

Teachers – The professionals in formal learning as practitioners of informal workplace learning

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Abstract

Schools have been targets for plenty of research, but working life researchers have showed only limited interest in schools as workplaces and as arenas for learning among teachers and other staff. The purpose of this paper is to introduce a new study, *Research-supported development work in the schools* by describing its background and methodology. The study is built on the perspective of workplace learning and learning organisations, with a goal to examine teachers as ‘practitioners’ of informal learning and schools as sites for learning among the staff and as learning organisations. The interest will be on whether various models on workplace learning and learning organisations are applicable at schools and whether teachers use informal learning in their work for goal-oriented, continuous competence development. The first part of paper introduces the background for the study, the new Norwegian school reform and a educational dilemma from which it has emerged. The second part will look into the discourse and theorising on workplace learning and learning organisations, with some discussion about their applicability for school development. The third part will present the theoretical frame and methodological approach, work development research, in the new study. Finally, the paper will present some preliminary observations from the development work in the schools participating in the new study.

Introduction

In his foreword to McNiff’s (1995) book on the principles and practice of action research, Jack Whitehead wrote in late 1980’s about his concern for the traditional divide between educational theory and professional practice in teachers’ work. Since that time teacher’s work has become challenged by the new discourse on learning rather than teaching, and by the view of schools as *collaborative learning centres* rather than sites for imparting knowledge. Theories and, presumably, practices have changed. Many teachers are thrilled by the new liberty, many frustrated by a lost identity and concept for their work.

While schools have been targets for much research, working life researchers have showed more limited interest in schools as workplaces and as arenas for learning from the point of view of teachers and other staff. Drawing from that line of theorising and discourse, this presents the background and methodological starting points for a new study, *Research-supported development work in the schools 2005-2008* (RESDWIS). RESDWIS was initiated as a response to the call from the current Norwegian school reform, *Knowledge Promotion*, to be continued until 2008 (Introduction to Knowledge Promotion, 2005). The purpose of the study is to examine schools as workplaces and teachers as ‘practitioners’ of informal learning in these arenas. That is, the practice of school work among teachers and the development of schools will be approached from the discourse on workplace learning and development. Consequently, the study draws

also from the discourse and theorising on learning organisations. The focus of interest will be on how teachers, as The Group of real professionals in formal learning, use informal learning in a purposeful and goal-oriented way to develop their own competence and practice, as well as schools towards learning organisations. Besides teachers, the study includes school headmasters and other school management.

From a societal dilemma to a school reform: It is not the education resources, but how they are used that counts for learning results

An interesting dilemma can be pictured on the background of the current Norwegian school reform. On one hand, in regards various educational indicators Norway ranks among the top countries in the world. The formal educational level of the population in Norway, like in other Nordic Countries, is among the highest in the world. A quarter of the population aged 15 years and above has completed tertiary education (a university or college degree) – a figure almost doubled during the last a couple of decades (Statistics Norway, 2005). Measured in the number of years spent in education, adults in Norway rank on the second place among the OECD countries after the USA, as shown by the OECD statistics (Education at a glance, 2005). The same statistics also show that over 16% of the public expenditure is used in education, ranking Norway on the fourth place among all the OECD-countries. Furthermore, the number of students per teacher was among the lowest in the world on all school levels in Norway in 2003, and teachers' net salary increase between 1996-2003, with about 40%, was one of the highest among the OECD countries (Education at a glance, 2005).

On the other hand, pupils in Norway perform often poorly in international comparisons of learning results, most importantly in the OECD's PISA study and TIMSS (2003). According to the results from the PISA-study the Norwegian pupils score below the OECD average on three of the four areas covered - maths, natural sciences and problem solving – and generally speaking score clearly lower than other Nordic countries, with which the results are most comparable (Kjærnsli, Lie, Olsen, et al., 2004). However, they enjoy school, even if both children and headmasters at the same time report about more problems with the working environment than in other countries. TIMSS (2003), which measures skills in mathematics and sciences, showed that the results of the Norwegian pupils were among the poorest among the OECD-countries in 1995 and were still worsened by 2003. While these results speak on behalf of serious problems in the Norwegian educational system, the conclusion nevertheless is that it is not the financial resources that are the problem. This was the conclusion drawn by the Norwegian Minister of Education Kristin Clemet (Press release 6.12.2004).

The challenge for improved quality in the country's educational system then seems to lie in how the resources (economic and intellectual) are used. Even if the level of formal education, and hence the knowledge-based resources generally speaking are high in the country – logically, also among teachers and school management – competence in regards how to make best out of these resources seems to be lacking. To address the problems, the new school reform *Knowledge Promotion* took teacher competence and schools' learning culture as the key areas for interventions. The challenge, then,

generally speaking, was set in expanding teachers' job-competence¹ from the traditional narrowly subject-focused to a more comprehensive set of skills, knowledge, and attitudes. Better acknowledgement and more visibility and credit are now to be given to competence areas such as metacognitive, social, and communicative, as well as pedagogic skills in general, and their development. Furthermore, the challenge lies in developing a new understanding about the school institution and school culture by breaking the familiar and the traditional.

Focus on informal workplace learning to develop schools to learning organisations

The frame for the current school reform was outlined in the White Paper *Culture for Learning* (2004). It argued that changes in the educational system, school practices, and teacher's competence are the way to better meet the challenges of the knowledge society. Teachers' competence and, perhaps ironically, development of the learning culture at schools, were set as the "necessary groundwork" before any structural and content-related changes. The reform places strong emphasis on "professional renewal" among teachers through continuing education.

As a part of the reform a strategic plan (Competence for Development, 2005) has been constructed for the development of competence for teachers and trainers for the reform period 2005-2008. The plan was made in broad cooperation between the Ministry of Education and a range of other relevant bodies: the Norwegian Association of Local and Regional Authorities, the Union of Education Norway, the Norwegian Association of Graduate Teachers, the Norwegian Union of School Employees, the Norwegian Association of School Leaders.

Development of schools as and towards learning organisations is set high on the agenda in the strategic plan and the whole school reform. The rhetoric and conceptualisation, which is more common in private sector organisational development, is used in the argumentation. According to the strategic plan, the aim with learning organisations would be to optimise learning at schools as professional communities, not only among teachers but also among pupils. With pupils this rationale boils down to adapted learning as a key to quality development in learning. Learning adapted to the abilities, aptitudes, and capabilities of the pupils should then lead to improved learning results.

"The main challenge for the school as a learning organization is to develop a learning environment and organize it in such a way that it promotes optimal learning for pupils and for staff in a professional community. Changes in the Education Act give schools greater freedom to organize the teaching and adapt it better to local conditions and needs. (...) The evaluation of the national Campaign for Quality Development 2000-2003 showed that schools with a cooperative work ethos and systematic assessment of their own practice managed to a greater extent than others to give pupils teaching adapted to their needs. (...) To develop the school as a learning organization, it is vital to strengthen the administrative and teaching staff's ability to assess the results of their practice."
" (Competence for Development, 2005, 7-9.)

¹ The concept 'job-competence' is used here in the sense common particularly to Norway (Competence Reform, 1999; Validation of Realkompetanse, 2003) and to the other Nordic countries, including all competence regardless how gained, the 'total competence' ('helhetlige kompetanse; I første rekke, 2003). Thus, it has a broader meaning than in the English speaking literature, particularly in the UK, Australia or New Zealand. It is considered to involve all knowledge, skills, and attitudes that a person brings to and puts in use in a workplace, also those referred to by 'generic skills' (Garrick, 2000), with a somewhat similar meaning to 'capabilities' (Stephenson, 2001).

Thus, the new competence reform imposes several requirements for competence development among the pedagogical staff and school management, as well as for changing the school culture. It is not unproblematic, however, to develop schools as organisations simply by new laws, regulations, and goal descriptions (Skalde & Skaret, 2005). While the knowledge promotion imperative at schools includes all relevant actors in society, including universities and teacher training colleges, in practice most schools – teachers and school leaders - are left with little support from outside the school to fulfil these new requirements by developing their individual and cooperative competence. School owners – municipalities and Counties – have officially got the mandate for realising the reform and the much of the responsibility for achieving its goals. Yet in practice, besides some formal courses from the universities and/or teacher colleagues and alike, schools are by and large left on their own with the reform-related, and other school-development work. Teachers and other pedagogic staff and school management are required to build on and draw from reflection on their own practice, and existing knowledge, experience and skills. From this point of view we can say that the reform sets a requirement to schools to improve in informal workplace learning, individually and collectively, within the resources available (time, finances, knowledge and skills) in order to improve the school institution, and with measurable results.

The discourses on and approaches to informal workplace learning: Relevance for schools?

Among the most important reasons for the increasing attention that informal workplace learning has been gaining during the last decade or so are the rapid changes in society, particularly in and through the technological development and the due demands to develop work-related skills, knowledge and attitudes (job-competence), as well as the inadequacy of the formal, institutional vocational and continuing vocational education and training to address these changing competence needs and requirements. Informal learning has become ‘useful’ in the post-industrial workplaces, due to its productive potential in as much as it makes work organisations more innovative and competitive, as Garrick (1998) points out. The amount of literature and research on the theme abound. A range of definitions, models and approaches have been presented by scholars around the world - for some overviews and analyses see e.g. Boud & Garrick (1999), Fischer, Boreham, Nyhan (2004), Garrick (1998, 2000), and Tikkanen (2005) – a state of affairs which can be viewed as valuable, considering the powerful, yet elusive nature of the phenomenon (Garrick, 1998). The field of inquiry is highly inter-disciplinary (Bratton, Calder & Gold, 2001). It has been characterised by an intense search for new research approaches and theories, crossing boundaries between economics, organisational theory, sociology, cognitive science, psychology and anthropology (Engeström, 1996), from various methodological perspectives (Garrick, 1998).

The same can be said about the work done around learning organisations, the promotion of which is supposed to build on informal learning as its cornerstone (e.g. Nyhan, Kelleher, Cressey, et al. 2003; Nyhan, Cressey, Tomassini, et al. 2003). While the approaches to workplace learning are more based on the theories of (adult) learning, and vocational adult education and training, within the applied disciplines of education and adult education, the models on learning organisations tend to draw from business schools background and be based on theorising in human resources, i.e. in HRD and HRM (Tikkanen, 2005). Philosophies underlying the various approaches range from

humanistic arguments to economic rationalism. Demands for and practice in competence development and renewal take often place at the interplay between individual and collective or work community, i.e. between the development of workers and organisations. With the concepts of Lave and Wenger (1991) learning takes place through participation in the community of practitioners. On the other hand, in his critical analyse of the typically instrumental use of informal learning, Garrick (1998, vii) points out how managers and HRD-practitioners attempt to deploy informal learning in the 'design' of corporate cultures, and how this in fact has resulted in the "so-called democratic and participative workplaces (...) being 'framed' by an economist human capital theory and a 'mercantilisation' of knowledge".

Most of the research and theorising on workplace learning and learning organisations has been conducted in relation to private sector organisations. Some related work has, however, also been done in the public sector, most notably under the paradigm of New Public Management (e.g. Barzelay, 2001; Christensen & Lægveid, 2001), with its goal in promoting innovation and change in public sector organizations, "getting things done better". It is not uncommon in educational and school reforms either to apply the conceptualisation and models from informal and organisational learning, and the focus is often set on developing a new school culture through a new learning culture (e.g. Godwin, 1999; Normore, 2004; Read & Hoff, 2005).

In practice, school development has traditionally been the business of the schools themselves, and only them. In the same vein, the work of teachers has been very autonomous, its quality assured from within, rather than guided through external assessments. Such a state of affairs makes schools very different organisations from the private sector ones, which tend to be more open and invite external actors in their development work. Inarguably, schools have not been high in self-reflection and self-critique, and paid little attention to their nature and characteristic as an organisation (OECD, 2001; Roald, 2000). The research in and evaluation of schools and classrooms indicate a corresponding approach among teachers to their own practice: the problems at schools tend to be explained by structural (e.g. too big schools or classes) and/or economic aspects, or the quality of student material (socio-intellectual capabilities, in many cases to be traced back to home and parents). Any major developmental effort will nevertheless need to address the complexities and layers that are typical for schools and its challenges and dilemmas, with multiple perspectives involved, such as curricular, organizational, social, political and cultural (Read & Hoff, 2005).

Any school development effort must also take a stance to the fact that schools are organisations in which activities of the actors are highly regulated from outside and above by public authorities. Much of what teachers do at schools can be guided, if not regulated, strongly or less so, by curriculum (content-centred rather than student-centred), depending on the prevailing 'paradigm', i.e. the level of centralisation of the overall school administration, a state of affairs usually directed by prevailing educational politics and governments. Regardless of the fact that schools are often pressed with expectations and demands from various directions (parents, authorities, politicians, media), there has not been a tradition for clearly articulated definitions and demands for results in the core area of their work (learning among pupils), as Skalde and Skaret (2005) point out. Interestingly then, even if there is a certain ambiguity in regards the nature of the results, the new school reform in Norway puts a strong emphasis on the ability of teachers and administrative staff at schools to assess the

results of their practice, as described earlier in this paper (Competence for Development, 2005). Clearly, an analysis of schools as learning organisations cannot be seen independent from how society and authorities seek to manage the quality in an educational system (Skalde & Skaret, 2005).

The ‘politicality’ and ivory tower nature of schools, i.e. their distance and “closedness” through their inarguable authority - regardless of apparent closeness and openness to parents’ involvement - clearly poses a challenge to the usability and applicability of existing approaches to and theories on informal workplace learning and learning organisations at schools. The issue here is about getting access and acceptance to the informal within the formal. In this regards the development efforts, like the new action research, RESDWIS, have contact points to the prior research, which has explored the behind-the-formal and made-visible at schools by reaching towards the informal and invisible (cf. ‘hidden curriculum’).

In his valuable analysis of the possibility to change the school institution, Miettinen (1990) starts by describing how difficult it is to change the school and how the school institution has for the last hundred years been one of the most stable and unchanging of all institutions. So much so, that it has been suggested that there should be a separate page in the book of Guinness for all unsuccessful pilots and reforms concerning teachers work, because so few of them has ever become part of the actual teaching practice (Larry Cuban, quoted in Miettinen, 1990). One of the conclusions Miettinen (1990) makes is that the school institution has largely become isolated from the rest of the society and work, and that this maintains the traditional approach to schools and school work, for example the model for classroom teaching. One of the core questions for this paper and for the new study it presents is, can the models and approaches on informal learning and learning organisations developed during the about last ten years or so, be successfully applied to the work of professionals in and the organisations of formal learning, notorious for their conservativeness and “inertia” (resistance to renewal and reforms, i.e. learning) for more than a hundred years? That is, when success is defined as improved learning and measurable learning results among pupils.

The existing examples of success stories from Norway and many other countries give reason for optimism. The multi-method analysis conducted by Skalde and Skaret (2005) (qualitative interviews and national school achievement tests were used, among others) focused on the question, whether it is possible to find a measurable relationship between the results from and investments in organisational development and job-competence in schools. Their results were encouraging in that they confirmed a relationship between the organisational development, expectations, and cooperation among adults at school and the learning results among pupils. They focused on schools, which they call as “pattern breakers”, because they have managed to break away from the fixed patterns and traditions concerning schools and school work. The most striking aspect in their meetings with the patten-breakers was that in these schools personnel tended to see possibilities where others saw obstacles. Even if these schools too had problems, enthusiasm and positive approach were the dominant characteristics to their work. Furthermore, in these schools there was a short way from “the fine words” defining visions and plans for organisational development to concrete consequences and results, and pupils were often included in the development work. Generally speaking, as Skalde and Skaret (2005) describe, these schools took a holistic approach to their development work, under the rationale that to be a learning organisation the school will have to

involve the whole organisation and all relevant groups of actors for actions and constructive reflections. Innovation as a result of successful development work was seen to require not only individual learning but learning of the organisation.

Theory and methodology in the new RESDWIS-study

Developmental work research: Theory and method

This paper is describing the background and methodology for a new study, RESDWIS. Methodologically the study will build on action research as it hopes to narrow the theory-practice relationship typical in education research. The purpose is to apply the theory and methodology within this line of research to support the renewal of the teacher profession and schools' learning culture, by helping teachers to critically and systematically examine, evaluate, and develop their knowledge embedded in their work practices. Action research contains a theory of its own practice (Usher & Bryant, 1989) and therefore represents both a theory and methodology. The general theoretical frame for action research comes from the cultural-historical theory. The theory postulates that the concept of action forms the link between the individual and the system he or she is part of (e.g. society); that the individual activity and characteristics are both formed by a collective activity system and form it further (reciprocally); and that the activity systems are historically developing, contradictory and dynamic (Engeström, 1998). Central to learning and development work is the concept of zone of proximal development, a contested area between the traditional practice and alternative future directions (Engeström, 1994).

A particular variant of action research applied in RESDWIS is developmental work research (Engeström, 2005). The method is thoroughly described in the new book by Engeström (2005). Developmental work research can be defined as a change strategy, which combines research, practical development work, and learning (Engeström, 1998). As a method, the approach is based on practical interventions, targeted to help practitioners to analyse, and think anew on their activity systems and their reform (Engeström, 2005). Thus, the practical interventions function as experiments to change work and thereby to study the possibilities to develop work (Miettinen, 1990). The research method characteristic to action research is the formative or developmental experiments and the role of researchers in these experiments is to engage "in forming societally new artefacts and forms of practice, jointly with their subjects" (Engeström, 2005, 36).

Research-supported development work in the school (RESDWIS)

The study *Research-supported development work in the schools 2005-2008* (RESDWIS) will be conducted in the south-west part of Norway, Rogaland County. At the moment one municipality with six schools is involved, five primary schools and one secondary school. These include a total of about 160 teachers and 6 head masters, and almost 1700 pupils. Discussion with another municipality is going on about the possibility to involve another six schools.

Getting access and acceptance. Because the municipalities (and Counties) as school owners are responsible for implementing the reform, it is them who decide whether they offer their schools the possibility to join the project. However, management at schools

has a lot to say to this choice. Early spring 2005, when the study still was only an idea, rather than ready with a design, the regional school authority organised an information conference on the new school reform and invited the local knowledge partners (university, university colleges, and a research institute) to present their ideas for implementing the reform. The brief presentation by the RF Rogaland Research was closed with an invitation to the audience to learn more about the project in a workshop organised a month later. However, even if project participation has been accepted by school owners and management, teachers at some schools have been sceptical towards researchers' involvement. It has been important to have intensive dialogues to make the goals and purposes of the project as clear as possible, and thereby the researchers themselves as "non-dangerous", as one headmaster put it.

A three level approach to knowledge development and sharing. The main work in the study will be done at schools, making teachers (pedagogical staff) and school management the central actors in the project. On the second level targeted cooperation is being built to promote collaborative learning among personnel across the schools within a municipality (e.g. among headmasters, among teachers with ICT responsibility). The third level is a regional network between the municipalities and schools involved. To an extent also schools and municipalities outside the project are included in the networking on this level.

Thematic approach to developmental experiments. The developmental experiments or practical interventions are conducted as thematic work. The search for the thematic focus is taking place in the schools in regards three levels and the challenges and tensions arising from their interplay: 1) the goal setting in the new school reform and the requirements imposed from above, 2) the developmental plans that the schools have /would have had regardless of the reform (development from within), and 3) schools involvement in the RESDWIS project in the area of informal learning and learning organisations (development in cooperation). At the moment the dialogue is going on around the choice of the themes at schools. In this early phase, the dialogue at schools is also shifting between the specific (particular themes for the development work) and the general (what best serves the school as a whole and under the requirements set by the school reform) There is not only a multitude of choices, but often tensions either between the goal setting in regards the dimensions 1 and 2, or between the multitude of voices (actors) involved in making the choice.

Concluding commentary: Preliminary observations

The following observations have been made in the project in its early start phase:

1. Schools are, indeed, closed institutes when it comes to development work. Traditionally, in Norway, all school development has been taken care of from within. The only accepted external actors to get involved in these processes have been the school owner. Accordingly, access and acceptance of researchers' entrance have in some cases been challenged on behalf of part of the teachers, even if welcomed by the school management.
2. The development work at schools is focused on presented plans for, not results from it. We can also say that neither the school owner, nor the parents seem to ask for results, but satisfy with seeing developmental plans.

3. The systems for organising and managing knowledge at schools vary and are underdeveloped. Technology is utilised for these purposes only to a minimal extent, with little variation between the schools.
4. The level of digital competence varies between teachers and schools, but is generally speaking low.
5. Use of ICT as a pedagogical tool is not common and there is great variation in access to pc's among teachers. Pupils tend to have better access to pc's than teachers.
6. Exchange of pedagogical knowledge and experience at schools is typically haphazard and not systematized. Again, ICT is poorly utilised for enhancing learning on this level. The "best schools" have developed some structures and shared folders for some particular purposes.
7. The contents and the purpose of the new school reform seem to be poorly internalised, even among the school management.

Nevertheless, great enthusiasm and openness has been developed in most schools to truly get support to their development work from external knowledge actors.

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