Teachers’ Collective learning for more reliable assessment

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Abstract

Purpose

From around 1990 until today, Sweden has implemented a series of educational reforms. On one level the changes can be described as part of decentralization and democratization while on other hand they can be characterized in terms of centralization and deprofessionalization. What ever you prefer to call these changes they obviously have affected the structure and content of teachers daily work. This means that the teachers themselves must take more responsibility for their assignment, interpret and understand e.g. the content of the new rating system, demands for new assessment procedures etc. Research shows that teachers in Sweden have difficulties in implementing all these changes in their practice in general and specially in those of assessment. Traditionally teachers plan their lessons, different tasks and how they are assessed entirely themselves. This is now slowly changing not at least due the governmental approaches, which mean demands on for more formative assessment practices. This paper is a part of a research project, which took place in Stockholm University in 2013-2014. The project aimed to improve education for teacher students and in service-teachers by creating some new courses in assessment. Courses included practical examples and exercises in some pre-schools and schools and covered whole process of assessment. These examples consisted real classroom and teacher planning events which all were recorded on video. One of these samples consists a series of teacher discussions of formative assessment process. While discussing this process teachers actually plan and create their assessment process. Through these discussions teachers were offered opportunities to develop professional skills in a collegial and mutual cooperation. This paper aims to study how some teachers through collegial and didactic discussions create a process for more formative assessment practice.
Method

A case study is pursued. In this project, video textual analysis of teacher discussions are used as empirical sources.

Findings

Teachers learned through the discussions the meaning and advantages of discussing their work together. They experienced that the whole assignment for assessment got easier to manage by collective learning. The results show that school organizations are in great need of creating tools and arrange structures and give space and time for collegial and collective learning for all teachers in order to create understanding for not at least for the assignment of assessment in order to keep it equivalent and legally secure for the pupils. Collective learning expands and renews teachers' understanding of the formative assessment process.

Research Limitation

The major implication of the study is that it includes only one school and one subject.

Originality/Value of paper

The study makes a contribution to the knowledge about collective or collegial learning in school.

Keywords: collective learning, collegial learning, assessment practice, formative assessment, assignment

Article classification: Research Paper

This paper aims to study how some teachers through collegial and didactic discussions create a process for more formative assessment practice.
Background

During some decades has Sweden implemented a series of educational reforms. On one level the changes can be described as part of decentralization and democratization while on other hand they can be characterized in terms of centralization and deprofessionalization. These changes have obviously affected the structure and content of teacher’s daily work. This means that the teachers themselves must take more responsibility for their assignment, interpret and understand e.g. the content of the new rating system, demands for new assessment procedures etc. Research shows that teachers in Sweden have difficulties in implementing all these changes in their practice in general and specially in those of assessment. (Jönsson, 2011; Lundahl & Folke-Fictelius, 2010). For the assessment and grading highlights Selghed (2006) that teachers in Sweden have gaps in their assessment skills. Traditionally teachers plan their lessons, different tasks and how they are assessed entirely themselves. This is now slowly changing not at least due the governmental approaches, which mean demands on for more formative assessment practices. These changes in assessment process could be preferably a part of teachers’ collective competence.

Several studies have demonstrated that substantial learning gains are possible when teachers use formative assessment in their classroom practice. (Vescio, Ross and Adams, 2007) At the heart of most definitions of formative assessment lies the idea of collecting evidence of students’ thinking and learning, and based on this information modifying teaching to better meet students’ needs. Such regulation of learning processes would require skills to elicit the thinking underlying students’ oral and written responses, and the capacity to make suitable instructional decisions based on this thinking. When the continuation of the teaching is contingent on the information that appears in such assessments additional knowledge and skills are required compared with a more traditional approach to teaching. Today, sufficient knowledge about how to help in-service teachers and pre-service teachers develop their formative classroom practice have some shortcomings in Sweden. In the pursuit of gathering research evidence about the specific content and design of professional development programs and teacher education courses in formative assessment, it is important that we know what kinds of skills and knowledge teachers need to successfully orchestrate a formative classroom practice. There is a need to investigate how teachers could learn the skills needed for more liable assessment in general and more formative assessment particularly. Learning in professional environments is a matter of professional to learn to handle complex tasks by reacting abstract reasoning in practical activities (Abbott, 1988; Bromme & Tillema 1995). Broadly speaking, based on the research found out about learning in profession, conditions for professionals' learning is partly in how to organize to facilitate continuous and lifelong learning, but also in how the learning process works. Louis (2006) argues that the capacity of schools to innovate and reform relies on their ability to collectively process, understand, and apply knowledge about teaching and learning. According to Barnes (2000), a focus on gathering and processing information within and between schools requires the establishment of opportunities for teachers to collectively think and share information on a sustained basis.
Therefore, to revise their existing knowledge and keep pace with environmental changes, schools need to establish structures, processes, and practices that facilitate the continuous collective learning of all their members (Silins & Mulford, 2002). Hattie and Timperley (2007) argue in their research that the formative assessment in the right context is extremely powerful and should be used by the teacher. They mean that one must have a good knowledge of how to develop classroom climate and the ability to provide feedback at the right moment and in the right direction. The specific skills for practicing formative assessment that teachers need to be able to do are: creating the conditions for the formative practice, using student self-assessment, and being able to interpret evidence of student learning and matching instruction to the gap. All these aspects mentioned above are crucial for liable assessment of student learning and performance. This study focuses on the use of knowledge and skills when the teachers practice formative assessment through their collective learning.

Collective learning

Collective, collaborative and collegial learning are terms often used in the context of joint learning processes. When talking about collective learning processes it reveals to an underlying position: namely, that there are learning processes that are not collective. Ohlsson (2008) describes learning as a social process when the individual change their way of thinking about something. Collaborative learning can be considered as a form of joint learning, as a special type of phenomenon, where the starting point is that all learning is based in social activities, but with the collaborative learning processes is meant something beyond the social. (Bruffee, 1993; Dillenbourg, 1999). Collaborative learning is a situation in which at least two people learn something together (Bruffee, 1993; Dillenbourg, 1999). Collaborative learning activities can include collaborative writing, group projects, joint problem solving, debates, study teams, and other activities. The approach is closely related to cooperative learning, which is the instructional use of small groups so that students work together to maximize their own and each other’s learning (Johnson et al., 2008). The difference between collaborative and collective learning is still vague. But according to Granberg & Ohlsson (2016) can this difference consist of that in collaborative learning there is group of individuals trying to learn something together but without to specify or clarify the social context. In collective learning however it is decisive to try to achieve a common understanding. Collegial learning in turn, often used in when discussed schools and teachers, is related to the concept of collaborative learning. Collegial learning can be seen as a combination term for various forms of professional development where colleagues through structured cooperation acquire knowledge from a broad concept of knowledge, which also contains abilities and skills. In general it’s emphasized that peer learning or collegial learning is a method by which a more experienced person helps a less experienced to absorb specific knowledge. Useful methods for peer learning are among other learning study, lesson study, auscultation with feedback and peer tutoring.

The importance of the joint learning synergistic effect is often highlighted in the descriptions of the collective learning (Wilhelmson, 1998; Döös et al., 2001; Döös and Wilhelmson, 2011). Synergy means that collective processes based on interaction and communication, leads to the new common beliefs that had not been possible for individuals to come up with on their own (Granberg, 1996; Ohlsson, 1996; Wilhelmson, 1998; Döös and Wilhelmson 2005, Granberg and Ohlsson, 2005).
Wilhelmson (1998) also draws attention to the importance of symmetry between the participants in a dialogue. Symmetry means that all participants' observations and opinions are given the same weight in the conversation, and to recognize each other experiences as valid. An asymmetric situation means a situation where power positions and opinions consolidation and an evaluative approach prevent an open and common search for new opportunities. Symmetrical relationships can thus be seen as favourable to collective learning.

Habermas (1996) argues that inter-subjective founded collective agreement will not occur from the fact that someone has been manipulated or forced to a particular approach, but requires certain symmetry between the participants. Ohlsson (1996) has developed the concept of collective learning and created a model of the relationship between individual and collaborative learning, which can be used to illustrate the collective learning. Ohlsson (1996) notes, that the collective learning shapes how the individual perceive their practical work and thereby shape the collective learning individual experience potential. It is important for the collective learning that the experiences described in the collective so that the community can jointly problematize and reflect on the experience (Dixon, 1994; Granberg, 1996; Ohlsson, 1996; Wilhelmson, 1998; Larsson, 2004).

Ohlsson (1996) points out the learning dynamic character and the ongoing co-constructing of borders for example, the permissible and the impermissible, is something which can be perceived as a condition for learning processes. There is a critical, emancipatory dimension of awareness rising of these unconscious conditions for learning. If the individual is unaware of its potential and limitations, she cannot respond fully to promote learning. The actors’ understanding and interpretation of the change is significant for the way in which they assume change for fulfilling what they are commissioned to do. The understanding includes the cognitive and psychological processes and shows in turn how the assumption of change can be shaped (Reeve, 2009).

When the understanding of change describes what happens to the professionals and in turn leads to heightened competence, the concept of change can also be viewed as a pedagogical concept. (Lindensjö & Lundgren, 2002; Scherp, 1998; Ohlsson, 2004; Alexandersson, 1994) The understanding of assignment and change can thus be regarded as a learning process, which is in turn essential for active assumption of change. This learning process is deemed to be an important part of the organization staff’s competence development and professional development. (Ellström, 2011; Madsén, 1994; Ohlsson & Stedt, 2003; Ohlsson, 2004; Goodson, 2005).

To sum up the section above and according to Illeris (2007) three factors must be filled within collective learning: a) The group or team must be included in a common situation; b) Participants should have roughly the same opportunities to learn; c) The situation should be of such a character (emotional and jointly) so that it mobilizes the mental energy required to get at a position substantially learning. Granberg (2014) says that it’s also important to develop action strategies for how the collective knowledge can be used to create collective expertise. Prerequisites for collective learning are interaction, communication and reflection.

In addition to the elements included above there are factors that facilitate or otherwise affect the elements included in the process of organizational learning. They are such as structure of the organization, organizational culture, working methods and ways to inform and communicate. (Dixon, 1994; Mülern & Östergren, 1995).
Method

This study was performed in a Swedish Comprehensive School as a case study. (Yin, 1994). The participants were three in-service teachers in English language at grade seven, enrolled in a project of learning more formative assessment process. The study was conducted as a participant observation and videotaped. All teachers were certified and taught in parallel classes. Teachers had no earlier experience of discussing their work together as a group of English teachers. The process started with teachers discussing and planning for upcoming five weeks period of time on teaching and assessment. This planning session and the last, one hour-long discussion over the process were videotaped and observed. The aim of the study was to explore how teachers talked about their subject, learning and teaching and how this was connected to process of formative assessment. The advantages of video methods, terms of data collection are that video compensates for researchers’ inability to transcribe accurately the flow of discourse, proxemics and gesture as events unfold. Video records, however, do not capture everything (Marshall & Rossman, 1999). Since camera frames may exclude vital perspectives. These limitations are offset by the ability to use video records with informants to generate gap-filling data through stimulated recall strategies. (Denzin & Lincoln, 2000). In particular, the plasticity and accessibility of video records permits repeated viewing by multiple parties, as well as slow motion replays and quick manoeuvring to specific interactions. The major implication of the study is that it includes only three teachers, one school and one subject. Teachers approach towards more formative assessment process is analysed by using the aspects and demands on collective learning processes described above in theoretical discussion.

Results

In the investigation three English teachers were discussing their assessment process. Within the final videotaped discussion teachers summarizes their experiences of their teaching, pupil learning and process of assessment in whole. The conversation begins with these three teachers informing each other different solutions to a number of tasks designed for students during the period. Pretty soon the discussion circles just around the details. Teachers argue that they have deficiencies in the knowledge of assessment in general, and especially regarding the formative assessment processes. They point out that it’s difficult to understand the link between summative and formative processes in the assessment. They have understood that the formative process requires more assessment during the process in form of the multiple tasks that have to be assessed. They add that this can be seen as very demanding for them with 25-30 students in the classroom. They are communicating design of their instruction, how their have been using tasks in the classroom and how these have ultimately also affected the pupil learning. They are even trouble shooting in general terms. Then teachers discuss the assessment. Furthermore while discussing the tasks teachers notify and show their interest in each other by sharing advice how to vary teaching through different tasks. This seems to increase their curiosity about each other's way of working.
They describe openly for each other how they usually work with the different types of tasks and exercises. After that the discussion begins to turn on the educational foundations: student learning becomes central. When assessing the data on the issue, the teachers seem to be uncertain and questioning. They wonder if they are doing right. They ask each other if one is to rate all the information or how one should look at the relationship between assessment and grading. Finally they seem to create a common understanding of the assessment process. Teachers are then planning for joint strategies for assessment and express an appreciation for having conducted these discussions. They also consider these discussions as a means and tools to improve their future assessment and evaluation skills. They have a desire to continue to discuss these things together.

Discussion and Conclusions

In the background section of this paper the importance of the understanding of teacher assessment practice was discussed and in theory section the benefits of collective learning were highlighted. The study shows that the formative assessment practice is a very complex, demanding and difficult task for the teachers. In formative assessment practice the teacher also handles unpredictable situations and makes decisions about teaching and learning situations. It is crucial that the teachers really understand the formative assessment process. The first conclusions with this study are that there are possibilities within teacher discussions to bridge the gap between theory and practice in learning formative assessment. It is also crucial that the teachers are open minded and willing to take part in the learning process. To sustain this new knowledge, learning takes place through different processes, both individually and collectively. Individually as individual constructs knowledge with the cognitive processes and collective knowledge as related in a social context, and includes human actions that can be measured and assessed. (Ellström, 2011)

To form the common understanding requires that the individual members offer their individual experiences and thoughts to the others in the group. Learning, both in individual and collective sense, can thus be described as a process of rationalization of action (Ohlsson, 2004). Learning seen in this way is about the interaction between the individual and collective constructioning of knowledge. In this relationship the interaction and communication between individuals and the group is a central part.

Another conclusion drawn in this investigation is that to get skills in collective learning is a must. It demands skills of dialogue and reflection. In the scientific sense reflection means to pay attention to the conditions of one’s own consciousness. To achieve deeper knowledge there is first our own interpretation frameworks to be discovered. (Alexandersson, 1994) Assessment should be examined and reflected upon. Reflection is characterized by internal dynamics, creativity, critical questioning, innovation and reinterpretation of past performances.

According to Wilhelmson (1998); Döös et al. (2001) and Döös & Wilhelmson (2011) one important aspect is the importance of the joint learning synergistic effect. That is that collective processes based on interaction and communication, leads to the new common beliefs that had not been possible for individuals to come up with on their own.
In the interpretation process however, on the more conscious level, a conclusion in this work is that shared understanding and collective thinking was created through continuous talks between the teachers when they openly shared their practice and experiences. Döös and Wilhelmson (2011) studied the link between the individual and collective learning. The results of their research show that the complexity of many modern organizations is dependent on a collective learning process for creating common products. Knowledge exchange is done by discussing different solutions in-group. Group members are bound together by task-based documents on a joint action arena where learning processes occur involving specific things. Before it can consider as collective knowledge it has to achieve the goal (Döös and Wilhelmson, 2011). These teachers were openly sharing their experiences over the different tasks, performance of assessment due the assignment based on the national curriculum demands.

Collective learning processes should be relevant even at the assessment practice at school. The teachers have a common assignment for pupils' learning. This assignment is carried out by many different specialists and with different subjects. According Habermas (1996) inter-subjective founded collective agreement will not occur from the fact that someone has been manipulated or forced to a particular approach, but requires certain symmetry between the participants. Wilhelmson (1998) studied the dialogic encounter as a tool to promote collective learning. Research shows that the greater symmetrical communication groups have, the higher quality can be found on each individual's learning. Wilhelmson mean that before the collective learning can take place, an exceedance of one's perspective need to occur. (Wilhelmson, 1998) The results indicate the importance of the organization of collective learning in the subject groups. This can even lead to schools being well served to go outside their own school organization to create opportunities for collective learning in the subject groups if this is not possible for various reasons in their own school.

The study shows the importance of joint discussions on the formative assessment process. It seems that the collective learning is the way and the key to creating a consensus and strategies on the assessment process. This is probable not enough to be able to learn the new assessment procedures in the assignment. There are surely old foundations of the assessment understanding remaining in the subconscious of the teachers that might affect them. It is necessary therefore support teachers by training, seminars, mentorship and literature that can serve as guidelines and help in the discussions. This new understanding can then be formed into both individual and collective competencies. Since there was no more time to follow teachers’ process of assessment in practise no conclusion can be drawn about how well these three teachers succeeded to implement their new common understanding of formative assessment in their daily work. Lastly, the study shows that teachers are in great need of time to be able to orchestrate their own learning. The principals in Schools are responsible in arranging these forums for their staff in order to improve assessment practice, which in turn and most importantly will benefit the students and their learning.
References


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