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Dette er siste forfatterversjon av artikkelen før publisering i tidsskriftet

Policy futures in education, 10 (2012)4: 402-410

Forlaget versjon er tilgjengelig [her](#)

doi: 10.2304/pfie.2012.10.4.402

Tidsskriftets forlag, *Sage*, tillater at siste forfatterversjon legges i åpent publiseringsarkiv ved den institusjon forfatteren tilhører

Teamwork to Enhance Adapted Teaching and Formative Assessment

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ABSTRACT This article has as its main focus the contextual factors connected with teachers' teamwork. Firstly, it deals with the question of how to create reflections among teachers on the topic of teamwork. Their written answers function as empirical data for researchers and also as contributions to the further professional development of teamwork. Secondly, the authors discuss the content of teamwork in the sense of how teachers as a community might support the individual teacher's work with both adapted teaching and formative assessment.

Intentions and School Cultures Regarding Teamwork

From the 1980s until today, teamwork has steadily evolved in Norwegian schools. Through the work of school leaders and teachers implementing central school policy reforms, it has become evident that the organisation of school-based development has placed an increasing emphasis upon teamwork. We know that the professional development of teachers is most effective when it is mediated through cooperation in communities of practice (Stenhouse, 1975; Hargreaves, 1994). A community of practice constitutes a culture where members of teacher teams share experiences, ideas and perspectives on their work. Respect for the individual co-worker's experiences, where knowledge is shared, may lead to a creative community (Wenger, 1998).

In this article, we will present and analyse different aspects of teamwork in the school as disclosed in teachers' evaluations of their individual and collective work regarding adapted teaching and pupil assessment. As data, we will draw upon the case of a Norwegian primary school where we have collected information about how teachers have used teams in their work with adapted teaching and formative assessment.

Methodology

Beechwood Primary School has about 30 teachers and two classes in each year group. A number of the teachers have been interested in assessment for learning, but the school as a whole has not yet established a common practice on these matters.

Adopting a model inspired by action research and developed by Bjørnsrud (2005, 2009), staff participated in the research individually, jointly in teams and eventually in a plenary session to assess and debate their practice. The model has been called the ITP model (Individually, in Teams and in Plenary sessions). The action research progressed through a limited number of predefined periods where teachers were allocated regular times to meet in their regular teams for cooperative planning and project participation. In accordance with emancipatory action research (Carr & Kemmis, 1986), the meetings provided the opportunity for teachers to collectively reflect upon their own practice. The meetings of the teams constituted, on the one hand, self-governing groups for the discovery of new and untried options for transforming their classroom assessment practice. On the other hand, they were a site for the generation and collection of empirical material concerning 'teachers' individual and collective voice'.

In the first meeting, a research partnership (Tiller, 2007) was established between the researchers, school leaders, a teacher union official and two teacher representatives, and the topic for the action research was agreed: different perspectives on teamwork with regard to

adapted teaching and pupil assessment. The seven teaching teams, the school leaders and the two researchers were to have different roles and tasks within a joint project. The researchers, in the words of Carr and Kemmis (1986, p. 203), adopted the following role: ‘outside facilitators form cooperative relationships with practitioners, helping them to articulate their own concerns, plan strategic action for change, monitor the problems and effects of changes, and reflect on the value and consequences of the changes actually achieved’.

Through dialogues between the school leadership, the school’s project planning group and the researchers, we arrived at five questions concerning pupil assessment and adapted teaching. The questions were as follows:

1. In what ways does teamwork contribute to the learning and professional development of teachers?
2. What characterises your teamwork with regard to adapted teaching and inclusion?
3. What are the teams’ functions in organising for adapted teaching and inclusion?
4. How do you develop good relations between adapted teaching and assessment for learning?
5. How can teamwork be improved with regard to pupil assessment?

Written answers to these questions by individual teachers and teams functioned as a basis for further development work and as a source of empirical data for our research. In the next allocated project period, it was the turn of the individual teachers to reflect upon and formulate a written answer to the five questions.

In the third project period, the individual teachers discussed their answers with their team until a shared consensus was reached on all five questions. Some of the teams elected a secretary. In the fourth project period, each team gave a PowerPoint presentation in a plenary session. The presentations were actively discussed and the audience obviously considered them to be authentic.

After these presentations, the head teacher gave the teams four hours to revise their answers to the five questions and send them to the researchers for further analysis. The analysis by the researchers highlights a critical assessment through an exploration of alternative explanations and a cultivation of doubt regarding one’s interpretation and understanding. When using the ITP model, scepticism becomes a corrective to formulations in the final texts and an essential contribution made by the researchers (Bjørnsrud, 2005).

The researchers presented their final analysis to the staff in a plenary session in the final period. The texts written by the teams demonstrated a strong will and competence to initiate a planned process for adapted teaching and assessment for learning. One of the teams wrote:

The model has functioned well. We all feel we have expressed our main thoughts. Everyone showed enthusiasm and was well prepared for later discussions. In a short time, lots of interesting issues have been brought up, and some of the discussions are suitable for further development. Thoughts have been put into words and, last but not least, they have been written down.

The texts reveal that the teams considered the process to be valuable for their work. One team put it this way: ‘The ITP model is effective and we have been able to discuss matters of immense importance. It has helped us to further professional development’. Such formulations are key indicators of what the researchers associate with ‘the teachers’ voice’ (Goodson, 1992). This includes both the individual and collective voice that is characteristic of professional teachers’ work.

All of the participants were encouraged to accept that the meetings were about developing teaching practice in a research partnership. A main challenge is to arrive at the five questions that will guide the work and also produce processes that give rise to reflection and creativity. The content of these processes relies upon individual and collective contributions (Wenger, 1998). Common responsibility is demonstrated by distributing the holding of the chair, and the writing of reports and summaries. The intention is to promote collectively owned dynamics of school competence development through individual involvement.

Since 2004, the ITP model has been used in close to 60 schools in Norway. The participants have favoured the written texts and the opportunity for discussions to put thoughts into words. The answers form a basis for further professional development.

Teamwork Creates Common Frames of Reference

Through cooperating teams, teachers develop common frames of reference for teaching and other aspects of their work. Previous research by Little (1990) points to factors that constitute cooperative teamwork. One of these factors is *joint planning and preparations*. The teachers cooperate to organise learning for their pupils by discussing teaching methods, working methods and subject content. The amount of individual planning is reduced while taking advantage of colleagues who make suggestions. One of the teams provided support of this:

Teamwork helps us draw upon each other's experiences; we guide each other, exchange thoughts, ideas, frustrations and observations throughout the school day, both in and outside the classroom. We discuss both subjects and pupils, receive suggestions and share thoughts. This gives us an extra drive. It is inspiring and motivating. We are supportive and not alone in our decision-making. The pupils become more ours than mine. The team also contributes to a deeper understanding because we take advantage of our strengths and skills.

The teachers told us that cooperation in teams provides contributions and ideas as to how they can improve their teaching in a subject content and didactic sense. It is considered important that the school leadership is loyal to the staff, follows up their decisions and bases development work on broad agreement. Some of our informants referred to the problem of 'balkanisation' (Hargreaves, 1994), or a strict division between teams.

Another factor cited by Little (1990) is that teamwork contributes to a *common language*, so that teachers develop a more unified perspective of their work. A common language may also support reflection on their practice and create new forms of action. The concepts used in conversations between colleagues constitute meaning. A community of practice and use of a common language create common points of reference for organising learning and for the teams' professional development.

The texts about teamwork in Beechwood Primary School show that individual and teambased reflections constitute an instrument for creating common understanding. One of the teams stated: 'we need to have a common understanding of the process we are in; it will make our cooperation swing'. One of the teams at Beechwood said the process had been successful because it was a matter of importance for them. They added: 'we have put words to things in a new way also by writing down our thoughts'.

A third point highlighted by Little (1990) is that teachers learn from and contribute to each other's practice through classroom observation. This is an important part in colleague-based counselling. This point was emphasised in our project:

It can be really inspiring to watch each other in action. We receive suggestions to improve our teaching, both in terms of subject content and methodically, especially when we do topic work or some kind of team teaching. It ensures quality.

This is an essential point, which shows that the teams' tasks are linked to observations and guidance in practical situations. This can be seen as being in accordance with Little's (1990) fourth point, which deals with colleagues supervising each other in the trial of new ideas and practices in the classroom. This was not organised in a systematic manner in Beechwood Primary School. The exchange of ideas appears distinctly, however, as well as the usefulness of fellow teachers' experiences.

The Organisation for Economic Co-operation and Development's Teaching and Learning International Survey (TALIS) report (OECD, 2009) states that teacher teamwork is well established in Norway as well as internationally. Teachers rarely observe each other's work, however, and such observations are rarely discussed among staff. In our school, this seems to be different. Classroom observations are especially linked to professional development by sharing methods. The teachers referred to this as a means of ensuring quality. However, some of the teams wanted this to be organised in a more systematic manner.

Teamwork as Individualism and Collectivism

Research on teachers' teamwork has often focused on the relations between individualism and collectivism. In a normative sense, the individual characteristics of the profession have to some extent been regarded as less desirable than the collective ones (Hargreaves, 1994). The concepts of individualism and collectivism belong together when one deals with the tasks connected to teachers' teamwork. The concepts make it obvious that teamwork includes the single teacher's work with the pupils' learning and assessment, while at the same time belonging to a collective remains an essential factor in this work.

A survey by Dahl et al (2004) shows that the individual and collective aspects of the teacher's profession are two fundamental and complementary dimensions. A balance of the tasks and roles between these dimensions will therefore render teachers' work visible. Sometimes the individual and collective roles merge. This was an observable characteristic of teamwork in Beechwood Primary School when teachers taught in the classroom in pairs.

With regard to the collective tasks, the teaching teams displayed a common responsibility for planning topic work and organising both colleagues and children. They had a common responsibility for the optimal learning and assessment of their pupils, and worked to form a united pupil group. Moreover, they planned parent meetings. All of the teams pointed to collective tasks concerning planning and teaching. There were different traditions between the teams, however, when it came to teaching. The teachers seemed to have lots of individual tasks related to the learning and assessment of the individual pupils, but the tasks were related to and dependent upon the collective work. There seems to be no distinct division between them.

The above-mentioned TALIS report (Organisation for Economic Co-operation and Development, 2009) documents that teamwork tends to deal overwhelmingly with practical issues connected to the organisation and the division of work tasks. The argument made is that this is one of the main reasons for a lack of connection between teamwork and an improvement in the quality of teaching and assessment. In our school, the cooperating collectives (teams), on the other hand, allocated time for the discussion of learning and teaching strategies. Planning and the organisation of teaching were also often done jointly. Individual work included practical preparations in accordance with the agreed-upon tasks and coordinating. The texts we gathered state that collective work could be extended if there were more staff, which also would lead to more frequent observations of colleagues' work.

Further action research needs to be undertaken on raising awareness about which tasks should belong to the individual or the collective. This may lead to a better understanding of the relations between matters that are discussed collectively and implemented individually, and how this relies upon the individual teacher's ability to attend to adapted teaching and assessment for learning. As we shall see, this became a main focal point in the work of Beechwood Primary School.

Teamwork for Adapted Teaching

Adapted teaching is a stated premise and principle for teaching practice in Norway. It is clearly stated in the Norwegian Education Act. How to organise adapted teaching is an immense challenge for teamwork and a continuous process for both teachers and school leaders. At Beechwood, all of the teachers highlighted the importance of developing common frames of reference or understanding, a process that occurred in teams. Discussing the teaching consequences of how adapted teaching was understood conceptually strengthened cooperation in the teams:

Professional competence, in-service training and common understanding of the terms adapted teaching and student assessment are extremely important ...

Generally, our team has had a steady focus on adapted teaching, organising and inclusion. In certain periods, organising has been our main focus.

A study published by the State Auditor (2006) has some interesting features regarding adapted teaching and teaching practice. In this extensive survey, 507 school heads from primary and lower secondary schools point to teacher competence as the most important factor for organising adapted teaching. Head teachers consider their teachers' subject competence as

satisfactory and yet add that subject competence is not enough. In addition to subject competence, the teachers at Beechwood emphasise the importance of pedagogical factors when organising for adapted teaching, and thus give support to the government:

Adapted teaching is characterised by variations in exercises, content, work methods, teaching aids, intensity and organisation. It depends on choosing actions conscientiously in order to promote learning. Teaching practice should not be singularly about subject content or teaching methods, but also take account of students' age and qualifications. Different competence levels and the learning environment must be considered as resources for optimal teaching and learning. (Ministry of Education, 2006-2007, p. 76)

This quote shows some of the complexity regarding teaching teams and adapted learning. Adapted teaching concerns most of the work in schools to support learning and development, and the teachers stated clearly that this was something in which they wanted to increase their competence:

We all experience that the pupils' potentials and the subject matter itself represents challenges regarding our provision of adapted teaching. We wish strongly to be given the time to develop and vary our teaching methods, and to share experiences regarding pupil progression.

After finishing the ITP model, the school management and two of the teams confirmed this. The teachers considered it natural to focus on improving teaching methods, adjusting subject matter and taking pupils' potential into account.

A Change towards Formative Assessment

The Organisation for Economic Co-operation and Development (2009) has estimated assessment to be perhaps the most important contributing factor in the raising of standards and improving pupils' learning outcomes. If these goals are to be reached, and also the establishment of sustainable and lasting assessment cultures, then fundamental changes in teaching practice and teacher experience are required. In this connection, current assessment practices do not need to be strengthened or further developed. Instead, a fundamental change from summative to formative assessment practice is essential, or, in assessment terminology, a move from assessment of learning to assessment for learning.

In recent years, the central authorities in Norway have had a focus on assessment. It began with the two-year project 'Improving Assessment Practice' in 2007, which included 77 primary and secondary schools. The project teachers trialled prespecified national assessment standards; alternatively, they developed their own and trialled them. The participating schools experienced the need to improve teachers' assessment literacy. The project explored the extent to which national standards might represent a more equal and fair assessment practice throughout the country (Engh, 2009; Throndsen et al, 2009). Meanwhile, in parallel with the piloting of national assessment standards, national regulations on assessment were changed both in 2007 and 2009. The changes were largely in accordance with the ideas to be found in the United Kingdom's Assessment Reform Group. In the autumn of 2010, the Norwegian Directorate for Education and Training followed up this work by launching a presumptive four-year policy, during which about half of all municipalities in Norway will be supported financially in the drive to introduce assessment for learning.

Generally, the teachers at Beechwood Primary were interested in a further development of their professional competence in assessment, provided that their working days were structured in such a manner that sufficient time was made available. A majority said that teamwork was timeeffective, but not necessarily to the extent that it was a necessary prerequisite to fulfil their expectations. Their levels of ambition were high; they expressed a genuine interest in becoming professional assessors (James & Pedder, 2006). We found no evidence of resistance to the changes in assessment regulations. On the contrary, several of the teachers positively defended these changes.

Although the teachers were organised in teams, their individual freedom was significant with respect to assessment, with the result that assessment practices were numerous. Some of the teachers were extremely loyal in following the assessment regulations, studying literature on formative assessment and attending conferences on assessment. Others were openly curious as to the practice of their colleagues, but not sufficiently motivated to change their practice decisively. This was despite the fact that all seemed to have been influenced in some way or other by the national trend towards assessment for learning. A small minority played a 'wait and see' strategy, waiting for the focus on assessment to slow, but neither we as researchers nor the school leadership discovered active resistance to this new assessment policy.

Norwegian educational authorities have thus sought to increase pupils' learning outcomes through assessment for learning. The teachers at Beechwood Primary School expressed that they were in agreement with this goal, but their concerns were more about daily teaching, the learning process, knowing the individual pupil and viewing pupils as learners who should be happy and motivated to learn. They realised that an assessment for learning paradigm exerted an influence on most aspects of their teaching practice and continued to support the argument that the changes would improve the quality of their teaching (Black & Wiliam, 1998, 2006; Black et al, 2004; Stobart, 2008).

Teaching Teams, Adapted Teaching and Assessment for Learning

Cooperation in teams at Beechwood Primary School was considered to be quite essential for their daily assessment practice, not only as a means of creating a common practice, but also as an arena for further developing the integration of teaching and formative assessment methods (Bjørnsrud, 2009).

By trialling different ways of organising year groups, the teachers were able to free up more time to spend with individual pupils – this was a factor that they considered to be a necessity for good formative assessment. Hence, we can see that they established a close relation between adapted teaching and formative assessment practice. In an interview, one teacher expressed it as follows: 'I do not understand that it is possible to reflect on the term "adapted teaching" without including pupil assessment. They represent two sides of the same issue'. This realisation is probably not representative of all the teachers, but the meetings held with the teachers seemed to indicate that more teachers were on their way towards such a realisation (Eng & Høihilder, 2008). As Perrenoud (1991, pp. 88-89) has stated, it is not possible to realise formative assessment by superior undertakings alone: 'If one is bent on formative assessment sooner or later one must face the fact that no overall adjustment can meet the needs. The only appropriate answer is differentiated teaching'.

With a positive attitude towards teamwork and a desire to actually increase formal qualifications in teamwork, a majority of the teachers expressed that they would like to spend more time discussing educational practice and sharing knowledge and experiences in plenary sessions. One of the teams wrote: 'It would be nice if we could improve our opportunities to exchange methods and experiences with the forms we created for pupil assessment'. The team members believed that their teams might overcome efforts to develop a common practice. By this, they meant that they could extract the very best from each single teacher and thus improve the general practice of the team (Little, 1990). Furthermore, they asserted that cooperating teachers would ensure that the allocation of class teachers would be less decisive for the learning experience of pupils.

The teacher's ability to give constructive feedback is an essential activity in formative assessment. The learning goals should be shared (Clarke, 2004), and feedback should be both instructive and motivating (Black & Wiliam, 1998; Hattie & Timperley, 2007; Stobart, 2008; Hattie, 2009). In our school, the teachers desired more insight into feedback. One team wrote: 'How can we become better at recognising and acknowledging the competence of pupils, especially those who have low degrees of attainment, and give all the pupils the best feedback to optimise their learning?'

The teachers insisted that concepts like pupil participation, self-assessment, peer assessment and the pupils' responsibility for their own learning were quite essential in their daily teaching practice, but added that unforeseen classroom events often made them hard to

implement. Still, they did not believe that these concepts were imperative to pupils' conception of their identity as learners. A majority believed that assessment for learning could increase motivation for pupils as well as teachers (Harlen, 2006; Smith, 2009).

Summary

Our study has not resulted in a completely unambiguous understanding of what is considered necessary to create a decisive change in the assessment culture, but it indicates that there is a certain consensus in the understanding of what is needed. Teams play an essential role in developing a systematic and well-founded understanding of assessment practice. The teachers admitted that there were substantial variations between their colleagues' experiences and practice, and that team discussions were necessary in order to discuss crucial issues regarding the assessment culture of the school. Of the central topics, the following can be mentioned: What are the central characteristics of good formative assessment? What kind of common practice do we want to accomplish? How can learning criteria best be used? To what extent can the pupils be involved in planning and assessing their own learning? How can we develop a systematic self- and peer assessment? As can be seen, the teachers all valued their colleagues as significant and competent persons in this endeavour.

These questions reflect a genuine learning perspective on teaching. There is a chance that assessment criteria, for example, might become an instrumental tool, narrowing the learning path and resulting in what Harry Torrance (2005) calls 'criteria compliance'. Specific criteria may lead pupils to know what the teacher appreciates, thus becoming an instrument that is made use of not in order to learn, but in order to receive praise from the teacher.

The contribution of external experts is also a point of discussion, and it was also the case in our research on teams. The teachers at Beechwood Primary recognised the importance of making provisions for sharing experiences and inviting external specialists to offer feedback at different stages in the project (Black et al, 2003; Stobart, 2008). This last point is also emphasised by Daugherty and Ecclestone (2006) and Black and Wiliam (2006), and is an essential component in the Scottish project 'Assessment Is for Learning'. The Norwegian Directorate for Education and Training also insists on external experts for schools participating in its national assessment initiative.

In this project, we wanted to find ways of strengthening the teamwork to function as a 'community of learning' or 'community of practice' (Wenger, 1998). The model proposed seeks to exploit the innate resources in the school as a learning organisation. It presupposes a dialogical interpretation of concepts, a cultural collective where meaning is constituted by common consent and a focus on pupils' optimal learning. This learning is further enhanced when teachers master their communication with pupils in accordance with the pupils' learning processes, in such a way that the pupils' motivation and goal orientation are aroused and their metacognitive strategic abilities are stimulated (Hattie, 2009).

The ITP model (Bjørnsrud, 2005, 2009) is adjusted according to the school's possibilities for realisation. There is a condition for the potential and applicability of the ITP model that the teachers' texts and their presentations and discussions in the plenary session will be used for future policy development in the school. The issues and questions in the study are developed and decided upon in cooperation with the school management and planning group. The work process with the researchers, teachers and the school management is a research partnership progressing through five work periods. This article has outlined the different roles of the participants in the research partnership.

An essential finding is the need for common frames of reference related to what tasks belong to the individual work of the teacher and the collective, represented by the team. As with Hargreaves (1994) and Dahl et al (2004), the teacher's role should include this important division when working with adapted teaching and assessment for learning. In a community of learning, learning and development must take place on all levels. The staff's experiences have to be shared and discussed openly in order to improve their methods continually. The school as an evolving learning organisation will benefit from a systematic exchange between the individual and collective levels, and from all teachers trialling different practices to expand their experiences, as opposed to inviting stagnation. At stake is the creation of an optimal balance

between individual and collective work. This will lead to an improved awareness of individual and collective roles, and of the actions that are necessary for realising adapted teaching and pupil assessment. Put differently, individual and collective work can thus support each other and lead to professional development and increased pupil learning.

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