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Enhancing peer interaction during guided play in Finnish integrated special groups

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Abstract

This article focused on the pedagogy that enhances peer interaction in integrated special groups. In Finland, most children identified as having special educational needs (SEN) attend day-care in mainstream kindergarten groups; the rest are in integrated or segregated early childhood special education (ECSE) groups in public day-care centres (National Institute of Health and Welfare, 2013). An integrated group, which typically consists of seven children without and five with SEN, is supposed to be an inclusive environment that provides an atmosphere in which every child can feel togetherness and be scaffolded (Pihlaja 2009). Our aim was to examine how ECSE professionals' pedagogical practices were used to enhance peer interaction in interactive play. We analysed 14 videotaped sessions of guided play and conceptualized the studied phenomenon by portraying five guidance types in which the identified pedagogical practices were used in different ways.

KEY WORDS: peer interaction, special educational needs, guided play, pedagogical practices, guidance types, group-based sensitivity

Introduction

Interaction, peer groups and play

Peer groups are crucial for children's well-being and learning. In peer groups children interact, share common values and rules and feel a sense of belonging and togetherness (Corsaro 2005; Hartup 2009). Social abilities are basic elements of interaction. However, individual characteristics, such as temperament and challenges in emotional regulation or executive functions, may compromise peer interaction. (Hay, Payne and Chadwick 2004; Ladd 2005). Power relations as well as the social status of an individual child frame interaction in peer groups. According to Schaffer (2006), interaction between an adult and a child is vertical, representing different knowledge and power, whereas peer interaction is seen as horizontal with equal social power between the parties. Nevertheless, peer interaction includes different kinds of social representations of power and participation. In complex representations age and social competence have proven to be an important component, shaping a child's social status in a group (e.g. Corsaro 2005; Löfdahl and Hägglund 2006). Reunamo et al. (2013) found that children with compromised playing skills are less popular in peer groups, whereas good players are liked best. Moreover, it has been shown that language abilities and social communication skills are related to interaction and play behaviour (Murphy, Faulkner and Farley 2014; Suhonen et al. 2015). Positive interaction between children with and without SEN is a fundamental precondition of inclusion. Being accepted into a peer group and having a sense of belonging build positive self-concepts and promote social inclusion (Koster et al. 2004; Meyer and Ostrosky 2016).

Play forms the context for peer interaction and can be defined in terms of psychological development and cultural activity. Social play can be seen as a leading activity for pre-school- aged children. Play promotes cognitive and social progress. It contributes to the development of self-regulation, requiring an intentional and deliberate way of acting with others (Bodrova and Leong, 2007, 2005). Children do learn social abilities when playing; for them, play is a form of their own culture, 'a stable set of activities and routines, artefacts, values and concerns that children produce and share in interaction with peers' (Corsaro 2005, 110). As well as being connected to interaction in general, play is widely related to language and communication, as it involves verbal initiatives, sharing ideas and negotiation. This might be a challenge for those who have difficulties with interaction, communication or emotional regulation. Suhonen et al. (2015) perceived more solitary and nonverbal social play among children with SEN compared with their typically developing peers. Social initiatives of children with SEN might be weak and difficult for their peers to interpret. Joining the play or playing with others can be compromised because of difficulties in co-ordinating and sharing activities with others (Hay, Payne, and Cadwick 2004; Suhonen 2009).

The role of early education professionals in play and interaction

The role of professionals in play has been passive or indirect, probably related to the idea that play is part of children's activity during which adults are bystanders, intervening mostly in the event of conflict (Fleer 2015; Hakkarainen et al. 2013). However, various studies have shown a tendency towards or the need for a more active adult role. The role and positioning of the teacher should vary, from structuring space and time for play to scaffolding the play, and from staying outside the play to acting with children's imaginary play (Fleer 2015; Reunamo et al. 2013; Travick-Smith and Dziurgot 2010). Within the context of the narrative playworld, introduced by Hakkarainen et al. (2013), adults' active role as part of imaginary play creates a zone of proximal development (ZPD) for children. Howes (1997) stated that the guidance of interaction should be indirect rather than direct. When ECE professionals organize a physical environment focused on boosting play and interaction and creating an emotionally safe atmosphere, they are supporting peer relations. An adult should be scaffolding a child's engagement, not only in activity, but also in interaction (Howes 1997). There is also a need for direct guidance. Various studies have indicated that professionals have a pivotal role in promoting interaction among children, both with and without SEN. When engaging in play seems to require insuperable efforts for a child, the teacher should monitor the child's play abilities (Kemp et al. 2013; Meyer and Ostrosky 2016). In addition to – or perhaps as an element in – promoting a child's social competence, guided play offers professionals an ideal context for supporting the development of language and communication (Lindsay and Stockall 2015; Weisberg et al. 2013). 'Guiding' refers also to the theoretical-based construct of guided participation, meaning the communicative systems among people who are taking part in socio-cultural activities and to the interpersonal engagement involved in that participation. The concept highlights the active nature of the children's own efforts to participate (Rogoff 2008).

In this article, we focus on the role of professionals during guided play and pose the following questions: (1) What are the pedagogical practices used by ECSE professionals in guided play activities? (2) How do professionals enhance peer interaction among children with and without SEN during guided play?

Method

Participants

The present study is a continuation of an earlier study with 19 integrated ECSE groups (a group with typically 7 children without and 5 with SEN) of Finnish kindergartens. Four groups, selected for the study, represented high and low levels of the quality in enhancing peer interaction, assessed with Learning Environment Assessment (Strain and Joseph

2004) during the previous phase of the study (see Syrjämäki et al. 2017). Altogether 16 professional team members and 50 (3–6-year-old) children participated in this phase of the study (Table 1). The main areas of the children's SEN, based on evaluations by their teachers and the clinical neuropsychologist, were in the areas of communication and language, interaction, and self-regulation (see Suhonen et al. 2015).

Ethics

This study was following the principles of review board in the humanities and social and behavioral sciences. The video recordings are included in the acceptance received from the local Department of Early Education and Care. We were respecting the autonomy of research subjects, avoiding any harm, and maintaining privacy. Data is protected and only the principal investigator and selected members of the research group have access to the data. A written consent was asked the participants with an information sheet about the purpose and procedure of the present study, as well as about the anonymity of the participants and the use and access to the material. In the case of the children, permission was requested from their parents. Altogether, 15 out of 16 professionals and 41 parents out of 50 children consented to participate in the study. The process and purpose of the study were explained also to the children during the researcher's first visit. They were all enthusiastic and willing to take part the video recording.

Research context and material

Play is considered essential in Finnish early childhood education. Teachers are expected to take into account the importance of and opportunities for play in creating an environment for playful learning as well as in combining dramatic, creative and physical elements of play (Finnish National Agency for Education 2016). In this study, we focus on the play guided by ECSE professionals, because of the pivotal role of adults in enhancing peer interaction and participation among children with and without SEN.

The data acquisition was carried out during three visits (duration: 3-4 hours) with each group. The raw data consisted of a corpus of 15 video hours (17 play sessions) and the researcher's field notes. Video segments for closer analysis were selected from the video corpus on the basis of the research questions. The data we analysed (11:18 hours in total) contained 14 play sessions with 10 various ECSE professionals and a total of 33 children (Table 2).

Table 1. The participating ECSE groups

PROFESSIONAL TEAM MEMBERS (all females)	CHILDREN			
POSITION / SCHOOLING, IF NOT QUALIFIED FOR THE POSITION	AGE IN YEARS	WITH SEN / consent / on the video	WITHOUT SEN / consent / on the video	Codes for children on the video
GROUP 1				
A1 = ECSE teacher	4-6	2 / 2 / 2 girls	3 / 3 / 2 girls	G1-G5
A2 = ECSE teacher		4 / 4 / 3 boys	3 / 3 / 3 boys	B1-B5
* nursery nurse				
* teaching assistant / no schooling				
		Total 6 / 5	Total 6 / 5	Total 12 / 10
GROUP 2				
A3 = ECSE teacher	3-6	0 / 0 / 0 girls	5 / 2 / 2 girls	G6-G7
A4 = ECSE teacher		5 / 3 / 3 boys	2 / 2 / 2 boys	B6-B10
* =nursery nurse				
* =teaching assistant / other schooling				
		Total 5 / 3	Total 7 / 4	Total 12 / 6
GROUP 3				
A5 = ECSE teacher	3-6	0 / 0 / 0 girls	4 / 4 / 1 girls	G8
A6 = ECSE teacher / nurse		6 / 6 / 4 boys	3 / 3 / 3 boys	B11-B17
* nurse / other				
A12 = teaching assistant				
		Total 6 / 4	Total 7 / 4	Total 13 / 8
GROUP 4				
A13 = ECSE teacher	3-6	1 / 0 / 0 girls	5 / 5 / 3 girls	G9-G11
A14 = ECSE teacher		5 / 3 / 3 boys	2 / 2 / 2 boys	B18-B22
A15 = nurse				
* teaching assistant / no schooling				
		Total 6 / 3	Total 7 / 5	Total 13 / 8
N = 16		n = 23 / 15	n = 28 / 18	N = 50/33
* = not in the video material				

The duration of a single play session was 13:20-112:51 minutes. The analysed sessions represented different kinds of social play routines (see also Kronqvist 2004):

- Socio-dramatic play (7 sessions), like playing house, shop, doctor or the knights and the dragon, as well as playing with ponies, dinosaurs, Barbie dolls or other figures
- Fictional play (4 sessions), such as playing with Lego bricks, toy cars or trains with fictional elements but not any role differentiation or continuous plot
- Imitation / functional play (2 sessions) with cars and trains
- Parallel play routines (2 sessions): socio-dramatic + fictional or socio-dramatic + imitation / functional play appeared side by side.

Table 2. The analysed research material

VIDEOTAPED PLAY SESSION, duration (min.)	PARTICIPANTS (A= adult, B = boy, G = girl with and without SEN)	TYPE OF PLAY
1. 13:20	A2 + B1, B2 (with SEN)	imitation / functional
2. 34:18	A1 + G1, G2 (with SEN) + G3 (without SEN)	fictional
3. 57:40	A1 + G1, G2 (with SEN) + G4, G5 + B3 (without SEN)	sociodramatic
4. 44:45	A2 + B2 (with SEN) + G3 (without SEN)	fictional
5. 54:25	A1 + G1, G2, B4 (with SEN) + G2, B5 (without SEN)	sociodramatic
6. 14:30	A5 + B7, B9 (with SEN) + G6, B6 (without SEN)	sociodramatic
7. 112:51	A5+ B7 (with SEN) +1 girl + 2 boys (without SEN)	sociodramatic + fictional
8. 86:53	A5, A6 + B7, B10 (with SEN) + G6, G7, B6, B8 (without SEN)	imitation/functional
9. 15:57	A12 + B11, B12 (with SEN)	imitation / functional
10. 21:02	A10 + B15 (with SEN) + B13, B14 (without SEN)	fictional
11. 49:28	A9 (09:43 min.) → A10 (40:45 min.) + B16 (with SEN) + G8, B17 (without SEN)	sociodramatic
12. 17:50	A15 + B19 (with SEN) + G11, B18 1 girl (without SEN)	fictional
13. 42:10		
14. 49:5	A13 + B19, B22 (with SEN) + G9, G10 (without SEN) A14 + B20 (with SEN) + B18, B21 (without SEN)	sociodramatic sociodramatic
11:18:30	10 adult professionals 33 (different) children: 2 girls + 13 boys with, 9 girls + 9 boys without SEN	

Analysis

In the tradition of visual ethnography, interpreting visual images are expected to lead us to find connections between the images and the reality. We did not use video material only to create data showing what people were doing, but also to recognize the importance of the process and the cultural context in which the knowledge has been acquired (Pink 2007). In focusing on the pedagogy, seen as socially active interaction between an adult and children, we were also aware that pertinent features, e.g. the professional background of the participants or the physical setting, had an effect on the pedagogical activity (Heath and Hindmarsh 2002). In addition to language and the verbal aspect, video-based research allowed us to analyse non-verbal acts, which form an important part of the behaviours and interactions between adults and children (Flewitt 2006).

A clear content log with details of recording and the field notes of the observations on the video sessions and the discussions with the participants was written directly after the shooting. After watching the material, the researchers made rough transcriptions as a way to become familiar with the data. In these transcriptions, each of the chosen play sessions was divided into episodes. The division was made on thematic grounds: what happened and also how the interaction was formed. As suggested by Derry et al. (2010), only the essential parts of the video material, concerned with the theme of the study were minutely transcribed for closer analysis. The transcription was not meant to replace the video data, but to be used side-by-side with the videos in analysis (see Heath and Hindmarsh 2002).

Our material was analysed modifying qualitative content analysis (QCA), which Schreier (2012) has noted is a convenient method to use in posing a descriptive research question. We began the analysis going through the video material several times and creating the coding frame (Appendix) inductively, adapting the idea of open coding primarily taken from Grounded Theory. The similarities found in the material were conceptualised as codes and the similar codes were grouped into categories, which formed the dimensions of the coding frame. (Schreier 2012; Strauss and Corbin 1998). To identify the professionals' pedagogical practices (question 1), we continued with QCA by segmenting the data into units of coding so that each unit could be fitted into one subcategory of the coding frame. The coding frame was unidimensional and the subcategories mutually excluded each other in that one unit was encoded only in one subcategory of a dimension. The actual coding was systematically conducted with the whole material using the created coding frame (Schreier 2012). In order to study the professionals' practices in enhancing peer interaction (question 2), the play sessions were juxtaposed in a matrix and compared. We examined how the identified pedagogical practices differed from or resembled each other in terms of promoting peer interaction. We were also interested in whether the categories or their combinations would form distinguishable patterns and ultimately construct a typology that would summarise the findings of QCA (see Schreier 2012). The consistency of the process was examined by double coding part of the material (5 play sessions / 35% of the analysed sessions; a total of 165 min / 25% of the analysed video corpus) by one researcher and comparing the interpretations with another researcher (see Schreier 2012). The peer reliability was 93%.

Findings

The pedagogical practices in guided play

Our first research question concerned the pedagogical practices used by ECSE professionals to enhance peer interaction during play activities. We identified five dimensions of practices, with a total of 10 subcategories (Appendix 1). The dimensions were play, observation, control, support (of interaction), and response (to initiatives).

Play

Verbalizing play. Talking and verbalizing directed to play were encoded in this subcategory (A5¹: 'You can build a cottage there; it's a good place for that. You can make your own place there'). Some of the professionals also asked numerous questions during the play (A10: 'Does the baby [doll] have a name? Is Mimmi a boy or a girl's name? That's right, it's a girl!!')

Modelling play / playing a role. Showing how a toy car goes along the road or drinking fictional coffee from a toy cup were encoded as modelling play (see the following excerpt). In addition, the professionals participated in and enriched the children's play in many ways, for example, playing a role in a socio-dramatic play. Play involving verbalizing and modelling the play as well as actual playing were the most often used pedagogical actions in our data.

EXCERPT 1 (Group 1, Play 1)²

B1, B2 and the teacher A2 are playing with toy cars. B1 does not communicate with words. He is sitting by the car case, handling the cars. A2 and B2 are driving.

A2 *Look, the lorry goes there, like this* (shows how the lorry runs ahead)

B1 rummages in the car case, is about to turn over the case. A2 puts out her hand and, without making any eye contact, restrains B1 from turning over the case. She continues playing with B2. B1 throws a car to the other side of the room. A2 glances at him but goes on with B2.

A2 *There, the lorry goes there. Now we shall empty the load. Then the lorry goes away* (drives her lorry).

B2 Hey, wait for me (follows with his car).

A2 The tractor is also coming. And here comes the next car (both are driving).

Observation

Observing outside the play. We identified observation as an essential part of enhancing interaction among children. Withdrawing from active play provided opportunities to observe how to support the play or interaction. On some occasions, the observation was followed

¹ The codes in the text examples and excerpts are as follows: 'A' refers to adult professional, 'B' to a boy, 'G' to a girl. Each adult, boy and girl has a running number (see Table 1).

² See Note 1

by dyadic interaction between the professional and the child rather than a reinforcement of the interplay between the children:

EXCERPT 2 (Group 4, Play 12)

G11, B18 and B19 (a boy with SEN) are playing with toy cars. A15 (the nurse) is sitting and observing.

G11 *B2, the ambulance is coming. It tells the police about the robbers...*
B19 *I'm coming. UUII - UUII - UUII*
B18 *(to B19) Police, police, two robbers have escaped*
G11 *Hey, let's track their footprints. I have very sharp senses...*
B18 *I'll track them*

G11 and B18 drive their cars across the room, discussing in the role of the play. B19 returns to his former position. A15 is still sitting and observing.

B19 *I hope that kind of monster car will not come any more. Not anymore.*
A15 *Yeah. See, you could build here... something for the ambulance helicopter....*

Observing from within the play. Although active playing sometimes limited the opportunities for observation, some of the professionals managed to observe and play at the same time. They seemed to scan the playing children constantly as they took in the play and reacted to the children in their own play role.

EXCERPT 3 (Group 4, Play 14)

G9 and G10 are playing princesses, and the teacher A13 is their queen. They are preparing supper. Next to them, B19 and B22 (both with SEN) are playing workmen, who are repairing the house.

A13 *Let's set the table.*
B22 *These workers don't want to...*
A13 *The workers can come and eat with us when supper is ready.*
B19 *It's hard work to build...*
B22 *RRRRR. I'm drilling this wall. Look at me, I'm drilling!*
A13 *Awesome! We'll say when it's time for the workers to come and eat with us.*

A13 is making supper with the girls, and at the same time looking at the boys.

G10 *(walks by the boys) Workers, go away. It's getting late.*
A13 *We haven't eaten yet. The workers will come and have supper with us. G9, get the pancakes, so we can eat. And call the workers: dinner is served!!*

Control

Positive control. Structuring interaction and behaviour through control was one of the pedagogical practices identified in our data. Some of the children participating the play sessions had difficulty with emotional regulation. Still, we found very few examples of teachers' direct control. To a child who loses his temper indirect control appears to be emotional support (A13: '*Come with me, let's go and get some water to drink*') or as guidance in the play role or humour (A5: '*Dear helpers, don't get the train from the person who is the engine-driver!*')

Negative control. However, we did find examples of something interpreted as reinforcing inappropriate behaviour or interactions instead of reinforcing appropriate behaviour:

EXCERPT 4 (Group 3, Play 10)

B15 and B14 are playing with Lego bricks by the table, looking for figures among the bricks. B13 has been sitting on A10's (the nurse) lap next to the others. He stands up, goes over the table, stirs the bricks with his hands.

B14 *Hey-y!*
A10 *B3! (takes his hand) B13, look at me! No, you don't go there and fumble when the others are playing. Do you understand?*
B13 *Yeah.*
A10 *Then go and sit down in your own place.*

B13 sits by the table. A10 moves her chair between B13 and B14. She turns to B14 and B15 and starts a discussion.

Support

Verbalizing interaction. The professionals also verbalized interactions when they remained outside the actual play as well as when they were involved in a socio-dramatic play. In the latter case, the pedagogical mode was also encoded in the play dimension. Capturing the child's attention and helping to direct his/her attention to the others, to shared activities, or to interaction was encoded in this subcategory, as was supporting communication. Augmentative and Alternative Communication (AAC) systems, which were used as needed, appeared to be crucial elements in enhancing interaction. The support with AAC (here mostly signs or pictures) made it possible for the child to participate. However, the lack of experience of the adult professionals by communicating with books decreased the child's possibilities.

"A1 said that they used the communication book once when playing earlier. But today when she put the book on view, G3 wasn't able to make good use of it, not on her own. A2 suggested that, for their part, the adults should also practise using the book, especially when playing."
(Field notes of discussion with the teachers, 15 February 2016)

Modelling interaction. For example, showing a child how to take turns driving to a car park or pouring coffee along with discussion and role interplay were encoded as modelling interaction.

EXCERPT 5 (Group 4, Play 15)

B18, B21 and B20 (a boy with SEN) have built a castle for the knights together with A14 (the teacher). The plastic dinosaurs, played by B20, had attacked, and the castle collapsed in the battle.

A14 *Look at our castle. We have an enormous job to rebuild it. Shall we start? Robin Hood (the figure which B21 is playing with), help us build the castle!*

B18 *Yeah!*

A14 starts piling up the wooden bricks, watching what the boys are doing. B18 joins the work, and B21 follows. B20 plays alone with the dinosaurs.

A14 *Hey, Big Dino! Come and build with us, you are so strong!*

Response

Negative response. Ignoring a child's initiative was a kind of negative response. The initiatives of children with SEN in particular could be nonverbal or even unnoticeable (see Excerpt 1), and some of those escaped the teachers' attention. Direct negative responses ('Don't go there and fumble like that!') were also encoded in this subcategory.

Positive response. The professionals were responded positively to the initiatives in one of two different ways. When the response was a dyadic interaction between an adult and a child, it sometimes happened at the expense of peer interaction. The practice was intended, for example, to guide a certain child in playing, which surely is important, but still the goal of promoting peer relations was not realized. However, responding with a warm dyadic interaction can also contain elements of supporting interaction:

EXCERPT 6 (Group 2, Play 8)

B10 (a boy with SEN) has built a train with small plastic bricks. He has been playing alone, next to the others (who are playing shop and house), driving his train along a bench. He comes close to the teacher, A5, touches her cheeks and gives her a hug. A5 hugs him back.

B10 (pointing to the train on a bench) *Smooth – smooth road. Smooth road.*

A5 (signing and speaking) *A smooth road? Yes indeed, it is a smooth road!*

On many occasions, the teacher was striving for peer interaction in responding. A frequent way of enhancing peer interaction was to reinforce and direct an initiative towards interaction with another child or children, as in the following example: the teacher was giving support to a certain child, but the emphasis was still on playing and acting together as a group.

EXCERPT 7 (Group 2, Play 7)

A5 observing the children: B6, B8 and G7 are playing with Barbie Anna (a character from the Disney film *Frozen*), Ken and a lizard. B7 (a child with SEN) is playing with a train close to the others.

B7 *A car fell down*

The others keep on playing

A5 *Oh no, do you need somebody to help you?*

B7 *Yeah*

A5 *Somebody must go and help! Ken goes. How about Anna?*

B6 and G7 move towards B7. After a while, B8 follows.

A5 *Are you rescuing the train now? Should you build more railways?*

B6 *Ken helps!*

A5 *Excellent!*

G7 *Anna...*

A5 *Well done, Anna!*

The pedagogy in enhancing peer interaction

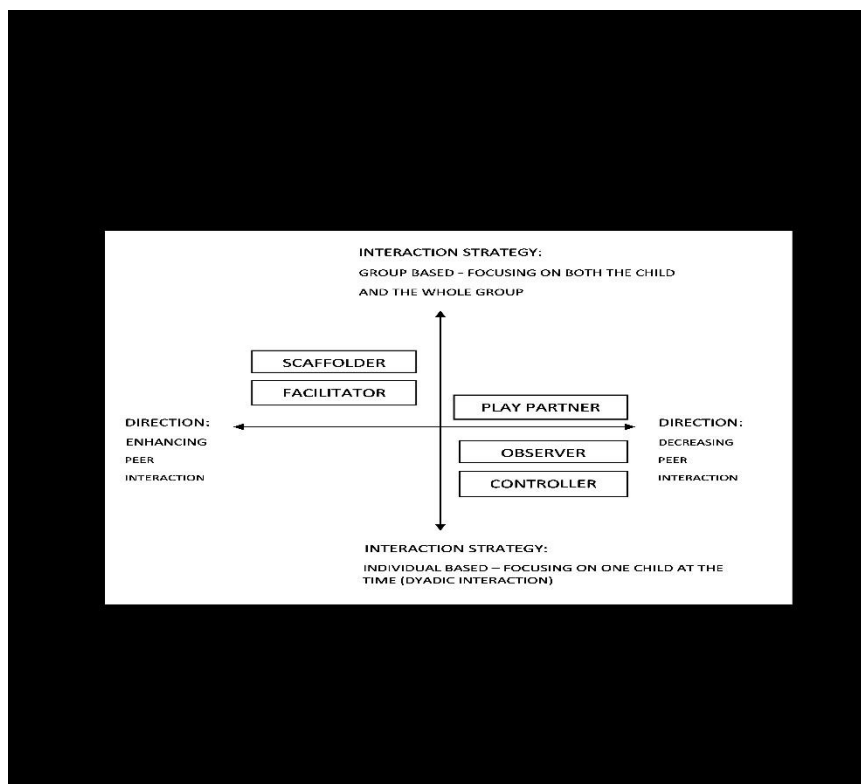
Our second research question was how ECSE professionals promote interaction among children with and without SEN. By examining the resemblances and differences between the videotaped play sessions (n =14), we constructed a typology of five types of pedagogical guidance carried out by ECSE professionals (Figure 1).

We found three types by focusing on only one of the practices. The first of these one-dimensional types was *the play partner* (A2, Excerpt 1 above), which highlighted verbalizing, modelling and taking part in the play. While playing themselves, the professionals were rather inattentive towards the children's social initiatives. In some of the play sessions, the professional play partner was interacting and playing with one or two children and ignoring the others. In those instances, emotional involvement with the play or interaction seemed to hinder rather than promote sensitive guidance and opportunities to respond to social initiatives, especially nonverbal ones. The second was *the observer* (A15, Excerpt 2). However, simple observation was recognized in only one play session. Observation alone wasn't enough from the viewpoint of enhancing interaction. A child with SEN, in particular, needed more support, for instance, to join in the play. The third one-dimensional type, *the*

controller (A10, Excerpt 4), was identified in one play session with many examples of negative control. This kind of guidance seemed to hinder peer interaction, and a dyadic interaction between the adult and one child which excluded another could also be interpreted as negative control.

In addition, we identified two multi-dimensional types that combined different pedagogical practices. *The scaffolder* (A13, Excerpt 3) brought together play, observation from within the play, positive control, and support of interaction, and recognized the individuals and the group dynamics at the same time. The scaffolder ignored only a few, if any, of the children's initiatives and turned these into peer interactions rather than into dyadic interplay. Compared with the scaffolder, *the facilitator* (A5, Excerpts 6 and 7) played less and withdrew from the play to observe, but also verbalized the play and interaction. Like the scaffolder, the facilitator used positive control and turned the children's initiatives into interactions. Supporting communication by utilizing AAC systems was characteristic of the facilitating type of guidance. In one play session (see session 8 in Table 1), two facilitator-type teachers worked together in a flexible way. While one was observing, the other took part in the play and then they switched roles.

Figure 1 The types of guidance on the continuums of direction and interaction strategy



In our study, four out of 10 professionals consistently demonstrated the above-mentioned multi-dimensional guidance types, while the others focused on one pedagogical practice or demonstrated different types practice in the play sessions. A crucial distinction between the guidance types was the way in which the professionals interacted with the children. The one-dimensional type professionals concentrated more on dyadic interaction, while the multi-dimensional types were sensitive in combining different ways of interacting and turning a single child's initiative into peer interaction. This sensitivity seemed to be emphasized especially in the case of SEN children. The multi-dimensional type professionals supported communication with AAC systems, modelled the play and interaction between children with and without SEN and used positive control instead of negative. They helped the child to join in or keep playing with the group, and their perceived dyadic interaction complemented the group-based interaction strategy.

Discussion and limitations

The present study revealed mostly successful pedagogical strategies, and also targets for improvements in terms of enhancing peer interaction. The findings confirm those of existing studies. Several scholars have recognised some variation in teachers' roles or positioning as well as in pedagogical strategies. Fleer (2015) described the diversity of teachers' pedagogical positioning during imaginary play situations by defining different ways of being in an activity or outside it. A physical position close to the playing children made it possible to give support when needed. On the other hand, by focusing on playing, the professional might have missed an opportunity to promote positive relations among the children. Travick-Smith and Dziurgot (2010) offered a theoretical model of teacher-child interactions, influenced by Vygotsky, stating that "good-fit" interacting and responding, matched to children's developmental and contextual needs, would promote play and interaction. The model highlights the importance of observing children's needs and of reflections on necessary guidance. We argue that, in our study, the pedagogy that implemented multi-dimensional types of guidance was directed towards peer interaction. The flexibility in combining different pedagogical practices provides sensitive reflection, seen in the pedagogy used by those professionals representing scaffolding or facilitating guidance types.

The idea of vertical interaction is based on unbalanced power relations between an adult and a child. The presence of power is related to the adult's responsibilities and the goal of keeping a child safe. At its best, it strengthens the development of a child's personality, well-being and peer relations (Schaffer 2006; Gjerstrand 2015). Still, sensitive interaction between an adult and a child can be reciprocal and flexible. Sensitive adults observe the actions and emotional needs of children, and their responses to an individual child can affect the relationships in a group of children (Ahnert, Piquart and Lamb 2006). That

highlights the importance of ECE professionals' knowledge of the balance between dyadic and group-based interaction, seen related to the child's developmental phase and trajectory from dyadic to peer interaction. That kind of balance was found in our study to be the way in which the facilitator professionals in particular enhanced peer interaction in integrated special groups. Following the above-mentioned researchers, Singer, Nederent, Penninx, Tarik and Boom (2013) defined group-focused sensitivity as attentiveness to the whole group while proximately interacting with individual children. Child-orientated guidance, whereby the adult reacts and responds to the child's actions but takes no initiative themselves, might be too demanding for children with SEN. Intersubjective scaffolding of a sensitive ECE professional interpreting children's intentions and taking the initiative to play and interact is needed (Suhonen 2009; Suhonen et al. 2015). We state that the pedagogy which enhances peer interaction among children with and without SEN is led by the concept of guided participation (Rogoff 2008). However, when participatory appropriation – the stage of a child's advanced participation, a concept also proposed by Rogoff – is not achieved, there is a need for pedagogical guidance. The needed guidance requires the knowledge and methods of special education. It is possible within an intersubjective relation in which the adult professional is sensitive and committed, not only to one child, but to the whole group of interacting children.

With ten ECSE professionals and 33 children, the accounts of participants and the amount of video material could be wider. A larger body of material would have given a broader view. Moreover, instead of the overall picture of the children's group, detailed background information on the children with SEN would have given the study a different focus.

Conclusions

Our main findings conceptualized the studied phenomenon with the help of two continuums. The first continuum described the direction of guidance and the other described the interaction strategy used. We demonstrated that of the pedagogical types of guidance demonstrated in our study, one-dimensional types implemented individual-based strategy and led away from peer interaction. The multi-dimensional types on the other hand were directed towards interaction among the children and emphasized participation in group activities.

Our study offer material for professional reflection in the context of early special education as well as in mainstream early childhood education. Recognition of the pedagogical practices and types of guidance used would help EC(S)E professionals identify ways to enhance peer interaction and scaffolding, especially for those children who need support and guidance in joining or playing in a peer group. This kind of pedagogy promotes inclusion and prevents the exclusion of children with diverse characteristics and needs.

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APPENDIX 1. Codes, subcategories and dimensions of the pedagogical practices

