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Interdisciplinary Collaboration as a Prerequisite for Inclusive Education

Abstract

This article reports on findings from a research project on interdisciplinary collaboration between mainstream school teachers and special school teachers. The aim of the research project has been to examine the knowledge of special school teachers and how this knowledge can contribute to the development of an inclusive learning environment in mainstream schools. Not as a simple task of transferring knowledge, but as a process of transforming knowledge through interdisciplinary collaboration and co-teaching. The design of the study is inspired by the notion of participation within action research as a research approach. Thus the thick data generated from reflective activities in the study design is analyzed within a narrative and practice directed strategy of analysis.

Key words: Interdisciplinary collaboration, co-teaching, special schools, inclusive education.

Introduction

Inclusive education has been the guiding ideology in Scandinavian countries for the last few decades. Thus, in the Danish context, creating inclusive education has become a highly prioritized national agenda, and the international framework and ambition of inclusive education has informed general school policies (Tetler 2015). The Danish ‘case’ serves as a radical example of the dilemma between “the inclusion challenge” within the schooling system (Allan 2008) and an increase in the number of students referred to special educational teaching (Tomlinson 2013), as well as an increase in the number of students diagnosed (Langager 2014). A law passed in Denmark in 2012 pushed toward inclusion by calling for a reduction in the numbers of students in segregated settings (from 5.6% of students in 2010 to 4% by 2015). This law has been defined as a response to an increase in the number of students who are given a clinical diagnosis and placed in segregated settings (special schools and special classes). This reform has been followed by a bureaucratic change of the concept of special needs in 2013. Students with special needs are defined as students with a need for special support for more than nine lessons weekly. It also promotes the inclusive agenda because students who are defined as having a need for support for less than nine lessons a week are now taught in mainstream settings. The support is included in the organization of mainstream schools: Resource centers, social educators, various counsellors and other groups of professionals. The overall political ambition is to encourage mainstream schools to be more inclusive.

This article reports on findings from a research project on interdisciplinary collaboration between special school teachers and mainstream school teachers. The project is situated within

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1 With regard to ADHD there has been more than a tenfold increase in ten years in the number of people (children, young people and adults) being treated with medicine for ADHD, and the number of people with the diagnosis ASF has increased by 70% over 15 years (Langager, 2015).
the political frame of transition for mainstream schools toward inclusive education. The study has focused on examining – from the perspective of special school practitioners – how they can take part in the process leading toward a more inclusive school system.

The Danish context: Support systems

It is a shared assumption in the Danish discussion that schools and learning environments must develop in order to be characterized as inclusive learning environments. And as a part of this, it is an assumption that mainstream teachers and schools have a need for ‘specialist’ or ‘special’ support. Some resource persons and specialized professionals are employed at schools as specialized colleagues with specific knowledge and training with regard to students in need of special support, or with knowledge and training with regard to the development of inclusive learning environments. In Denmark these are called inclusion counsellors (internationally they are called SEN coordinators). Specialized professionals are also affiliated to mainstream schools as visiting consultants (for instance as educational psychologists) working with specific issues regarding individual students.

Special schools are placed in the middle of these different types of support systems and have not yet found their role in supporting the process of building inclusive learning environments in the school system. However, some teachers and headmasters from special schools have created knowledge centers at special schools. These centers consist of teachers from special schools who work part-time as consultants for mainstream school teachers. In the empirical part of the research project we have examined some of the experiences gained in the consultative practice of these teachers.

One very significant finding in the research project, and thus an argument in this article, is that teachers with working experiences from special schools have something important to offer to mainstream teachers in their efforts to teach a diverse range of students. Special school teachers are not trained as psychologists and psychiatrists to know about diagnostic categories, and they do not work in mainstream schools with general teaching. Special school teachers are trained as teachers (knowing about didactics and about teaching subjects), and they have developed competences in teaching diverse classrooms and thus in working professionally with individual students in challenging learning situations. They combine knowing about teaching and knowing about differences between students. Special school teachers have the potential to become important partners in interdisciplinary collaboration between different professionals with the aim of developing inclusive learning environments.

Theoretical background: Special and general knowledge

In the research field on inclusive education and special education (Florian & Linklater 2010; Norwich 2013), it has been stated that ‘the expertise of colleagues who specialize in learning difficulties, and those from related disciplines, can be used to support teaching and learning in the mainstream classroom’ (Florian and Linklater 2011, 371). This interdisciplinary collaboration supports local professional development in mainstream schools as it builds confidence and broadens teachers’ repertoire of responses to difficulties that students experience (ibid.). In research on the relation between achievement and inclusion (Farrel et al. 2007), teachers’
concerns about their ability to cope with troubled and troublesome children in mainstream schools are discussed. It is stressed that teachers’ concerns need to be taken seriously. “Under certain circumstances, the presence in mainstream schools of students whose behavioral difficulties otherwise have led to placement in special setting does indeed impact negatively on the learning of other students” (Farrel et al. 2007, 142). Slee asserts that the closure of special schools implies a diminution of the importance of providing the best education possible for children, and that “children who migrate from special schools to their neighborhood schools too frequently experience marginalization” (Slee 2011, 41). Interdisciplinary collaboration can be seen as a prerequisite for positive learning outcomes in inclusive settings (Murawaski 2008), and thus as an important strategy with regard to supporting teachers in dealing with the diversity of students. Interdisciplinary collaboration may be a prerequisite for approaching inclusion in the educational system.

In the research project on which this article reports, we have also examined (in a practical setting) how special school teachers’ knowledge can contribute to the development of inclusive learning communities in mainstream schools.

What is special about special knowledge?

The discussion about knowledge and teaching in special schools has a history. Historically, special education has been organized around types of impairment and in segregated learning environments (special schools and special classes). The sociological critiques of special needs education have emphasized the problematic sides of segregated provisions: injustice, marginalization, stigmatization and exclusion (e.g. Booth and Ainscow 1998; Slee 2011). In this discussion the assumption has been that teachers who work in specialist forms of provision draw on specialist teaching methods (Black-Hawkins and Florian 2012) and emphasize diagnostic-prescriptive teaching and different kinds of tests and interventions. Special education has been problematized for drawing primarily on a psycho-medical knowledge base (Hick and Thomas 2008). The research debate on special and inclusive education rests on the assumption that the practice of teaching in special education and in inclusive education is seen as two different practices and types of professional knowledge base. This division of special education (and assumptions about knowledge) and regular education (and assumptions of knowledge) has led to an understanding that knowledge and teaching practices in segregated learning settings are very different from knowledge and practices in regular settings. These assumptions are challenged in recent studies of teachers’ practices in both segregated and inclusive settings (Norwich 2013; Hedegaard-Soerensen 2013). In these studies a clear-cut boundary between special educational teaching approaches and teaching approaches in mainstream school settings is not confirmed. The knowledge of special school teachers is founded on many theoretical perspectives which are combined into complex patterns in response to learning situations in everyday classroom teaching (Hedegaard-Soerensen 2013; Hedegaard-Soerensen & Tetler 2016). Teachers in special schools do not only work from diagnostic prescriptive approaches. They are experienced in working professionally with individual students in challenging learning situations. This is in line with Reindal’s (Reindal 2008)
understanding of the phenomenon of disability, which connects individual and social aspects in the understanding of students and the design of provisions. In the Nordic countries this approach to disability research and to special needs education is called ‘the social relational model of disability’ (Norwich 2013, Hedegaard-Soerensen 2013; Reindal 2008). It involves an understanding of teaching approaches and provisions that includes interactions between the inclusivity of school systems as well as responses to specific individual needs (Reindal 2008, 140-141).

In our study on interdisciplinary collaboration we have both examined what is special about the knowledge of special school teachers and how these teachers can collaborate with mainstream school teachers in developing inclusive learning environments. In this article we emphasize the process of collaborating and will shortly report on findings about knowledge. We have found – aligned with the above-mentioned research – that the practice of teaching in special schools is not very different from the practice of teaching in mainstream schools. And at the same time we have found that special school teachers have craft knowledge (Black Hawkins and Florian 2012) that can contribute to mainstream school teachers’ reflections about specific lessons and in the development of teaching (Norwich & Jones 2012). Special school teachers have knowledge about how to deal with individual needs by differentiating teaching, and as a part of this they are experienced in balancing the community (whole-class activities) and the individual student (Corbett 2001).

Support systems

The use of teaching assistants in schools is part of a growing international trend toward the use of paraprofessionals in various areas (health and social care, for instance). Paraprofessionals are used in schools to support learning, but they are not part of mainstream schools in Denmark. It has been decided by law (2014) that childcare professionals should be used in mainstream schools instead of teaching assistants. However, in special schools teaching assistants have been part of the professional community for decades – alongside childcare professionals and teachers. In Scandinavian countries it has been discussed whether social workers should be part of mainstream schools’ support systems offering targeted support to students experiencing problems (Kyriacou et al. 2013). In a research project on the role of teaching assistants in mainstream schools in the UK, Webster et al. (2010) show that the effects of teaching assistants is best understood in the context of wider, interlinking factors, related to administrative and political decisions about teaching assistants rather than decisions made by them (Webster et al. 2010, 319). The main tasks of teaching assistants involve supplementing teacher input and providing more opportunities for one-to-one teaching and working in small groups. They also work outside the classroom with students who are not making the expected levels of progress (ibid. 320). Teaching assistants have a positive effect in classrooms in terms of reducing off-task behavior and allowing more time for teaching provided by the teachers. The research on teaching assistant support contains little evidence about improvement of students’ positive approaches to learning and of students’ academic achievements. One explanation of this is that teaching assistants have qualifications at a lower level than teachers. It is stressed that teaching assistants should be better prepared by teachers (and in collaboration with them) prior to lessons, and that more attention should be given to pre- and in-service training.
In international research (Hansen et al. 2014) interdisciplinary collaboration is seen as a prerequisite for positive learning outcomes in inclusive settings (Murawaski 2008). Close collaboration through co-teaching is recommended between resource persons and mainstream teachers as it influences the development of inclusive learning environments, leading to shared responsibility for planning, teaching, and evaluating teaching. The English researcher Ann Edwards reflects on this in this way: “Relational expertise is therefore based on confident engagement with knowledge that underpins one’s own specialist practice, as well as a capacity to recognize and respond to what others might offer in local systems of distributed expertise” (Edwards 2011, 1).

In international research on collaboration (Hansen et al. 2014) a huge variation is found with regard to what professionals collaborate about and how they organize and practice collaboration. An overall distinction is mentioned between the direct model and the indirect model. In the first model the support person works directly with the student, and in the second model the support person works with the team of teachers with a view to developing the teaching and learning community. With regard to the indirect model of collaboration, international research shows differences in the practice of supporting teachers. In the ‘advisory model’ the support person offers advice and answers specific problems; in the ‘consultative model’ the support person contributes new understandings and perspectives pointing at different solutions; in the ‘model of inspiration’ the support person offers new knowledge and understanding and in collaboration with the teacher inspires the teacher to find new approaches to teaching; and finally in ‘the model of professional discussion’ the support person facilitates analysis and reflection (Gottlieb and Rathmann 2014). In the international research literature on collaboration, ‘the model of professional discussion’ is the recommended use of support in mainstream schools. This way of collaborating contributes to the development of inclusive learning environments and to success in learning outcomes for students (ibid.).

Furthermore, in the international research on collaboration the concept of co-teaching is embraced as a prerequisite for positive learning outcomes for all students (Murawski & Lochner 2010; Murawski 2008). Co-teaching is defined as ‘true collaboration’ (Murawski & Lochner 2010, 1) between general and special teachers. Co-teaching requires special and general educators to co-plan, co-instruct and co-assess on a regular basis. Educators with varying areas of expertise will then collaborate to teach in the same classroom. The research on co-teaching states that this kind of collaboration will benefit all students socially, behaviorally and academically. “These teachers collaborate with one another to teach students with and without disabilities in the same classroom, focusing on the use of collaborative and differentiated instructional strategies to increase the accessibility of the content for all learners” (Murawski & Lochner 2010, 2). The above-mentioned indirect model of collaboration and the practice of co-teaching constitute the theoretical background for the design of the project reported on in this article. In the next section we will present the methodological approach and the design of the project and thus how collaboration is examined.

The research design and methodology
The research project has been designed as a joint venture between researchers and participants. In this sense, the project connects to and is influenced by action research and the notion of participation within this research approach (Reason & Hilary 2011). The methodological approach of the project has been to make a productive interplay between workshops and what we could call ‘development through self-reflection’ (Bjoernsrud 2008, 38; McNiff and Whitehead 2005). Action research is understood by Bjoernsrud as a ‘trade-off’ between practice and research in which the researcher uses analytical approaches – concepts and methods – in order to deliver a description of practice as well as problems and dilemmas in practice to practitioners for joint discussions, reflections and analysis. In this approach, practitioners co-investigate their own practice by deducing a deeper understanding of it, and based on this they will be able to develop theories about their practice (ibid. 39). The goal is both to generate theory and to improve practice. The scientific approach is narrative and directed towards practice (Barth 2004; Flyvbjerg 1991). The data generated in the project design consists of narratives on specific and complicated learning situations in the practice of teaching. The narratives are produced in the process of collaboration between mainstream school teachers and special teachers, and are analyzed by the research group and by the teachers taking part in the research project.

Teachers and principals from seven special schools have participated in the research project. These schools teach students with a variety of diagnoses: ADHD, ASF, SLD (severe learning difficulties) and MLD (moderate learning difficulties). The schools were selected for the project because they are all in a process of developing into ‘knowledge centers’ – meaning that they have been collaborating with mainstream school teachers to develop inclusive learning environments for at least one year. All the schools participated with great interest and commitment. The empirical data in the project was produced in five workshops with the teachers and principals taking part. These were all held in 2014. The workshops consisted of theoretical presentations by the research group, discussions about the political and organizational changes affecting the special schools involved, structured presentations by the teachers, discussions about specific issues involving practitioners and researchers, and presentations by the teachers based on their examinations of collaborative practice. These activities were documented and are used as data consisting of narratives, posters, protocols, notes from discussions, and presentations by the participants.

The project consisted of five workshops involving the following activities: In the first workshop the teachers and principals were asked to unfold the characteristics of their special educational knowledge. This was facilitated by various exercises planned by the research group. In the period between the first and second workshop, the participants were asked to document their special educational knowledge by documenting and evaluating the practice of teaching with the use of a tool for evaluating the quality of teaching in special education. This tool consists of seven indicators and a variety of sub-indicators for quality in the practice of teaching (Hedegaard-Soerensen & Tetler 2016). The participants in the research on collaboration evaluated their teaching practice in special schools and presented the dominant professional dimensions of their practice. In the second workshop the focus was on identifying the
differences and similarities between teachers’ knowledge in special schools and in mainstream schools. The participants presented their documentation and evaluation of their teaching practice, and the presentations of all the participants from different schools were discussed. The presentations and the discussion were recorded and used as data. For the preparation of the next workshop, the teachers taking part were presented with narrative documentation as a way of collaboration with mainstream teachers about challenging situations in practice. The special school teachers were told to produce a narrative together with a teacher from mainstream schools in the period between the second and third workshops. In the third workshop an analysis of the data from the second workshop was presented to the teachers taking part. This analysis focused on the characteristics of the practice of teaching in special schools and on the similarities and the differences between the teachers’ knowledge. From the outset of this analysis, the participants were asked to discuss the differences. This discussion was recorded and transcribed and used as data. Furthermore, the process of collaboration with a view to producing a narrative on a challenging situation in practice was presented by the teachers taking part. They focused on the process of collaborating about a narrative. By way of preparation for the next workshop – and with a view to examining collaboration – the special school teachers were asked to analyze and reflect on the narrative together with the mainstream teacher, and to develop solutions for the challenging situation in practice. The narratives and the presentation of the process of collaboration are used as data in the project. The fourth workshop focused on interdisciplinary collaboration – with a specific focus on the consequences for collaboration of various structural conditions in mainstream schools and special schools (for instance the number of students. In special schools there are typically eight students in a class, while in mainstream schools there may be up to 28 students). Finally, in the last workshop, the structural conditions for special schools were discussed and the preliminary analysis produced by the research group was presented and discussed.

Analysis

The general theoretical and methodological inspiration for the analysis of data is the theory of Fredrik Barth (Barth 2004). In Barth’s perspective actions are embedded in ‘the social’, which means that people make decisions and act (in situations) on the basis of values, understandings and the opportunities they see in the given moment and situation (ibid. 14). In this sense, circumstances – including theories – and the way they are perceived by teachers (for instance) are present and embedded in interactions between people (social encounters between students and teachers, for instance). According to Barth, people’s way of defining situations is central to how they act in a given situation. This means that narratives of situations in practice describe the interaction between students and teachers and they include teachers’ definition of situations and their in-the-moment decisions (Hedegaard-Soerensen 2013). The teachers taking part in the project have produced narratives about challenging situations in practice and analyzed these narratives together with teachers from mainstream schools. This was one way of organizing collaboration and creating data in the project. So the data on which this article focuses consists of seven narratives and seven analyses as well as workshop discussions about collaborating through a narrative approach. In this sense, the project draws on action research as a way of generating data close to situations in practice. Our approach is grounded on a
A participatory approach that also brings together actions and reflections (Brydon-Miller et al. 2003; Hedegaard-Soerensen & Tetler 2011). Having a participatory worldview connects to the notion that knowledge is socially constructed jointly by the professionals and researchers in question. The knowledge of practitioners and the knowledge of researchers were employed in the process of researching knowledge and collaboration, with the practitioners presenting their thoughts and work from their ‘self-investigations’ and the researchers presenting more general knowledge in order to facilitate discussions and analysis of knowledge and collaboration. In the analysis we have focused on special school teachers’ understanding of their practice, including both the practice of teaching and the practice of collaborating.

**Teachers’ narratives and analyses**

The following is a narrative produced by a special school teacher participating in the project. This narrative was produced during and after a specific lesson in which the special school participated alongside the mainstream teacher. The focus of observation is negotiated before this lesson in a meeting. In this specific example the focus for collaboration is classroom management, including explicitness, predictability, appreciation, and the practice of differentiating teaching. This is the narrative:

*It’s morning in first grade. Students and some parents are in the classroom. Some students are playing and others are with their parents. 16 students in the classroom are asked to get ready to participate in the lesson, and the parents are leaving. At 07.50 the lesson begins. The teacher asks for attention and tells the students to find a book and a pencil as they are going to read. The students read different books depending on their ability and level. Some students read alone and others read aloud for each other. There is a lot of noise in the classroom, with the students walking around, running, talking and laughing. The teacher asks quietly for silence. Some students look at the teacher and don’t stop talking, walking and laughing. Some just continue to read or talk without noticing the teacher. One student doesn’t read. He is very noisy and restless, and one student is crying. Another teacher enters the classroom. Her presence results in less noise. The teacher who has participated in the lesson from the beginning leaves the classroom together with the student who is crying. At 08.10 the bell rings. The activity for the students changes. All the students are asked to stand on a carpet. It’s December and the students are supposed to share stories about Christmas and eat cookies. Some of them are expected to open presents. The noise and unrest continues and it’s difficult for the students and teacher to hear what the students are saying. The teacher asks for attention several times as the noise continues.*

After the lesson the teachers meet and negotiate how to analyze the narrative and improve their practice of teaching. In the first meeting two days after the observation the teachers meet to discuss the following question: What challenges can the teachers identify, what works, and how can the practice of teaching be improved. They agree on a process of observation, documentation, evaluation and further observation, documentation and evaluation. They
collaborate for four months regarding changes in practice, sharing ideas about adjusting their teaching practice. They agree that the following things are important: Short and precise communication by the teacher, more direct and clearer messages to the students, follow-up and feedback on the work done by students, and better planning with regard to changes of activity during a lesson.

Research findings: Knowledge sharing and formalized collaboration

The analysis focused on opportunities and barriers for a systematic and formalized process of knowledge sharing. The indirect model of collaboration and co-teaching is a point of departure for the research project, and is incorporated in the research design. This is a model of collaboration in which the support is directed towards the school and the teacher and not directly as an in-class and individualized support of the student. The teachers taking part (special schools and mainstream schools) have produced narratives together on challenging situations in the classroom and in the practice of teaching, as well as reflecting on and evaluating the narratives together. The following analysis has focused on the practice of collaboration and on the opportunities and difficulties in co-teaching and in collaborating.

The practice of collaboration

Gottlieb and Rathmann (Gottlieb and Rathmann 2014) identify four different categories of collaboration: 1) Giving advice and prescribing solutions to specific problems, 2) counselling directed toward specific solutions and new understandings of and different, new perspectives on problems, 3) offering inspiration to the teacher from new knowledge, new insights and understandings in order to support teachers’ search for new teaching approaches, and 4) being a discussion partner in order to support teachers’ reflections and analysis of practice. The fourth of these categories is highlighted as the most significant in contributing to the learning outcome of more students. A discussion partner is a resource person supporting the teacher in reflecting and analyzing the practice of teaching in a formalized collaborative practice. This formalized and systematic collaborative practice (involving the common identification of a problem in practice and a common solution to the problem) characterizes the model of collaboration with which the teachers have been presented and which they have examined and analyzed with the research group.

In the analysis of interdisciplinary collaboration we have found four different types of collaborative practice: 1) Three of the schools taking part teach mainstream school teachers about specific diagnosis and the implications of disabilities and difficulties for teaching. This is not a category mentioned by Gottlieb and Rathmann. 2) Two of the schools taking part describe how they collaborate with general teachers by giving advice and inspiration through counselling. The special school teachers combine the categories of collaboration as they are defined by Gottlieb and Rathmann, and collaborate by observing the practice of teaching and giving advice about (for instance) classroom management and collaboration between teaching assistants and teachers. 3) One of the teachers works with individual students (direct model) in the classroom and with multi-professional support outside the classroom. She coordinated in meetings between different professions and sectors (school, social services and family), and thus helped children to stay and thrive in mainstream school. 4) Finally, a form of collaboration
was identified in which special school teachers supported mainstream school teachers’ reflections on and analysis of practice with a narrative approach. Two teachers from two different special schools already had experience of collaboration as well as significant back-up from the school management. From the start of the research project they were well trained in collaborating in the ways that were included in the research design.

**Opportunities and barriers in the practice of collaboration**

Aligned with the international research on collaboration, the analysis shows that formalized consultative collaboration regarding systematic analysis of the practice of teaching contributes to the development of teaching, thereby helping students who might otherwise be excluded from mainstream schools to participate in mainstream teaching.

The analysis of data in the project shows that a narrative approach to collaboration supports co-teaching and the transformation of knowledge. In the shared analysis and reflections about narratives, the practice of teaching is the focus of the professional talk and reflections and on the basis of these analyses they adjust curriculum decisions together. In relation to interdisciplinary collaboration, it is possible for special school teachers to suggest adjustments of the curriculum or the practice of teaching, thereby helping general teachers to discover new perspectives and strategies in practice. This is close to what Edwards (Edwards 2011) defines as a relational expertise in which engagement with specific knowledge is combined with the capacity to recognize and respond general teachers’ local knowledge. It is a significant finding that a model of collaboration taking the point of departure in teachers ‘craft knowledge’ (Black Hawkins and Florian 2012) and in teachers ‘situated professionalism’ (Hedegaard-Soerensen & Tetler 2011; Hedegaard-Soerensen2013) supports the teachers’ ‘didactic reasoning’ (Aldrin 2015) about what is educationally desirable (Biesta 2012). In the research project it is found that special school teachers contribute with situated knowledge about balancing the community (whole-class activities) and the individual student (Corbett 2001) and thus the special school teachers contribute to the development of inclusive learning environments. The narrative approach can contribute to the transformation of knowledge and thus build new knowledge because it enables co-teaching. In the process of co-teaching different professionals (with different perspectives) take joint responsibility for identifying and solving problems and for implementing and evaluating efforts (Hansen et al. 2014). In this process new knowledge can be built and a practice of teaching can be developed that combine inclusivity and responses to specific individual needs (Reindal 2008, 140-141).

The teachers participating in the research project with experiences from interdisciplinary collaboration with a narrative approach stress these advantages. They emphasize the advantages of a narrative approach through the following statements: “We focus on the whole class and on the system and not on the individual student, we inspire the general teacher to see the process of teaching from the perspective of the individual student, and we produce new narratives on the student in the classroom. We work systematically and we look at the problems from the outside and from professional perspectives, we introduce theories and good advice when the general teacher is ready and open for this and when it is relevant, in the shared
Analysis. In the narrative approach we make room for the narrative on the situation and we do not go directly to problem solving. We pose questions to facilitate insight for the general teacher, and we invite the teacher to find the solutions. The general teacher defines the problem and we help to find the solution. We are managers of the collaboration and we use methods that are formalized and a bit strange and different from ordinary talk.”

A general professionalization of the practice of teaching is the outcome of this way of collaborating. Through common and shared responsibility for planning, teaching and evaluating/analyzing teaching, craft knowledge and situated professionalism can be expressed in words and related to theoretical perspectives.

Barriers to collaboration

Furthermore, the analysis shows that it is difficult for teachers in general teaching to find time – together with the special school teachers – to conduct profound analysis of narratives. The organizational support by school managements of this kind of co-teaching is needed in order to create time for systematic analysis and reflections in both mainstream school and special schools. And in order to organize and define professional roles between internal (SEN coordinators, inclusion counsellors) and external resource persons (educational psychologists) in mainstream schools.

Beside two teachers involved in the project the teachers involved in the research project were not experienced in collaborating with a narrative approach and thus with co-teaching. In most municipalities in Denmark special schools are not supported in developing into knowledge centers. They experience difficulties in having their competencies acknowledged at municipality level. At the same time they experience that teachers in mainstream schools contact them for support and advice. A consequence for them and their collaborative work is that they are not used to collaborating in formalized ways. These participants joined the project because they were interested in trying the method and experimenting with formalized collaboration. At the end of the project they said they intended to develop more formalized ways of collaborating in order to support teachers’ reflection and evaluation of teaching practices. The participants with less experience of formalized collaboration with a narrative approach presented other forms of collaboration during the research project. They collaborate using a mixture of different forms, some of which are mentioned by Gottlieb and Rathmann.

Conclusions

Formalized collaboration is highlighted as most significant in contributing to the development of inclusive teaching practices as it supports general teachers in reflecting and analyzing the practice of teaching. It offers close collaboration between the special school teacher and the general teacher as recommended by international research on co-teaching. The learning outcome of all students becomes a shared responsibility in collaboration with regard to planning and evaluating teaching. This is a prerequisite for developing inclusive learning environments and specialized teaching, as it facilitates discussions and knowledge sharing.
about how special educational knowledge and special school teachers can influence the practice of teaching. Teachers and specialists can define what kind of knowledge teachers from special schools can offer general teachers and how this knowledge can support inclusive and specialized teaching.

The findings of this research project suggest that municipalities use the knowledge of special school teachers in the process of implementing the political push toward inclusive education. Aligned with research on the role of special schools (Allan & Brown 2001) we have found that special school teachers can have an important role in the process of approaching inclusive teaching practices in schools. The findings of the study reported on in this article suggest that municipalities support special schools in their development into knowledge centers. And furthermore, that local politicians decide on a division of various kinds of support systems for mainstream schools. Special school teachers can contribute with knowledge about teaching students in complicated learning situations. In formalized, interdisciplinary collaboration, teachers from mainstream schools and special schools can take joint responsibility for balancing the relation between whole-class teaching and individuals (some with specific needs) by analyzing the practice of teaching with a narrative approach. Special school teachers are external resource persons like educational psychologists and other specialists, and at the same time they are teachers and are working as teachers like the teachers they collaborate with. Educational psychologists, however, are not working as teachers and some of them are not trained teachers. They can first and foremost contribute to the general teachers with types of collaborations that are more consultative and consist of specific knowledge about individual needs. Internal resource persons as SEN coordinators/inclusion counsellors can contribute with long-term developments of the practice of teaching in a daily collaboration. They are internal partners and thus, they are a part of a professional community and a school culture. Contrary to that, special school teachers are external resource persons with the possibility to create a rupture of the knowledgeable talk about children and abort teaching methods by insisting on analysis of narratives – in a formalized way. Internal resource persons would benefit from participating in formalized interdisciplinary collaboration with teachers from special schools. In Denmark internal resource persons have specific theoretical knowledge about inclusion and can contribute to discussions and changes in curriculum from this outset, but they do not have sufficient ‘craft knowledge’ about teaching in complicated learning situations.

Different groups of professionals have different perspectives. In interdisciplinary collaboration and in co-teaching they can take joint responsibility for identifying and solving problems and for implementing and evaluating efforts. This would support general teachers in their practice of teaching and in their struggle to balance whole-class teaching and meeting the needs of individual children.
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