

## *Teacher interventions in peer interaction in early second language education*

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### Abstract

This study investigates the nature of teacher interventions in peer interaction in early second language (L2) education. In particular, it illuminates the intervention strategies teachers use and how these interventions enhance peer interaction in early L2 classrooms. Although previous research has illustrated the significance of teacher interventions for educationally productive classroom interaction, little is known about teacher interventions in peer interaction during the early years of L2 education. The data were collected from six pre-primary/early primary L2 classrooms, with three teachers and 125 children (aged 6-7) through video recording (55 hours) and observational field notes. The interaction analysis revealed five dominant intervention strategies the teachers used: (1) organizing, (2) giving corrective feedback, (3) scaffolding, (4) orchestrating and (5) motivating. The findings illustrate that it is challenging to foster peer interaction in early L2 education and hence it is

important to support teachers in developing their pedagogical sensitivity and intervention skills.

*Keywords:* second language education; teacher intervention; peer interaction; sociocultural theory; early childhood education

## 1. Introduction

Previous research has shown that children are more inclined to interact with peers than adults in the classroom (Henderson & Palmer, 2015; Washington-Nortey et al., 2020; Wasik & Hindman, 2018; Xu et al., 2021). Interaction among peers has been found educationally beneficial as it can activate children's participation and advance their second language (L2) skills (Cekaite et al., 2014; Garcia Mayo & Agirre, 2016; Harmer, 2001; Lake & Evangelou, 2019; Philp et al., 2014). While interacting with their peers in a playful way, children's engagement in ongoing tasks is fostered and they can develop their vocabulary, oral literacy, and second language (L2) production with a sense of accomplishment (Brumen, 2011; Piirainen-Marsh & Tainio, 2009; Piker, 2013; Pladevall-Ballester & Vraciu, 2020). Teachers' support, described as interventions in this study (Washington-Nortey et al., 2020) is significant for children to benefit from peer interaction in L2.

Although teacher intervention and the intervention strategies in supporting classroom interaction have attracted the interest of a growing number of researchers (e.g., Acar et al., 2017; Hoffman & Mercer, 2016; Kajaama et al., 2020; Wasik & Hindman, 2018) over the last decade, research on early childhood education and care (ECEC) regarding teacher interventions in peer interaction during L2 education remains scarce (Washington-Nortey et al., 2020). Hence, our study investigated teacher interventions in peer interaction during L2 education framed by efforts to enhance child-centered learning. Through our examination, this study will thus provide further understanding of peer interaction research and practice in early childhood L2 education. The specific research questions were as follows:

1. What intervention strategies do teachers use in peer interaction in early L2 classrooms?
2. How do teacher interventions support peer interaction in early L2 classrooms?

## 2. Previous research on peer interaction and teacher interventions in L2

Peer interaction has received attention from L2 educational researchers, especially in the context of secondary and tertiary education (e.g., Cekaite & Aronsson, 2004; Havnes. et al., 2016; Kagwesage, 2014; Philp et al., 2014; Sit, 2012). In their

review, Blum-Kulka and Snow (2004) reported that peer talk offers a variety of opportunities for mutual learning of interactive and linguistic skills in L2. In another study from a university context, Kagwesage (2014) concluded that student-initiated group discussions had a considerable potential in promoting knowledge construction and increasing student participation. In spite of the scarcity of previous research addressing this in the younger age groups, there have been some studies on peer interaction among younger learners in language learning. For example, Erdemir and Brutt-Griffler (2020) found that peer interaction promoted preschool children's vocabulary learning. Hung (2018) studied the benefits and challenges of peer assessment among young L2 (English) students and reported that small group peer assessment activities made students more engaged, and this positively affected their learning. Butler and Liu (2019) studied the role of peer relations in English language learning and discovered that there are complex, dynamic associations between the context (such as classroom, school or home environment) and language learning. According to their findings, children's peer relations and the role of these relations in language learning can change across context and time since the interaction among peers is often temporary and short-term in nature (also in Piker, 2013). Therefore, creating and facilitating productive peer interaction in L2 mostly depends on teacher support, which we have described in this study as teacher interventions (Swain et al., 2002; Washington-Nortey et al., 2020).

The significant role of the teacher in supporting and facilitating peer interaction in language classrooms has already been underlined in previous research (Kaunisto, 2022). For instance, Xu et al. (2021) proposed that teacher-scaffolded instruction helped to promote children's language skills and increased their social interaction likewise Xu and Li (2022) suggested that form-focused instruction help learners improve their grammar. Koyuncu et al. (in press) found that teachers' scaffolding by using a variety of scaffolding strategies promote children's participation in L2 learning. Lake and Evangelou (2019) stated that interactive intervention had an important effect on children's receptive vocabulary. According to Ammar and Hassan's (2017) findings, learners benefitted from collaborative dialogue among peers while teachers' scaffolding helps children extend their knowledge. Similarly, Acar et al. (2017) found that teachers' presence and support was essential for children's positive peer interaction. In addition, Walqui (2006) stated that there is a critical relationship between teacher support and peer interaction for bilingual language development while Ellis (2012) and Kaunisto (2022) illustrated that teachers use strategies such as corrective feedback, clarification, eliciting for mediating children's initiatives.

Regarding when to intervene in learners' interaction, Hoffman and Mercer (2015) found that teachers tend to take action when a correct or incorrect idea is

created or when no idea is produced by students during the tasks. They also identified intervention strategies as authoritative, initiating and continuing. Likewise, Kajaama et al. (2020) studied interventions in students' collaborative work and explored that teacher interventions were motivational, procedural or conceptual while teachers used strategies like authoritative, orchestral or unleashing. Both studies tapped into the importance of interventions in students' learning. Although the benefits of teacher support are apparent from the studies, it needs to be investigated when and how interventions should be applied in early L2 classes. Using interventions to support children's peer interaction has not been sufficiently covered in previous literature and needs further research attention. Our study contributes to this research knowledge by investigating peer interactions and teacher's intervention strategies in Finnish early years L2 classrooms.

### 3. Conceptualizing teacher intervention in peer interaction

This study draws from sociocultural theory (Vygotsky, 1978), which provides useful conceptual and analytical tools for researching and understanding the social and cultural dynamics of peer interaction and intervention in L2 classrooms. Sociocultural theory sees teachers and children as active participants and the language is a tool for them in mediation of teaching and learning through interaction (Elbers et al., 2013; Gass & Selinker, 2008; Lantolf, 2006; Vygotsky, 1978). The two key notions in Vygotsky's theory that are relevant in this study are the *zone of proximal development* (ZPD) and *scaffolding*. The ZPD is "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p. 86) The concept highlights teachers' support in the meaning making process of children. This support or scaffolding is the process that enables children to carry out a task which would be beyond their current level of understanding (Wood et al., 1976). Teachers scaffold children for the mastery of tasks in L2 learning through interventions systematically by building on their present knowledge and experience while they are learning new skills. Therefore, scaffolding represents responsive and adaptable support based on children's needs (i.e., *contingency*). When children are improving their skills, the support is gradually removed (i.e., *fading*) in scaffolding while the responsibility is handed over to the children gradually (i.e., *transfer of responsibility*). In order to support children's interaction among peers during L2 tasks, teachers use some means such as hints and clues, questions, corrections, repetitions or using audio-visual aids, which can be illustrated under different intervention strategies like organizing, motivating, procedural (Kajaama et al., 2020; Van de Pol et al., 2012).

In this study we examined scaffolding as the intervention strategies the teachers used in children's peer interaction during L2 tasks while the ZPD concept helped us in analyzing how these interventions support children's participation in peer interaction better (cf. Lantofl, 2000; Ohta, 2001). In particular, we searched for the different teaching and learning situations the teachers intervened in peer interaction and how their intervention helped children's meaning making.

## 4. Materials and methods

### 4.1. Participants

The present descriptive study was conducted in six educational settings in Finland; four pre-schools (6-year-old children) and two primary schools (grade 1; 7-year-old children). An invitation to participate in the study was initially disseminated to the early childhood education units and schools. Using a convenience sampling research strategy, we invited the schools in the capital region since it is convenient for the researcher to visit regularly and then choose the volunteer ones (Creswell, 2012). In total, 125 children and three teachers participated in the study. There were 84, 6-year-old pre-school children and 41, 7-year-old first graders. The class size ranged from 16 to 21. Of the 84 pre-school children, 13 children had an other-than-Finnish language background, but they had no previous formal English language instruction. The rest of the children had a Finnish language home background with no previous formal English language instruction. Among the 41 first graders, only four children had native languages other than Finnish, the rest had Finnish as their native language. All the children had received Finnish pre-school education without English language education. Therefore, all the participants were at beginner proficiency levels even if many would have been exposed to English through children's programs and games on TV/internet or through community engagement, for example. All teachers were qualified to teach the L2 classrooms: two primary level English language teachers from two separate schools and one preschool teacher who taught in four separate participant pre-schools. The teachers' work experience ranged from two to 11 years. In this study, we did not use teacher codes since the study did not focus on comparisons between teachers regarding the variation between pre-school and primary.

The study followed the ethical standards of the Finnish Advisory Board on Research Ethics (2022) and the Data Protection Act (2016). Research Permission was provided by Helsinki City. Informed consent was obtained from all the participants and the children's guardians and the aims of the study were explained to the children to get their permission. All children and teachers participated in the study voluntarily and had been informed of their possibility to withdraw from the study at any time.

## 4.2. Research setting

Finnish education includes four syllabi from A1 to B2 (FNBE, 2016b) as mandatory and optional in language teaching. The earliest start of mandatory language instruction was the third grade of basic education. According to the recent change in the curriculum (FNBA, 2016b), the children formally start English language instruction from the early grades of the basic education as of the spring term of 2020 (VOPS, 2019). With this change, some pre-primary schools voluntarily included L2 education in their programs. The renewal of the curriculum was preceded by pilot studies in 2018 based on the findings about the benefits of early L2 education (Huhta & Leontjev, 2019; Inha, 2018). The schools and the students have the option to choose the foreign language that they want to teach/learn. Although some schools offer alternative foreign languages for children/parents to choose, the most popular choice is English (Inha & Huhta, 2019).

The Finnish national curriculum for pre-primary and basic education (FNBE, 2016a; FNBE, 2016b) presents general and complementary aims and objectives; they promote children's plurilingual and multicultural identity and develop children's language skills by allowing adequate space for joy, playfulness and creativity. While the children's role is described in the curriculum as active agents, the teacher's role is to create opportunities for children to take initiatives. Play is regarded as a developmentally significant activity through which children explore, create, produce with their peers and thereby learning happens (Huhta & Leontjev, 2019; Inha, 2018; Mourão & Lourenço, 2015).

Teachers in Finland have flexibility in the pedagogic implementation of the curriculum objectives and in their teaching practices, which can be either an advantage or a challenge (Alstad & Sopanen, 2020; Kangas et al., 2019). At the time of the data collection for the study, it was the pilot year of L2 education in the early grades and in the participant pre-schools in Finland. Therefore, there were variations in English language programs. As regards the participant pre-schools, the lesson was divided into two parts. The first part included a classroom routine, which we call as whole-class sessions (with max. 22 children) including teacher-child interactions (e.g., revising basic vocabulary, telling the date, numbers, weather). In the second part, the teacher divided the classroom into three groups, which we call small-group sessions (six to seven children) and taught the new structures and provided pair/group activities or games and tasks to practice what they learnt. The English language lesson was 90 minutes per week; 30 minutes as whole-class, 20 minutes for each small-group. The teacher used a variety of materials such as audio-visual materials, realia or handouts. While one small group was with the English language teacher, the other two groups were doing preschool activities with their pre-school teachers. English

language lessons in the early grades were carried out on a predefined day and time as two lesson hours (90 minutes) a week based on the curriculum. The group sizes varied between 19 and 25 children ( $M = 22$ ) in each class. The teachers started the lesson as a whole class instruction of the new contents, and then they used pair, group and individual activities to practice L2. Teachers stated they wanted to use English more often, but they had to use Finnish frequently (the main instruction language at schools as the native language) to be sure all children understood the instruction.

### 4.3. Data collection and analysis

Data were collected over a ten-week observation period (October 2018-May 2019) spent in six L2 classrooms by means of video recordings, observation and field notes for triangulation by the researcher. The video recording with a video camera (each recording approximately 60 minutes, 55 hours in total) and non-participant observation with field notes were taken by the first author. Video recording was essential for detailed interaction analysis procedures, allowing us to explore the dynamics of interaction and analyze the data multiple times. We wrote descriptive summaries of each lesson based on video recording and field notes. The descriptive summaries included the details of the lesson content (e.g., topic, objectives, peer tasks, material choice) to identify teacher interventions in peer interaction and highlight the unclear parts in the video recordings (if any).

To respond to the first research question (“What intervention strategies do teachers use in peer interaction in early L2 classrooms?”), video recordings were transcribed and read carefully with the field notes. Regarding how the episodes were chosen to be analyzed, all data were approached by viewing them as a whole and later focusing on a *teacher intervention episode*, which Kajamaa et al. (2020) defined as an episode that was observed when a teacher participated in children’s work either on their own or based on children’s demand. The qualitative analysis (Jordan & Henderson, 1995) focused on the episodes chosen from the lessons when the teachers intervened in peer interaction. In our analysis, we depicted 35 intervention episodes, in which teacher intervention was initiated by either the teacher or the student. We analyzed the frequencies of teacher-initiated and child-initiated interventions and identified five main thematic strategies: (1) organizing, (2) giving corrective feedback, (3) scaffolding, (4) orchestrating, and (5) motivating (See Table 1). To respond to the second research question (“How do teacher interventions support peer interaction in early L2 classes?”), the episodes were further analyzed through interaction analysis. This analysis was theory-driven grounding in peer interaction and intervention studies (e.g. Kajaama et al., 2020; Ohta, 2001; Van de Pol et al., 2012). The

researchers purposely selected episodes that captured teacher's interventions during peer interaction and how children's peer interactions in L2 were affected by these interventions is described in the presented examples. Teacher interventions in the children's turns to support their L2 interaction were highlighted in the presented examples. The initial analysis of the data was conducted by the first author and then checked by the co-authors. All differences in the analysis were negotiated to reach a consensus. There were no disagreements between the authors regarding the analysis and the trustworthiness of the study.

## 5. Findings

The total number of episodes ( $N = 35$ ) below were chosen for detailed analysis of teacher interventions in children's peer interaction in the participant L2 classes. To answer the research questions, first, we illustrated teacher intervention strategies, inspired by the study by Kajamaa et al. (2020), and then we displayed who initiated the teacher intervention. Here, we present qualitative examples of teacher interventions and peer interaction during L2 lessons.

### 5.1. Teacher intervention in peer interaction

Table 1 describes the strategies and shows an example of each teacher intervention strategy. *Organizing interventions* (1) were related to the challenges that occurred because of the difficulties to start, proceed with and/or to complete the tasks. The difficulties usually resulted from the lack of understanding the instruction for undertaking the task or lack of L2 knowledge required to undertake the task. *Giving corrective feedback interventions* (2) were connected to the problems in L2 use, such as wrong pronunciation, search for vocabulary or problems in L2 form (e.g., sentence structure, wrong verb forms). *Scaffolding interventions* (3) included any form of teacher support for the tasks children could not complete on their own. To illustrate, teachers simplify the explanation, repeat the words, demonstrate the task or give some clues when children cannot complete the task. *Orchestrating interventions* (4) were focused on teachers' supporting peer interaction by helping children in conducting tasks as regards the rules or steps to be followed. For example, they were typically associated with the children's ignoring turn-taking, not following the steps in the tasks (e.g., completing ask and answer, but not writing the words in the notebook). Finally, *motivating interventions* (5) were connected to the moments at which the children were not eager to join in tasks.



Table 1 The description of teacher intervention episodes

The teacher intervention episode	Description	Example
1. Organizing	Teacher interventions related to the preparation and planning peer tasks and organizing the peers	Children need to say what they like; some don't understand what to say and ask for help.
2. Giving corrective feedback	Teacher interventions focusing on pronunciation/ L2 form check or help with the vocabulary	A child cannot pronounce the word, the teacher helps with this.
3. Scaffolding	Teacher interventions focusing on peer's initiatives which need support to further the L2 interaction	One child writes words while the other child is dictating, the teacher helps the children to complete the children by giving clues.
4. Orchestrating	Teacher interventions focusing on managing the tasks to be practiced properly (turn takings/follow rules)	A child repeatedly does a spoken task without giving turns to peers, the teacher asked for turn-taking.
5. Motivating	Teacher interventions focusing on children's motivation to join in peer interaction and tasks	The teacher motivate a reluctant child to join in the task by offering alternatives.

Figure 1 illustrates the distribution of teacher intervention episodes. Of 35 episodes, the teacher intervention episodes initiated by the teachers included 71% (25 interventions) of 35 total episodes while children-initiated ones were 29% (10 interventions). As regards teacher-initiated intervention, the most frequent intervention was *scaffolding* children's L2 use to help them to maintain the peer interaction, (10 interventions, 29%). The second most frequent intervention category was on *giving corrective feedback* (8 interventions, 23%) when the children had difficulty in L2 pronunciation, vocabulary and form, pronunciation. The organizing (6 interventions, 17%) and orchestrating (6 interventions, 17%) categories shared the same frequency. The teachers organized the peer tasks and helped with the implementation before and during the peer interactional tasks. Finally, the least frequent intervention focused on motivation (5 interventions, 14%), in which the teachers encouraged the children to join and keep the peer interaction L2 tasks.

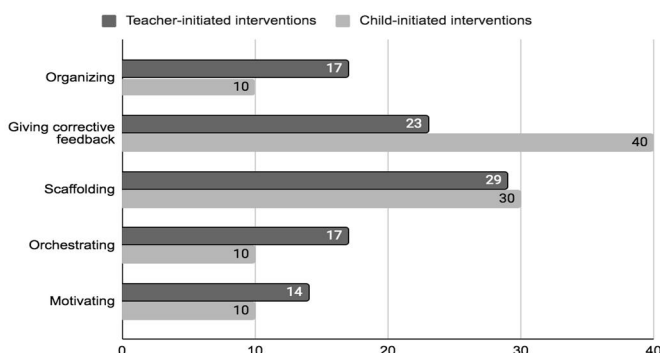


Figure 1 The distribution of teacher- and child-initiated interventions regarding the intervention strategies

As for child-initiated interventions, children often asked for help when they could not do the task due to their lack of understanding of what to do, lack of vocabulary or pronunciation skills, or when having problems with their peers (e.g., complaining about their turn-taking). Of all the interventions, the most frequent one was *giving corrective feedback* (4 interventions, 40%) when children asked about words, pronunciation or asking directly for the answer. The teachers helped them by correcting their mistakes and providing them with answers to their questions. The second most frequent intervention for children's needs was through *scaffolding* (3 interventions, 30%). The teachers helped the children in their meaning-making process by giving clues to children when they asked for help during the tasks. *Organizing, orchestrating* and *motivating* (each of them was 1 intervention, 10%) strategies shared the same frequency for child-initiated teacher interventions. The children asked the teacher about the task when they were not sure of the instruction (*organizing*), they complained about each other when one was not following (*orchestrating*), and they told the teacher that they did not want to do it or the task was difficult (*motivating*). The teachers supported initiatives by children by explaining the task again to the children, putting their turns in order again and simplifying the task for the one who found it difficult to motivate them.

## 5.2. Teacher interventions in promoting peer interaction

This section presents our findings concerning teacher interventions in supporting children's peer interaction in L2 classrooms. The illustrative examples have been chosen from among 35 episodes and each example exemplifies at least one intervention strategy, identified in this study (eg. organizing, scaffolding).

Example 1 illustrates *scaffolding and orchestrating* teacher intervention strategies. In this episode, the children were supposed to build a house from wooden blocks and practice house-related vocabulary in English. The teacher gave instructions, later the children started to work on their task with their peers. Two children asked for further instruction in their native language, to initiate the teacher's intervention. The teacher came closer and explained what to do in L2 slowly by demonstrating the process, so they could start their task. During the peer interaction, one of the children was unable to remember a particular word (kitchen) and the teacher firstly encouraged them for peer interaction. Then, she helped him to remember the word by giving a clue and confirmed the child when he found the word. Later, the teacher intervened in their interaction to remind them of the turn taking and encouraged them to continue the interaction in L2.

Example 1 (pre-school)

C1: What will we do? (*in native language*)

T: These are the blocks (*showing*), I am making a room myself (*sleeping demonstration*), then a garden to play with my dog, what rooms do we need more in our house?

C1-C2: OK, OK (*started to choosing the blocks*)

C1: What room is here? (*trying to decide rooms they will construct*)

C2: kitchen (*in native language since he can't remember*)

C2: (*looking at the teacher*)

T: Did you ask your friend if he knows? (*encouraging him to interact to his peers*)

C2: What is "kitchen?" (*asking about the word again to the friend in native language*)

C1/C2/C3: (*looking each other, thinking*)

T: remember it is kiiii (*saying the first syllable as a clue*)

C2: kitchen kitchen. OK, then a garden here? (*asking peer's opinion*)

T: Well done! (*confirming*)

C1: yes, ok (*just approving, no participate in building*)

T: Now, your turn. What are you building? (*looking at the child*)

C3: building garden and pool here (*repeating the names of the rooms and building blocks*)

T: great, a beautiful garden and pool

C1/ C2 /C3: look our kitchen, garden ... (*excitedly showing their house to others*)

T: Well done! Would you like to tell us more what this room is here (*pointing a place*)

C1: It is a playground.

T: a playground, very good idea.

In the next example (Example 2), we illustrate the *giving corrective feedback* teacher intervention strategy. In the episode, the children had problems in pronouncing numbers and the teacher intervened in their peer tasks. The teacher's corrective feedback by modeling the pronunciation helped the children to say it correctly. In the next phase of the practice, the children exchanged the peers and this time they did not make any pronunciation mistakes.

Example 2 (primary)

T: stand in two lines, you come here, then you!

T: Oh, you are alone, then you can join here! (*looking at a girl*)

T: Now, show your drawing to your friend and ask what they like (*demonstrating*). Who can say what you will do?

C1: I can. We are drawing the number here (*drawing on his friend's back*) and what number is this (*asking his friend*)

C2: three

C1: yes

T: Well done. Let's start.

C3: ninet

T: nine, repeat it nine (*saying the words and making the child repeat it a few times*)

C3: nine .....*exchanged the peers*  
C4: What is this?  
C3: nine

Example 3 provides instances of giving *corrective feedback, orchestrating and scaffolding* intervention strategies. In the first part of the episode, the teacher gave children a set of cards to revise the family members. A group of peers repeatedly skipped one card, then they went to the teacher and asked for the word (uncle). With the help of the teacher's corrective feedback, the children were able to continue the tasks and reviewed the family vocabulary. Later, the teacher assigned the children a dictation task by orchestrating the peers. While one child was dictating the days of the week, the other was writing them in the notebook. Finally, the teacher scaffolded children with questions to guide them guess the missing letter, then she corrected the spelling by giving corrective feedback.

Example 3 (primary)

C1: (*showing a picture*)  
C2: brother, showing another card and what's this, *setä* (*looking the teacher, asking in L1*)  
T: uncle  
C2: uncle  
.....  
T: now one of you says a day and the other is writing the days in your notebook  
C1: Tuesday, T (*dictating the day of the week*)  
C2: T, U, S, D, A, Y in order (*writing*)  
T: (*walking around the class and checking the peers' tasks*) one missing letter here, what is it?  
C2: one letter hmmm (*thinking*)  
T: Tuesday, can it be something here? (*showing the syllable of the missing letter*)  
C1/C2: Tuesday (*repeating the day and thinking*)  
*wait time by the teacher*  
C1: U, U, Tuesday (*repeating*)  
T: E here, Tuesday (*with a different intonation*)  
C1/C2: Tuesday (*write it correct*)

Example 4 shows the *organizing* teacher intervention strategies. In this episode, children first needed to pick a card, say what it was in English and rush to the end of the line. The group finishing all the cards first won. While organizing the tasks, the teacher gave the instruction clearly, repeated in L1 when necessary and provided the children examples and made sure each child was joining in the task. Later, they needed to count the items on the worksheet (snowfalls, stars, moon, trees) in pairs or groups and write the numbers correctly with their peers. The teacher first checked group composition and helped the one who did not find a peer group, then helped the peers, who did not understand the task so that the children could start and complete the task.

Example 4 (pre-school)

T: Let's make two groups, one here, and the next one here (*showing the place to be lined up*)  
children's rush to find their place

Three children: We want to be together (*in L1, hugging each other*)

T: You want to be together, OK, you can be together in the group (*stressing the word 'Together' and organizing the other ..... three rounds completed and the teacher gave the instruction for the next part...*)

C1: (*looking around, waiting silently*)

C2/C3: one, two, three... (*started counting the items on the worksheet*)

T: Want to join your friends here? (*comes closer to the child and ask the question by pointing C2/C3*)

C1: (*nods and walking towards the friends*)

T: Now she is here, too. Count them all together (*pointing the new friend in the group*)

C1/C2/C3: ... eleven, twelve..... (*continue counting together*)

In Example 5, the teacher used a *motivating* intervention strategy. In the episode, the children practiced how to ask and answer questions about their favorite food. They drew pictures and put the drawings on the floor. In turn, they asked and answered questions about what their favorite food was to each other by showing their drawings. The teacher motivated a child in a peer group who was not eager to participate in L2 practice through peer interaction by wait-time and giving options to choose the other materials which they could use for the practice.

Example 5 (primary)

C1: My favorite fruit is banana. (*showing the banana drawing*) What is your favorite food?

C2: My favorite fruit is apple. (*showing the apple drawing*). What is your favorite food?

C3: ..... (keep silence)

T: Would you like to answer? It's your turn now. (*looking at C3, wait-time*). OK, what is your favorite food? (*turning to C4*)

C4: Ice cream, my favorite food is ice-cream (*showing the drawing of ice cream*)

T: Look at C3

C3: ..... (*shrug his shoulders*)

T: We have some play dough here, would you like to make your favorite food with this and show us?

C3: .... (*nods and take the dough*)

..... after a few turns .....

C3: Candy, (*saying 'I made candy' in native language*)

T: Let's see, your favorite food is candy.

C3: My favorite food is candy.

## 5. Discussion

This study was conducted to investigate the types of intervention teachers use for supporting peer interaction in early L2 education. Teacher interventions have

been found to play an important role in supporting productive peer interaction and L2 learning (Acar et al., 2017; Lake & Evangelou, 2019). However, there is scarce empirical evidence concerning research knowledge on teacher interventions in the context of early years L2 education (Washington-Nortey et al., 2020). The study contributes to filling this gap.

Regarding the first research question, the findings show various intervention strategies that were initiated either by the teacher or children. As we illustrated above through empirical example episodes, the teachers intervened in peer interaction when the children asked for help or when the teachers thought children need such as (see Figure 1):

- children's not starting the task since they did not understand the task well (organizing);
- children using L2 form incorrect, wrong pronunciation, incorrect answer (giving corrective feedback);
- children being stuck during the task when not remembering L2 word/ form (scaffolding);
- children not following the turns, skipping some tasks (orchestrating);
- children not being eager to join in the interaction (motivating).

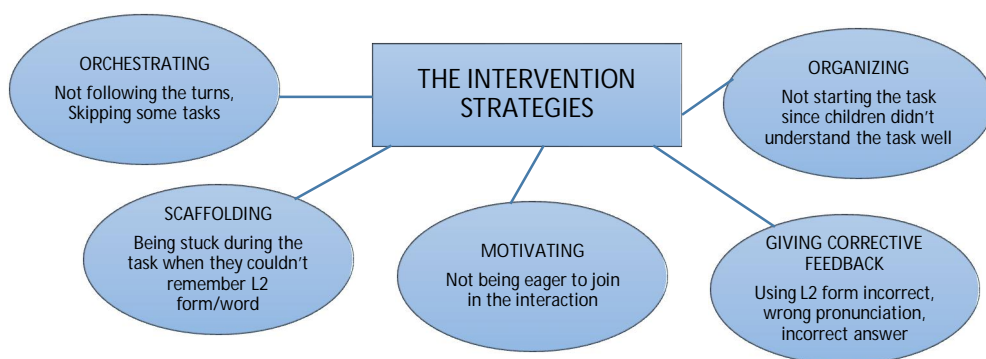


Figure 2 Intervention strategies

Of the teacher intervention strategies presented in this study, scaffolding and giving corrective feedback are related to teaching L2 (forms/words/practice) while motivating, orchestrating and organizing are helping children in joining/continuing the interaction. Scaffolding and giving corrective feedback strategies were often used by teachers. The teachers scaffolded or gave corrective feedback to the children, which encouraged the children to engage in repeating, practicing and/or writing. The use of interventions show how they support peer interaction, which was our second research question. In light of our field notes, we concluded that the children's participation in peer interaction and their benefiting

from the teacher's intervention varied according to the children's interests in the activity, the materials, and willingness to work with peers. For instance, when audio-video materials, toys, songs, games were included in the tasks, the children's participation both in L2 task and also in the peer interaction was high.

Despite the importance of interventions for facilitating productive peer interaction in L2 classes, the children's participation in peer interaction during L2 tasks was based on teachers' interventions, which requires attention from teachers. This study shows that early L2 classrooms were rich in interaction, the teachers used a variety of playful tasks promoting peer interactions and supported children's L2 practice. Playful tasks created affordances for children's L2 learning and increased their participation (cf. Brumen, 2011; Piitainen-Marsh & Tainio, 2009). It could be seen that teacher interventions supported the children's continuing their interaction and/or completing the tasks for L2 practice. Since the children were beginner learners in L2, they often had difficulty in understanding instructions or completing the tasks. The teachers' support helped the children feel comfortable as inferred from the observational field notes. Furthermore, our results show that the children were eager to join in the peer interactional tasks when they were instructed well, supplied with samples, given support and feedback (see also in Ohta, 2001).

Overall, the aim of the teachers was to turn the naturally existing interaction among children into a language learning environment in which children helped each other to use the language (see also Piker, 2013). Therefore, based on our findings, we have gathered the supportive elements of productive peer interaction into a kite diagram (Figure 3), suggesting that like the slats of a kite support each other and make it strong, the elements of tasks, playfulness, children's participation, teachers' intervention supported one another. Namely, when L2 pedagogy includes a variety of tasks with carefully chosen materials in playful learning practices, the children's participation in tasks can increase. When the children's participation is supported by teacher interventions, peers can help each other's L2 development, which can be defined as productive peer interaction.

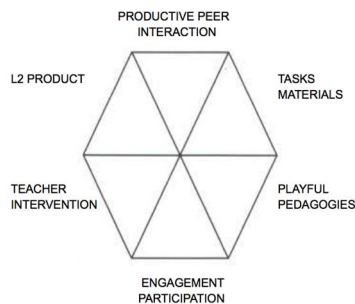


Figure 3 Kite diagram describing productive peer interaction

What is also pertinent to the second research question, while completing L2 tasks with peers, the children helped each other's learning. For example, they engaged in practices like ask and answer or vocabulary revisions, all of which offered opportunities for children to remember, to practice or to learn L2 forms or words. Almost all the episodes we analyzed in this study illustrated that the children were able to continue the task with their peers after teacher interventions. For instance, in examples 1, 4 and 5, the children got stuck in the task for a range of reasons, such as lack of vocabulary or not being eager to join in the task. Yet, after the teacher's intervention, they continued to work on the task among their peers. The peers helped each other with L2 practice both in vocabulary learning (Example 1), and also in pronunciation (Example 2), sentence structure (Example 5), and motivation (Example 4, 5) with the help of teacher's interventions during L2 tasks. They also instructed each other in conducting peer tasks like turn-taking and completing tasks with the help of teacher interventions. One problem regarding the tasks seen from the observation data was that the children had focused on completing their task (not on L2 form or vocabulary) when the task included a lot of repetitions. At this point, teachers' attention to when and how to intervene in their interaction was significant for children to benefit from peer interaction.

## 6. Conclusions

This study examined intervention strategies used by teachers and how these interventions support peer interaction in early L2 classes. Our study emphasizes the benefits of teacher interventions and how children could be active in peer interaction when they are supported by teachers in the L2 learning process. While our study groups intervention strategies under five titles as orchestrating, organizing, scaffolding, giving corrective feedback and motivating, it highlights that the interventions support children's L2 meaning-making process. The findings show that it is difficult to enhance productive and playful peer interaction in early L2 education and therefore it is significant to provide teachers with their pedagogical sensitivity and skills in intervening in peer interaction.

Each study has its limitations. In this study, firstly, we only used one video camera for recording peer interaction. Secondly, this study did not focus on the similarities or differences across individual teachers. We did not focus on variation between L2 education in pre-school and primary schools, including teaching practices or teachers' pedagogical thinking behind those practices, either. In addition, this study did not directly investigate playfulness in L2 classes. However, playful pedagogies were found as an important element in enhancing children's participation in peer interaction during L2 tasks. Therefore, playfulness could have been added as a research question.



Several implications can be proposed on the basis of this study. Further studies could use several video cameras to obtain peer interaction in L2 learning better. In addition, we found that interventions support children's L2 practice, but good management of teacher interventions in early years L2 classes requires a good understanding of peer interaction and much effort. Further studies could also try to tap into teachers' meta-level thinking regarding intervention strategies such as how teachers chose the strategies they used and how to develop their beliefs about problematic situations while deciding to intervene so as to deepen our understanding of teacher practices. Also, further studies could investigate peer interaction by extending the playfulness perspective. Providing children with a variety of peer tasks in which children can practice L2 playfully with their peers has the potential in creating opportunities for L2 interaction, so playfulness could be promoted in early L2 teaching practices. Considering the benefits of interventions in peer interaction to support children's L2 learning, knowledge about teacher interventions and peer interaction could be fostered in early childhood education. All in all, raising teacher awareness about intervention in children's peer interaction has a pivotal role in early years pedagogies, particularly with respect to the various functions of intervention regarding why, when and how to intervene in children's peer interaction to support their L2 learning.

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