

Finnish teachers' views on co-teaching

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Co-teaching has become a well-known way of working among Finnish teachers in recent years. Teachers' collaboration is becoming increasingly important in light of the rising number of diverse students in regular classes. In an ideal co-teaching context, teachers collaborate as equals, recognise and respect each other's skills and competencies, and strengthen and support each other. In this study, we examine teachers' views on co-teaching and investigate which background factors explain teachers' views concerning the benefits and the challenges of co-teaching. The data obtained from Finnish basic education teachers' ($N = 694$) responses to an online questionnaire are analysed quantitatively. The results show some differences among the teachers' views. Subject teachers perceive more challenges in co-teaching than class and special education teachers. Class teachers perceive the fewest challenges. Although teachers are generally interested in co-teaching and some of them co-teach regularly, they also report several barriers to its application. The explanatory factors concerning the differences in teachers' views are gender, teachers' co-teaching experiences, the amount of co-teaching per week and working as a class teacher.

Key words: co-teaching, benefits and challenges, inclusion, collaboration, reciprocity

1. Introduction

Inclusive education has become a worldwide trend. International agreements, such as the Salamanca Statement (UNESCO, 1994) and the Convention on the Rights of Persons with Disabilities (UN, 2006), have promoted inclusive

education in schools internationally, and locally in Finland. The main requirement of this inclusive ideology and Finnish education policy is to provide teaching for all pupils despite their diversity (Saloviita, 2018; Saloviita & Schaffus, 2016; Official Statistics of Finland, 2019). Inclusion can be understood in many ways (see Ainscow & Miles, 2009; Ketovuori & Pihlaja, 2016; Lauchlan & Greig, 2015; Savolainen, 2009). Inclusive education is understood as an approach to serving children with disabilities in general education settings and it is also regarded as a reform that supports diversity among all learners and eliminates social exclusion (Ainscow & Miles, 2009). According to Haustätter (2014), inclusion is a process that requires continuous changes in schools, which not only means that pupils with special educational needs should have access to mainstream schools, but also that it concerns *all* pupils and barriers to learning. The role of all teachers is crucial to implementing inclusive education (De Boer et al., 2010; Savolainen, 2009). According to Saloviita and Schaffus (2016), teachers' attitudes towards inclusion are influenced by their professional abilities to teach pupils with special needs. Instead of focusing on learning challenges as the characteristics of individual pupils, more attention should be paid to teaching methods and practices that can promote each student's learning.

Statistics show that the number of students in need of pedagogical support continues to grow in general education, nationally and internationally (Official Statistics of Finland, 2019; Ricci & Fingon, 2018). This increase has led to a situation where the provision of pedagogical support has become part of every teacher's work (Thuneberg et al., 2013). Previous studies show that increasing heterogeneity in class has made teachers' work more challenging (Tirri, 2014) and that their knowledge and skills may be insufficient for teaching heterogeneous classrooms (Lauchlan & Greig, 2015). The Evaluation Report of the Teacher Training Forum, prepared by the Ministry of Education and Culture in Finland, finds that teachers' insufficient knowledge about handling and teaching pupils with special educational needs currently poses a challenge (FINEEC, 2018). It is therefore important to take into account teachers' experiences of inadequacy. To overcome these inadequacies, collaboration with special educators and other teachers could be beneficial.

Finnish teachers are highly educated, and their work and teacher education are valued (Väljjärvi, 2017). Compared to assessment of the quality of teaching in other countries, there is little control over Finnish teachers' work. This autonomy contributes to the independence and social appreciation of the

profession (Niemi et al., 2012) and is a positive aspect of teachers' work. However, excessive autonomy can lead to situations where the teacher is left to face challenges on their own. One way out of this predicament is through collaboration with other teachers; for example, in the form of co-teaching and partnership between teachers with different areas of expertise.

Co-teaching is a method of teaching in heterogeneous groups (Chitiyo, 2017; Ricci & Fingon, 2018; Ruijs & Peetsma, 2009) and has been noted as one way of supporting pupils in school (Ministry of Education & Culture, 2014). Co-teaching is defined as simultaneous teaching. In successful co-teaching, teachers combine their skills in planning, implementing and evaluating teaching and learning together (Friend et al., 2010).

2. Different ways of implementing co-teaching

Co-teaching can be applied in various ways. The most common models of co-teaching are *one teaches and one observes*, *one teaches and one assists*, *station teaching*, *parallel teaching*, *alternative teaching* and *teaming* (Friend et al., 2010). The most commonly implemented method of co-teaching used in previous studies has been a combination in which one of the teachers is a special education teacher (Fluijt et al., 2016). Other combinations include collaboration between class teachers and subject teachers (Friend et al., 2010; Morgan, 2016; Scruggs et al., 2007; Villa et al., 2013). According to Scruggs and Mastropieri (2017), the teachers' roles in teaching can differ, for instance, with the subject teacher taking more responsibility for the content of the teaching and the special teacher concentrating on supporting students with specific needs. New schools often have open learning spaces where large groups of children study together and several teachers are present. These situations demand co-teaching and collaborative skills (see Kattilakoski, 2018).

In this study, we aim to establish the suitability of co-teaching and determine what kinds of benefits co-teaching can contribute to teachers' work in heterogeneous classes, and what challenges it poses. We are also interested in identifying the background variables behind the teachers' views. The theoretical lenses we use are the concepts of reciprocity, agency (Becker, 2014; Hallamaa, 2018) and equality (Hallamaa, 2017). The important key to the success of co-teaching is the teachers' fluent collaboration. Understanding the prerequisites for collaboration can make it possible to promote the implementation of co-teaching. Examining the conditions for collaboration facilitates the understanding of the factors that promote collaboration, and why working with someone may fail (Hallamaa, 2017).

3. Teachers' views on the benefits and challenges of co-teaching

Previous studies have shown that co-teaching increases teachers' job satisfaction and well-being (Sirkko et al., 2018). Students' support needs are better met when there are more teachers in the classroom (Krammer et al., 2018). Implementing co-teaching can reduce segregation (Strogilos et al., 2016), promote inclusion, improve students' socio-emotional and interaction skills (Friend et al., 2010; Strogilos & Stefanidis, 2015) and reduce students' challenging behaviour (Strogilos & Avramidis, 2016; Botha & Kourkotas, 2016). According to teachers, co-teaching enables professional growth and collaboration and supports and develops teachers' work (Friend & Cook, 2014; Scruggs et al., 2007). The different skills of teachers make collaboration meaningful and create opportunities to learn new pedagogical approaches and content from each other. In co-teaching, the responsibilities are also divided between teachers, thus supporting their well-being and ability to cope with the workload (Shin et al., 2016). The quality of teaching can also be improved by combining the teachers' knowledge (Friend et al., 2010; Murawski, 2008).

Previous studies have reported that the most common barrier to implementing co-teaching is the lack of common planning time (Chitiyo, 2017; Saloviita & Takala, 2010; Scruggs & Mastropieri, 2017; Shin et al., 2016; Strogilos et al., 2016; Takala & Uusitalo-Malmivaara, 2012). Other hindrances include difficulty in finding a suitable partner (Pratt, 2014; Takala & Uusitalo-Malmivaara, 2012), differences in teachers' personalities (Chanmugam & Gerlach, 2013) and unclear roles in teaching situations (Takala & Uusitalo-Malmivaara, 2012). Additionally, lack of support from the school management is perceived to hamper the implementation of co-teaching (Friend & Cook, 2014).

4. Teachers' agency and reciprocity in the co-teaching context

Co-teaching involves collaboration built on the interaction between teachers (Friend & Cook, 2014). In good collaboration, successful interaction is based on reciprocity and experiences of equality (Hallamaa, 2017). Reciprocity is a moral virtue that is part of the human ability to build and maintain a productive social life (Becker, 2014). The willingness for reciprocity is acquired as part of human development (Becker, 2014). It binds human agents into mutual dependency, where the behaviour of each agent affects the common good. Non-reciprocity isolates people from one another, diminishing the will to help and support others (Törrönen, 2018). Although teachers have different specialities in education, equality in co-teaching means that by combining

their areas of expertise, they can achieve more than by teaching alone. Instead of determining someone's value or worth, in co-teaching, every teacher is perceived as playing a significant role in providing education (Friend & Cook, 2014).

Structures that consist of rules and resources are constantly changing through human activity, and they create boundaries and possibilities for different actions (Giddens, 1984; Jyrkämä, 2008). For example, resources and the action of the school culture set boundaries for teachers' work. Teachers have to be aware of educational laws and regulations, which include the rights and responsibilities of the students and teachers. Individuals' capabilities also affect the kinds of obstacles and possibilities they experience in different situations. Even though teachers differ from one another in education and amount of experience, they all have their respective strengths. A teacher's knowledge is built individually through their life experience, education and work (Karjalainen et al., 2006). Thus, regardless of age or educational background, each teacher brings a unique perspective to the interaction and the delivery of lessons in the classroom (Friend & Cook, 2014). According to Pratt (2014), teachers can use their individual differences as strengths to overcome challenges.

In collaboration, human agents have goals they consider worth striving for (Hallamaa, 2017; Tuomela, 2007). According to Tuomela (2007), the goal of collaboration can be individual, shared or common. Collaboration becomes deeper through common goals (Tuomela, 2007). According to Hallamaa (2017), successful collaboration is built on recognising other people's human agency, which means accepting people's various goals and the means to reach them (Hallamaa, 2018). Acknowledging human agency is acknowledging one another's moral value because the agents, as well as their fellow human beings, are valuable and therefore have the right to be treated with dignity (Hallamaa, 2017). Acknowledging others' moral value does not mean that their goals or means are accepted, but that they are considered accountable agents with whom a dialogue on differences in goals and means can be exchanged. This means that one gives space to the other and does not control the other (Hallamaa, 2017).

In co-teaching, collaboration is based on mutual trust (Villa et al., 2013; see also Tuomela, 2007). Trust is based on understanding and following common rules, and it increases with developing self-awareness and collaboration (see Yuan et al., 2018). According to Hallamaa (2017), trust increases as the

interests of each human agent are pursued. However, if it is impossible to pursue everybody's interests, conflicts arise. Life is about dealing with different types of conflicts, for an individual, as well as for a social community. Conflicts do not prevent reciprocity, but they create the need for rational argumentation, through which faults can be recognised and activity can be developed (Hallamaa, 2018). The goal is to reach a mutually satisfactory conclusion as much as possible, through impartial discussion (Hallamaa, 2018). Attaining the goal requires collaboration, with the ability to compromise and overcome conflicts.

According to Hallamaa (2017), reciprocity requires that human agents be freely allowed to present their ideas of beneficial outcomes and their aims and methods, and that they tolerate one another's views and endeavours. Collaboration is not possible if all parties do not share a true desire to find – and a commitment to search for – solutions that consider everybody's interests. The basis for collaboration is to acknowledge the required mutual understanding and the inevitable disagreements among human agents. By considering the terms for conducting collaboration together, the reasons why collaboration is sometimes unsuccessful and the factors that advance collaboration can be understood. For example, trust is affected by the use of power and by the power relations among people (Becker, 2014). In an ideal situation, reciprocity in collaboration is based on voluntarism and a way of acting that has been jointly agreed on (Friend & Cook, 2014).

5. Method

In this research, we explore Finnish teachers' views on the suitability of co-teaching and its benefits and challenges. We look at the possible benefits and challenges and identify the factors that relate to the differences in teachers' views concerning them. The research questions are as follows:

1. What are teachers' views on the suitability of co-teaching?
2. What are teachers' views on the benefits and challenges of co-teaching in the Finnish school system?
3. What factors explain the differences in the teachers' views?

5.1. Participants

A sample comprising 694 Finnish primary and secondary education teachers completed an online questionnaire as part of the 'Supporting Together!' project financed by the Finnish Ministry of Education and Culture. The data

were collected from teachers in one southern city and one larger northern city and in smaller municipalities around these cities. The teachers could decide whether to respond to the survey questionnaire. The sample consisted of 286 (41%) class teachers, 234 (34%) subject teachers and 174 (25%) special education teachers. The questionnaire included 19 questions about co-teaching, of which six were used in this study. The background variables that were asked about were the teachers' age, gender, basic education, type of school and educational background (Table 1). The respondents had considerable teaching experience (Table 1).

5.2. Measurement

The *suitability of co-teaching* from the teachers' viewpoint was addressed by the following six statements: 'Co-teaching is suitable for (1) differentiating, (2) sharing of professionalism, (3) sharing of responsibilities, (4) improving the effectiveness of teaching, (5) managing a restless class and (6) getting to know each pupil'. The questions were answered on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree), which was converted to a five-point scale because few respondents chose the extreme alternatives (see Krosnick & Presser, 2010). The *benefits of co-teaching* were explored with five statements, and these were rated on a seven-point Likert scale, which was also converted to a five-point scale. The factors that measured the benefits were as follows: 'From the teacher's viewpoint, the benefits of co-teaching are that you can (1) design teaching with another teacher, (2) teach together, (3) evaluate together, (4) divide the class into small groups and (5) share feelings and experiences from teaching'. The teachers' views on the *challenges of co-teaching* were mapped out by seven statements that illustrated the challenges of co-teaching identified in previous studies (Friend et al., 2010). The statements were rated on a five-point scale ranging from 1 (never) to 5 (always). The challenges were measured by the following statements: 'The challenges in co-teaching are (1) finding a common time to plan, (2) inadequate subject skills of another teacher, (3) lack of training in co-teaching, (4) lack of working models in co-teaching, (5) unclear roles of teachers, (6) questionable benefits and (7) lack of support from the school management'.

5.3. Analysis

The suitability of co-teaching and its benefits and challenges were analysed through descriptive statistics as frequencies, means and medians using SPSS (IBM SPSS Statistics for Windows, Version 25). The explanatory factors concerning the teachers' views on the benefits and challenges were examined using factor analysis. The claims concerning co-teaching benefits constituted

Table 1: Background information on the subjects (N = 694)

	N (%)	CT	ST	SET
		n (%)	n (%)	n (%)
Age in years				
<i>20–30</i>	57 (8)	33 (12)	17 (7)	7 (4)
<i>31–40</i>	183 (26)	69 (24)	64 (27)	50 (29)
<i>41–50</i>	244 (35)	108 (38)	73 (31)	63 (36)
<i>51–60</i>	184 (27)	71 (25)	64 (27)	49 (28)
<i>Over 60</i>	26 (4)	5 (2)	16 (7)	5 (3)
Work experience in years				
<i>0–5</i>	94 (14)	50 (17)	29 (12)	15 (9)
<i>6–10</i>	110 (16)	43 (15)	38 (16)	29 (17)
<i>11–15</i>	148 (21)	55 (19)	48 (21)	45 (26)
<i>16–20</i>	99 (14)	41 (14)	32 (14)	26 (15)
<i>Over 20</i>	243 (35)	97 (34)	87 (37)	59 (34)
School form				
<i>Comprehensive school grades 1–6</i>	230 (33)	169 (59)	13 (6)	48 (28)
<i>Comprehensive school grades 7–9</i>	65 (10)	2 (0.7)	48 (21)	15 (9)
<i>Comprehensive school grades 1–9</i>	308 (44)	101 (35)	134 (57)	73 (42)
<i>Comprehensive school grades 1–9 and high school</i>	46 (7)	12 (4)	29 (12)	5 (3)
<i>Special school</i>	28 (4)	1 (0.3)	0 (0)	27 (16)
<i>Other</i>	17 (2)	1 (0.3)	10 (4)	6 (3)
Implementing co-teaching				
<i>Never</i>	153 (22)	32 (11)	105 (45)	16 (9)
<i>2–4 lessons</i>	341 (49)	144 (50)	112 (48)	85 (49)
<i>Half of weekly lessons</i>	105 (15)	48 (17)	12 (5)	45 (26)
<i>Almost all lessons</i>	95 (14)	62 (22)	5 (2)	28 (16)

Notes: CT = class teacher; ST = subject teacher; SET = special education teacher

one mean sum variable to describe the benefits from the teachers' perspective ($\alpha = 0.89$). Lack of common planning time had emerged clearly as a challenge in previous studies (Saloviita & Takala, 2010; Strogilos et al., 2016; Takala & Uusitalo-Malmivaara, 2012); for this reason, it was excluded from the main components of the challenges and analysed separately. Views concerning (1) lack of training on the topic, (2) lack of working models, (3) unclear roles

of teachers, (4) difficulty in finding a suitable partner, and (5) lack of school management support were constructed as a single mean variable to describe the challenges of co-teaching ($\alpha = 0.81$).

The differences among the teacher groups in terms of benefits and challenges were analysed using analysis of variance. Analysis of regression was used to determine whether the teachers' gender, age, teaching experience, co-teaching experience, co-teaching education and weekly implementation of co-teaching explain the teachers' views on the benefits of co-teaching. We used hierarchical analysis, which introduced variables into the analysis in two steps. The analysis of regression was used exploratively, incorporating all the factors that might explain the benefits to teachers. Then, using SPSS, the worst-case variable that did not improve the model's explanation was removed (Nummenmaa, 2009). For statistical analysis, teacher groups (class, subject and special education teachers), gender, co-teaching education and co-teaching experience were made dummy variables.

6. Results

Although most teachers had positive views on co-teaching, its weekly implementation was low (see Table 1). Of the teachers, 153 (22%) did not co-teach at all, and 341 (49%) co-taught only two to four hours per week. Only 95 teachers (14%) implemented co-teaching in almost all lessons; most of these were classroom teachers (see Table 1).

6.1. Teachers' views on the suitability of co-teaching and its benefits and challenges

The results showed that most teachers perceived co-teaching as suitable for several situations, such as differentiating, getting to know the pupils, sharing responsibilities and professionalism, managing a restless class and improving the effectiveness of teaching. Co-teaching was most suited to sharing professional skills (see Table 2).

According to most of the teachers, the major benefit of co-teaching was the opportunity to share their feelings and teaching experiences. Additionally, most teachers reported that co-teaching was well suited to dividing students into smaller groups. The essential parts of co-teaching – planning, teaching and evaluation – were also considered useful (see Table 3).

The most commonly reported challenge was the lack of common planning time (see Table 4), followed by difficulty in finding a suitable partner.

Table 2: Teachers' views on the suitability of co-teaching

<i>Co-teaching is suitable for...</i>	Disagree or strongly disagree		Partly disagree		Neither disagree nor agree		Partly agree		Agree or strongly agree	
	N (%)		N (%)		N (%)		N (%)		N (%)	
<i>Differentiating</i> Md = 5, M = 4.7, SD = 0.67	7 (1)		9 (1)		19 (3)		94 (14)		565 (81)	
<i>Sharing professional skills</i> Md = 5, M = 4.7, SD = 1.02	8 (1)		9 (1)		25 (4)		90 (13)		562 (81)	
<i>Sharing responsibilities</i> Md = 5, M = 4.7, SD = 0.75	7 (1)		15 (2)		32 (5)		103 (15)		537 (77)	
<i>Improving the effectiveness of teaching</i> Md = 5, M = 4.5, SD = 0.96	18 (3)		24 (4)		50 (7)		118 (17)		484 (70)	
<i>Managing a restless class</i> Md = 5, M = 4.4, SD = 1.06	24 (4)		40 (6)		53 (8)		125 (18)		452 (65)	
<i>Getting to know each pupil</i> Md = 5, M = 4.4, SD = 1.04	19 (3)		39 (6)		57 (8)		131 (19)		448 (65)	

Notes: Md = median; M = mean; SD = standard deviation.

Table 3: Teachers' views on the benefits of co-teaching (N = 694)

<i>From the teacher's point of view, the benefit of collaborative teaching is that you can...</i>	Disagree or strongly disagree	Partly disagree	Neither disagree nor agree	Partly agree	Agree or strongly agree
	N (%)	N (%)	N (%)	N (%)	N (%)
<i>Share feelings and experiences</i> Md = 5, M = 4.7, SD = 0.73	10 (1)	7 (1)	31 (5)	92 (13)	554 (80)
<i>Divide the class into small groups</i> Md = 5, M = 4.7, SD = 0.72	8 (1)	8 (1)	33 (5)	97 (14)	548 (79)
<i>Evaluate together</i> Md = 5, M = 4.6, SD = 0.85	14 (2)	17 (2)	31 (5)	119 (17)	513 (74)
<i>Implement a lesson together</i> Md = 5, M = 4.6, SD = 0.84	17 (2)	11 (2)	27 (4)	134 (19)	505 (73)
<i>Design a lesson together</i> Md = 5, M = 4.4, SD = 1.04	31 (5)	25 (4)	33 (5)	149 (22)	456 (66)

Notes: Md = median; M = mean; SD = standard deviation.

Table 4: Teachers' views on the challenges of co-teaching (N = 694)

<i>Co-teaching has the following challenges:</i>	<i>Never</i>		<i>Rarely</i>		<i>Sometimes</i>		<i>Often</i>		<i>Always</i>	
	<i>N (%)</i>		<i>N (%)</i>		<i>N (%)</i>		<i>N (%)</i>		<i>N (%)</i>	
<i>Finding a common planning time</i> Md = 4, M = 3.6, SD = 1.03	32 (5)		59 (9)		167 (24)		302 (44)		134 (19)	
<i>Finding a suitable partner</i> Md = 3, M = 2.7, SD = 1.16	133 (19)		149 (22)		222 (32)		154 (22)		36 (5)	
<i>Lack of training on co-teaching</i> Md = 2, M = 2.6, SD = 1.07	112 (16)		236 (34)		200 (29)		118 (17)		28 (4)	
<i>Lack of working models</i> Md = 3, M = 2.7, SD = 1.06	100 (14)		206 (30)		229 (33)		132 (19)		27 (4)	
<i>Questionable benefit</i> Md = 2, M = 2.1, SD = 1.10	271 (39)		198 (29)		148 (21)		54 (8)		23 (4)	
<i>Unclear roles of teachers</i> Md = 2, M = 2.4, SD = 1.05	151 (22)		255 (37)		182 (26)		84 (12)		22 (3)	
<i>Lack of support from school management</i> Md = 2, M = 2.0, SD = 1.04	267 (39)		217 (31)		143 (21)		53 (8)		14 (2)	
<i>Inadequate subject skills of the other teacher</i> Md = 2, M = 1.8, SD = 0.93	285 (41)		257 (37)		107 (15)		38 (6)		7 (1)	

Notes: Md = median; M = mean; SD = standard deviation.

Questioning the benefits of co-teaching, lack of school management support and the inadequate skills of other teachers were mentioned only rarely or never mentioned (see Table 4). One-fifth of the teachers found the lack of training on co-teaching challenging.

6.2. The connection of background variables to teachers' views on co-teaching

When looking at the teachers' views on the benefits of co-teaching, the differences among the teachers' groups were significant, as shown by the variance analysis: $F(2, 691) = 22.99, p < 0.001, \eta^2 = 0.06$. However, training explained only 6% of the variation in perceived benefits. There was no statistically significant difference between class teachers and special education teachers concerning co-teaching benefits. Subject teachers' views had a statistically significant difference from those of the class teachers and special education teachers. Subject teachers perceived the least benefits of co-teaching.

The entire set of background variables explained 17% of the variance. The best explanation proved to be gender (-0.24^{***}), followed by implementation of co-teaching (0.19^{***}) and acting as a class teacher (0.15^{***}). In this study, female teachers perceived more benefits of co-teaching than male teachers. Further, class teachers recognised the most benefits of co-teaching, and subject teachers saw the least. The more the teachers engaged in co-teaching, the more useful they found it to be and the fewer challenges they experienced. A variance analysis showed that the impact of the teacher group was significant: $F(2, 691) = 19.14, p < 0.001, \eta^2 = 0.05$. Despite a statistically significant difference among the teacher groups, their educational background explained only 5% of the variation in their experienced challenges. An explanation at 15% was obtained for all explanatory factors. The best explanation was the weekly implementation of co-teaching (-0.31^{***}). The other explanatory factors were co-teaching experiences (-0.14^{***}) and acting as a class teacher (-0.094). These findings indicate that co-teaching experiences alleviated the teachers' concerns about co-teaching challenges. Subject teachers experienced more challenges in co-teaching than the other two groups, with class teachers encountering the fewest challenges. Special education teachers' views concerning challenges were closer to those of class teachers than those of subject teachers.

7. Discussion

This study sought to determine Finnish teachers' views of co-teaching. We identified differences among the views of different teacher groups (that is, class, subject and special education teachers) regarding the suitability of

co-teaching and its benefits and challenges. Additionally, we explored the background variables behind the teachers' views. Our study's findings confirm the results of previous studies regarding the benefits of co-teaching for teachers' work. Although most Finnish teachers were positive about co-teaching, its implementation has not increased in Finland relative to the findings reported by Saloviita and Takala (2010) and Takala and Uusitalo-Malmivaara (2012). Most teachers consider co-teaching suitable for sharing professional skills and responsibilities, which indicates their trust in each other's professionalism. This study found that most teachers rarely or never report the inadequate subject skills of their teaching partners, which reflects the existence of an environment conducive to reciprocity. Moreover, most teachers perceive co-teaching as suitable for differentiating, getting to know the pupils, managing a restless class and improving the effectiveness of teaching. Implementing co-teaching makes it possible to take into account the heterogeneity of student groups more effectively because it allows the pupils to be divided into smaller groups, which facilitates differentiation. Additionally, as more adults participate in teaching, their observations of students' learning and opportunities to support students increase (Friend & Cook, 2014; Friend et al., 2010). This situation thus allows early intervention and a better encounter with a student in need of support. The results of this study, together with those of previous studies (Strogilos & Avramidis, 2016), reinforce the potential of co-teaching to support the teaching of heterogeneous classes.

According to the teachers in this study, the major benefit of co-teaching is the opportunity to share their feelings and experiences that emerge from teaching. Despite the high level of autonomy that characterises the work of Finnish teachers, peer support is welcomed, and reciprocity is an important factor in the smooth functioning of co-teaching. Successful collaboration is built on the identification of a teacher's own agency and the recognition of a colleague's agency (see Hallamaa, 2017). Agency is realised as a relationship and in relation to other people (Jyrkämä, 2008). Understanding the factors affecting the smooth flow of collaboration can help teachers reflect on their actions and facilitate their encounters with colleagues as peers. Also in teachers' work, collective commitment can create outcomes that could not be achieved alone (Tuomela, 2007). Although several studies have identified the importance of teacher collaboration, interaction and sharing, teachers' collegial support has been scarcely promoted through structural or organisational means (Penttinen et al., 2011). From the perspective of well-being at work, peer support is vital. Co-teaching contributes to the solution to this issue, enabling peer tutoring to form part of day-to-day work.

As reported in previous studies (Scruggs & Mastropieri, 2017; Shin et al., 2016; Strogilos et al., 2016; Takala & Uusitalo-Malmivaara, 2012), the major challenge identified in this research is the lack of common planning time, followed by difficulty in finding a suitable working partner. In Finland, teachers' educational backgrounds differ between lower grades (1 to 6) and upper grades (7 to 9). In the upper grades, subject teachers teach the subjects in which they are trained, and teachers handling lower grades teach all subjects in their own classes. If teachers only regard similar competencies as important, co-teaching with colleagues from different educational backgrounds may be perceived as challenging. This may be one reason why the subject teachers consider it difficult to find a suitable partner. According to Shin and colleagues (2016), different educational backgrounds are sources of richness in co-teaching. While sharing professional competence reciprocally promotes collaboration, inequality is a significant barrier to establishing effective co-teaching relationships (McDuffie et al., 2007). Teacher competence is developed individually through life experience, education and work (Karjalainen et al., 2006). Regardless of age or educational background, each teacher makes a unique contribution to interaction situations and lesson implementation (Friend & Cook, 2014).

Despite the teachers' varying views concerning the benefits and challenges of co-teaching, such differences can only partly be explained by age, educational level, co-teaching experience and gender. The best explanatory factor for the benefits of co-teaching is gender. That is, female teachers experience more benefits from co-teaching compared with their male counterparts. This finding supports the results of Saloviita's (2018) study, which showed that women engage in co-teaching more than men. The second explanation for the benefits of co-teaching involves the implementation of co-teaching. The more the teachers use co-teaching, the more useful they find it. The third explanation lies in acting as a class teacher. Regarding the benefits perceived by the teacher groups, class teachers recognise the most benefits, compared to special education teachers and subject teachers. Class teachers' education differs from subject teachers' education, and for this reason class teachers might interact with a colleague more easily as a peer. According to this study's results, the more the teachers collaborate, the more benefits they find and the fewer challenges they encounter.

The best explanatory factor for the challenges is the weekly implementation of co-teaching. The more teachers implement co-teaching, the fewer challenges they experience. The other explanatory factors are co-teaching experiences

and acting as a class teacher. Subject teachers identify the most challenges, whereas class teachers perceive the least challenges. Similar results were obtained by Takala and Uusitalo-Malmivaara (2012) and Saloviita (2018). These findings suggest that implementing co-teaching alleviates teachers' concerns about the challenges it poses. The background factors studied in relation to benefits and challenges make a minimal explanatory contribution (see also Jokivuori & Hietala, 2007). Because teachers' views on co-teaching are strongly positive, overcoming the challenges makes it possible to implement an increase in co-teaching.

This study's limitations reflect the nature of its methodology. Quantitative research provides generalised data about a phenomenon. However, its shortcomings can be compensated for by obtaining more detailed and in-depth qualitative information about the phenomenon under study. In the future, using qualitative methods to examine teachers' collaboration could provide a deeper understanding of equality and reciprocity in co-teaching (see Queirós et al., 2017). The sample used in this study consists of teachers with different educational backgrounds and work experience. In addition to training, the skills needed in the teachers' work are learned in practical work (Leivo, 2010). In this study, most respondents have over 10 years of teaching experience, which may have increased their ability to assess the potential benefits and challenges of co-teaching. No teacher group is over-represented or under-represented, which improves the study's ecological validity (Schmuckler, 2010). The study's representativeness is improved because the study participants include those with co-teaching experience and those without training or experience in co-teaching. However, the possible risk of self-selection bias should be noted, which means that often the most motivated teachers participate in a survey. Therefore, it is possible that more of the respondents have a greater interest in co-teaching.

Our results show that co-teaching has several benefits that support teachers' work, and that its implementation promotes teachers' perceptions of its benefits. However, the remaining challenges make its implementation difficult. Implementing co-teaching requires good communication skills among teachers, based on reciprocity and experiences of equality. Practising co-teaching could form part of teacher education for class, subject and special education teachers and thus act as a tool for working in heterogeneous classes that aim for inclusive values.

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