

# Action Research in Qualitative Classroom Studies

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## Introduction

How research is conducted depends on its purpose. The point of departure for traditional qualitative classroom research has been a research question that is formulated on the basis of learning and teaching processes in the classroom. Furthermore, relevant theories are used to illuminate the teachers' and research participants' perspectives. The aim of traditional qualitative classroom research is to inspire and initiate reflection and discussion in order to improve practice (Gudmundsdottir, 1997; 2001). There is no expressed intention in this research tradition where researchers help practitioners to develop practice during the ongoing research process.

Several theoreticians have raised questions about such a research approach (Carr & Kemmis, 1986; Wardekker, 2000). Usually, researchers in school have teacher experience or knowledge about teaching practice in school. Bearing this in mind, Wardekker (2000) raises some interesting ethical issues. He wonders if it is proper that experienced and competent researchers who also have knowledge about or experience of teaching in school refrain from contributing to and supporting development in schools when they are in, what is for them, a familiar context. Wardekker also maintains that the quality of research should be evaluated on the basis of the changes the research work has inspired in the research field. For many years Carr and Kemmis (1986) have claimed that it is not enough to describe actions and reflections connected to practice. Rather, they contend that if there are problems in a

teaching situation, researchers should not just describe the processes, but also try to improve practice in their ongoing research. Thus, according to them, both research and development work (R&D work) should be conducted side by side. “Action research” and “action learning” can be juxtaposed with the terms “research” and “development work”, and in this article I use these terms side by side. Action learning is perceived as learning processes undertaken by participants in research (Revans, 1982; 1984). Action research is research conducted on these actions.

Many classroom studies have aimed at presenting best practice examples. If this is the purpose of the studies, they can be conducted by using traditional qualitative research strategies. The researcher can collect and analyse data, and then present an understanding of the practice as a text intended as a thinking tool. This means that readers can perceive the described processes as parallel experiences and adapt them to their own situation or practice, thus conducting naturalistic generalizations (Stake & Trumbull, 1982). However, the question is whether or not all teaching can be improved. I think this question can be answered in the affirmative; all teaching processes can be developed. However, written texts are not necessarily read, and if they are read there is no guarantee that they lead to change and improvement in practice. Hence, the conclusion must be that classroom researchers with competence in teaching and learning should have two roles at the same time, both to conduct “research with” and “research on” the teachers in their practice, meaning that they develop practice together with the practitioners, as well as conducting research on it and writing research texts about this practice.

Working as an action researcher is challenging. The purpose of this article is to describe action research processes in school and, furthermore, outline researchers’ and research participants’ possibilities and challenges within this tradition. In the following I will write about the start-up phase of such a research project, and about how teachers can observe each other’s teaching processes and reflect on them afterwards as a basis for learning. First, I will focus on the research question as the frame for the research as well as the development work. Examples and experiences presented in the article are mainly taken from the first year of an action research project conducted in a lower secondary school

in Norway<sup>55</sup>. The teachers at the school were divided into three teams. I was connected with Team 3, which contained 12 teachers who were responsible for the pupils in the eighth, ninth and tenth grades, and this is therefore the micro society (Krogh, Ichijo, & Nonaka, 2000) referred to in this paper.

## The question framing the research and development work

The initiative for action research can come from the practice field as much as from researchers. A headmaster at one school said the following to the researcher:

We invited you here because you know something about our way of working. At the same time you're an outsider and probably see things from another perspective than we do (Postholm & Madsen, 2006).

We see that the research or thesis question can be the teachers', the researchers' or their jointly formulated question. Regarding the action research project focused on in this text, the researcher and teachers formulated the question or problem formulation together. Such collaboration between researchers and subjects is called by Engeström and Sannino (2010) formative interventions. The researchers do not know the overall goal for the work ahead of time, and the researchers' role is to provoke and sustain a transformation process led and owned by the practitioners.

The main focus at the selected school was the development of pupils' learning. The headmaster eagerly invited researchers into her school to help her develop the teachers' practice and the premises necessary for improving it. She motivated the teachers to take part in the project and also reminded them that research and development competence is an important part of their total competence, as stated by the central authorities (Ministry of Teaching and Research, 2004).

The researcher and teachers arrived at the following research question for their project: "How can various work methods which focus on learning strate-

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55. The study, to which the article refers, was part of a larger research project called "The Lade Project' – A Learning Organization for Pupils' Learning". The selected school was situated in a suburban area and has pupils from the first to tenth grades. Forty teachers were working at the school, which had 400 pupils. The pupils were for the most part from middle-class families, and there were few immigrants at the school. The duration of the project, funded by the Norwegian Research Council, was two years in the practice field.

gies contribute to each pupil's academic and social development?" (Postholm, 2008a) This functioned as an overarching question for the teachers, and also helped me, the researcher, focus my research. From this overarching question that functioned as a vision or milestone for the teachers, several sub-goals were established: "Making the pupils more aware of various ways of working"; "Helping the pupils become more aware of how they learn"; "Making teachers more aware of what they are doing in this connection." The teachers also formulated questions connected to specific lessons to focus their reflections on these conducted lessons. These questions were also formed within the frame of the goal and sub-goals. I will return to how they observed and reflected on the teaching and learning processes below.

The overarching question for the work also functioned, as mentioned above, as a guide for the researcher, but the research questions show that I took a step aside or perceived the processes from a meta-level, thus performing research. It also took some time before I could form these questions, because I did not know beforehand in what direction the process would develop. Two research questions that were formed gradually over the first semester were: "What importance does the reflection process after each observation of the teaching have for the development of teaching?" and "What does the start-up phase mean for further development?"

Even though the researchers and teachers develop the research question together, it can take some time before the teachers identify with the project as their own. I have found that the start-up phase in an action research project is vital and lays the foundation for further development (Postholm, 2008a).

## The start-up phase

Whether the research question that functions as the guide for the work is the schools', the teachers' or the researchers', further development depends on the teachers' feeling that the project and the work is theirs; that they identify with the project. When they start working together, the researcher must therefore make the teachers feel that they are equal partners (Postholm & Skrøvset, in press). During the start-up phase researchers should observe the participating teachers in their lessons to get acquainted with teachers and pupils in their work situation. Furthermore, teachers in a micro society (Krogh et al., 2000) should be given the opportunity to develop intersubjectivity with regard to their teaching practice and be assisted in developing an overarching goal before

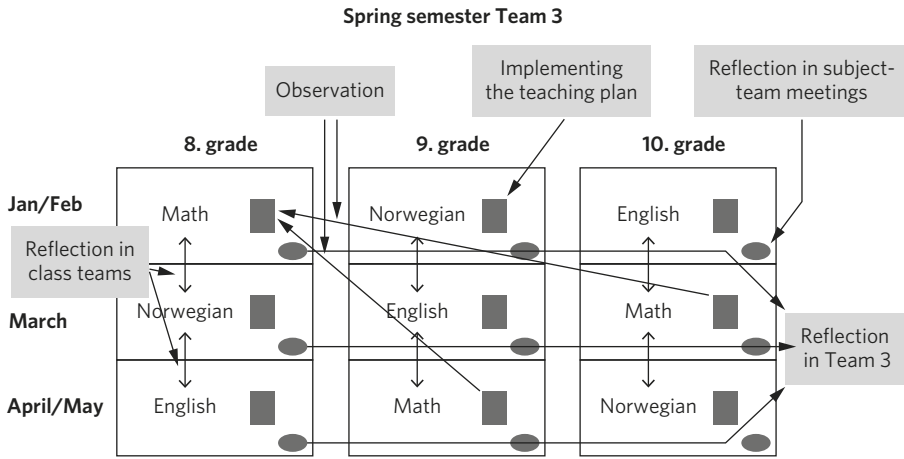
initiating the development processes, which they should also break down into sub-goals that can assist them in their attempts to attain the overarching goal or answer the research question. The teachers must also be given time to discuss and develop a common understanding of their vision and sub-goals. A common understanding is a premise for learning in teacher teams (Senge, 2006). While the teachers in this project were given time to develop several sub-goals to help them attain the overarching goal, the start-up phase ended up lasting the entire autumn semester. During this period the teachers began to perceive the project as their own.

Early in the semester the teachers said that they saw the benefit of reflecting on their own and other's teaching, but they were afraid it would take a great deal of the time they had at their disposal, which was already fully booked. During a meeting in the middle of October in the first semester, a teacher said that she found it very useful that colleagues teaching the same subject at different levels reflected on the teaching and actually shared ideas. During the same meeting one teacher in the tenth grade commented that they had already begun to talk more about their teaching in their class teams. She found it positive because their focus was on other things than just some of the pupils' bad behaviour. "Then we can develop instead of just talking about some of the pupils, which is a rut I think we sometimes get stuck in", she said. Thus, the teachers began to see the meaning of focusing on their teaching guided by the goals to enhance pupils' learning.

The team leader, who was also one of the teachers, believed there would be continuity in their work if they found it useful: "We do the things that we feel are right, from what we know inside, and then I think we manage to achieve continuity in our work". She added that they also needed to be prodded, which means that researchers have to be sensitive and balance between prodding and supporting teachers. "But for some time now the project has been rooted in the teachers' intentions, and already I think they feel it's their project," the team leader concluded. This was said in the beginning of November, and before the month was over, I made a formalized plan for observations of teaching and reflections in subject-team meetings, class-team meetings and meetings in Team 3.

## Observation and reflection

The formalized plan was made on the basis of the teachers' expressed wishes, and it guided the organization of observation and reflection processes during the spring semester. The plan is shown in Figure 1 below.



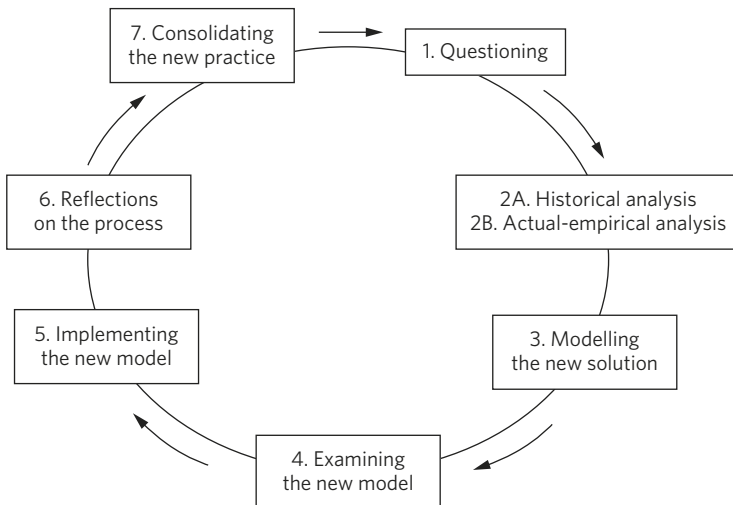
**Figure 1** Formalized plan.

The figure shows that the teachers teaching the same subject observe each other, afterwards reflecting together on the observed activity. For instance, while the 8<sup>th</sup>-grade mathematics teacher is instructing his pupils, the 9<sup>th</sup> and 10<sup>th</sup>-grade mathematics teachers observe him. Before teaching the class, the teacher sends a planning document to the observing teachers and me, the researcher, who is also taking part in the observation and reflection processes. This document describes the subject/theme and lesson aims, and the teacher writes questions about his own planned practice and what he wants feedback on. As we see, the intention is that the teachers reflect together in each of their own class teams after each observation (and in Team 3 with all the teachers) when one-third of the process has been completed. Additionally and as already mentioned, the teachers teaching the same subject reflected on the observed activity the same day as the observation session.

It is necessary to add that the teachers were paid extra for the time they used on reflection after each observation session. The long-term intention was that these teachers would find this activity so useful that they would add it to their repertoire on a permanent basis during the time they already have at their disposal. It must also be said that the teachers intended to follow the same plan the following year. They wanted to include the activity in the total time-frame at their disposal, meaning there was no extra pay for it. So the intention has been realized; they have perceived their development work as meaningful (Postholm, 2008b).

## Teachers' learning

Learning from making reflections about one's actions is called action learning (Revans, 1982; 1984). Action learning implies looking as much forward as backwards. According to Revans, reflection means asking questions about one's own practice and foreseeing possibilities for change and development. Thus, it is important for teachers to look ahead and not get stuck on their experiences. Concurring with Revans, Engeström (1999, 2001)<sup>56</sup> contends that teachers have to see possibilities in their teaching and ask questions about it with this overall goal in mind. They must therefore have some ideas and foresee some consequences, as Dewey (1916) put it. In Figure 2 below presenting The Expansive Circle, we see that questions are the point of departure for development.



**Figure 2** The Expansive Circle

The overall goal or vision for the teachers in Team 3 is to vary their work methods and focus on learning strategies to contribute to each and every child's academic and social development. Figure 2 shows how researchers and research participants ask questions about the current practice at the outset of their work. There is tension, and there are some conflicts that have to be resolved and even

56. It is important to be aware of the fact that action research and developmental work research (DWR) or intervention research have different foundations. In intervention research, which is the research method used by Engeström and colleagues at the Change Laboratory and University of Helsinki, the cultural historical activity theory is the theoretical framework. Culture, history and collective processes are central aspects in the research. Thus, the research methods have various origins, and during action research the abovementioned aspects are not necessarily in focus.

possibilities that have to be strived for. To make progress, Engeström suggests that both historical and actual empirical analyses should be conducted before a new solution is framed. The next step is to analyse the new model from various angles prior to implementing the new practice. After the implementation process, the involved parties, and this can be both teachers and researchers, reflect on their practice before the new practice is eventually consolidated. New thesis questions will again be focused on current practice to move it towards what is envisioned for the work (Engeström 2001, Engeström & Sannino, 2010). In this way The Expansive Circle will be the foundation for spirals of development illustrating the constantly changing practice. This circle was introduced to the teachers as a planning tool that also visualised for them the development processes they were in. The research conducted on the development work shows that the teachers actually learnt from the collective reflection processes (Postholm, 2008b; Postholm, 2011). The fact that teachers learn in their own school along with other colleagues in reflection processes conducted on the basis of observations of teaching practice is also supported by international research on teachers' learning (Postholm, 2012). In the following I will describe strategies that can be used to conduct research on development processes.

## The researcher collecting and analysing data

During the autumn term I visited the school several times to get to know both pupils and teachers. I observed the teachers during learning activities, and also observed and reflected together with the teachers in class team meetings and in meetings with all the Team 3 teachers present. Furthermore, I took part in some meetings in the leader team in which the headmistress, deputy head and three team leaders took part. I also have observation notes from seminars on action learning, and tape-recordings from a one-day seminar. In addition I had group interviews with the teachers in the three class teams, conversations with all the team teachers and interviews with the team leaders. The data material from these meetings, including observation notes and tape recordings of interviews and conversations, provided me with information about the project's start-up phase. At the same time this information functioned as a context for understanding the processes during the observation and reflection activities of the spring semester, as illustrated in Figure 1.

The data material from the spring semester and remainder of the project – altogether comprising a two-year period – includes the teachers' planning docu-



ments for the observed lessons. I observed every lesson and took observation notes. I actively took part in the joint reflections afterwards, which were tape-recorded. I was also present, with my tape-recorder, at class team meetings and meetings of all the teachers. At the end of both spring semesters, all the teachers at school attended a meeting to present their experiences as participants in the project up to that point. These presentations were also tape-recorded, and all tape-recordings have been transcribed.

The notes and transcriptions were analysed by using the constant comparative method of analyses (Strauss & Corbin, 1998). The coding and categorising process structured and reduced the data so that their particular characteristics were reportable (Garfinkel, 1967; Sachs, 1992). Member-checking (Lincoln & Guba, 1985; Merriam, 1998; Stake, 1995) was used to ensure the quality of the research project. This means that all the teachers in Team 3 have read the texts I wrote, checking for both accuracy and commenting on the ethical dimension. This shows that during an action research project, the researcher collects and analyses data in the same way as in a traditional qualitative study. The great difference is that these data are also used to change practice during an action research project in addition to serving as the basis for the research report.

## **Challenges and possibilities for teachers and researchers**

The close cooperation between teachers and researcher places a number of demands on both parties when the intention is to develop practice during the process. Researchers have to be honest and responsive, building relationships founded on trust. As regards the relational discursive situations, the researcher must be both an active listener and supportive interlocutor, have a high level of competence in teaching and learning and be willing to share this competence with teachers. These ethical codes challenge the researchers' communicative, social and knowledge competence. Researchers need social competence in order to show sensitivity towards persons or activity settings. For participants to trust researchers and really believe in and be willing to contribute to the development of the studied practice, this competence must be honestly and openly communicated (Postholm, 2008a, b; Postholm & Madsen, 2006, Postholm & Skrøvset, in press). Last but not least, teachers must see the need for development and be willing to take part in developmental processes, listening to and using researchers as resource persons.

During an action research process, researchers write log book entries, observation notes, transcriptions and preliminary analyses and interpretations. These texts are the first formulations making up the basis for articles based on the study. It is the researchers' task to write the texts based on the data material collected during the process (Bjørnsrud, 2005). During this writing process researchers also have to take ethical considerations into account, meaning that they have to protect the teacher's privacy and therefore have to be sensitive to what information should be used in the text so that the participants are not placed in a bad light. Researchers can use pseudonyms so that the teachers are not recognized. The teachers can also read the text and eventually approve the content, and if not, they can write their own version and include it in the text (Postholm, 2010). The teachers can also be active writers and co-authors of final research texts. This means that researchers and teachers cooperate closely right up to the moment when the last word is written down. Even if the teachers do not take part in writing the actual research texts, one of the premises is that they can write during the developmental phase when they are planning, undertaking and reflecting on their practice. Observation notes and log book entries can be useful tools in dialogues on practice with researchers. Using these notes as an aid, teachers can retell events from practice with related reflections. The teachers' notes contribute to the researchers' total material collected from the practice field.

To find out how pupils perceive the teaching, information can be collected by using questionnaires or interviewing a sample group. Researchers and teachers can formulate questions or themes for discussion. The teachers know their pupils best, and it is therefore most appropriate that they are responsible for and lead the conversations with pupils. The researchers should also be active in these processes so that they and the teachers have a common basis for making reflections afterwards. In this way both parties develop an understanding of the teaching practice and how it can be improved.

## Concluding comments

Both teachers and researchers can develop an understanding of the teaching practice during action research or a research and development project. During development work the researchers and teachers work together to improve practice. They have a common overarching goal and sub-goals they strive to attain. The participation in such a community can in my opinion be called "legitimate peripheral participation" (Lave & Wenger, 1991). As mentioned, while

the research is being conducted, both researchers and teachers develop their understanding of practice. Teachers are also in a position to gain more insight into the researchers' strategies for collecting and analysing data. In this way both parties can move from a peripheral to a more adequate understanding of each other's practices (Lave & Wenger, 1991). Researchers can then use their developed understanding of the teaching practice in their subsequent research work and in their teaching of teacher students, and the teachers will have more insight into how various strategies can be used to systematically obtain information about their own practice as a basis for further development. In this way both teachers and researchers learn more about their own and the other party's work during action research.

During an action research study researchers can use the same strategies to collect and analyse the data material as in traditional qualitative research. The research will also conclude with a research text that may function as a thought provoking tool initiating and inspiring reflections and discussions on teaching practices, leading to a developed practice. This is also the aim of traditional qualitative research. In action research the aim is to improve practice during the research process; this form of qualitative classroom research produces a high level of quality and utilitarian value.

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