time for staff to engage in projects such as the one at Tower School.

Some of the arrangements at Tower School, such as the new meeting schedule that resulted from how time was reallocated and regulated by the Principal, had particular social justice implications. As explained, the new meeting schedule excluded two groups of teachers from the project. This prevented those teachers from fulfilling their obligation to conduct school development and contribute to the development of knowledge within the school. School development and professional development is a mission that is included in the teaching profession according to the Swedish school plan. It is part of the Principal's mission, a legislated expectation, to provide opportunities for staff so that they have the professional knowledge and skills required to perform their professional duties. So, decisions about meetings and overtime pay affected the teachers' work conditions and their opportunities to continue as planned, but also how they were able to exercise their right to professional development as detailed in the Swedish curriculum. Furthermore, as observed by one of the teachers, the ongoing action research project and school development was an opportunity for teachers to engage in and control professional development for themselves. Some of the teachers were denied this opportunity.

On a positive note, the project also showed that when the opportunity arises and is established through action research, barriers can be overcome and professional teachers can continue to develop innovative and creative teaching-learning practices, even under difficult circumstances. Perhaps this is due to the power that comes from solidarity between colleagues when they work through the action research process together. Also, when school development planning is firmly implanted in a school as an expectation among teachers (i.e., as an embedded cultural-discursive arrangement), there is hope for a favourable common goal of school improvement for all rather than only where it can be afforded.

## Conclusion

The theory of practice architectures foregrounded what enabled and constrained an ongoing action research project and school development at a particular school and has helped me identify how the teachers at Tower School discuss, act, and create relationships, and how practices are shaped and moulded by the practice architectures with which they are enmeshed. In other words, it has contributed toward identifying what was facilitated and what was impeded by both internal and external factors. The practice architectures created by economic conditions, and associated management decisions, impacted on the actions of the teachers and constrained development to different degrees in different ways across the school over time.

The theory of practice architectures, put to work analytically, has formed a lens for the analysis which helped me to see what enabled and constrained practice in the school with respect to the sayings, doings, and relating of teachers and the researcher. What was happening in the physical space and its material-economic arrangements appeared to affect things most profoundly on the surface, but in reality, it was the material-economic arrangements *together with* cultural-discursive and social-political arrangements that influenced what school development and action research was, and was not possible, at Tower School.

In this chapter, I attempted to render visible how particular practice architectures affect possibilities for action research projects and school development. What took place at Tower School is not unique in Sweden. These are tough times in terms of funding for education. So the insights about constraining and enabling practice architectures for school development and action research presented in this chapter will likely resonate with changing conditions experienced in other Swedish schools, and perhaps in other national contexts.

## References

- Carr, W., & Kemmis, S. (1986). *Becoming critical: Education, knowledge and action research*. London: Falmer Press.
- Fullan, M. (1991). *The new meaning of educational change*. London: Cassell Educational Limited.
- Grant, J., Nelson, G., & Mitchell, T. (2008). Negotiating the challenges of participatory action research: Relationships, power, participation, change and credibility. In P. Reason & H. Bradbury (Eds.), *The SAGE handbook of action research. Participative inquiry and practice* (pp. 602–614). London: Sage.
- Huberman, A. M., & Miles, M. (1984). *Innovation up close: How school improvement works*. New York: Plenum Press.
- Kemmis, S., & Grootenboer, P. (2008). Situating praxis in practice. In S. Kemmis & T. J. Smith (Eds.), *Enabling praxis: Challenges for education* (pp. 37–62). Rotterdam: Sense.
- Kemmis, S., Edwards-Groves, C., Wilkinson, J., & Hardy, I. (2012). Ecologies of practices. In P. Hager, A. Lee, & A. Reich (Eds.), *Practice, learning and change: Practice-theory perspectives on professional learning* (pp. 33–49). Dordrecht: Springer.
- Kemmis, S., Wilkinson, J., Edwards-Groves, C., Hardy, I., Grootenboer, P., & Bristol, L. (2014). *Changing practices, changing education*. Singapore: Springer.

- McNiff, J., & Whitehead, J. (2002). *Action research. Principles and practice*. London: Routledge Falmer.
- Megowan-Romanowicz, C. (2010). Inside out: Action research from the teacher-researcher perspective. *Journal of Science Teacher Education*, 21(8), 993–1011.
- Reason, P., & Bradbury, H. (Eds.). (2008). *The SAGE handbook of action research: Participative inquiry and practice*. London: Sage.
- Schatzki, T. (2002). *The site of the social: A philosophical account of the constitution of social life and change*. University Park: University of Pennsylvania Press.
- Tyrén, L. (2013). “Vi får ju inte riktigt förutsättningarna för att genomföra det som vi vill”: En studie om lärares möjligheter och hinder till förändring och förbättring i praktiken. [“We do not really have the preconditions for implementing what we want”: A study of what enables and constrains teachers to make changes and improvements in practice.]. Doctoral thesis, University of Gothenburg, Gothenburg.
- Winther, R. (1998). Managers, spectators and citizens: Where does “theory” come from in action research? *Educational Action Research*, 6(3), 361–376.
- Zeichner, K. (2001). Educational action research. In P. Reason & H. Bradbury (Eds.), *The SAGE handbook of action research. Participative inquiry and practice* (pp. 273–282). London: Sage.