Learning and Leading in Communities of Practice

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Background and focus
The research project Learning and Leading in Communities of Practice is a collaborative project involving the teacher training departments at the University of Tromsø and Tromsø University College, and the three municipalities of Balsfjord, Karlsøy, and Tromsø. In addition, school leaders from Spitsbergen participate in the project. The research is conducted in close cooperation with the school owners in the three municipalities, and with participants from the schools and their in-service programme. One important focus of our research is how school leaders develop new knowledge through participation in dialogue conferences and networks, and what types of knowledge they develop. The overall research concept is that of action research, which is made concrete through dialogue conferences and networks.

The aim of the project is to develop new knowledge about how managers handle reform in different schools and how they work with different models in their own schools in order to implement the new curriculum "Knowledge Promotion". One of the most interesting aspects of this research is the overall interaction between the school management, the school as a learning organisation, "Knowledge Promotion", and the action research project itself. Together with the participants, the researchers from the two teacher training departments will produce knowledge that may contribute to understanding and handling reform work in a more coherent manner. The benefits of the project will be both theoretical and practical. The project will provide new insights into the leadership of schools and schools as learning organisations, and the tools of action research, dialogue conferences, and networking will be explored and evaluated as future tools for developing knowledge in schools.

"Knowledge Promotion" is largely a reform of responsibility where the local level, leaders, and teachers have to concretise the intentions of the reform in local curriculum work. The research project is also designed with the intention that the participants can use dialogue conferences at their own school, by structuring conversations between teachers when working with the reform.

The research project is initiated from an already established action learning programme for 2006. Recently, 120 school leaders (principals, vice principals, and leaders of the in-service training programmes as well as municipal youth and education officers) and the chief administrative officer level in these three municipalities have started an action learning-based programme called Leading "Knowledge Promotion", which is run as a joint project involving the Faculty of Education at Tromsø University College and the Department of Education at the University of Tromsø. We want to continue this project with our established cooperation as a starting point through municipal applications for funds from Programme for School Development1.

The action learning programme touches upon essential aspects of the research areas in this application. Thus, the research project will constitute a continuation and an expansion of the action learning programme for 2006 in the three municipalities, with the same researchers

represented. The transition to a more research-oriented approach has been cleared with the ongoing action learning programme. The three municipalities and Spitsbergen will be partners in the research project during the proposed (R&D) research period. This means that we have established cooperation with the practice field and that we are on our way from the phase of initiation to the implementation of the project. The focus on the participants will be further emphasised by several of the school leaders participating in a master programme in educational leadership organised by the same researchers.

**Practical organisation**

The practical organisation of the project will be handled by the researchers who will organise dialogue conferences and follow them up through network meetings. The conferences will focus on reflection and the creation of ideas. The conferences will be organised with the view that practical knowledge is legitimate and is the starting point for dialogues about new actions. The project will contribute to development through reflection on the conferences and the network meetings. These will be the basis for qualitative interviews, surveys, document studies, and selected case studies from individual schools and networks.

The researchers have different research questions connected to the action research programme. The research strategy will be continually discussed in the group of researchers and with the active partners involved. An established and active reference group consisting of school owners, school leaders and in-service training managers has been and will be an important partner for discussion initially and throughout the programme. This group has already provided important premises for the ongoing action learning programme in the actual municipalities.

**Project Objectives**

This research project is based on the idea of constructive social science that research should contribute directly to development. The aim is to use active participation in networks and dialogue conferences to develop knowledge from the experiences and interaction of the participants in the two arenas. Specifically, the project addresses the question of how the development of good leadership in schools can contribute to an eminent culture of learning for reform work in schools, and our main research question is:

*How can we develop the role of the school leadership and the school as a learning organisation through participant action research?*

The objectives of the project are the following:

- to develop and try out new models for knowledge development in schools and educational systems
- to investigate the role of the school leader in the development of schools, with an emphasis on the leader's role as a leader of learning in his/her organisation
- to analyse the changes that take place at the level of school managers in three municipalities whose organisations are different
- to explore what constitutes a well-functioning leadership team and what effects the team has on the school's development.
Two empirical references
The research project has its empirical basis in two large projects where the researchers in this application have been directors or participants; the SOL project and the PILOT project.

The SOL project\(^2\) gave us the following indicators of what good leadership in schools includes:
- Good leadership practices are interactive processes involving many people.
- A focus on the pupil and on learning plays a central part in the leadership's philosophy and practice.
- Leadership is organised as cooperation and teamwork.
- Leaders who succeed base their leadership on democratic principles and values, and are to a great extent able to handle the permanent dilemmas at the core of working with people in schools (Møller et al 2005).

The PILOT project\(^3\) gave the following insights which are especially relevant to the participation of schools in action research projects where dialogue conferences and networks are tools:
- Schools that participated in networks which emphasised closeness to practice and structured dialogues felt that this was supportive to their development.
- Dialogue conferences create motivation for working with school development, as well as greater insights into how this work must be done at each individual school.
- Teachers to a large extent function as co-researchers in action research that uses networks and dialogue conferences as tools.\(^4\).

Both projects form important starting points for the perspectives of the researchers and their research questions.

Perspective and design
Our project has a clear action research profile which is expressed through actions in the form of dialogue conferences, constructive networks, and case studies. The aim of action research is to increase the participants' insight into and control of their own situation and their ability to improve it. "Action research aims to solve pertinent problems in a given context through a democratic inquiry where professional researchers collaborate with participants in the effort to seek and enact solutions to problems of major importance to the local people" (Greenwood and Levin 1998:75). Essential concepts in this definition are research, participation, and actions in a local context.

\(^2\) The SOL project ("School and Leadership") was the Norwegian component in the international research project The Successful School Leadership Project (2001-2005). The project was aiming at identifying the qualities, characteristics and competences of successful school leadership in primary and secondary schools in different socio-economic circumstances. The project included teams of researchers from UK, Sweden, Denmark, US, Canada, Australia, Hong Kong and Norway. The Norwegian co-ordinator was Professor Jorunn Möller, Department of Teacher Education and School Development, University of Oslo, and Siw Skrøvset and Else Stjernstrøm were two of the six contributors.

\(^3\) The PILOT Project ("Project, Innovation, Learning, Organisation and Technology") was a national project of school development in the period 2000-2003. The objective of the project was to develop the pedagogical use of ICT. In all, approximately 120 schools in 7 counties participated. The project was followed by researchers using action research as their strategy. Associate professor Torbjørn Lund was director of the northern Norwegian network PILOT i Nord ("PILOT in the North").

\(^4\) The PILOT Project partial report "Pilotspor mot fremtidenes skole" ("Pilot tracks towards the school of the future") (Lund 2004).
Our research is conducted in cooperation with practicians. Knowledge development and changes in the practice field take place based on concrete forms of cooperation between practicians and researchers. Kalleberg (1992) uses the term constructive research for this type of social research. The aim of the research is to understand and improve practices, and at the same time to contribute theoretical knowledge about the field in which the research is conducted. Action research is a research strategy that uses methodological approaches from different traditions, where the question of what benefits the development of actions and knowledge is what directs choices of methods and data.

In addition to identifying different approaches to action research, there has been a focus on describing, justifying, and arguing for the importance of practical knowledge in relation to research. The roots of action research to Dewey and Schön, through the concept of reflective practice, are central in the development of concepts of the reflective practician as an expression of practical expertise (Noffke and Somekh 2005). Learning through participation in networks and dialogue conferences in the present project is largely based on the participants' experiences and formulations thereof when meeting other practicians and researchers.

The idea of the reflective practician is based on the idea of practicians as experts in their own activity. In our context, the basis is pragmatic action research. It uses the practicians' knowledge as a starting point for changes, and shows that theory and practice are different domains which bring different experiences to the meetings of knowledge development (Greenwood and Levin 1998).

In the pragmatic tradition, democracy and plurality are central concepts. Democracy in this context means creating arenas for ideas, and for the exchange of ideas and of thoughts about actions. Plurality is the starting point for diversity as a resource for knowledge development. The idea is that school leaders, school owners, and researchers are to contribute to knowledge development in dialogue conferences and constructive networks through mobilising, emphasising, and creating energy to highlight different perspectives and experiences from the practice field.

Another quality of the pragmatic (and democratic) tradition is the generative planning and the desire to keep conversation going. It is in the encounter between practicians and researchers that understanding and learning develop. Tools for the management of this type of project are found in the dialogue, not in a set of decided methodological rules. Below, the two most central tools in the action research project, namely networks and dialogue conferences, are described. Both seek to maintain the function of the dialogue as a creator of ideas and reflection.

Two scaffolds for development

1) Learning networks

Gustavsen and Hofmaier (1997) point out two important characteristics of and reasons for networks. Firstly, networks can develop and utilise knowledge in a better way than organisations working alone. Secondly, networks and their participants may support organisational development in their own practice through impulses that they give each other. Networking can thus be seen as a collective learning process with the intention of supporting learning and development in one's own organisation, while one's own work also gives the network, as a whole, new energy.
Networks are then generally understood through the interaction of different parties. Powell and Smith-Doerr (cited in Foss et al 1994) claim that there are two approaches to studies of networks. One takes sociology and organisational theory as its starting point, and is related to studies of social relations in networks. The other is more concerned with investigating and understanding how networks appear as new constructions. Studies of these have led to more attention being paid to the interaction of local and regional actors participating in different networks. While traditional research strategies seek to understand activities in networks through descriptive analyses, actor-network theory (ANT), for example, is concerned with what happens in the development of different networks. ANT focuses on understanding why participants are active in networks, their interpretations of their activity, and what results they achieve by participating in networks. Like action research, ANT is an intervening research strategy (Kalleberg 1992) which views the researcher's participation in networks as a constructive part of learning and of the development process in the network. Understanding the activity of the participants in networks means understanding different practices represented. Networks thus mean different things to different members. The constructive side of the network, as an arena for the creation of ideas and reflection, links it to action research.

2) Dialogue conferences
Dialogue conferences entail highlighting, discussing, and analysing actions from the practice field, with the intention of contributing to the improvement of practice. This places dialogue conferences within the pragmatic tradition of knowledge and action research as a scientific tradition (Gustavsen 1992, Greenwood and Levin 1998).

An essential aim in dialogue conferences is to prepare arenas where the participants can present themselves and their work, and express themselves together with others. In other words, it is a matter of the opportunity to highlight actions through language and to let actions be the subject of investigation in the form of argumentation and encounters between different perspectives. Thus, a premise in this project is that the school managers develop and formulate strategies for how best to make sure that teacher, pupils, and the surroundings work with "Knowledge Promotion". Another premise is that the school leaders can express these in encounters with other school leaders and meet other and different perspectives on how to lead reform work in schools.

An important element in such discussions is the maintenance of a democratic dialogue. It is necessary to structure and regulate the conversations between people through constant reminders of what leads to good dialogues. The dialogue conferences regulate which contributions are given at what times: "...they can be seen as a set of reminders working to orient participants towards what a dialogue conference is" (Shotter and Gustavsen 1999:17).

The researchers' approach
The two scaffolds are the common tools that the researchers and the participants have for building knowledge in this project. Working together in such a research partnership entails new and interesting challenges which should be meaningful for knowledge building. The specific tools of the researchers are the theories, methods, and models used in constructive meetings with the practitioners, and they are followed up through different case studies.

Case studies
There are several definitions of what a case study is, because the word case is used in different ways in different contexts. Any disagreement may be an indication that we lack precision in terms of what we refer to when we talk about case studies. Robert K. Yin (1981,
1994) has provided significant contributions to the understanding of the nature of case studies, and he maintains that it may be useful to apply case as a method when one is to conduct an empirical investigation of an everyday phenomenon, especially when the borders between the phenomenon and the context are not obvious. In this project, what happens in the schools is closely connected to the context, and can only be studied in this light. This type of approach is well suited e.g. to explain a causal relationship, when one intervenes in real situations that are too complex for experimental strategies, when one is trying to describe real situations where intervention has been used, or when one is to explore situations where the intervention to be evaluated has no unambiguous results (Yin 1994:15). In short, case studies are a way to investigate an empirical question, and are similar to other research in that specific procedures are followed.

**A sketch of the four sub-projects**

With the projects' overall research question as a starting point, several dimensions of school development will be explored. The first sub-project has as its main focus the question of how participation in networks and dialogue conferences constitute social practices, and is thus a research overview of the two scaffolds for development; learning networks and dialogue conferences. The other three projects look more closely at different aspects of the role of the school leaders. Project 2 looks more closely at the principal as a leader of learning. Project 3 addresses the leadership role connected to the aspect of municipal organisation, while project 4 looks at team organisation as an element in school development.

**Sub-project 1: Knowledge development through dialogue conferences and constructive networks**

*Responsible: Associate professor Torbjørn Lund, Department of Education, University of Tromsø.*

This sub-project is based on the assumption that changes in society demand the continuous development of competence in schools. At the same time, it is not clear how best to contribute to the development of competence in order to help schools change according to national intentions and local conditions. A question which is asked is how researchers can best contribute to the necessary competence for reform work in schools. Report no. 30 to the Storting (2003-2004), "Culture for learning", points out that education must be developed through a dialogue with those who have their daily work in and for schools. The present project is based on knowledge from the PILOT research project mentioned above. An important finding was that dialogue conferences work well to support the knowledge development of teachers and leaders in processes of change. At the same time, it was clear that more and systematic knowledge of this approach was needed.

The sub-project aims at discovering how knowledge about change in schools is developed through participation in different forms of social practice. In this context, networks and dialogue conferences are seen as two different forms of social practice. The most important ambition of the project in this context is to develop arenas for dialogues and constructive networks and to follow and develop good dialogues between the participants in the project. The specific aims of the project are:

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5 Introduction to Report no. 30 to the Storting (2003-2004), "Culture for learning"
- To identify and develop the importance of the network for how school leaders understand and work with the implementation of "Knowledge Promotion". An important question is how the participants identify with and construct the network along the way.

- To identify and explore the importance of dialogue conferences for the creation of ideas and for reflection on ongoing reform work in schools. In this context, it is interesting to look at how the creation of ideas and reflection manifest themselves through conversations at the conferences.

- To develop knowledge about how networks and dialogue conferences can create new learning situations in school development. An important focus is developing further the structures that have been established for such conferences. The specific objective is to develop and suggest new models for competence development for the teacher training institutions which can meet the practice field based on new premises.

**Sub-project 2: The principal as a leader of learning in his/her own organisation**

*Responsible: Associate professor Siw Skrøvset.*

The aim of this project is to explore how and on what basis the principal exercises leadership of learning in schools. The role of the principal is many-faceted and includes the role of pedagogical leader with the responsibility for the pupils' and the teachers' learning, as well as the development of the school as a learning organisation. Today, there is no discussion about whether school managers should be able to influence the pupils’ learning, because that has been politically decided, but on a more theoretical and practical level, the discussion has not been concluded, partly because it is connected to the constant battle of who decides what in schools and how the school leader can gain influence on the pupils' learning (Moos 2003).

At the same time, we see that school leaders have the greatest influence on learning processes in schools where they are role models for the teachers, where they monitor what is accomplished through teaching, and where they have a dialogue with the teachers (Blasé & Blasé 1998, Southworth 2003, Leithwood and Riehl 2003). Teachers have traditionally increased their competence through different courses and in-service programmes, but adapting work in the school so that it opens up for development and common reflection is equally relevant (Spillane and Louis 2002, Kristiansen 2004).

When school leaders become active in an action learning programme which has the aim of qualifying them as leaders of development in a learning organisation, this will influence all the parties involved in their school. Action learning is a new learning paradigm in schools, a paradigm which challenges the traditional field and which gives both leaders and teachers new roles; for example, it breaks with the "invisible contract" between teachers and leaders where they are left to be the managers on the condition that they do not interfere with teaching content and form (Berg 1999). Action learning can be seen as a mildly provocative learning aimed at creating expansive learning (Engeström 2001).

The following questions are thus relevant:
- What happens when the principal - together with the researcher - seeks to increase learning in his/her own school?
- What are the consequences for established cultures and contexts of learning?
- What basic conditions do we find for the implementation of the leadership of learning?
Sub-project 3: The role of the leader and municipal organisation

*Responsible: Cand. Polit and assistant professor Lars Aage Rotvold.*

Based on how the municipalities are organised, Rotvold will look more closely at whether the roles of leaders in schools and in the municipal administrations responsible for the school sector change according to the organisational model chosen. For his master's thesis (Rotvold 1996), he worked on explaining a rationale for processes of change in public organisations. The thesis discusses the process of change in Avinor (formerly Luftfartsverket, the Norwegian Civil Aviation Authority) at the beginning of the 1990s. Using three models of rationality, the actions of the different actors are explained from different angles. Using a strategic perspective of rationality, the actions are explained as motivated by strategic self-interest. In a contextual perspective of rationality, norms govern the actions. A final perspective used to explain the actions in processes of change is a communicative perspective of rationality. Here, the focus is on the argumentative dialogue, and the best solution is sought.

The three models of rationality will be used to analyse the changes that take place at the level of school leaders (including the municipal administrative level) in three municipalities; Tromsø, Balsfjord, and Karlsøy. The municipality of Tromsø is a relatively large one, organised in a two-level model, whereas Balsfjord and Karlsøy are small municipalities where the field of schools is organised differently than in Tromsø. Using the three perspectives of rationality, we will follow a selection of schools and managers throughout the project period. The models will not only be analytical tools. They will also contribute to the understanding of one's own practice and thus they may contribute to the development of each individual school as well as the field of schools in the three municipalities. Especially the model based on a communicative perspective of rationality will be fundamental in the development processes. A strategic and contextual perspective is important in order to create the dynamics on which a communicative approach depends.

Sub-project 4: Team organisation

*Responsible: Cand. Polit. and assistant professor Else Stjernstrøm.*

Teamwork has proved to be a way of improving the intrapersonal skills of the actors (Ulloa and Adams 2004), which in turn leads to learning and improved practice. Team leadership in organisations has been studied extensively, especially in industry and within production companies (McGregor 1960, March and Simon 1958, Levin and Rolfsen 2004, Bolman and Deal 2004), but to a significantly lower extent in schools and similar organisations producing knowledge. The research-based knowledge of team leadership and teamwork and of their effect on the development of the actors in schools and of the schools as organisations is therefore limited. Many schools have a team organised leadership, but we know little about how the teams work and the effect, if any, such an organisation may have. Thus the overall aim of this project is to create new knowledge and in this way contribute to general and theoretical insights, primarily about the role and the function of the school leadership in team processes, and secondly about the leadership processes that take place in teams of teachers.

The idea is to approach this aim by

- looking at the relationship between team organisation and the effect of learning
- looking at leadership as a distributed phenomenon, where leadership tasks are distributed among several persons, and where leadership is seen more as interaction than as actions of individuals.

The main research question in sub-project 4 is:
Explore how the leadership team together with the researcher contributes to a collective learning community in the school.

Literature
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