Inclusive special education: the role of special education teachers in Finland

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This study concentrates on the work of special education teachers in mainstream education in Finland, where these professionals work with children from various classes, usually in a separate room. The research reported in this article by Marjatta Takala of the University of Helsinki, Raija Pirttimaa of the University of Oulu and Minna Törmänen, who is studying for her PhD at the University of Helsinki, involved sending a questionnaire to 133 special education teachers and undertaking observations. The work of the special education teachers was revealed to consist of three elements: teaching, consulting and background work. Teaching, often focusing on giving support to children who had challenges in the main academic subjects, was realised in small groups, in co-operative or individual settings. Consultation mainly concerned co-operation and discussion. Behavioural challenges needed a targeted approach. The main problems experienced by the teachers were the lack of time for consultation and co-operation, an unclear work profile and too much work. The work of special education teachers was partly inclusive, but also entailed segregative elements. The authors discuss the potential for promoting further steps towards inclusion as well as possible changes in organising special educational provision at school level.

***Key words:* special education teachers, questionnaires, observation, inclusion.**

Introduction

What should we offer children with individual needs: special or general education, or something in between? The question has a variety of answers, one of which is inclusion. Inclusion can be seen as part of the equality of education, and it is recommended in the educational documents of many countries (Clark, Dyson, Millward & Robson, 1999; Stortingsmeldingar nummer 30, 2003–2004; Haug, 1999; Winter, 2006). In Finland, where inclusion is the official educational policy, the goal is that one school should be suitable for all pupils (Naukkarinen, 2003; Saloviita, 1999, 2006; Ministry of Education, 2007). In practice, inclusion means teaching in a diverse classroom with pupils who have various individual needs (Forlin, Loreman, Sharma & Earle, 2009). The criteria for inclusive education are diverse. Critical elements are active, meaningful participation in everyday functions of the classroom, as well as a sense of belonging and the shared ownership of all the students in the institution (Stainback &

Stainback, 1992; Frostad & Pijl, 2007; Voltz, Brazil & Ford, 2001). In order to function well, inclusion needs to be promoted, and this can be carried out by adapting the instruction and the curriculum, and through the support given by the headteacher (Idol, 2006).

One central means of supporting inclusion in Finland has been a system called part-time special education. Participating in part-time special education demands neither an individual educational plan (IEP) nor any official decisions, because it is temporary for the pupils and occupies only part of their school day. The pupils remain in mainstream education. Pupils receiving part-time special education, as Itkonen and Jahnukainen (2007) say, do not have special education status; they are not considered disabled, but they are in need of short-term special education. At the time of writing 22% of school-aged children receive it, 25% at primary and 16% at secondary school. In the twenty-first century, part-time special education has been offered to around 20% of school-aged children, and full-time special education has been offered to 8.1% of children. Finland seems to have the world record in the number of students receiving full-time special education, and this number is gradually increasing (Vislie, 2003; Statistics Finland, 2008). In reality, therefore, Finnish education seems not to be very inclusive, because of the high number of children in special education.

The educational results of Finnish pupils are successful according to PISA (Programme for International Student Assessment). Part-time special education has been considered one of the possible reasons for this success (Kivirauma & Ruoho, 2007). PISA tests are performed by 15-year-olds in 32 OECD countries. In 2003, Finland ranked first in reading, and in 2006 first in science and second in mathematics and reading. Finnish children did not perform poorly at all in PISA tests, at least partly because continuous support has been offered whenever needed, mainly by a special education teacher (PISA, 2006; Arinen & Karjalainen, 2007). What this support, called part-time or inclusive special education, is like and how it functions will be studied in this article.

Special education as part of the educational system in Finland

Finnish children go to school when they are seven years old. They can start preschool at the age of six, but it is not compulsory. Primary education lasts six years and secondary three years. After secondary school, pupils can either continue their studies in upper secondary school or go to a

vocational school. A free school meal is offered to everyone every day. Finnish teachers are well educated; from 1980 all class teachers have had to obtain a master's degree. The programmes of study for special education teachers are nearly homogeneous in all Finnish universities offering this training, concentrating mainly on reading, writing, language and mathematical and behavioural issues (see Hausstätter & Takala, 2008). Special education teachers have a slightly higher salary than class teachers, and the profession is respected.

Early intervention and early support are considered important for children who have learning problems (Finnish National Board of Education, 2004; Ministry of Education, 2007). Intervention and support are offered immediately when difficulties are noticed, first in the form of support teaching provided by the student's own class teacher. If that is not enough, every school has access to the services of a special education teacher. Special education teachers mainly work in regular schools, and the most common way of organising this form of support has been a pull-out model (Klinger, Vaughn, Schumm, Cohen & Forgan, 1998; Ström, 1996; Huhtanen, 2000), where pupils in need of special educational support visit the special education teacher's room during certain lessons. This support is initiated by the class teacher or sometimes the parents. The pupil remains in mainstream education, but is supported by a special education teacher on a weekly basis. However, if the pupil has severe learning difficulties, full-time special education can be suggested. This option merits further research, but this kind of segregated special education is not the topic of this article.

Delivering support

Today almost every school in Finland has one or more permanent special education teachers. Nevertheless, in rural areas and small schools this work is often carried out by peripatetic teachers. The children they teach have various learning problems (see Figure 1).

The profile of their work is different at the primary and secondary stages, as seen from Figure 1. Reading and writing is supported extensively at the beginning of compulsory education. At the secondary stage, mathematics and foreign languages need support. One reason for problems in foreign languages is that Finland is a bilingual country and everyone has to learn both Finnish and Swedish. In addition, English is usually preferred as the first foreign language.

Regular financial support is given to special education in Finland by the Ministry of Education. Children with the status of special needs are funded 1.5 times more than children without this status. However, pupils receiving part-time special education do not normally qualify for this status. Another form of support is a pupils' welfare team (Honkanen & Suomala, 2009). This type of team can be found in almost every school. It meets regularly and consists of various school professionals and parents.

Forms of inclusive special education

The work of special education teachers in Finland seems to be somewhat similar to that of SENCos (Special Educational Needs Co-ordinators) in the UK (for example, Abbott, 2007; Cole, 2005; Layton, 2005; Mackenzie, 2007; Szwed, 2007). SENCos are responsible for educational arrangements and related issues concerning pupils with special educational needs. They are responsible for identifying, assessing, overseeing and co-ordinating all special needs. In addition, they prepare individual education plans and provide guidance for teachers. They work in conjunction with a wide range of assistants, parents and therapists. All of this requires excellent organisational and problem-solving skills, as well as people skills (Abbott, 2007). The role of SENCos is wide and has widened. That is why many SENCos are overwhelmed by the operational nature of their role, with little support, time or funding to consider strategic aspects of special educational needs (Mackenzie, 2007; Cole, 2005). SENCos carry out their role in diverse settings,

Figure 1: Reasons for receiving part-time special education in 2007 (%)
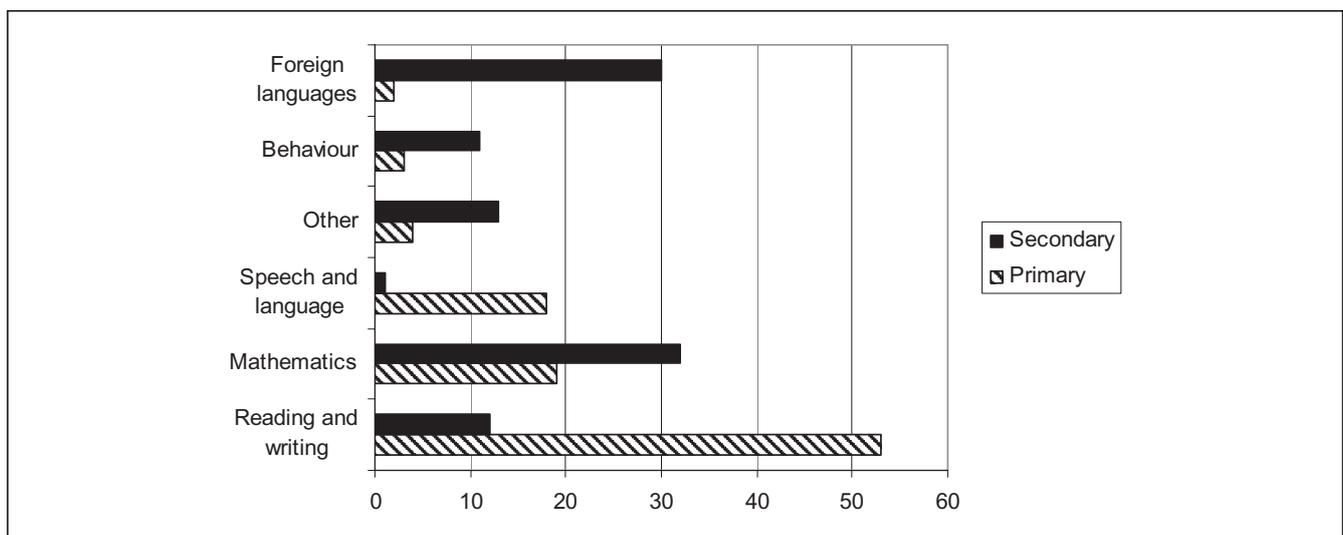
Note: from Statistics Finland (2008).

with considerable variations in how their role is interpreted (Mackenzie, 2007; Szwed, 2007). They operate in increasingly complex contexts within very different management structures (Szwed, 2007). The SENCo's work varies according to factors such as the setting, time allocation and membership of the senior leadership team. Mackenzie (2007) also notes a marked lack of consistency, over time and across contexts, in interpretations of the SENCo's role, and points to variation in workload, status and position within school hierarchies. SENCos themselves argue that they should be part of the senior leadership teams in order to work strategically, to have responsibility for such tasks as budget management and special educational needs policy, and to have opportunities to influence whole-school policy (Layton, 2005; Shuttleworth, 2000; Szwed, 2007).

Because special education covers so many areas, its framework and content are not clear to everyone involved, and the profile varies from school to school. This is also the case in Finland. It seems that today, increasingly the aim is to emphasise a consultancy orientation in addition to teacher-oriented support (Huhtanen, 2000; Ström, 1996; Buysse & Wesley, 2004).

Flexible curricular materials and activities offering alternatives and increased participation for students are necessary. Instructional planning has to be flexible and geared towards students' needs (Harris, Kaff, Anderson & Knackendoffel, 2007). When a special education teacher pulls students out of their own class, participation among students remaining in the class suffers, and it seems to have a negative effect on educational results (Markussen, 2004). However, if support were to be given in class, the teachers would have to change their instructional routines, which is viewed as laborious (Wright, 2005; Tissot & Evans, 2003).

Research questions
A variety of roles and tasks are given to special education teachers. The motivation to study their work content and settings was provided by the unclear profile of their work throughout the whole of Finland. In order to find out what Finnish special education teachers do and whether their way of working is inclusive, our first research question is: what is the structure and pedagogical settings of their work, and what are the challenges and positive issues related to their work? The second question is: which pedagogical methods are used in the most common areas of teaching? Finally, the third question is: what makes special education high quality, according to the teachers, and could it be called inclusive?

Study design
All special education teachers working as part-time special educators in Finland's three biggest cities, Helsinki, Espoo and Vantaa, were involved. These special education teachers working in mainstream schools taught children who had mild or moderate problems in learning, but who had not been given any special status. The learning difficulties of these pupils were in line with those presented in Figure 1. The special education teachers in these three cities received a questionnaire, which was posted to their schools in the

autumn of 2006. They mailed it back to the researcher in a sealed envelope. Responding electronically was also an option, but only two teachers chose to do so. The questionnaire had 44 questions, 13 of which concerned background information (such as age, sex, school size and education). For this study, questions (N = 9) about five areas of the teachers' work were used. These questions dealt with the organisation of the teaching, meaning (1) the structure, (2) timing and (3) pedagogical settings of teachers' work. Further questions addressed (4) the methods and materials most frequently used in teaching (a) reading and writing, (b) mathematics, (c) foreign languages and (d) children with behavioural challenges. Finally, questions were asked about (5) features of high quality special education. The questionnaire included questions about how teachers share their time in individual teaching, small group work, co-teaching, consulting, planning and making materials. Descriptions of teaching sessions were also requested, as well as disadvantages and advantages of various settings. Some examples of the questions are given in Table 1.

Table 1: Sample questions from the questionnaire

1. How do you usually share your work time as a special education teacher within one month (total should be 100%)?
Teaching individual pupils __%
Co-teaching __%
Teaching small groups __%
Consulting class teacher __%
Consulting subject teacher __%
Co-operation with families __%
Work in pupils' welfare team __%
Pupil assessment/testing __%
Planning; modifying, making materials __%
Other tasks, please specify __%)
2. List three most frequently used methods and materials.
3. What are the problems special education teachers meet in their work?

The respondents worked in the metropolitan area of Helsinki, where 66 were in Helsinki, 23 in Espoo and 44 in Vantaa. There were 133 respondents altogether (113 women and 20 men). The response rate was 46% in Helsinki, 35% in Vantaa and 22% in Espoo. The average response rate was 36% (see Table 2). When asked about the reasons for not responding, the teachers said that the questionnaire was too long (17 pages) and too demanding.

The mean age of the respondents was 44 years, $SD = 9.5$, ranging from 25 to 62 years. The schools were very different in size. The smallest had only 35 pupils and the biggest 1,100, with a mean of 459 pupils ($SD = 205$). Most schools had one or two special education teachers. Work experience varied greatly, from less than a year to 32 years as a special education teacher, the mean being 7.9 years ($SD = 7.7$). Of all the responding teachers, 75 taught at the primary level, 30 at the secondary level, 22 at both primary and secondary

levels, four at higher secondary and secondary levels, and two teachers at all levels between primary and high school.

In addition to this data, three student teachers (Alikoski, 2008; Paananen, 2008; Saarenkanta, 2008) being taught by the first author of this article collected additional data for their bachelor's thesis during 2007/2008 from special education teachers working at primary and secondary schools. They used part of our questionnaire, mainly the demographics and questions related to the five abovementioned areas that are the focus of this article. Alikoski received a response from 13 special education teachers (in secondary schools in Espoo) and Paananen from 25 (in primary schools in Espoo). These respondents were different from those who responded to our own questionnaire, and thus additional data were generated. Saarenkanta received responses from a small city called Janakkala (nine teachers, all from that community). The data from Espoo were collected because the response rate would otherwise have been exceptionally poor for that city. Janakkala was used as a comparison to the metropolitan cities. The response rate for Espoo was 48% with the student teachers' questionnaires added, and the average response rate was 45% with their help (Table 2). The demographics of the students' respondents did not differ from ours.

Table 2: The response rate

Response rate	2006
Average response rate in all cities	36%
In Helsinki	46%
In Espoo	22%
In Espoo with students' data	48%
In Vantaa	35%
Average response rate in all cities with the students' data	45%

Additionally, the first author observed 11 lessons (six at primary, three at secondary and two at higher secondary school) given by special education teachers in Helsinki (nine teachers) and in Vantaa (two teachers). The author sat in the lessons and wrote down everything the teachers did in order to see the methods and settings used. No readymade form was used, but it was designed after the observations were made, on the basis of the notes taken. The questionnaire method was chosen in order to reach all the teachers, and the observation method was chosen to confirm and understand the data received via questionnaires.

Data analysis
The quantitative data were analysed using frequencies, percentages and ANOVA. The amount of working hours in various settings was studied together with the demographics using ANOVA. For the open-ended questions, as well as for the first author's observations, content analysis using themes and typologies was used. The aim was to use triangulation in the data collection in order to receive a multi-faceted picture of the work.

Results
Structure of the work
The work was divided into direct (with children) and indirect work (mainly with adults) in the questionnaire. The direct work (that is, teaching pupils) could be grouped into three main categories: individual teaching, teaching a small group and teaching children in co-operation with the class or subject teacher in a large class. Most of the teaching was undertaken in small groups of children (between two and 10 pupils, with four being the mean), and very little time was spent in co-operational settings (see Table 3).

The indirect work was divided into eight different categories in the questionnaire, namely: (1) consulting with the class teacher, (2) consulting with the subject teacher, (3) co-operation with parents, (4) co-operation with the pupils' welfare team, (5) assessment, (6) finding/buying/making materials, (7) planning and (8) doing something else (or 'other'). Most of the indirect work consisted of planning, material design and assessment (see Table 4). The 'other' consisted mainly of three activities: (1) consulting with a partner, such as the head of the school, the school psychologist or staff at day-care centres or at secondary schools, (2) writing a variety of documents such as IEPs and (3) participating in official school meetings and projects. Participation in various training events and courses was also mentioned. One-third of the time spent on 'other' activities could also be called consultation.

Table 3: Special education teachers' evaluation of the time spent in direct work in a month (max 100%)

Direct work = Teaching		N	Mean %	SD	Min %	Max %
Individual teaching	primary	63	14.7	15.6	.0	70.0
	secondary*	45	14.0	15.1	1.0	80.0
Co-operational	primary	54	7.3	6.7	.0	30.0
	secondary	37	13.2	14.5	.0	64.0
Small group	primary	66	49.3	21.4	1.0	95.0
	secondary	53	46.0	25.7	1.0	100.0

Note: * includes also those four teachers working in upper secondary schools. SD; standard deviation.

Table 4: Special education teachers' evaluation of the time spent in indirect work in a month (max 100%)

Indirect work		N	Mean %	SD	Min %	Max %
Co-operation with class teacher	primary	75	5.7	5.0	0	20.0
	secondary*	58	2.4	3.4	0	10.0
Co-operation with subject teacher	primary	75	1.4	2.3	0	10.0
	secondary	58	5.0	4.4	0	20.0
Co-operation with homes	primary	75	4.1	3.3	0	15.0
	secondary	58	5.1	5.6	0	35.0
Co-operation with extended team	primary	75	1.2	2.4	0	10.0
	secondary	58	1.0	2.2	0	10.0
Assessing	primary	59	4.7	2.5	.0	12.5
	secondary	41	7.6	8.7	1.0	50.0
Planning	primary	59	9.3	5.9	1.0	25.0
	secondary	44	8.8	4.5	.0	20.0
Making/finding material	primary	58	6.8	4.3	1.0	20.0
	secondary	42	7.6	4.6	.0	25.0
Other	primary	75	0.5	3.0	.0	24.0
	secondary	58	0.6	2.4	.0	15.0

Note: * includes also those teachers working in upper secondary schools.

In order to study the indirect work more closely, issues related to consultation were compiled (work with the class and subject teachers, with parents and with the pupils' welfare team), and they formed a new category, 'consultation' (see also Alridge, 2008). Also, categories dealing with assessment, planning, making/finding material and 'other' were computed together and given the title 'background work' (see Table 5). After this process, 'background work' became the most common form of indirect work. The amount of consultation work would probably be higher if the third component of the 'other' category could be added into it. However, those data were descriptive, so this could not be done.

Table 5: Special education teachers' evaluation of time spent on consultation and background work

Indirect work	N	Mean %	SD	Min %	Max %
Consultation					
primary	75	12.3	9.2	0	40.0
secondary	58	13.4	9.8	0	45.0
Background work					
primary	53	21.7	9.9	5	50
secondary	38	24.1	13.6	1	70

The work of the special education teacher was thus divided into three categories: teaching, consultation and background work. When using the special education teachers' estimated mean of the working time spent on these three main categories, a picture of a common work profile can be constructed (Figure 2). This figure represents the work of a typical special education teacher in compulsory school as a whole,

including both the primary and secondary stages. However, it must be kept in mind that the ratio of consultation and background work varies during the year, and the amount of consultation is probably slightly higher and the amount of background work slightly lower.

Figure 2: Estimated breakdown of the monthly workload of a special education teacher in compulsory school
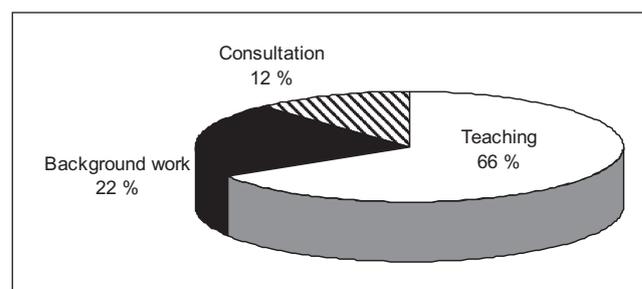
Neither the age nor the city of the respondent had any effect on these results. The stage, however, did. The data were split into two parts: those who worked only at the primary level ($N = 75$) and those who worked only or partly with older pupils ($N = 58$). Those who worked with older pupils undertook slightly more co-operational teaching [$F(1,89) = 7.608$, $p = .007$]. Also, co-operational teaching was used slightly more in larger schools (those with more than 740 pupils) [$F(2, 88) = 2.508$, $p = .087$].

Similar results concerning the structure of the teachers' work were compiled by Alikoski (2008) from 13 secondary school special education teachers. According to her study, 79% of teaching time was used with small groups, 12% with

individuals and only 9% in co-operational settings. The mean of co-teaching was 7% of working time.

Pedagogical settings
Special education in mainstream schools is offered in small group, individual and co-operational settings, but the primary setting is in small groups. In the next section, the reasons for choosing a setting, as well as its positive features and challenges, are presented. The most recurrent issues are listed below in the order of the importance given to them by the special education teachers.

Individual teaching
Individual teaching is considered very intensive and effective. It is also a very supportive way of working, and the environment can be quite peaceful, which makes concentration easier for many pupils. The teacher gets to know the pupils well when teaching only one child at a time. However, there are also negative aspects. The lack of social contact with peers worries special education teachers. Individual teaching can also be too demanding for the child; the child can feel that the adult is constantly pushing him or her. It can also be stigmatising when only one pupil is taken from the class. Teachers also considered financial issues and commented that it is a very expensive use of resources.

Teaching in a small group
Small group teaching is quite individual, which makes it possible to get to know the pupils well. The atmosphere is relaxed and supportive. Forming homogeneous groups is possible, and if the whole subject is taught in the group, the time can be used effectively and planning is easy. It is also good that all the pupils are in need of help; no one child feels like he or she is the only one needing special attention. This gives the pupils the courage to ask questions and forms a reference group.

Teachers also mentioned some negative aspects of this technique. Some children suffer from being separated from the class; they feel stigmatised. When leaving the class, pupils miss what is being taught. A small group does not always offer enough time per pupil. Teachers also underlined that there is not enough time to plan lessons with the other teachers. Especially at the secondary or higher stages, special education teachers are required to help with various subjects and they mentioned that their subject knowledge is often not sufficient.

Co-operative teaching
Some teachers thought that spending time with the whole class helps them to become better acquainted with their pupils. It was also noted that two teachers can do more than one in a class, and thus more pupils receive support. When pupils stay in the classroom, they do not miss a lesson and they receive everything that the others receive. The lessons are also better designed when two teachers are involved.

Turning now to the teachers' negative perceptions, there is seldom enough time for planning the lessons together; and, often as a result of this, the special education teacher works more like an assistant and feels his/her resources are wasted. Teachers often are not used to working with other teachers, and many find it disturbing. The special education teacher cannot get to know all the pupils in a class, which can create difficult situations.

Few teachers were really in favour of co-operational teaching, and some considered small groups the best option. The lack of common planning time with other teachers was a problem in all settings. Similar results were recorded by Paananen (2008) and Alikoski (2008) from Espoo schools.

Timing the work
The special education teachers stated that the most common method of delivering education involved students attending special education lessons according to their needs, which are evaluated together with the class or subject teacher. At the primary stage, students in the first grade who struggle with reading usually attend special education lessons until they learn to read. The time spent in special education settings varies from four to eight weeks; some children attend for a whole term, and a few even for the whole year. At the secondary stage, most schools have a period system of between four and six periods a year, and special education teachers also change pupils in each period. However, some pupils attend special education lessons for more than one period.

Pedagogical methods
The next focus of this article is on the content of the work, what the special education teachers do with their pupils and what kind of methods are used. These topics were surveyed separately in terms of the most common reasons for attending special education: reading and writing problems, challenges in mathematics, challenges in foreign languages and behavioural issues. All the teachers did not teach students with all of these issues, so the number of responses varies.

Challenges in reading and writing (often dyslexia)
A total of 111 teachers responded to this question. The methods and exercises used can be divided into four groups, all of which have subcategories. The numbers in brackets are the numbers of teachers who mentioned the issue. The four categories are:

- Practicing reading and/or writing: teachers mostly used individual exercises which were often self-designed (63). The most common subject to be addressed was phonological/language awareness (27). Computer programs like Audilex (Törmänen & Takala, 2009) were often used as part of the lesson (25), as well as reading (21), listening (20) and writing (17) in various ways. Some teachers also actively used other senses, such as the tactual and kinaesthetic senses (8).
- Pedagogical initiatives: in addition to materials, various pedagogical changes were used (20), such as giving extra time, using a deliberately slow tempo or utilising a clear structure. Some teachers mentioned a specific method, such as that described in Bakker

(1990), or a 'reading through speech' system (13) (Leimar, 1974). Evaluation of the students was adjusted or dynamic (3).

- Metacognitive skills: in order to promote learning, the teachers taught and practised metacognitive skills (13) with the pupils. To help with reading, various reading strategies (13) were taught (see Palinscar & Brown, 1984; Takala, 2006).
- Mental issues: many children needed encouragement and discussions. This kind of mental support (18) was also used.

Challenges in mathematics
A total of 128 teachers mentioned methods and exercises used in mathematics, which fell into four categories.

- Practising mathematics in different ways: the teachers thought the most important initiatives were to be concrete and to visualise the tasks (79). Examples from the daily life of the pupils were useful (11), as well as various computer games and other games (19). Basic skills often had to be strengthened (25), and the pupils needed a great deal of continuous practice in all basic mathematical skills, more than is typically provided in class (11).
- Pedagogical initiatives: pedagogical changes, such as drawing the task or doing it in small steps, were used (35). Not only speech but also multichannel teaching was needed, as well as action methods (7) and various specific methods, such as Varga-Neményi and Montessori (6).
- Metacognitive skills: training metacognitive skills such as counting strategies were used (14).
- Mental issues: mental support (11) was necessary when, for example, pupils felt that they were poor at mathematics, as well as discussion about attitudes (9), which were often negative.

Mere reading, writing or calculating in various ways seemed to be insufficient. Pedagogical arrangements were used actively, as well as metacognitive exercises and various types of mental support.

Challenges in foreign languages
A total of 75 teachers mentioned methods used to deal with these challenges. They could be grouped in the same four categories that were used in reading and writing education. In order of frequency, they were:

- Practising foreign languages in different ways: teachers used discussion, speaking, reviews and conversations (44). They also used various exercises including translation, reading, listening, extending vocabulary and writing (37). Various materials, games, books, CDs (13) and computers (10) were used. Both visual and auditory dimensions were used in teaching (8).
- Pedagogical initiatives: this category included provision of extra time, a slow pace and a clear

structure (26), as well as self-made materials (12), adjusted or dynamic evaluation (3) and special groupings of students (10).
- Metacognitive skills: these mainly consisted of teaching how to study and how to remember words (37).
- Mental issues: it was important to motivate and encourage the students. Teachers mentioned emotional aspects such as atmosphere, support of self-esteem and a positive attitude as examples of motivating factors (20).

Challenges in behaviour
A total of 73 teachers mentioned methods concerning behavioural challenges. Over 75% of the issues could be categorised into six main themes. The rest were isolated methods, such as certain materials, Brain Gym, games and books. The methods most often used were:

- giving feedback, positive and negative, to the pupils, as well as teaching pupils to see the consequences of their behaviour (54);
- discussions with the pupils (36);
- using clear rules and structures in lessons (36);
- individual teaching (15);
- issues connected to the teacher's person and behaviour, such as the need to work strongly with one's own personality, and using a lot of patience, good humour and so-called adult behaviour (12);
- the necessity of co-operation at school and with parents (7).

Main challenges and high quality teaching
At the end of the questionnaire, the teachers were asked to describe the main problems in their work as well as the factors they perceived as contributing to high quality teaching. The data was analysed separately for primary schools, and then for secondary and high schools. The problems were strikingly similar in all grades (Table 6), but the ranking of the problems varied. At the primary level, the main issues were the lack of time for indirect work, the need for more resources and an unclear work profile. At secondary schools, special education was not as rehabilitative as the teachers would have liked; it was more often a way to 'store' the difficult pupils. Also, the lack of time for consultation was a problem, as was the unclear work profile.

Good quality special education requires motivating the pupils (56), the professional skills of the special education teacher (50), co-operation (34) and good results (29), according to the special education teachers. When the teachers know their job and work together with other professionals, the quality is considered high. This leads to good results from the pupils; thus, attaining high quality is a reciprocal process.

Observations
The first author observed 11 lessons: one co-teaching lesson at the secondary stage, one individual teaching lesson at the primary stage and the other lessons given in small groups.

Table 6: Main problems in the work of special education teachers at the primary and secondary levels according to the teachers (number of mentions in brackets)

Main problems at primary level	Main problems at secondary level
a) No time for indirect work (29)	a) No time for rehabilitation, often only keeping/'storing' pupils (24)
b) Need for resources, both time and materials (22)	b) No time for indirect work (21)
c) Work profile unclear, unlimited, changing; misuse, old traditions (20)	c) Work profile unclear and undefined, changing; misuse, old traditions (19)
d) Special education not understood, unrealistic expectations (16)	d) Difficulties with schedules, too dependent on others (11)
e) Too many and too difficult pupils (11)	e) Mentally exhausting and lonely, feeling of inadequacy, no support (8)
f) Mentally exhausting and lonely, feeling of inadequacy, no support (10)	f) Special education not understood, unrealistic expectations (6)
g) Difficulties with schedules (9)	g) Need for resources, both time and materials; too many books (4)

The mean number of pupils was 4.5, ranging from two to 11. The subjects of the lessons were Finnish, mathematics and English. The teachers used discussions and individual exercises and the pupils participated actively, asking questions and making comments. The atmosphere was encouraging and the methods were pupil-centred.

Summary of the results

Special education teachers have to be experts twice over. They need a good knowledge of special education and, in addition, they need to have good interaction skills in order to engage in consultation. The content of the work of special education teachers in mainstream schools can be summarised in three categories: teaching, consultation and background work. However, special education teachers have commented in many training sessions that consultation should rather be called co-operation. The majority of the teachers' time was used for teaching pupils. Special education teachers also participated in school meetings, carried out written work (IEPs), took part in training, assessed pupils and designed materials, all of which together was called background work. They also consulted with various partners, such as other teachers, parents, psychologists and headteachers. Although all three categories form the work of special education teachers at compulsory school, the special education teachers pointed out that these work types overlap, and separating them is artificial. A special education teacher has to hold discussions with parents and with other teachers before starting to teach pupils. Each component of the work is dependent on the others. There is also a great deal of variety during the school year; for instance, at the beginning of the term there is more assessment than at mid-term.

A special education teacher works mainly with small groups of children and more seldom in big classes in co-operation with another teacher, although this seems to be an effective way of giving support to the pupils (Markussen, 2004). Co-operational teaching is carried out more often with older pupils (aged 12 years and over) at secondary schools and in large schools (see also Knackendoffel, 2005). Consultation/co-operation has a smaller role in the work profile than in theory or in professional recommendations (Huhtanen,

2000; Abbott, 2007; Alridge, 2008). This might also reflect the training of special education teachers in Finland, which concentrates mainly on pedagogical issues and less on working in co-operation with other professionals (Hausstätter & Takala, 2008).

The methods used in native language, mathematics and foreign language lessons could be classified into four quite similar groups. It was surprising that the groups were so similar because the classification was undertaken separately by the three authors. The first category was the practical part, consisting of individual exercises carried out in various ways. This was also the most commonly mentioned way of working. Various pedagogical initiatives were also used a great deal; a special education teacher must know how to adapt the teaching situation so that all children can learn. In addition, metacognitive skills were practised, for example, by teaching learning strategies. Finally, mere teaching is never enough; pupils need mental encouragement, discussions and a supportive attitude. Quite a few special education teachers mentioned issues related to metacognitive strategies. It seems that the teachers were more used to teaching subjects than teaching how to learn. Teaching children with behavioural challenges had a different profile from other challenges; it required discussions, clear rules and abundant feedback. Nevertheless, during the observations of the first author, all lessons included a great deal of discussion. This kind of working method somewhat resembles therapy work, which special education sometimes seems to approach.

The main challenges in the work of special education teachers were the need for a scheduled time for consultation/co-operation and planning, more resources, a decrease in workload as well as more clarity of their work profile. The quality of special education depended mainly on motivating the pupils and on the professional skills of the teacher (both subject skills and interpersonal skills).

Discussion

The Finnish model of special education in ordinary schools seems to be at least partly inclusive. This is because the child has easy access to special education, no formal decisions are

needed, no special status is given to the child, and the child attends special education for a limited period of time. Although the form of this support is inclusive in shape, it is often a pull-out model and, as such, segregative. The reason for the use of this pull-out system seems to be the lack of supportive organisational structures for co-operation. There was no scheduled time for planning co-teaching or for consultation. This is worrying because inclusion is based on the principle of collaboration and participation (Pearson, 2007; Abbott, 2007; Harris, Kaff, Anderson & Knackendoffel, 2007). The Finnish model does not promote these criteria for inclusion. Regardless, special education teachers seem to adapt their instruction and curriculum so that the teaching can partly be called inclusive (Idol, 2006) although the framework is not.

The special education teachers, like SENCos, are in a unique position to contribute to the way in which a service delivery model plays out within a school. Throughout the process of collaboration, the special education teacher can be a key consultant assisting in the planning, implementation and evaluation of interventions across the continuum of education (Cummings, Yent, Allison & Cole, 2008). The school, as an institution, should offer possibilities for all forms of special education that are needed. In the UK, the work of special education teachers functions so that SENCos co-ordinate special education, both in teaching and indirectly (Soan, 2006). When time is available for planning co-teaching, greater equality between teachers can develop and the special education teacher no longer has to be an assistant (Mastropieri et al., 2005; Takala, 2007).

It seems that metacognitive and mental input is needed to promote learning-to-learn skills (Hautamäki et al., 2002) and in practising learning strategies, in addition to subject-specific issues. One result found in a longitudinal study of people with learning disabilities was that they felt they should have been taught various learning and managing strategies and compensatory methods (Goldberg, Higgins, Raskind & Herman, 2003). This element had only a minor role in Finnish special education.

The work of special education teachers is demanding. In Finnish mainstream schools, the special education teachers often work alone and find their work exhausting. The work profile is unlimited, and often no regular support systems exist. The same is true in the UK, where SENCos often find themselves with joint responsibility for both special educational needs and inclusion but with little management power, usually no control over funding for special educational needs and an immense amount of bureaucracy and admin-

istration to deal with (Cole, 2005). Support such as discussions with colleagues, personal consultation and the addressing of specific problems have been useful elsewhere (Westling, Herzog, Cooper-Duffy, Prohn & Ray, 2006; Szwed, 2007). In Sweden, the workload has been divided in many schools between special education teachers (working mainly with children) and special education pedagogues (working mainly with adults) (Olsson, 2006; Malmö University, 2008a, 2008b). Also, a full-time teacher model, where office hours are included, is used in some schools. This gives the teachers enough time for co-operation. Full-time teachers have the opportunity to co-operate and share the responsibility with other teachers, which has also reduced the stress experienced by teachers and promoted the learning of the pupils (Pfeifer & Holtappels, 2008). This full-time teaching structure was also suggested by two of our participants. This possibility should be studied and developed more in the future.

This study has limitations. The response rate was only 45%, which was partly the fault of the researchers. Several pages on the questionnaire were wasted on asking about specific learning difficulties and the number of pupils in various classes. This information would have been available through the cities' own records as well as from national statistics. However, those who responded did so attentively and gave thorough answers. Also, the results received by three students (Alikoski, 2008; Paananen, 2008; Saarenkanta, 2008) confirmed the 2006 data regarding the settings. In addition, our study is one of the very few that really concentrates on the substance of the work of a special education teacher and found four areas in teaching to help develop working methods.

Many SENCos, as well as Finnish special education teachers, are responsible for the implementation of policies of inclusion. When the SENCos are supported by senior management, the role can be a powerful one in relation to inclusion (Cole, 2005). The Finnish model of an inclusive special education system could be even more inclusive if it were to go through a moderate reconstruction. The pull-out model could be used less, metacognitive skills could be taught more and time could be reserved for planning and co-operation. When organisational support is available, guidelines are clearer and the workload is reasonable, future special education teachers will be able to focus on the learning process, on co-operation with educational staff within the schools and on helping students achieve their individual learning goals even better. In other words, these teachers would be able to focus on the essential aspects of education.

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