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Developing bilingual pedagogy in early childhood education and care: Analysis of teacher interaction

Katri Hansell[a] & Siv Björklund[b]

[a] Åbo Akademi university, corresponding author, e-mail: katri.hansell@abo.fi, https://orcid.org/0000-0002-2926-4160
[b] Åbo Akademi university, https://orcid.org/0000-0002-2910-2882

ABSTRACT: The aim of this study is to investigate two kindergarten teachers' bilingual pedagogy by scrutinizing their bilingual interactions during typical ECEC activities. We focus on the teachers' bilingual language use and its contextualisation. The study is based on an experimental programme under development and, thus, has the character of a case study. The data consist of audio recordings (28 h) of the teachers' interactions with a group of five-year-old children and were collected on five occasions over one academic year. The results show that Finnish was used in a variety of recurring situations — teacher-led activities, everyday routines, and playtime — especially through concrete topics and contextualization, allowing the teachers to create diverse affordances for children's language learning and inviting the children to participate without explicitly signalling language switches. The results further illustrate a change over time in the teachers' language choices when introducing new content and discussing it later, as well as certain individual differences in the teachers' language use. These insights into bilingual interactions in practice can benefit teachers at different levels of this programme and in similar contexts, as well as contributing to a deeper research-based understanding of bilingual pedagogy in ECEC.

Keywords: *bilingual interaction, bilingual pedagogy, early language learning and teaching, minority-medium ECEC*

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Introduction

In bilingual and multilingual contexts, there is a need to learn one another's languages and thus comprehend one another, communicate, and collaborate. However, this requires a focus on languages across the curricula in education. The current trend in many European contexts is to begin early to maximise children's language learning (e.g., European Commission, 2011; Hahl et al., 2020), foster early bilingualism by implementing different forms of bi- and multilingual pedagogy beyond formal language teaching sessions, and view each language learned as a means of learning various types of content. Regarding the Finnish context, Cummins (2018) defines multilingual pedagogy as instruction in which either two or more languages are used as mediums of instruction or students' home languages differ from the language(s) of instruction. The study presented in this article concurs with the first definition because we focus on bilingual pedagogy as a means of introducing the second national language, Finnish, in Swedish-medium early childhood education and care (ECEC) as a means for learning both language and content.

Even though Finland is officially bilingual, with Finnish and Swedish as national languages and obligatory language teaching of the other national language for all students in basic education (Boyd & Palviainen, 2014; Palviainen & Mård-Miettinen, 2015), documented bilingual pedagogy, as defined above, is scarce overall. The Finnish system of two national parallels, with either Finnish- or Swedish-medium education (for parallel monolingualism, see, e.g., Heller, 1999) has traditionally not promoted bilingual (Finnish-Swedish) educational programmes. Even though the Finnish educational policy and curricula embrace the European Commission's goal of all citizens learning at least two languages in addition to their first language (e.g., European Commission/EACEA/Eurydice, 2017), two paths, with either Finnish or Swedish as the language of instruction and administration, are characteristic of education at all levels. However, well-established and large-scale programmes with two languages of instruction such as early total Swedish immersion in Finland (for ECEC in Swedish immersion, see, e.g., Björklund et al., 2014) and other content and language integrated programmes (CLIL) (Peltoniemi et al., 2018) have paved the way for more small-scale, language-enriched programmes. The latter programmes, with less than 25% of activities being conducted in the target language, are intended to 'stir interest in and a positive attitude towards languages in children' (Finnish National Agency for Education [EDUFI], 2018, chapter 4.6) and are currently gaining ground in Finland (Peltoniemi et al., 2018). All ECEC units in Finland assign their 'language of education and care', but they can also provide different forms of bilingual ECEC in the national languages or foreign languages (EDUFI, 2018). In the ECEC unit of this study, the language of instruction is Swedish, and the target language is Finnish, which is introduced through language-enriched ECEC to support Swedish-dominant children in developing emergent bilingualism in their early years.

Toward a bilingual pedagogy – theoretical underpinnings and practical applications

A growing consciousness of the need for bilingual and multilingual pedagogy, as well as language awareness, is emerging internationally and in Finland (for ECEC, see Bergroth & Hansell, 2020; Kirsch & Duarte, 2020; Schwartz, 2018). Although educational contexts vary in terms of models of bi- and multilingual pedagogy (Creese & Blackledge, 2010), most recent studies (e.g., Schwartz, 2018) focus on minoritised children's and students' first languages (L1) in education. As Bialystok (2018) points out, there is a distinction between the education of bilingual children such that they will maintain and use their both languages and bilingual education intended to make (majority-language-speaking) children bilingual. Despite the above, there are also unifying features of these studies, such as teachers' stances toward multilingualism, as well as their openness to maximising children's use of their linguistic resources (e.g., Cummins, 2019). These features are crucial theoretical underpinnings of our study.

To analyse the teachers' bilingual pedagogy, we build on studies concerning large-scale bilingual programmes, such as language immersion and CLIL, that utilize two languages as languages of content instruction (Nikula & Mård-Miettinen, 2014). Studies have shown that the early introduction of a second language is beneficial because children are very motivated to participate in play activities and less critical of their own language mistakes and errors than older learners (Hickey & de Mejía, 2014). Russette and Taylor (2014) point out that interactional and experiential approaches to pedagogy are well-suited to teaching a second language because these approaches are naturally situated in child-directed learning, in which children's own interests are centred. The importance of relating to what the child is focused on was mentioned in Björklund et al. (2014), in which the authors recommend that teachers maximise meaningful second language input to children by verbalising actions and feelings, as well as in transitions from one activity to another. Savijärvi (2011) further concludes that children's second language learning is strongly situated in interaction and visible in their verbal and non-verbal behaviour.

In addition to a child-centred approach, the documentation of teaching processes with emergent bilingual young learners in large-scale programmes indicates that routines are vital for creating stability and helping learners orient themselves and make meaning (Russette & Taylor, 2014). In addition, teachers' strategies for eliciting second language use have shown that teachers can successfully elicit language use via the sensitive development of question patterns (Södergård, 2008). The versatile role songs play in routine-based activities as markers of transition, instructions, and behaviour regulation

has been investigated by Russette and Taylor (2014), who indicate the importance of songs for reinforcing content learned, as well as attracting children's attention.

In Finland, national curriculum (EDUFI, 2018) explicitly mentions the right of monolingual children to access bi- and multilingualism within ECEC. Other related trends back up this right by focusing on language and cultural awareness (Bergroth & Hansell, 2020). Recent studies on Finnish ECEC show that the prevailing set of curricula has helped practitioners reflect on their own beliefs, even though it will most likely take time to transfer such beliefs into practice (cf. Bergroth & Hansell, 2020; Honko & Mustonen, 2020; Sopanen, 2019). Many studies have reported on bilingual practitioners' changed beliefs regarding the use of two or several languages for instruction (e.g., Kirsch & Duarte, 2020; Mård-Miettinen et al., 2018; Palviainen et al., 2016).

Research on multilingualism in education has shown that state curricula and policy are predominantly framed within a 'monolingual mindset' (Clyne, 2008, p. 347), in which monolingualism, as a norm, is embedded in steering documents, structures, and pedagogy. This includes also the assumption of the "two solitudes', meaning that even in bilingual education — e.g., immersion — the languages are kept strictly separate (Cummins, 2008, p. 65). Despite this frequent monolingual framing on a macro level, Lo Bianco (2018, p. 24) notes that teachers, in most contexts, have 'a space of semi-autonomous activity' in teaching. This enables the implementation of bi- and multilingual pedagogy in the Finnish context in particular because teachers in Finland are trusted and free to decide on their own teaching methods and learning materials (Ministry of Education and Culture, n.d.). Thus, the Finnish decentralised system allows teachers to position themselves as key change agents for bi- and multilingual pedagogy (Bergroth & Hansell, 2020; Moate et al., 2021). In this study, we scrutinise teachers' bilingual interactions and language use in a developing language-enriched bilingual program in which both languages are used by the entire educational staff throughout the day and curricula.

The local context of the study

Swedish speakers comprise a numeric minority in Finland (5.2 %) (Official Statistics of Finland [OSF], 2021) but are in the majority in the region and municipality where we conducted our study. There, at the time, 86.4% of the inhabitants' registered mother tongue was Swedish, while the Finnish language accounted for 6.9% and other languages comprised 6.4% (OSF, 2019). Thus, only a minority of the children in our study come from bilingual or multilingual homes, and the use of Finnish is not naturally part of most local families' linguistic repertoires. Another special feature of the local context of our study is

that most educational staff did not use Finnish regularly outside the ECEC context, even though they had learned the language in school. The teachers of the study are therefore in a position to make use of two languages of instruction, one that stands in contrast to the position of teachers whose classrooms have children with different L1s (Cummins, 2019; French, 2019).

The local education authorities and parents shared a vision of promoting children learning Finnish through an early start in communicative Finnish, which was seen as a way to better prepare the children in the community for national bilingual realities and the instrumental use of Finnish (Björklund et al., 2018). The second author was invited as an expert on bilingual education to participate in a local working group consisting of teachers and administrators from ECEC to the end of basic education (grade 9). This group was set up to create guidelines for a bilingual programme. The working group decided to give priority to authentic communication, that is, more bilingual pedagogy as compared to restricted lessons or hours with a focus on language only (cf. Nikula & Mård-Miettinen, 2014). The working group was most inspired by language-enriched programs that allow a maximum of 25% of instruction time in a language other than the language of education and care (EDUFI, 2018). In addition, a major principle of the local bilingual pedagogy was to spread the bilingual instruction time, totalling approximately 20 minutes, out during the day. However, the 20-minutes-per-day total was not strictly time-based. Rather, it would mainly serve to remind the teachers to remember to regularly switch languages, even if only for a brief moment.

The bilingual programme was introduced in autumn 2018, beginning with ECEC (five-year-old children). The study presented in this article focuses on the first child group in the programme during their first year (this pioneer group is since followed by an annual intake of a new group). The same group has been followed further into pre-primary education and to basic education within the action research project to which this study contributes. The programme is aimed to continue to the end of basic education (grade 9 at the age of 15) as an add-on to Finnish language art lessons from grade 1 onward. To support the envisaged programme, the working group prepared pedagogical guidelines to complement the local curriculum. The guidelines state that Finnish should be included in current, age-appropriate themes and thus support the content-based goals set up in the national and local curricula. The guidelines have a twofold aim. The first involves practices for bilingual pedagogy, such as the recommendation to use Finnish in familiar routine situations, avoid direct translations between Finnish and Swedish in instruction, and use versatile strategies to support the children's comprehension of Finnish. These practices build predominantly on the recommendations of studies presented in the previous section and other Finnish studies (e.g., Mård-Miettinen et al., 2018; Palojärvi et al., 2016; Palviainen et al., 2016). The second aim is to support the educational staff's

authentic use of Finnish because the programme requires the staff to engage in daily bilingual Swedish-Finnish instruction. The guidelines list examples of digital materials, appropriate vocabulary, and short idiomatic utterances in Finnish.

In the group of five-year-olds — the focus of our study — the 20 minutes were allocated through the day. The ECEC unit had a daily programme beginning at the opening of the ECEC unit at 6:30 AM. The morning activities were comprised of breakfast at 8 AM; going out at 8:30 AM; circle time at 9:30 AM, including a teacher-led activity followed by playtime; and lunch at 11 AM, followed by a bedtime story and the children's lie-down at around 11:30 AM. The afternoons consist of playtime from 12:30 PM until snack at 13:45 PM, followed by story time at 14:15 and going out at 15 PM, until the ECEC centre closed at 16:45. The parents could drop of and collect their children according to their individual schedules, and not all the children were there full time. The schedule could be described as quite typical of Finnish ECEC.

Research task and questions

The aim of this case study is to outline the two teachers' bilingual pedagogy by scrutinising their interactions and use of the two languages during daily recurring activities at the ECEC. The analysis focuses on bilingual sequences and the contextualisation of these sequences. The following research questions guided our study:

1. In which ways is bilingual language use contextualised in the recurring activities?

2. What trajectories of change and individual characteristics can be identified in the teachers' bilingual language use as bilingual pedagogy?

In our study, the two participating teachers are positioned as knowledge generators (Cummins, 2019) who create their own innovative ways of executing bilingual pedagogy when they orient themselves toward bilingual language use in their teaching. To support them in this mission, they are backed up by the local working group (see previous section) and by a team of researchers (see next section).

Data and methods

The researcher-teacher cooperation, which was intended to develop an experimental programme for language-enriched pedagogy starting with ECEC, was built as a long-term action-research-oriented process that consists of multiple cycles of planning-acting-observing-reflecting (see more about action research process in, e.g., Kemmis et al., 2014;

Rönnerman & Forsman, 2017). In the current project, researchers support the practitioners in planning, observing, and reflecting on their actions (cf. Forsman, 2021) in ECEC, pre-primary education, and basic education, beginning with a focus on each level for one academic year. The frame of reference for the documentation of the programme is ethnography, including (recorded) observations, interviews, and documentation. The authors are both included in this researcher team. The action research approach entails that the observations and analysis have direct implications for the development of bilingual practices, both in ECEC and at other levels of the programme.

Data were gathered on the first ECEC group of 20 five-year-old children, most of them from quite monolingual Swedish background. Even though some children had contact with Finnish through relatives or friends, only a couple of them had parents that besides Swedish also used Finnish with them. In addition, four children had other home languages, all of them different languages, and had varying skills in Swedish. The educational staff — two kindergarten teachers and one childcare worker — were audio-recorded for five days during one academic year (2018–2019) in October, November, January, March, and May. During the year, the observations were used as starting points for their joint reflections and the planning of continued bilingual language use and activities, in collaboration with the research team. Digital audio recorders and external microphones were attached to staff members to follow their educational and childcare activities, and these captured their interactions with the entire group, individual children, and one another, which means that the children's voices were also recorded, when audible, through the microphones. Initially, researcher observations were performed previously and simultaneously with the audio recordings (August, October), but this was given up because the staff felt that the researchers' presence influenced their interactions. The observations, however, provided the researchers with a deeper understanding of the learning environment at the ECEC. Because the data were not video recorded, we were unable to analyse non-verbal interactions (e.g., gazes, gestures, or use of artefacts), which could be assumed to play an important role in introducing a new language to this age group. Although video recordings would have captured several dimensions of the interactions and made it possible to analyse them in greater detail (cf. Rutanen et al., 2018), audio recordings were chosen as the staff preferred them. The data gathering was permitted by the educational administration of the municipality, and the practitioners participated in it on a voluntarily basis. Because the data also concerned children, their caregivers were informed and asked for written permission to make the recordings.

The empirical data in this case study are comprised of 28 hours of audio recordings focusing on the two kindergarten teachers because they are in charge of pedagogical planning and activities in the group and, thus, have the main responsibility for introducing the Finnish language in ECEC. The recordings were started at the beginning of breakfast,

at 8 AM, and ended at the end of lunch, around 11:30 AM. This timeframe was chosen because it included several activities (see the section on local context) and was also when most of the children were present in the group. The activities during this timeframe were categorised into three categories: i) teacher-led activities, ii) everyday routines, and iii) playtime. The data were transcribed for analysis (see Appendix 1), focusing both on the content and the details of the interactions (e.g., pauses or hesitations), as well as on the participants' orientations and responses during the interactions. The data were anonymised and the sequences, including bilingual orientation or metalinguistic discussions, were excerpted. In these excerpts, we used an inductive approach to identify how the teachers oriented themselves to bilingual pedagogy, as well as how the bilingual language use is contextualised (RQ1).

The microanalysis of teacher interactions also includes a longitudinal aspect, with a focus on identifying individual differences in the two teachers' interactional orientations, as well as trajectories of change in the bilingual interactions and pedagogy during the year (RQ2). One of the teachers observed in this study (Teacher A) has a bilingual background, although Swedish was reported to be the somewhat dominant language. The other teacher (Teacher B) defines themself as a Swedish speaker who has always struggled with Finnish but has a positive attitude and a desire to learn more. The example excerpts were translated into English, reproducing the content as precisely as possible. Finnish language is given in regular font and Swedish in **bold** to visualise language switches.

Findings: Teachers' bilingual language use during various activities

The results show that Finnish is used in all of the activity categories in the daily schedule: teacher-led activities, everyday routines, and playtime. We use this as a starting point in structuring the analysis.

Teacher-led activities

Teacher-led activities are planned and consist of working on current topics in a group. An important part of teacher-led activities is circle time, either in one group with both teachers present or divided into two smaller groups led by their respective teachers. During circle time, current topics, for example, colours, numbers, days of the week, months, and weather, are presented by the teacher and discussed with the children in a group. Circle time also includes songs, rhymes, and other playful activities regarding current topics (cf. Russette & Taylor, 2014). In addition to circle time, teacher-led

activities can involve other activities as well. For example, in our data, one teacher baked gingerbread with the children in small groups, working with one group at a time.

Analysing the interactions during teacher-led activities shows that new content was mainly introduced in the language of instruction, Swedish, as in Example 1 from October, in which the teacher initiated a discussion, in Swedish, about the children's mood that day using picture support:

Example 1. HOW DO YOU FEEL TODAY, October, Teacher A

01	P:	**då [namn] får du börja med till berätta- visa på en bild hur** ***then [name] you can start by telling- showing a picture of how***
02		**du känner dig idag (1) hur känner du dig idag** ***you´re feeling today (1) how do you feel today***
03		**(9)**
04	P:	**nöjd du är nöjd (1) bra↑ (1) [namn] hur känner du dig idag då** ***fine you´re feeling fine (1) good↑ (1) [name] how are you feeling today then***
05		**(2)**
06	P:	**du känner dig glad (1) bra↑ (1)[name] hur känner du dig *idag*↑** ***you are feeling excited (1) good↑ (1) [name] how are you feeling today↑***

In Example 1, the teacher asks the children, in Swedish, in turns, how they feel that day. If the child only points to the picture support, the teacher also repeats the mood verbally, thus supporting the children in developing their capability to verbalise their feelings in Swedish. Doing this in turns with the entire group also leads to natural repetition of the various feelings. Circle time often included similar kinds of activities that can be described as 'academic play' (Mård-Miettinen et al., 2018). These were repeated constantly during the year — e.g., discussing days of the week, weather, or moods with picture support and songs related to the topics (cf. Russette & Taylor, 2014). When the content was new to the children, it was introduced and discussed in Swedish (cf. Mård-Miettinen et al., 2015). After a while, when the children were familiar with the content, it could also be introduced in Finnish, as in Example 2 from March:

Example 2. ARE YOU HAPPY, March, Teacher A

01		[namn] (.) oletko sinä iloinen onnellinen tyytyväinen tai
		[name] (.) are you excited happy feeling fine
02		surullinen tai vihainen tänään
		sad or angry today
03	C1:	**va e** tyytyväinen
		***what is** fine*
04	P:	**nöjd**
		feeling fine
05	C1:	**som nöjd som- som- som lite glad**
		like fine like- like- a little bit excited
06	P:	mmm voi olla
		mmm could be
		[...]
07	P:	[name](1) oletko iloinen onnellinen tyytyväinen surullinen tai
		[name](1) are you excited happy feeling fine sad or
08		vihainen
		angry
09	C2:	surullinen ((ledsen ton))
		sad ((sad tone))
11	P:	no mutta mitä vartenhan (.) sinähän olet vähän surullinen
		oh but why is that (.) you seem to be a bit sad
12		tänään((empatisk ton))
		today ((empathic tone))
13	C3:	**vad e det** | (xxx)
		what is it | *(xxx)*
14	P:	|mmm (.) onko jotain tapahtunu (2) mmm (2) voit
		|*mmm (.) has something happened (2) mmm (2) you can*
15		kertoa myöhemmin jos haluat (2)
		tell me later if you want (2)

In Example 2, the situation and content are similar to those in Example 1. The teacher goes through the mood of the day with the children in turns, using picture support, but in Example 2, the teacher uses Finnish to do this (cf. Björklund et al., 2014). Again, the teacher says the feelings indicated by the children aloud, thus using familiar pictures to support the understanding of quite abstract concepts. Because the children are familiar with the content, the pictures, and the activity expected of them (saying or showing how they feel), they can also engage in interaction in the target language, Finnish. The children can also ask for the meanings of Finnish words (line 3), leading to the teacher translating these into Swedish (line 4). However, this activity is not limited to single Finnish words for feelings but, rather, also includes expansions (lines 11, 14–15), in which the teacher asks the child why they are feeling sad, for example. Thus, the focus in the situation is not merely on learning Finnish words for feelings but also on the content and learning how

the children were doing that day. This example shows how learning a second language is not just a learning goal but also a means of interaction regarding quite abstract topics.

Another way of including Finnish in instructions with content that is not familiar for the children is to support their understanding by alternating between the languages in the instructions, as in Example 3:

Example 3. PAINT, March, Teacher A

01	P:	**men (1) nu går vi o så sätter vi oss ner vid ett bord (.)**
		but (1) now we go and sit down at a table (.)
02		sitten me saamme maalata tuschikynäl- [sic!] kynillä
		then we get to paint with felth-tip- [sic!] pens
		((removed a sequence about where to sit))
03	P:	mm:↑ (1) istukaa olkaa hyvät (2) anteeksi (6) mm:↑ (1)
		mm:↑ (1) sit down please (2) excuse me (6) m:↑ (1)
04		ensin te saatte valita (2) väri (6) **då ska ni måla (1)**
		first you get to choose (2) the colour (6) ***then you shall paint (1)***
05		**på båda sidorna (3) på båda sidorna**
		on both sides (3) on both sides

Example 3 is taken from a situation in which the teacher gives the instructions for a new craft activity in small groups. The teacher uses both Swedish and Finnish in turn, making it easier for the children to understand the instructions when they are unfamiliar with the content (cf. Södergård, 2008). The teacher initiates the activity in Swedish (line 1), switches to Finnish when introducing the next instructions (lines 2–4), and then returns to Swedish (lines 4–5). Alternating between the languages, combined with the concrete context (e.g., table, chairs, and pens), allows the children to follow the instructions, even if they may not understand everything in Finnish. In contrast, direct translations of instructions or other interactions are not commonly used, which is in line with the pedagogical guidelines of the programme (Björklund et al., 2018; cf. also Palojärvi et al., 2016).

When a topic and an activity is familiar to the children, the teachers' use of Finnish increases. Example 4 is a typical example of this from circle time, in which the teacher uses a large paper doll, which the children call Kalle, to name and practice with body parts in Finnish:

Example 4. SHOULDER, January, Teacher A

01	P:	nyt minä kysyn jotain ihan vaikeata (1) että missä pä- missähän on
		now I will ask you something difficult (1) where is the- where do you think
02		kallen olkapää (2) olkapää [namn] voisitko näy|ttää meille
		kalle's shoulder is (2) shoulder [name] could you s|how us
03	C1:	|olkapää↑ (1)
		|*shoulder↑ (1)*
04	P:	olkapää (2) jos te muistatte sen laulun (1) pää hm hm hm ((småsjungande))
		shoulder (2) if you remember the song (1) head hm hm hm ((humming))
05	C2:	**jag vet**
		I know
06	P:	missä olkapää on [namn] (2) näytä kantapäällä (1)
		where is the shoulder [name] (2) show with your heel (1)
07		joo näytä (xxx) (1) joo siinähän ne on
		yes show (xxx) (1) yes there they are
08	C3:	olkapää peppu polvet varpaat polvet varpaat ((sjunger))
		shoulder bottom knees toes knees toes ((singing))

During the activity that Example 4 is a part of, the teacher consistently uses Finnish both in instructions for the activity and while discussing the topic of body parts during the activity. The teacher asks, in Finnish, where various body parts are, and the children are intended to point to them on the paper doll. Thus, the children mainly participate nonverbally by showing their understanding or uncertainty of the instructions and questions. In the beginning of the excerpt (lines 1–2), the teacher explicitly comments that this may be a difficult word and asks for the 'shoulder'. Because the child the question is directed to does not seem to recognise the word, the teacher begins humming a song that they have been singing in Finnish and is also a familiar song in Swedish ('Head, shoulders, knees, and toes') as a clue (line 4). Here, the teacher uses a well-known context, a song about body parts, to help the child recall and transfer a word from that context to a new one (cf. Russette & Taylor, 2014). This helps the child in question identify the correct body part (lines 6–7). Also, another child comments in Swedish that they know the answer (line 5), and a third child begins to sing the song in Finnish (line 8). Thus, the children are able to not only recall the song but also to correctly pick 'shoulder' as the word for the body part. Songs and rhymes to learn new vocabulary are common in ECEC, both in the first language and in other languages, and Example 4 illustrates their effectiveness in this.

In the data as a whole, bilingual language use represents a considerable part of teacher-led activities, with the majority of them being circle time. During circle time, Finnish is used frequently and intentionally in songs and activities that relate to a certain topic and set of vocabulary. Finnish is mainly used by the teachers, and the interactions are typically quite teacher-led. The children are allowed to participate in the interactions in Finnish, in Swedish, or nonverbally, which allows the children to show comprehension without demanding that they produce the target language. The children's language production occurs mainly as a group, for example, singing in Finnish or counting the participants as a chorus, that is, all together. It is only occasionally that the teachers prompt individual children to produce an answer in Finnish.

Everyday routines

The Finnish language is frequently and consistently used in everyday routines, such as meals and (un)dressing, that relate to the caregiving activities at the ECEC. The everyday routines often include many repetitions of similar utterances with different children, as well as context extensions relating to the topics and vocabulary introduced during the teacher-led activities. Example 5 illustrates such a conversation during meal time:

Example 5: BIG, October, Teacher B

01	C:	**kan jag få (xxx) knäckebröd**↑
		can I have (xxx) a rye crisp please↑
02	P:	haluatko lisää
		you want more
03	C:	mm↑ (1)
		mm↑ (1)
04	P:	puoli tai koko (4) koko (1) iso (1)
		half or whole (4) whole (1) big (1)
05	C:	i:sso
		b:ig
06	P:	i:so näk- i:so näkkileipä (1) i:so pukki
		bi:g r- bi:g rye crisp (1) bi:g goat
07	C:	((skrattar)) iso pu-
		((laughter)) big go-
08	C:	=iso pukki peikko ((sjunger))
		=big goat troll ((singing))
09	C:	iso pukki mökki ((sjungande)) ((skrattar))
		big goat cottage ((singing)) ((laughter))
10	C:	*iso*
		big
11	C:	((sjunger)) is:o pukki **mamma**
		((singing)) big: goat ***mother***

In Example 5, the child asks for more rye crisps in Swedish (line 1), and the teacher responds in Finnish (line 2). After asking the child if he/she wants a whole or a half-slice of rye crisp, the teacher introduces the word 'big' as an equivalent to 'whole' (line 4). The

child repeats the word in Finnish (line 5), and then, the teacher draws an explicit parallel to the song 'Three Billy Goats Gruff', which the group has been singing in both Finnish and Swedish and in which the word 'big' also occurs (line 6). This is acknowledged by other children around the table because they start to laugh and sing the song in Finnish and play with the words (lines 7–11). The example also illustrates how the teacher, by isolating and underlining the word 'big', decontextualizes it and enables its transition to other contexts that the children have experienced in Finnish — i.e., singing the song about three goats.

The teacher's consistent use of Finnish allows the children to use Swedish but also provides them with a model for using Finnish as well. The focus is on the content, and Finnish is used as the means of discussing that content, even if it can also include language-related extensions, as in Example 5. The teachers' reuse of well-known phrases facilitates the children's understanding and production of Finnish in predominantly familiar contexts and situations (cf. Mård-Miettinen et al., 2015). The teachers also occasionally use more explicit strategies for repetition, to prompt the children's Finnish language production, and even to check their knowledge of Finnish. In Example 6, the teacher helps the children put on outdoor clothes and asks about the colours of their clothes (line 1), explicitly demanding the answer in Finnish (line 3). At the same time, the teacher also receives feedback regarding how well the children are able to recall the vocabulary that is frequently used by the teachers and during the teacher-led activities.

Example 6. BLACK, November, Teacher B

01	P:	mhm↑ (2) joo-o [namn] (1) minkä värinen tämä on *mhm↑ (2) yeah [name] (1) what colour is this*
02	C:	**svart** ***black***
03	P:	joo mitä se on suomeksi (1) *yes what is it in Finnish (1)*
04	C:	öö: *ehm:*
05	P:	mus- *bl-*
06	C:	MUSTA *BLACK*
07	P:	musta hyvä (3) *black good (3)*

In Example 7, the teacher uses items on the breakfast table for vocabulary repetition and recall by asking the children, in turns, how high they can count in Finnish:

Example 7. CAN YOU COUNT IN FINNISH, March, Teacher B

01	P:	**kan du räkna på finska (1) hur långt kan du räkna på finska** ***can you count in Finnish (1) how far can you count in Finnish***
02		**får jag höra** ***may I hear***
03	C:	yksi kaksi kolme neljä viisi kuusi seitsemän kaheksan yheksän *one two three four five six seven eight nine*
04		kymmenen yksitoista kaksitoista kolmetoista neljätoista *ten eleven twelve thirteen fourteen*
05	P:	**men det va ju jättelångt (1) ända ti fjorton (1) bra** ***but it was very far (1) all the way to fourteen (1) good***

In Examples 6 and 7, the teacher explicitly asks the children about the Finnish vocabulary for colours and numbers during everyday routines, in a similar manner to that reported in Russette and Taylor (2014). While the children are expected to use Finnish, the teacher's language choice varies, using only Finnish in Example 6 and only Swedish in Example 7. The prompting of children's Finnish language production occurred in contexts in which the teachers assumed that the children were familiar with the content and the requested expressions. The teacher knows that the related vocabulary is familiar to the children because they have been focusing on colours and numbers during circle time. If the children do not say the word right away, the teacher prompts them by saying the beginning of the word (line 5 in Example 6) and providing well-known frameworks for the child's recall (Example 7).

The topics including bilingual language use in everyday routines are mostly concrete, contextualised, and repeated day after day, which is in line with the findings of Mård-Miettinen et al. (2015) in a Finnish ECEC context where Swedish was introduced through bilingual practices. In familiar routines, the children know what to expect, and the context includes many concrete clues and possibilities for supporting the children's understanding by using artefacts. The topics initiated in Finnish by the teachers are most often related to the current concrete context, for example, naming clothes in (un)dressing situations or asking what kind of bread the child wishes to have while the options are visible on the table. Bilingual interactions during everyday routines not related to the current, concrete context are most often initiated by the children describing, in Swedish, something that has happened outside the ECEC and the teacher responding to this in Finnish, much like in Example 8 from playtime.

Playtime

Playtime includes, in general, less use of Finnish by the teachers than teacher-led activities and everyday routines because play activities are often based on the children's own initiatives. Nevertheless, playtime is also used to introduce the second national language. This can be done, for instance, by the teachers naming objects in Finnish, for example, what is in the pictures in a memory game. The teachers also engage in bilingual interactions during play time by responding in Finnish to children's interactional initiatives in Swedish, as in Example 8:

Example 8. AEROPLANE, October, Teacher A

01	C:	**fast nu är vi på väg- nu- nu är vi på väg hem**
		even though *now we are on our way- now- now we're going home*
02	P:	jo↑ (1) menettekö junalla vai menettekö lentokoneella kotiin (2)
		already↑ (1) are you going home by train or by aeroplane (2)
03		lentokoneella tai junalla (1) ((gör ett fordonsljud))
		by aeroplane or by train (1) ((makes a vehicle noise))
04	C:	lento
		aero
05	P:	te lennätte (.) hyvä↓ (1) sitten ei kestä niin kauan tulla
		you are flying (.) great↓ (1) then it won't take so long to go
06		kotiin (1)mm: (4) saako lentokoneessa soittaa (2)
		home (1) mm: (4) are you allowed to make a call on an aeroplane (2)
07	C:	**jag ringer åt tåget**
		I'm calling the train
08	P:	jaa-a (1) tuleeko hän hakemaan sinut sitten
		yeah (1) is he going to pick you up then
09	C:	(xxx)
10	P:	mm: (1)
		mm: (1)
11	C:	**det var ganska många platser på tåget**
		there were quite a few seats on the train
12	P:	okei junalla oli- aika monta- (.) paikkaa
		okay there were- quite a few- (.) seats on the train

In Example 8, the child imagines that they are travelling and says, in Swedish, that they are heading home now (line 1). The teacher responds in Finnish throughout the sequence from which Example 8 is taken. In lines 2–3, the teacher asks what vehicle they are taking, provides two alternatives in Finnish ('aeroplane' and 'train'), and repeats them, thus stressing them as the keywords in the utterance. The child responds in Finnish with the first part of the word 'aeroplane' (line 4) and then switches back to Swedish (line 7), while the teacher continues in Finnish by commenting (line 5), asking questions (lines 6 and 8), and repeating in Finnish (line 12) what the child had said in Swedish (line 11), thus providing a model of the Finnish language. The teacher's repeated use of two options for travelling (by aeroplane or train) gives the child the opportunity not only to choose one

but also to reply in Finnish, and the subsequent discussion shows that the child can differentiate between 'train' and 'aeroplane' in Finnish.

Also, during playtime, contextualised language use is a common thread in the teachers' bilingual pedagogy, as well as giving instructions, for example, when it is time to tidy up the play activities and toys, resembling the interaction in Example 3. Playtime also offers possibilities for bilingual interactions beyond the concrete, physical context because the children initiate discussions about their playing and fantasy world. These initiations on the part of the children are nearly solely in Swedish, but the teachers can respond to them in Finnish also, as in Example 8, thus providing the children with affordances to learn Finnish related to the children's interests and initiatives.

Trajectories of change in and individual features of teachers' bilingual interactions

The study has a longitudinal aspect, focusing on potential trajectories of changes in interactions and language switches over time. At the beginning of the year, the teachers used Finnish mainly in contextualized, teacher-initiated sequences, and the range of situations in which the teachers used Finnish increased over time. The switches from Swedish to Finnish were generally not explicitly signalled to the children but were, rather, naturally embedded in the teachers' interactions (cf. Palojärvi et al., 2016). Because the Finnish language was introduced as part of the daily activities in the ECEC, the topics discussed in Finnish were quite similar to those discussed in Swedish. Introducing new topics or activities was done mainly in Swedish. As the activities and subjects were repeated and became familiar to the children, the language could be switched to Finnish. Thus, the teachers followed the principle that content and language should not be too demanding at the same time so that the children are able to participate and learn without too much anxiety or frustration (Cummins, 1984, 2021; Hickey & Mejía, 2014; Mård-Miettinen et al., 2015). Extended interactions regarding a wide range of topics outside the concrete context and situation were most often initiated in Swedish by both the children and the teachers, especially at the beginning of the year. Particularly Teacher A, who identified as bilingual, also used Finnish in decontextualized interactions, while the children tended to continue in Swedish in a manner similar to that shown in Example 8. Teacher B primed the use of Finnish by explicitly requesting it, as in Example 7, and even prompting the children by giving them the start of a word, as in Example 6. Teacher B used this kind of explicit prompting for Finnish on several occasions, while teacher A did so more seldomly, especially during everyday routines.

According to the teachers and the data, the teachers did not use Finnish only with the children but also with one another in various situations. This indirect affordance offers the children a multilingual model and means to become familiar with using Finnish in the

group. Finnish was frequently introduced by and used in songs and rhymes during circle time (cf. Kirsch et al., 2020; Russette & Taylor, 2014)), and both the teachers and the children related to these in other situations, as in Examples 4 and 5. Although the focus of the current study was predominantly on the teachers' bilingual interactions and bilingual pedagogy, we can, in general, conclude that the children's Finnish language use increased over time, as can be expected after a year in language-enriched ECEC. Some of the children began repeating the Finnish words or phrases and responding in Finnish during the first months (Examples 5 and 8). This is in line with preliminary results from another study undertaken in the same context, which showed that children reuse all or parts of teachers' Finnish expressions in a way that indicates the memorisation of, e.g., days of the week, numbers, and colours as entities within, e.g., songs or jingles (Virta, 2020).

Concluding discussion

In Finland, the two national languages and the obligation to study them offer a good opportunity for laying the foundations of early bilingual pedagogy in ECEC and school, but their potential is not being fully exploited today. We find that this situation could be better operationalised and used as a potential bilingual resource among, for example, teachers at different levels of education, even if they do not identify as bilingual. This study offers an overview of how an early introduction to Finnish as the second national language is implemented as a language-enriched bilingual programme in a Swedish-medium ECEC unit. Our focus has been on the teachers' bilingual pedagogy and its practical implementations through interactions. The analysis focused on how the teachers orient themselves toward and contextualise their bilingual language use during three recurring activity categories — teacher-led activities, everyday routines, and playtime — at the ECEC unit. In addition, we have analysed trajectories of change in bilingual pedagogy and identified individual features of the two teachers.

The goal of the bilingual program in focus is to include Finnish in Swedish-medium ECEC in order to allow children in a strongly Swedish-speaking local and regional context to develop their bilingualism (cf. Bialystok, 2018) in the national majority language, Finnish. The results reveal that the teachers used Finnish frequently and consistently during teacher-led activities (e.g., circle time), everyday routines (e.g., meals), and during playtime. Within the three activity categories, the teachers frequently used interaction strategies such as routines, the reinforcement of content learned, songs and child-focused approaches that have been documented to be efficient for bilingual pedagogy in other studies as well (Björklund et al., 2014; Hickey & de Mejía, 2014; Russette & Taylor, 2014; Södergård, 2008). Although the teachers' use of Finnish was mostly contextualised and related to concrete and familiar topics, it ranged from comprehension-directed bilingual

sequences focusing on content to explicit language eliciting sequences with focus on prompting the children's language production (cf. García, 2009; Mård-Miettinen et al., 2015).

Though often quite minimal in length, the teachers' communication in Finnish fulfilled several functions: social, regulatory, and informative. Routines, a familiar context, and repetition helped the children understand the bilingual interactions, and they also picked up keywords and phrases in Finnish. Even though we could identify a general positive attitude toward the Finnish language among the children, the aim of this study has not been to examine the impact of bilingual pedagogy on children's language learning but, rather, to provide examples of teachers' bilingual language use as a means of bilingual pedagogy (cf. Mård-Miettinen et al., 2018). This approach is in line with the ECEC core curriculum (EDUFI, 2018), which stresses the meaningfulness of activities in ECEC and does not define specific learning goals for children. Nevertheless, future studies focusing on the children's bilingual interactions would provide more information about the learning process of the children and be of value for the assessment and further development of the programme. However, to assess the program's effect on the children's language learning, longitudinal studies covering the entire program throughout basic education are needed (cf. de Bot, 2014).

Furthermore, our results show that the decentralised teacher role (Moate et al., 2018) implies that individual differences affect bilingual pedagogy as a whole, even though the two teachers in our study jointly planned their bilingual pedagogy and participated in discussions with us, as researchers, throughout the academic year. Because individual trajectories will always, to some extent, influence practices, it is crucial that the educational staff be encouraged to engage in and given resources for collaborative planning and pedagogical reflections in order to create a shared understanding of how to collaborate and enrich and complement one another. The staff's shared view of instruction and learning has, in earlier studies, been shown to contribute to a functional learning environment for children (e.g., Sundberg et al., 2018).

This study has limitations due to the small number of participants, which was related to the action-research-based development of a specific experimental bilingual programme. The audio-recorded data impose limitations on the analysis of non-verbal interactions. Nonetheless, with the support of additional data obtained from observations and interviews, as well as by taking into account how the participants in these interactions responded to one another and oriented themselves toward the situation, we were able to analyse how the teachers' bilingual orientations and language use formed their bilingual pedagogy. This contributes to a deeper understanding of the various applications of bilingual pedagogy, including language-enriched models in which the two languages are

not systematically separated (see Cummins, 2008, notion of the "two solitudes") but used dynamically in a wide range of situations. Due to the limitations, the results should not be over-generalised, and continued observations are needed when the programme proceeds with new child groups and new grades.

This article contributes to the reflection phase of the action research process (Kemmis et al., 2014) and thus serves as grounds for further developing the language-enriched programme in the context of ECEC and pre-primary and basic education. The results and reflections are also used to update the pedagogical guidelines for the local teachers, which are not a static policy document but a dynamic one developed over time as more experience and knowledge of the programme and its results are gained. These insights into bilingual interactions in practice can benefit teachers at different levels of this programme and in similar contexts, as well as contributing to a deeper research-based understanding of bilingual pedagogy in ECEC.

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Appendix 1: Transcription key

(.)	a pause less than 0.2 seconds
(0.5)	a pause indicated in tenths of seconds
|	indicates the beginning of an overlap/overlapping talk
:	prolongation/stretching of the prior sound
↑	rising intonation
↓	falling intonation
=	talk latches on previous turn
regular	Finnish
bold	Swedish
text-	cut-off or self-interrupted talk
>text<	faster talk than normal
<text>	slower talk than normal
°text°	markedly quiet talk
TEXT	louder talk than normal
text	stress or emphasis
((text))	non-verbal/embodied activity/transcriber's description of events
(text)	likely hearing of talk
(xxx)	inaudible
[name]	anonymised