

## From special tasks to extensive roles: the changing face of special needs teachers in Finnish vocational further education

Raija Pirttimaa<sup>1</sup> and Maija Hirvonen<sup>2</sup>

<sup>1</sup>University of Jyväskylä; <sup>2</sup>JAMK University of Applied Sciences

**Key words:** Vocational education and training, special needs education, Finland.

Following the development of inclusive education in vocational education and training (VET), the discussion about the prevention of marginalisation and dropouts has increased. At the same time, the formal education system has strengthened the position of support services, such as special educational needs (SEN) teachers, social workers and counsellors. However, a confusion of roles in the work of SEN teachers seems evident. The changing work of SEN teachers has not been of great research interest in Finland. The focus has been mainly on SEN teachers at the secondary school level (Kivirauma and Kuorelahti, 2002; Ström, 1999). The work of vocational SEN teachers has been studied by Kaikkonen, 2010 and Hirvonen, 2006. SEN teachers comprise two groups in the field: one group supports vocational subjects and the other group supports general subjects. The aim of this study is to determine how SEN teachers of general subjects define the objectives of their work and how they organise pedagogical support. Ten SEN teachers in vocational colleges were interviewed. A qualitative analysis was performed. The main findings showed, on the one hand, an autonomous position and, on the other, a work model that can be described as a 'traditional special needs education model'. However, the findings showed that the autonomous role was contradictory. SEN teachers did not emphasise the connection with the VET community or college-based guidelines and directions. Moreover, although the consultative role exists, the findings showed that it is not a regular part of the work of SEN teachers.

### Introduction

Internationally, there is an ongoing debate on inclusion and exclusion in vocational education and training (VET). The perspectives vary among education, sociology and philosophy (Billet, 2012; Mehaut, 2012; Miles and Singal, 2010). Supporting students with special needs is an integral part of vocational further education in Finland. Tradition-

ally, special needs education has referred to the remedial teaching of individuals with specific learning difficulties, such as dyslexia, in separate groups. However, in Finland, the current focus is on inclusive education, which challenges vocational education to restructure pedagogical environments.

In 2011, as Table 1 shows, 20 063 students in Finland, or approximately 7, 25% of the total number of students in VET studies, received special education services during their VET studies (Official Statistics of Finland, 2012). Special support is needed mainly for problems in perception, attention and concentration. More than 30% of VET students have been identified as having 'other reasons which demand special education', that is, unspecified needs for special support, which consist mainly of combined and diverse difficulties with motivation and coping in everyday life (Hirvonen, Ladonlahti and Pirttimaa, 2009).

The trends in VET indicate a clear direction in vocational special needs education that involves the move from segregated settings of the special education needs of special educational needs (SEN) target groups in vocational colleges towards a model of educational environments that are 'flexible' and multilevel (Figure 1).

Accordingly, the trajectory of the work of vocational SEN teachers has followed the structural and pedagogical changes in VET. In the 1890s, at the beginning of vocational education, there were no qualified VET teachers or SEN teachers. In the wake of the economic growth after the Second World War, which led to the educational reform of the 1970s, the doors were opened to students with SEN in general vocational education. At that time, the special needs educational model was the 'special class model' in which vocational SEN teachers worked autonomously; their role in the college clearly stressed their expertise in SEN.

In the 1990s, new legislation and changes in structure and policy (Laki ammatillisesta koulutuksesta, 1998) generated

**Table 1: Students of special vocational education by place of provision of teaching, 2011 (Official Statistics of Finland, 2012)**

Year	In other educational institution providing vocational education			Total‡	Share of students in vocational education, %	Number of students in vocational education
	In special vocational institution	In a special group	In a general education group†			
2011	2579	1805	15 679	20 063	7.2	279 266

†Includes curriculum-based vocational education provided by educational institutions organised in a general education group, education preparing for a skills examination organised elsewhere than in special vocational education institutions and all apprenticeship training.

‡In 2011, 19 116 special education students studied in curriculum-based education provided by educational institutions, 735 in education preparing for a skills examination and 2012 in apprenticeship training.

new SEN models in vocational education. In an effort to develop inclusive education, the vocational SEN teacher's role was broadened to include the consultation and guidance of colleagues. Following the confirmation of vocational SEN teacher education, the position of SEN teachers strengthened. Recent Finnish research shows that the work of SEN teachers in today's VET colleges differs in terms of tasks, responsibilities and roles (Kaikkonen, 2010). Although the core of their work is still teaching, there are clear developmental challenges, such as expansion and a widening range of SEN (Hirvonen and Pynnönen, 2010).

In Finland today, the major characteristics of education are guided by the principles of equal opportunities for all and the possibility of free, lifelong education (Kumpulainen, 2009). Inclusive education encourages the participation of students who have a broad variety of special needs. The focus is on the diversity of students instead of the differences among them. Therefore, in VET colleges, vocational teachers have a responsibility to promote inclusion. The expertise of SEN teachers should be directed in the consultations of teacher colleagues at the college level (Booth, 2005). Saloviita (2009) claimed that a recent medicalisation of special needs education tends to divert the focus from expert knowledge, thus limiting the general teachers' willingness to work with learners with special needs.

In Finland, teacher education for special needs targets two objectives. Universities educate SEN teachers mainly for compulsory education, whereas universities of applied sciences and teacher education colleges offer educational programmes for VET teachers in special needs education. SEN teachers educated at universities are eligible to work in diverse educational settings, including VET colleges, according to their individual study paths (University of Jyväskylä, 2013). Part of their work (in VET colleges) is to support students in general subjects (i.e., Finnish, Swedish, English and mathematics). These SEN teachers are a new phenomenon in Finnish VET settings. However, research on the work of vocational SEN teachers (Hirvonen, 2006; Kaikkonen, 2010) found a lack of defined work roles. Although vocational SEN teachers are an essential part of vocational colleges, they work mainly as vocational lecturers, not as SEN teachers.

**Figure 1: The roles of vocational special educational needs (SEN) teachers in different phases of vocational education and training (VET) (Hirvonen, 2006)**

Beginning of SEN in VET special vocational colleges (1890–1950) <i>'Work teacher'</i>	Years of integration in general VET colleges (1960–1980) special groups <i>'Expert teacher'</i>
Developmental years of inclusive education in 1990 <i>'Consultative role'</i>	Authentic learning environments from 2000 onwards <i>'Diversity of roles'</i>

The combination of work and study ('practice and theory') is a main characteristic of special needs education in VET. Although students need to take courses in general subjects, vocational subjects are core studies. Therefore, the goal of support services, such as special needs education, is to strengthen vocational skills and competencies to prepare students for employment.

The aim of our study is to determine how SEN teachers with new duties in supporting students with special needs in general subjects in VET define the objectives of their work and how they organise their pedagogical support.

## Method

### Participants

Ten participants in this study were found from mailing lists of the Finnish Association of SEN teachers. The data were gathered in two steps: a nationwide survey of SEN teachers (N = 120) with duties to support students in both general and vocational subjects; and interviews (N = 10). The interviewees represented different regions of the country, that is, the northern, eastern, western, central and southern parts of Finland. The sizes of the VET colleges differed

according to population density. The northern and eastern parts of Finland are mostly rural areas, and the colleges are small. All VET colleges were ‘general’ colleges where students with SEN study among other students. Eight interviewees had a master’s degree in education, whereas two had a diploma from a university of applied sciences. All interviewees had a pedagogical diploma in special needs education. Their ages ranged from 37 to 64, and there were two men and eight women. Their pedagogical work experience ranged from 6 to 30 years. Thus, the interviewees represented rather well the typical population of special education teachers in VET colleges. According to a survey on teachers in Finland, in 2013, more than 80% of SEN teachers in vocational education were women, and nearly 90% were over 40 years old (Kumpulainen, 2014).

#### Data collection

The interview formula was developed based on the cultural-historical theory of activity (Engeström, 1987; Leontjev, 1978). The activity theory has been used to study teaching in general educational settings (Daniels and Cole, 2002) and special education (Pearson, 2009). The activity theory offers a practical framework for examining the human activity/work system. It strives to understand social reality, the individual subject and the interactions between them in a community (e.g., school). Figure 2 shows the main concepts and their relationships.

The main themes of the semi-structured interviews are shown in Figure 2. The participants were also asked to provide background information (e.g., age, education, occupation and employment status). The tape-recorded interviews took place at a site chosen by the participants (two interviews), and the remaining interviews were conducted via the Internet using Adobe Connect Pro (Adobe Systems Inc., San Jose, California, USA) connections (eight interviews). Each interview lasted for about 1 hour, and the total interview time across all participants was 12 hours.

#### Data analysis

All 10 interviews were transcribed by authors. Content analysis was used to examine the transcriptions (113 pages)

(Franzosi, 2008; Silverman, 2001). The text was first read several times in order to gain a general understanding of the content of the interview. The approach was theory based and used themes derived from activity theory (Figure 2). The research target, the work of SEN teachers, is not a static phenomenon, but rather dynamic, changing and adapting its objects and tools in the wake of changes in the learning community as a whole (Engeström, 1987). The change in work is easiest to determine by describing the objectives and concrete tools. Finally, all statements linked to the concepts of activity theory were explored. The fidelity of the findings was confirmed by individual analysis performed by each author separately, followed by the joint comparison and discussion of the results. During the interview, we summarised the information gained from the interviewees as often as possible to get a reliable understanding of the discussion. Also the semi-structured form of the interviews helped to gather detailed information.

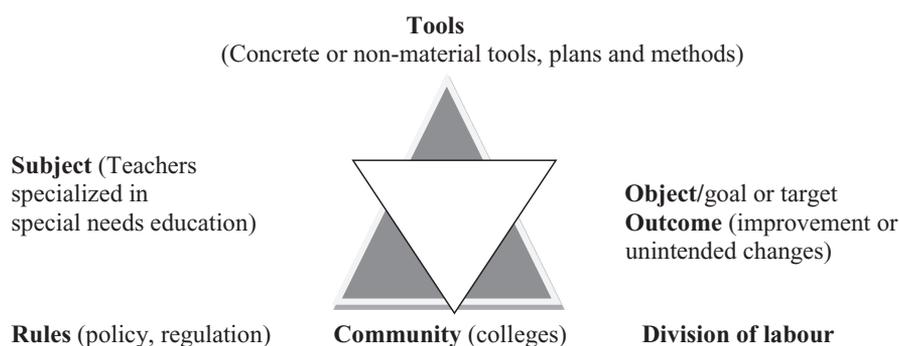
#### Findings

Our aim was to determine how SEN teachers supporting students with special needs in general subjects (e.g., Finnish, Swedish, English and mathematics) in VET define the objectives of their work and how they organise their pedagogical support. The findings of the study are provided below, following an explanation of the main concepts of the activity theory. First, the descriptions of their work by the SEN teachers are analysed to determine their objects. Second, the tools that were described by the interviewees are analysed to determine the forms of organisational support.

#### The work objects of SEN teachers

In activity theory, object means the phenomena, items or features that the workplace is trying to change (Engeström, 1987). Various factors seem to affect the object of SEN teachers’ work: structural factors, college-based factors or factors related to individual SEN teachers, such as his/her personal priorities. In Finland, VET is organised by municipalities. On a big campus, there might be several VET colleges and a SEN teacher has to share his/her work among different units. Hence, the size of the municipality affects

**Figure 2: The Applied Developing Work Research Model in this study (see Engeström, 1987, 2001)**



their work. In addition, the vocational field largely defines the work of the interviewed SEN teachers. Basic education has a unified curriculum that is followed by all pupils. A characteristic of vocational education is the diversity of fields. Each field requires different aptitudes, which may be the reason that students with specific special needs are attracted to or guided by counsellors into different fields. For example, in the field of catering and hotel management, the main special needs are psychiatric disorders, whereas in the technical field, attention deficit seems the greatest problem.

*‘Linguistic difficulties and then the problems in attention and concentration are most visible in our college, especially in the technology department and especially in general subjects. If these problems are combined, the classroom might become very noisy, and the students restless. Also psychiatric problems are common as are coping and problems with life management skills. . . .’* (Interview 5)

In the social and healthcare field, many students have difficulties in life management and coping skills. Hence, SEN teachers working in different fields need to adapt their professional roles, work models and tasks accordingly. According to the experiences of the interviewed SEN teachers, the number of students with psychiatric problems (e.g., depression and panic attacks) and alcohol overuse has increased.

In addition to the size of the learning environment and the nature of the field, specific fields have ‘top topics’ in elementary learning content, which places pressure on students. The social and healthcare field requires applied mathematics (calculation of medication), the hotel management field has high standards of hygiene (hygiene tests) and the catering field requires the understanding of applied mathematics. The responses of the SEN teachers indicated that they worked as support teachers in these areas of ‘top topics’.

The structure of vocational studies is linked to the work of SEN teachers. In units where sixth form studies are combined with vocational studies (joint qualification), there is a greater need for individual teaching. In purely vocational units, the work of SEN teachers consists of individual support, group support and co-teaching.

*‘My work consists mainly of teaching [. . .] There is the possibility to plan with my SEN teacher colleague during the breaks or some other time, but as she started working this year I said to her that ‘no niceties this year’. I gave her the first trial year, no new things this year! Next year we will shift to the periodic system, which is terrible, no reforms that year either [. . .] For the next two to three years – no development work!’* (Interview 3)

The curricula of different vocational fields dictate the work of SEN teachers. In spite of the vocational field, the work of the SEN teachers is targeted mainly at the general subjects.

*‘Because I work as the head of the general subjects’ department and my main task is to teach general subjects, the effects of my work are simply the completed courses in general subjects of the students with SEN.’* (Interview 10)

All interviewees are part of the general subjects unit in a VET college. All interviews revealed that learning problems manifested mainly in general subjects, which are taught separately during specific periods. The academic year is divided into periods of six weeks, whereas the periods of vocational or general subjects and on-the-job learning vary. This fact greatly affects the work of SEN teachers. In VET colleges that have special groups for students with special needs (Interview 6, p. 5), the need for the support of SEN teachers is less because teaching is based on practical work. It is commonly estimated that learning by doing is easier for those with SEN, and even students who have individual education plans (IEPs) may perform very well in functional lessons.

The work of SEN teachers seems autonomous. The administration of a VET college provides independence for SEN teachers. Most interviewees had lengthy experience in special needs education, and therefore they were able to develop their work autonomously. The SEN teachers interviewed in this study seemed aware of college-level administrative instructions and orders but usually were not aware of the connection of the latter with their work.

Several individual factors affected the work of the interviewed SEN teachers. They worked independently, and they did not base their work on an established, shared model. Some SEN teachers stressed collaboration with colleagues more than others did, but most of them defined individual students as the main target of their work in a separate space. Moreover, those who defined specific learning difficulties as the main target of their work (e.g., Interview 5) stressed individual, face-to-face support. In general, the interviewees described dyslexia as the most important learning difficulty in their work.

Goal setting was autonomous. The work model was affected by previous work experience of the SEN teachers. Those who had worked previously in secondary education tended to transfer the same model to vocational education. Previous work experience, such as in child welfare, may be an explanation for the current work in special needs education. The interviewees with personal experience of dyslexia (Interview 5) focused on dyslexia.

*‘When I started to work here there were no SEN teachers of general subjects in VET colleges. [. . .] And I was lucky that I had been working in a secondary school for such a long time and I had a very good existing network available. I had a structure to start from. And basically I have used the same structure until now.’* (Interview 3)

Although the SEN teachers described their work mainly as face-to-face-teaching, the objects of their work were not only individual students. As an outcome of their work, they stressed the importance of restructuring the learning environment, such as organising learning possibilities, securing positive learning experiences and the joy of learning for all students. The SEN teachers also emphasised attitudinal changes by other teachers, which led them to use differentiation and varied pedagogical methods. Some interviewees described difficulties with consultations with colleagues in special needs education. They described themselves as mediators between teachers and students regarding behavioural difficulties. Although the SEN teachers stressed the importance of follow up with colleagues (e.g., study counsellors and vocational teachers) on the progress of students with SEN, the focus was always on a single student:

*‘. . . I am trying to avoid meetings . . . my basic work is teaching.’* (Interview 10)

*‘Although the VET college stresses graduation, my personal goal is to . . . teach the students perseverance, not to give up even in difficult situations. . . .’* (Interview 4)

VET colleges are required to gather follow-up data about different functions. SEN teachers are expected to follow up the number of students with SEN who pass exams.

In summary, both structural and personal factors affect the work of SEN teachers. The size of the unit and the compliancy of the curriculum limit the work of SEN teachers. Furthermore, the special needs of students vary in different educational fields, which affect the work of SEN teachers. For example, problems in life management skills or psychiatric problems are more difficult to work with than other, more ‘defined’ special needs. The work of SEN teachers seemed autonomous. They usually worked alone in supporting general subjects. However, they felt pressure because of the lack of models of organising support. Hence, the interviewed SEN teachers benefited from their previous work experience and adapted the work model from secondary school where they had worked earlier.

#### *Organising pedagogical supports*

In activity theory, ‘tools’ are factors that mediate between subjects and objects. A tool mediates an activity by connecting a human being not only to the world of objects – his or her physical surroundings – but also to other human beings. Tools may be external and material (e.g., a textbook and a computer) or internal and symbolic (e.g., language). Tools take part in the transformation of an object into an outcome, which can be desired or unexpected. In formal learning, tools usually are bound to the institution in which they are produced and used (Engeström, 1987; Kuutti, 1996).

When we interviewed the SEN teachers, we asked them to describe their work. We particularly wanted to know how

they identified students who needed special education. The tool used the most was the testing and screening of all newcomers at the beginning of the school year. All teachers investigated the literacy skills of new students. The same test is used throughout the country (Holopainen et al., 2004). In addition to the dyslexia test, the teachers screened the students’ mathematical skills, and some teachers gathered data by using assessment tools to screen the students’ abilities in foreign languages. In some cases, new students were also interviewed. This procedure is widely accepted and used in special education.

*Interviewee: ‘Of course, in the beginning one source of information is this test for math, language and dyslexia and another source is information from previous schools. And of course there are these obvious cases. You only need to see these students and you know that they are [in need of support].’*

*Question: ‘How about the vocational subjects, are there any base line exams?’ Interviewee: ‘Hmm. I do not believe that there are any. I don’t know. Vocational teachers do the math tests. But I assume that there isn’t any test that measures if a student is able to handle a hammer.’* (Interview 3)

In the process of identifying the students who need special treatment, the diagnosis is often considered the rational first phase before the intervention. In this procedure (sometimes called the ‘medical model’), the student is viewed in need of rehabilitation (Bayliss, 1998; Fitch, 2010). Skrtic (1991, p. 54) stated that presumption of a pathological condition leads to the supposition that differential diagnoses are objective and useful. Boyle (2013) argued, however, that special educators should be aware of the possible negative consequences of labelling.

Transition information is another means of deciding the focus of the resources of SEN teachers. In this method, teachers or other professionals in the previous school fill out an information form. In some cases, the information is communicated via ‘transition meetings’ between the SEN teachers at VET and secondary schools. This communication sharing seems informal, although some written forms are used.

*‘I interview all students and discuss with those whose names I have received from the previous schools. I also get the transition plans from the previous school.’* (Interview 6)

*‘. . . this transition information is really important and we are constantly developing it.’* (Interview 10)

Communication with other teachers or college staff members was one way that interviewees obtained information about students who might need special education, assessment or a ‘closer look’ by professionals. Research has shown that communicating with colleagues have a positive

effect when new ideas or innovations are needed (Messmann and Mulder, 2011). We found both informal and formal ways of information sharing. Usually college staff has ‘many possibilities to discuss with each other daily’ (Interview 8), and these occasions are utilised. Although discussions with teachers occurred during teachers’ meetings and IEP meetings, they were often unofficial whenever a special education teacher met her/his colleagues. Although the special education teachers kept strict appointment hours to meet with their colleagues or students, they were also ‘available as often as needed without schedules’ (Interview 1, Interview 2). The interviewees stated that they try to remain open to both colleague and student initiatives, and they organise their work so that everyone can easily contact them. At the beginning of the college year, the SEN teachers circulated in every class and introduced their work, thus becoming acquainted with the students.

After the need for special support was determined, the SEN teachers used a variety of ‘tools’ consisting of both concrete material artefacts and non-material, mental or symbolic tools. In collaboration with other professionals, all teachers prepared an IEP for every student with SEN. This is mandatory by law (Laki ammatillisesta koulutuksesta, 1998). Because the IEP must be followed up, it is used regularly during the college year. The SEN teachers also used their time ‘to modify study materials, such as texts and tasks’ (Interview 9).

The actual work with students with SEN was composed of three techniques: co-teaching, small group teaching and individual instruction. Co-teaching was only recently adopted as a means of special education, mainly because of the growing demand for inclusive initiatives. However, both small group teaching and individual instruction are used the most in special education.

*‘. . . for those students that have both vocational studies and sixth form academic studies, 10% of my time is co-teaching and 90% individual instruction.’*  
(Interview 10)

Also, SEN teachers in secondary schools organise sessions that consist of small group or individual instruction (Takala, Pirttimaa and Törmänen, 2009).

Consultation with other teachers took place in order to help all teachers involved to support students with learning difficulties. Although such consultations were not organised systematically, they were used when the SEN teachers considered it reasonable. The problem with consultation is the tradition of teachers working alone in a classroom. Thus, it may cause feelings of incompetence in teachers whose teaching methods are questioned.

Question: *‘What advice do teachers ask from you?’*  
Interviewee: *‘How to handle difficult young people. How to activate a student. Perhaps these questions*

*because of my background [interviewee has previous experience in youth work and child welfare work]. Behavioural problems are the biggest concern. Actually teachers very rarely ask for advice. Sometimes I want to say [to teachers] PLEASE DO NOT ACT LIKE THAT! STOP! WAKE UP! THINK! But if you do this, you need not give any more advice for a year. . . . Usually I ask questions. . . .’*  
(Interview 7)

Laws, quality manuals, special education plans and other official or legal documents had little effect on the everyday duties of interviewees. Although every college had SEN action plans and other instructions, the SEN teachers did not find the existing guidelines to be important in their work. The interviewees knew about the regulations, but they claimed that these instructions were in the background when they worked with students. For example, the official Special Needs Education Plan, which is obligatory in Finnish VET colleges, was not viewed as essential by the interviewees.

*‘. . . no document is guiding us precisely, but we can decide the manner and level of support by ourselves and of course the culture of the college. We also have the curriculum and other legal documents there in the background. I like the freedom. . . there is the SEN Action Plan, in the background. It sets us limits, like a playground where I can act [. . .] I don’t remember when the last time I read it was, but that doesn’t bother me.’* (Interview 10)

In summary, with regard to how SEN teachers organised pedagogical support, their ‘tools’ and how they used them, it seems that SEN teachers have autonomy. Testing, screening and information from previous schools are commonly used tools in identifying special needs. Tests and interviews focus on learning difficulties, such as reading, writing and mathematics. Discussions with colleagues clarified questions about which students needed special support. IEPs were used as both support and follow up. The teaching was organised into co-teaching situations, in small groups or individual instruction. Consultation with other teachers was mentioned, but it did not play a strong role, and the teachers felt unsure of how to organise consultation. The college-level instructions did not strongly affect the work of SEN teachers.

## Discussion

There has been only limited interest in the work of SEN teachers in the changing inclusive educational context. Although SEN teachers have established their position in vocational education, the definition of the work roles and the role as a part of the inclusive VET community needs clarification.

Different support services and professionals are resources in the field of special needs education. In Finland, one

resource consists of ‘new’ SEN teachers, who are responsible for providing students with support in general academic subjects (e.g., languages and mathematics), but not in vocational/technical subjects. The objective of this study was to determine how this group of SEN teachers defines the object of their special educational duties and how they organise their pedagogical support. The semi-structured interview was designed according to themes in the activity theory of Engeström (1987, 2001, 2002).

The main findings reflected the individual work model of the SEN teachers and their position as a part of the VET community. Thus, the status of ‘expert teacher’ (see Figure 1) seems to be strong. The consultative role exists, but it is not systematic. The interviewed SEN teachers directed the support in academic subjects and implemented it mainly in individual or small group work where the focus is on learning difficulties. Work or vocation-related support is rare.

All interviewed SEN teachers ( $n = 10$ ) were well educated and experienced in education, but their experience was gained mostly at the level of secondary school. The critical question is whether SEN teachers transfer to the VET level the structure and practices of the support used with schoolchildren. This question is crucial because the interviewees are responsible for supporting students, especially in general subjects. According to the national curriculum, the general subjects should be strongly linked to the vocational subjects and the professional growth of students.

All interviewees seemed to share similar cultural understanding of special needs education. They emphasised the need to test and screen for dyslexia and dyscalculia. This was implemented in all first-year students in order to determine those with special needs. Moreover, the transition information from previous schools guided the SEN teachers’ work with the first-year students. The teachers implemented the ‘diagnosis–intervention–assessment’ model, which is not always sufficient for the diversity of needs or support. This reflects the demand for different structures of special support in VET in which the focus is on the development of field-specific vocational growth. Instead of learning difficulties, the support could be targeted at learning a vocation. Obviously, in inclusive education, the ‘weakness-based’ model would restrict the organisation of pedagogical support for all students with SEN in VET, especially in situations in which the problems are diffuse and difficulties are unspecified, such as the lack of motivation, consequences of substance abuse and the absence of coping skills (Hirvonen et al., 2009).

The SEN teachers did not work alone, but they were autonomous, that is, they enjoyed freedom in organising their weekly and annual work routines. This autonomy offers the highly appreciated status of professional expertise and independence of the SEN teachers, who were the key persons in organising the support. In Finnish schools, independent

work and responsibilities are highly valued, including the field of special education. The national curriculum, the college-based SEN Action Plan and other official protocols had a weak effect on the everyday duties of the SEN teachers.

The findings showed that the interviewed SEN teachers had an autonomous position in the VET college, and it did not help them to integrate into the VET college community. However, the SEN teachers appreciated their independence, and they said that they felt empowered. If the autonomy of the SEN teachers increases, it may result in the further separation of tasks and responsibilities.

Inclusive education in VET settings challenges teacher education. In order to avoid isolation and to focus purely on learning difficulties, staff members should apply a multiprofessional approach. The increasing importance of this new SEN teacher group in Finnish VET settings has implications for special needs education. However, in order to reach the goals of inclusive education, the role and tasks of this SEN teacher group should be redefined, and their position should be integrated into the multiprofessional support services of VET colleges. Based on our findings, we recommend a study of the curricula of teacher education in special needs to determine both models and trends. This information would be crucial in reorganising teacher education, especially in VET settings.

---

#### Address for correspondence

Maija Hirvonen,  
Teacher Education College/JAMK University of  
Applied Sciences,  
Piippukatu 2,  
FI-40100 Jyväskylä,  
Finland.  
Email: maija.hirvonen@jamk.fi.

---

#### References

- Bayliss, P. (1998) ‘Models of complexity. Theory-driven intervention practices.’ In C. Clark, A. Dyson & A. Millward (eds), *Theorising Special Education*, pp. 61–78. Oxon, UK: Routledge.
- Billet, S. (2012) ‘Vocational education and training, culture and self: dominant interests, diverse traditions and vocational education in globalised times.’ In S. Stolz & P. Gonon (eds), *Challenges and Reforms in Vocational Education. Aspects of Inclusion and Exclusion. Studies in Vocational and Continuing Education* (Vol. 11), pp. 53–72. Bern, Switzerland: Peter Lang.
- Booth, T. (2005) *Index for Inclusion, Developing Learning and Participation in Schools*. Helsinki, Finland: Kehitysvammaliitto ry.
- Boyle, C. (2013) ‘Labeling in special education: where do the benefits lie.’ In A. Holliman (ed.),

- Educational Psychology: An International Perspective*. London, UK: Routledge. <[http://www.academia.edu/2543279/Labeling\\_in\\_Special\\_Education\\_Where\\_do\\_the\\_benefits\\_lie](http://www.academia.edu/2543279/Labeling_in_Special_Education_Where_do_the_benefits_lie)> (accessed 20 October 2013).
- Daniels, H. & Cole, M. (2002) 'The development of provision for young people with emotional and behavioral difficulties: an activity theory analysis.' *Oxford Review of Education*, 28 (2 and 3), pp. 311–29.
- Engeström, Y. (1987) *Learning by Expanding: An Activity-Theoretical Approach to Developmental Research*. Helsinki, Finland: Orienta-konsultit.
- Engeström, Y. (2001) 'Expansive learning at work: toward an activity theoretical reconceptualization.' *Journal of Education and Work*, 14 (1), pp. 133–56.
- Engeström, Y. (2002) *Kehittävä Työntutkimus. Perusteita, Tuloksia ja Haasteita. [Developmental Work Research. Principles, Results and Challenges]*. Helsinki, Finland: Edita.
- Fitch, F. (2010) 'Laggards, labeling and limitation: re connecting labeling deviance theory with deweyan pragmatism.' *Philosophical Studies in Education*, 41, pp. 17–28.
- Franzosi, R. P. (2008) *Content Analysis. Volume I. SAGE Benchmarks in Social Research Methods Series*. London, UK: Sage Publications.
- Hirvonen, M. (2006). Ammatikouluista avoimiin oppimisympäristöihin. Ammatillisen erityisopettajan työ muutoksessa. [From vocational training to open learning environments. The work of the vocational special teacher during change.] Reports of JAMK University of Applied Sciences, p. 64.
- Hirvonen, M. & Pynnönen, P. (2010) 'Ammatillisen erityisopettajan työn sisältö, muutos ja haasteet. ["The content, changes and challenges of the work of vocational special needs teachers".]' In L. Kaikkonen (ed.), *Ammatilliset Erityisoettajat Työnsä Asiantuntijoina. [Vocational Special Education Teachers as Experts.] A National Study of the Changing Work of Special Education Teachers in Finnish Vocational Education, Reports of JAMK University of Applied Sciences*, pp. 39–50. Jyväskylä: JAMK.
- Hirvonen, M., Ladonlahti, T. & Pirttimaa, R. (2009) 'Ammatillisesta erityisopetuksesta tuettuun ammattiin opiskeluun – näkökulmia ammatillisen erityisopetuksen ja koulutuksen kehittämiseen. [From vocational special training to supported vocational studies – perspectives on the development of vocational special needs education.].' *Kasvatus*, 40 (2), pp. 158–67.
- Holopainen, L., Kairaluoma, L., Nevala, J., Ahonen, T. & Aro, M. (2004) *Lukivaikeuksien Seulontamenetelmä Nuorille ja Aikuisille [Dyslexia Screening Test for Young Adults]*. Jyväskylä, Finland: Niilo Mäki Instituutti.
- Kaikkonen, L. (ed.) (2010). *Ammatilliset erityisoettajat työnsä asiantuntijoina [Vocational Special Education Teachers as Experts.] A National Study of the changing work of special education teachers in Finnish vocational education, Reports of JAMK University of Applied Sciences*, p. 109.
- Kivirauma, J. & Kuorelahti, M. (2002) 'Erityisopettajat empirian ja teorian läpivalaisussa: osa-alueista sukupolviin [SEN teachers from the empirical and theoretical perspective].' In M. Kuorelahti & T. Saloviita (eds), *Erityiskasvatus ja Integraatio: Juhlakirja Prof. Sakari Moberg 60 Vuotta [Special Needs Education and Integration: Professor Sakari Moberg 60 Years]*, pp. 32–59. University of Jyväskylä. Research reports, Department of Special Education.
- Kumpulainen, T. (2009) *Koulutuksen Määrälliset Indikaattorit [Quantitative Indicators of Education]*. Tampere, Finland: Opetushallitus.
- Kumpulainen, T. (ed.) (2014) *Opettajat Suomessa 2013. Koulutuksen Seurantatiedot 2014:8*. Helsinki, Finland: Opetushallitus. [Teachers in Finland. Evaluation report 2014:8. National Board of Education].
- Kuutti, K. (1996) 'Activity theory as a potential framework for human-computer interaction research.' In B. A. Nardi (ed.), *Context and Consciousness: Activity Theory and Human-Computer Interaction*, pp. 17–44. Cambridge, MA: MIT.
- Laki ammatillisesta koulutuksesta. (1998). [Law concerning vocational education.] *Erityisopetus (special education)*, § 20.12.8.2011/951.
- Leontjev, A. N. (1978) *Activity, Consciousness, and Personality*. Englewood Cliffs, NJ: Prentice-Hall.
- Mehaut, P. (2012) 'Three challenges for the VET systems: the end or the rebirth of vocational education?' In S. Stolz & P. Gonon (eds), *Challenges and Reforms in Vocational Education. Aspects of Inclusion and Exclusion. Studies in Vocational and Continuing Education (Vol. 11)*, pp. 73–93. Bern, Switzerland: Peter Lang.
- Messmann, G. & Mulder, R. H. (2011) 'Innovative work behaviour in vocational colleges: understanding how and why innovations are developed.' *Vocations and Learning*, 4 (63), pp. 63–84.
- Miles, S. & Singal, N. (2010) 'The education for all and inclusive education debate: conflict, contradiction or opportunity?' *International Journal of Inclusive Education*, 14 (1), pp. 1–15.
- Official Statistics of Finland (2012) *Students of Special Vocational Education by Place of Provision of Teaching, 2004–2011*. Helsinki, Finland: Statistics Finland. <[http://www.stat.fi/til/erop/2012/erop\\_2012\\_2013-06-12\\_tau\\_009\\_en.html](http://www.stat.fi/til/erop/2012/erop_2012_2013-06-12_tau_009_en.html)> (accessed 28 May 2014).
- Pearson, S. (2009) 'Using activity theory to understand prospective teachers' attitudes to and construction of special educational needs and/or disabilities.'

- Teaching and Teacher Education*, 4 (25), pp. 559–68.
- Saloviita, T. (2009). Inclusive education in Finland: a thwarted development. 'Zeitschrift für Inklusion-online.net', p. 1. <<http://www.inklusion-online.net/index.php/inklusion-online/article/view/172/172>> (accessed 20 October 2013).
- Silverman, D. (2001) *Interpreting Qualitative Data. Methods for Analysing Talk, Text and Interaction*. (2nd edn). London, UK: Sage.
- Skrtic, T. M. (1991) *Behind Special Education. A Critical Analysis of Professional Culture and School Organization*. Denver, CO: Love.
- Ström, K. (1999). Specialpedagogik i högskolan: ett speciallärarperspektiv på verksamhet, verksamhetsförutsättningar och utvecklingsmöjligheter [Special Education in Upper Secondary Education: SEN-Teachers' Perspective on Special Educational Activities, Possibilities and Development]. Doctoral dissertation. Åbo: Åbo Akademi förlag.
- Takala, M., Pirttimaa, R. & Törmänen, M. (2009) 'Inclusive special education: the role of special education teachers in Finland.' *British Journal of Special Education*, 3 (36), pp. 162–73.
- University of Jyväskylä (2013). Erityispedagogiikan opetussuunnitelma [Curriculum of Special Education]. <<https://www.jyu.fi/edu/laitokset/eri/opiskelu/paaineopiskelijat/opetussuunnitelmat-ja-ohjelmat/erityispedagogiikan-ops-2013-2014>> (accessed 13 May 2014).