Professional Development for Early Language Immersion Teachers in Estonia

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Declaration

I hereby certify that this material, which I now submit for assessment on the programme of study leading to the award of PhD is entirely my own work, and that I have exercised reasonable care to ensure that the work is original and have conformed to the regulations on the use and declaration of Generative AI, and does not to the best of my knowledge breach any law of copyright, and has not been taken from the work of others save and to the extent that such work has been cited and acknowledged within the text of my work. I hereby certify that no Generative Artificial Intelligence (Gen Al) tools have been used in the creation of the thesis.

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List of Acronyms

CEFR	Common European Framework of Reference for Languages
ESL	English as a Second Language
ECEC	Early Childhood Education and Care
IELS	International Early Learning Study
L1	First Language/Mother Tongue
L2	Second Language
NCCA	National Council for Curriculum and Assessment
OECD	Organization for Economic Cooperation and Development
PLC	Professional Learning Community
PD	Professional Development
SCT	Sociocultural Theory
SEN	Special Educational Needs
SLA	Second Language Acquisition
TA	Thematic Analysis
TL	Target Language
ZPD	Zone of Proximal Development
ZPTD	Zone of Proximal Teacher Development

Professional Development for Early Language Immersion Teachers in Estonia

Anna Golubeva

Abstract

The ongoing language reform in the Estonian education system is establishing Estonian as the only medium of instruction in early childhood education and care (ECEC) settings. This change to bilingual preschool education, which has existed since the collapse of the Soviet Union in 1991, affects the 30% Russian-speaking minority population and is a critical and timely issue for immersion teachers' practice and professional development (PD). Despite the extensive literature highlighting teachers' PD in general and in the context of language immersion classrooms, there is a significant lack of literature covering the topic of the PD needs of language immersion ECEC teachers in Estonia which is the focus of this study.

Adopting a transformative-emancipatory paradigm, a mixed methods approach was utilised in a four-stage research design with 49 participants in total which included: a quantitative teachers' survey (Stage 1); a semi-structured interview prior to the intervention (Stage 2); an intervention in the form of a PD programme and classroom observations (Stage 3); and a post-intervention semi-structured interview (Stage 4). The findings were processed quantitatively and qualitatively; the qualitative data were analysed with the help of the NVivo software using reflexive thematic analysis. The research results indicate that the current PD provision requires development concerning its accessibility, especially to teachers with different proficiency levels in the Estonian language, while PD content needs to focus on play-based pedagogy and developing teachers' Estonian language proficiency. The outcomes also show that teachers need PD events that not only enhance their professionalism but also allow them to improve Estonian language skills and to receive emotional support. The research findings can contribute to better comprehension of ECEC teachers' PD needs in Estonia with regard to the transition to the Estonian-medium preschool education for 3-7-year-old children.

Chapter One

Introduction

1.1 Introduction

Language immersion plays a crucial role in early years education by providing children with natural and meaningful exposure to a new language. Implementation of early language immersion pedagogy allows to create the environment in which children engage with the target language during everyday activities, first and foremost, during play, which makes acquisition of the new language a natural part of children's development. Beyond language development, language immersion also fosters cognitive development and social abilities, thus ensuring holistic development of a child. This study focuses on teachers who work in early language immersion classrooms in Estonia and on their professional development (PD).

In the first chapter I contextualise the study within the Estonian system of early childhood education and care (ECEC) with a specific focus on Estonian-medium preschool education. I briefly describe the ethnic and linguistic situation in Estonia, the regulations related to the status of the Estonian language and the transition to Estonian-medium education as well as teaching and studying Estonian as a second language in ECEC settings. In this chapter I also discuss the research that has been conducted on topics related to the implementation of early language immersion in Estonia.

In the context of the current study, it is essential to define the terms 'language immersion' and 'early language immersion'. The former notion is usually used in the context of an educational programme aimed to ensure that learners achieve additive bilingualism and biliteracy (Baker, 2011; Baker & Wright, 2017; Mård-Miettinen et al., 2022). Language immersion in early years education is described as "settings which operate through minority and/or majority language(s), and include both monolingual and dual-language immersion (Hickey & de Mejía, 2014, p. 132). Early language immersion models can be monolingual or based on the use of two languages. In case of the former, children are provided with early years education through a single language, aiming at additive bilingualism. Dual-language immersion models in early years education provide children with an ECEC environment in two languages (ibid.) and typically target both majority and minority students who learn each other's languages (Mård-Miettinen et al.,

2022). Although monolingual or one-way language immersion programmes are typically aimed at children who speak the majority language as their first language (L1) and want to learn an additional or minority language in the immersion settings (Mård-Miettinen et al., 2022), Estonia is a country where the monolingual language immersion programme is used to teach the majority language, which is Estonian, to minority students (Peltoniemi, 2015; Mehisto, 2015). Taking into consideration the current situation in preschool education in Estonia, which is described in detail further, the notion of 'early language immersion' is used in the current study to refer to second language acquisition at an early age both in the above-described monolingual language immersion ECEC settings as well as in the preschool classrooms applying the core principles of language immersion methodology. In the current study I discuss implementation of early language immersion pedagogy in preschool education in Estonia in relation to the transition to Estonian-medium education which started on September 1, 2024. Taking into consideration that Estonia has experience of implementing the Language Immersion Programme with both monolingual and dual-language early language immersion models from 2003 to the summer of 2024, I briefly introduce the language immersion models that were used within the framework of the programme. I also describe the state-regulated system of training and professional development for language immersion teachers. Following that, I introduce the research questions and rationale. The structure of the present study is then introduced and explained.

1.2 Estonia: Current Ethnic and Linguistic Situation

The Republic of Estonia is a small country in Northern Europe, on the coast of the Baltic Sea. Estonia occupies a location along the eastern edge of the European Union, being bordered by the Gulf of Finland to the north, Russia to the east and Latvia to the south. The capital of Estonia is Tallinn, with the other important cities being Tartu, Narva, and Pärnu. The geographical location of Estonia is illustrated in Figure 1.1 below.

Figure 1.1 *The Geographical Location of Estonia*
(Retrieved from the ResearchGate website, 2022)

According to Statistics Estonia, the population of the Republic of Estonia was estimated at 1,369,285 people as of 2024 (Statistics Estonia, 2024). According to the statistical data of 2024 (ibid), the two largest national groups are Estonians (931,993 people or 68% of the total population) and ethnic Russians (296,268 people or 21.6% of the total estimated population). It is reported that 200 nationalities live in the territory of Estonia, however, the numbers in most groups are very small, with some nationalities represented by one or two people (Tiit, 2020). The most dominant Russian-speaking areas are located in the North-East, especially Narva on the border with Russia, and Tallinn. The data regarding the ratios of the Estonian-speaking and Russian-speaking population in the North-East of Estonia and in Tallinn is presented in Table 1.1 below.

As can be seen from the table, in 2024 the number of Russians living in the north-east of Estonia was 3.5 times higher than the number of Estonians (Statistics Estonia, 2024). Tallinn, which is the capital of Estonia, is a predominantly Estonian-speaking city, although the Russian-speaking population density varies depending on Tallinn neighbourhood. For instance, according to Statistics Estonia data of 2021, in Lasnamäe neighbourhood of Tallinn the number of Russians is twice as high as the number of Estonians. This neighbourhood was built the last, and its development started during the

time of the Soviet Union. At the same time, in one of the oldest neighbourhoods of Tallinn, Nõmme, the ethnic Estonian population clearly dominates.

Table 1.1 *The Estonian-speaking and Russian-speaking Populations in the North-East of Estonia and in Tallinn*

Location	Number of Estonian speakers	Number of Russian speakers
North-East of Estonia	25,845 people	92,090 people
Tallinn in total	237,832 people	139,835 people
Tallinn in Lasnamäe neighbourhood	32,567 people	66,090 people
Tallinn in Nõmme neighbourhood	29,405 people	3,657 people

Estonia has one state language, which is the Estonian language. The first Language Act of Estonia was adopted in 1989. Although that document defined Estonian as the only official language in the country, it also stipulated proficiency in the Russian language in the case of certain professions (Rannut, 2006). The next Language Act, dated 1995, which was enacted after Estonia regained its independence in 1991, no longer included provisions for the Russian language use. It is also essential that the language a person speaks was seen as the key marker of their identity (Verschik, 2005). As the current Language Act states, Estonian language is "the main language for communication in all spheres of public life" (Language Act of Estonia, para 1, 2025). This positioning of the Estonian language could have significant implications, some of which are explored in the current study.

1.3 Early Childhood Education and Care in Estonia

In Estonia, preschool education, which is not compulsory, is available for children between the ages of 18 months and seven years. There is no childcare provision for babies and toddlers under one and a half years of age as after the child is born, the parents are entitled to a 475-day parental benefit which they can use either separately or together, receiving the amount of money comparable to the recipient's regular salary prior to the child's birth (Social Insurance Board, 2025). In preschool education children are divided between Nursery (age 18 months-3 years) and Kindergarten (age three-seven years) groups. A local government or municipality is obliged to provide a family residing on its territory with placement in a local preschool (Preschool Child Care Institutions Act, 2018). Although attending a preschool is not obligatory, it is considered beneficial for the child's overall development, well-being, and preparation for school (OECD, 2019) and

thus is popular: 92% of 4-year-old children attend preschools (International Early Learning and Child Well-being Study – IELS 2018 report results for Estonia, 2020).

The Estonian system of Early Childhood Education and Care (ECEC) falls under the term of the "educare" model of preschool education, which is used in the Nordic Countries, including Finland (Finnish Education Evaluation Centre, 2019). This model means that it represents an integrated concept of care, upbringing, education, and teaching. According to the Preschool Child Care Institutions Act (entered into force in 1999/2000), the main task of a preschool educational institution is to provide a child with possibilities and conditions for holistic personal growth, to take care of the child's health, and to support their social, emotional, cognitive, and physical development. In addition to the Preschool Child Care Institutions Act, the area of preschool education is regulated by the Estonian National Curriculum for Preschool Child Care Institutions (enacted on 01.09.2008). This framework document sets the benchmark for school readiness per se by describing expected outcomes of 6-7-year-old child's development in the area of four general skills, which are play skills, cognitive and learning skills, social, and self-regulation skills, and in the seven content-based areas of early development, such as me and environment, language and speech, Estonian as a second language, mathematics, art, music, and physical education (Estonian National Curriculum for Preschool Child Care Institutions, 2008).

The targets for preschool education as the first stage of the education system as a part of the life-long learning process are defined by the Estonian Education Strategy 2021-2035 as follows:

- to contribute to improvement of availability of the diversity of educational possibilities and to ensure a smooth transition between levels of education where the indicator is children's engagement in preschool education one year prior to commencement of the compulsory school education at the rate of 100% by the year 2035,
- to increase the capacity to reveal special educational needs (SEN) and to offer early intervention as well as to provide the child with SEN with high-quality support services,
- with reference to Strategic goal 2 which states that by the year 2035, 95% of non-Estonian students who finish compulsory education speak Estonian as a second language at the level of B1 of the Common European Framework of Reference for Languages (CEFR), the role of preschool education is to ensure

that a non-Estonian speaking child acquires Estonian as a second language at the level that is sufficient for them to proceed to Estonian-medium school education.

Despite the aspirations of the preschool education described in the targets, the research indicates that early years teachers, which is the term used in Estonia for early years educators, feel pressured in achieving them. Teachers are concerned with ensuring the term "smooth" when it comes to transition from preschool to school. They are concerned that providing children with academic preparation for school takes away attention from the development of their general developmental skills (Neudorf et al., 2017). Early years teachers also have a mixed attitude towards curricular autonomy, preferring to have specific guidelines in relation to aims and methods of teaching (Tuul et al., 2015).

Following the strategic goal related to the students' proficiency in Estonian as a second language, the next subsection discusses the transition to Estonian-medium education.

1.4 Transition to Estonian-medium Education

In October 2022, the Government of the Republic of Estonia approved the action plan for the transition to Estonian-medium education which is an educational reform aimed to increase the amount of Estonian-medium teaching and to provide all learners, regardless of their first language, with quality education in the state language (Ministry of Education and Research, 2025). The preparatory period for the implementation of the reform required introduction of amendments to several legislative acts, including the Preschool Child Care Institutions Act and the Language Act (ibid.). The most significant amendments to the former in relation to the present study are in Paragraph 8 "Language". In the 2024 version of the legislative act the provision of preschool education and care in a language other than Estonian and the organisation of Estonian as a second language learning for non-Estonian speaking children were replaced by Estonian as the only medium of learning and teaching in a preschool institution (Preschool Child Care Institutions Act, 2024). The Language Act was supplemented with the "Requirements to the Estonian Language Proficiency and Use by Civil Servant, Employee and Individual Entrepreneur" decree (2024). The document states that the requirements to the Estonian language skills are based on the levels of language proficiency described in the Common

European Framework of Reference for Languages or CEFR (Council of Europe, 2025a). In Chapter 3 the decree sets requirements to the state language proficiency at the levels from A2 to C1 to representatives of different professions, including employees of the education sphere. The decree document was amended in connection with the transition to Estonian-medium education with the Republic Government's Decree no. 48 of 25.07.2024 titled "Amendment to the Republic Government Decrees in Relation to the Transition to Estonian-language education". The updated requirements to language proficiency of early years education specialists were stated as follows:

- teacher's assistants are expected to demonstrate the Estonian language proficiency at B1 level of CEFR. According to the framework, B1 is the first level in the independent user category. The corresponding language proficiency can be described as the ability to comprehend clear input in familiar situations related to everyday topics, including work and to produce simple output on familiar topics. (Council of Europe, 2025b)
- assistant teachers are expected to have the Estonian language skills at B2 level of CEFR. Based on the framework, B2 is the second level of the independent user category implying that a person with the corresponding language proficiency can comprehend the main ideas of specific and abstract texts, including those related to their professional activity. The language user is expected to cope in situations of spontaneous communication and produce language output on a variety of topics, expressing their opinion. (ibid.)
- early years teachers whose first language is not Estonian are to pass the state language test to demonstrate their proficiency in Estonian as a second language at C1 level of CEFR. This level of language mastery implies that a person is proficient in the target language and can use the language fluently and effortlessly in a variety of communicative situations. A proficient language user is also expected to produce clear, well-organised and sophisticated language output. (ibid.).

Taking into consideration the above-described situation with the high density of the ethnic Russian population in north-east of Estonia and in Tallinn, preschools in these regions faced the challenge of hiring personnel with the Estonian language proficiency complying with the amended requirements in the light of the transition to Estonian-medium education. For example, on April 9, 2024, Narva vice-mayor for education commented to the Õpetajate Leht [Teachers' Paper] newspaper on the shortage of

Estonian-speaking pedagogical staff, "as of the end of January, 13 of 27 kindergarten classrooms needed teachers with C1 level… There are only 85 employees with B2 level, which means that we are short of at least 24 teachers with B2 proficiency which would allow us to have at least one early years specialist with B2 level per classroom" (Vovdenko, 2024). In July 2024, Tallinn vice-mayor for education commented to the Estonian National Broadcast that by the beginning of the transition in September Tallinn had found less than half of the 90 early years teachers it needs to implement the reform (ERR, 2024a). In October 2024, in a different interview to the Estonian National Broadcast he explained that with the launch of the transition reform on September 1, 2024, Tallinn had to implement the one plus two system in the majority of the transitioning preschools as a solution to shortage of early years teachers with the required proficiency in the Estonian language (ERR, 2024b). The one plus two system means that instead of having two teachers and one teacher's assistant in the classroom, kindergartens now have one teacher with C1 level in Estonian and two assistant teachers whose level of Estonian language skills is B2. This is considered to be a temporary solution, and in the case of some kindergartens it has led to changes of employees' position within the same institution: former early years teachers who do not meet the language requirements have become assistant teachers, which, for example, has had a negative impact on their salary (ibid.).

As it has been mentioned above, all previously Russian-medium ECEC classrooms switched to Estonian-only instruction on September 1, 2024 (Ministry of Education and Research, 2025). The expectations for non-Estonian-speaking children's proficiency in the state language are discussed in the next subsection.

1.5 Estonian as a Second Language in ECEC Settings

Taking into consideration that families in Estonia prefer state-funded preschool education, as evidenced by the fact that in the academic year 2018/2019, 96% of all children enrolled in preschool education attended municipal kindergartens (IELS 2018 report results for Estonia, 2020), pedagogical practices in private ECEC settings are beyond the scope of this study.

Prior to the transition to Estonian-medium education, municipalities had the right to sanction the use of language different from Estonian as the means of instruction in ECEC settings. The children in these ECEC settings had to be provided with compulsory

teaching of Estonian as a second language from the age of three as it was required by the Preschool Child Care Institutions Act, which was one of the preconditions for the launch of the language immersion programme which is discussed later. Thus, according to Haridussilm.ee (Alushariduse ülevaade, 2025) which is the official webpage of Estonian statistics in the area of education, in the academic year 2023/2024, out of the total of 68,281 children who attended preschools, 56,505 were in Estonian-medium ECEC settings, 7,526 children attended preschools with Russian as the medium of instruction, 3,995 children were in language immersion classrooms, 246 children attended English-medium preschools and nine children were in French-medium ECEC settings. In these ECEC settings where the medium of instruction was other than the Estonian language, children were provided with Estonian language instruction in compliance with the Estonian National Curriculum for Preschool Child Care institutions.

The Estonian National Curriculum for Preschool Child Care Institutions (2008/2024) defines Estonian as a Second Language as one of the content-based seven areas of early development (the other six being “Me and Environment”; “Language and Speech”; “Mathematics”; “Arts”; “Music”; and “Physical Education”). The section of the document dedicated to Estonian as a second language defines the expected outcomes for 6-7-year-old children and provides general methodological recommendations for this area of content-based early development. The educational activity within the area of early development is aimed to initiate children's interest towards the Estonian language and culture and to help them acquire basic language skills, such as the ability to recognise and understand Estonian words and simple expressions and to use simple Estonian words and expressions in everyday communication. As the National Curriculum states, it is expected that as a result of studying Estonian as a second language within ECEC settings a 6-7-year-old child:

- understands simple Estonian speech on everyday topics,
- recognises and understands words and phrases he/she has learned and uses them in his/her speech,
- understands instructions and acts accordingly,
- understands simple questions and answers them within the frames of the learned vocabulary,
- uses appropriate polite expressions in their speech,
- knows Estonian poems and songs by heart,
- can name some Estonian places and famous people.

The above-listed expected outcomes are the same for all children who learn Estonian as a second language in ECEC settings regardless of the specific form in which the language teaching is organised. The previous version of the curriculum determined that all children whose home language is not Estonian and who attend Russian-medium preschools are taught the Estonian language starting from the age of three. This provision was the reason why the current study focuses on children at the age between three and seven years old. The updated version of the curriculum which came into force simultaneously with the transition on September 1, 2024 and is valid until August 31, 2025 includes the above-mentioned provision which is now related only to private kindergartens where the language of instruction is different from Estonian.

The updated curriculum document states that children whose first language is different from Estonian are supported in acquisition of the state language through integration of language and content-based activities and, if necessary, through additional language lessons (Estonian National Curriculum for Preschool Child Care Institutions, 2024). The previous version of the policy document referred to the Estonian Language Programme that was implemented in ECEC settings from 2003 to summer of 2024 and was based on the use of early language immersion pedagogy which is discussed further below.

1.6 Key Features of Early Language Immersion

Depending on the education system of a particular country, the length of the early language immersion programme and its timeframe can either fit into one stage of education or be programmatic. The example of the latter is Finland, where the early language immersion programme starts at the non-compulsory kindergarten level (age five-six) and compulsory preschool level (age six-seven) and continues till the end of secondary education (Björklund et al., 2014; Mård-Miettinen et al., 2022). The early immersion programme can be divided between different levels of preschool and primary education, as, for example, in Belgium (Buyl & Housen, 2014), where the early immersion programme begins in the final year of preschool (age 5) and continues until the end of secondary education. On the other hand, in Estonia, the language immersion programme operated in preschool and primary school education, however, the curricula were not related content-wise, or were parents obligated to continue with immersion school education in case their child had attended immersion ECEC settings.

Early language immersion programmes can pursue a wide range of aims varying from "language maintenance and/or enrichment to early second language learning, depending on the context of implementation" (Hickey & de Mejía 2014, p. 131). In most education systems the objectives of language immersion programmes are in line with the national documents regulating certain stages of education (Swain & Johnson, 1997; Swain& Lapkin, 2005), hence the learning outcomes and the expectations regarding the achievements of immersion learners are often identical to those of monolingual learners.

Language immersion programmes have certain core features which distinguish them from other bilingual or foreign language learning programmes (Swain & Johnson, 1997; Swain & Lapkin, 2005). These features have been defined also considering contexts of certain countries, for instance Canada or the USA. The characteristics that comply with the context of the Estonian language immersion programme most closely were described by Fortune & Tedick (Fortune & Tedick, 2008; Cammarata & Tedick, 2012). These features include: a) *instructional use of the immersion language for at least 50% of the preschool or elementary day*, which was the minimum margin of the Estonian-medium instruction in partial or two-way language immersion preschool groups in Estonia. These are the two models of dual-language immersion which were implemented in early years classrooms in Estonia and which are discussed in further detail; b) *promotion of additive bi- or multilingualism and literacy through instruction in two languages*, which complies with the Estonian context partially, as in the case of one of the implemented models, the total early immersion in the ECEC settings for 5-7-year-old children, instruction was provided through the medium of the Estonian language only; c) *employment of teachers who are fully proficient in the language(s) they use for instruction*, which was the same in the Estonian context, as the Estonian-medium teacher had to be either a native speaker or have a documented proof of their Estonian language proficiency at C1 level; d) *clear separation of teacher use of one language versus another for sustained periods of time*, which was a very important principle for the Estonian language immersion programme. Despite the recent research reconsidering the "one person – one language" principle (Cummins, 2021; Lyster, 2019) it was considered the fundamental rule for the Estonian language immersion programme, especially for the models implemented at the level of preschool education.

In addition to the above-described features of language immersion programmes which determine the organisation of the educational process, it is essential to refer to the main instructional strategies used by teachers in early language immersion classrooms.

The core teaching strategies used by language immersion teachers were described by Snow (1987, pp. 21-22). These include: 1) extensive use of body language; 2) predictability in instructional routines; 3) drawing on background knowledge to aid comprehension; 4) extensive use of relia, visuals, manipulatives; 5) review of previously covered material; 6) building redundancy into the lessons; 7) explicit teacher modelling; 8) indirect error correction; 9) variety of teaching methods and types of activities; 10) use of clarification/comprehension checks. These main instructional techniques are aimed to ensure that children understand the input in the immersion language and are provided with language models and support to produce their linguistic output.

1.7 Estonian Experience of Early Language Immersion Programme Implementation

This subsection introduces the Estonian experience in the implementation of language immersion pedagogy and the establishment of the national language immersion programme at the levels of preschool and basic school[1] education. Here I describe the language immersion models which were used in ECEC settings as well as provide an overview of activities of the Language Immersion Centre.

1.7.1 Early Language Immersion Classrooms in ECEC Settings

Although the establishment of the Estonian language immersion programme at the school level is not the focus of this study, it is essential to describe it to present the context for implementation of the early language immersion programme in the ECEC settings. In the years following the collapse of the Soviet Union and Estonia's regaining its independence in 1991, the issue of poor state language proficiency of ethnic non-Estonians was under discussion in different spheres of life. The drive for stability and better social cohesion formed promising grounds for the launch of the language immersion programme (Mehisto, 2015). In 1997-1998 the Estonian Ministry of Education and Research began consultations with different target groups, relying on the international experience of Canada, Finland, and other countries with developed systems of bilingual education (Haridus- ja Noorteamet, n.d.; Mehisto, 2015). The further development of the Estonian language immersion programme included a cooperation agreement with Canada (2000), the opening of the first one-way early language immersion classrooms in schools, and a later the cooperation agreement with Finland (2001-2002). In 2001-2002 the first

[1] Basic school is the term used in Estonia for compulsory education of Years 1-9 (7-16 y.o. students).

early years teachers received teacher training in language immersion pedagogy which was provided by Canadian and Finnish experts (Haridus- ja Noorteamet, n.d.). The first preschool groups of total early immersion were opened in nine kindergartens in 2003 (Immersion Centre, 2003), with the total number of preschools in the Language Immersion Network reaching 70 by 2022 (Education and Youth Board, 2022). The official implementation of the Language Immersion Programme in the Estonian preschool education ceased in the summer of 2024 due to the transition to Estonian-only education (Estonian National Curriculum for Preschool Child Care Institutions, 2024). However, the experience of the programme and its resources, including the human one, are of profound importance for the transition reform, as the majority of the preschools that are involved in the transition are the ones that used to belong to the network of language immersion kindergartens where the Estonian-medium teachers had undergone PD in early language immersion pedagogy.

The teachers of the above-mentioned first language immersion ECEC classrooms mostly relied on the immersion experience of Finland. The Finnish experience was followed due to similarities in the paradigm of preschool education and experience in early language immersion (Immersion Centre, 2003). The total early immersion model was implemented in groups with Russian-speaking children at the age of five and was planned for two years until children start compulsory school education. There were two teachers and one assistant teacher working with the children at the ratio of one adult per ten children aged three to seven, both the teachers spoke to the children only in the Estonian language during the educational activities and all routines within the settings.

The second immersion model implemented in the preschool education – the partial language immersion – was introduced in 2008 to address both the parents' concern for the development of the children's home language and to support the institutions in solving the solution of the lack of Estonian-speaking teachers in the predominantly Russian-speaking areas (Language Immersion Centre, 2008). Children started attending a partial language immersion group at the age of three. In the case of this model, there were two teachers and an assistant teacher working with the children, where one of the teachers only communicated in Estonian, and the other – in the Russian language. The teachers worked either half a day or the whole day interchangeably, they did not translate each other, but each of them consolidated the knowledge children had received in the other language. Music and physical education were taught by different teachers. These classes

were taught in Estonian only or in Estonian and Russian interchangeably, in line with the language of that half of the day.

The early language immersion model that was introduced last was the two-way immersion one. In 2013, the Ministry of Education and Research recognised the importance of providing all children in Estonia with access to possibilities for early multilingualism, which so far, in compliance with the 2008 version of the Estonian National Curriculum for Preschool Child Care Institutions had been given only to children in Russian-medium kindergartens by providing them with lessons of Estonian as a second language from the age of three. Thus, in April 2013 the Foundation Innove announced the launch of the preparatory period for the two-way immersion programme, and the first two kindergarten groups opened in September 2015, followed by two more in September 2016. In the case of this model, the group consisted of children with either Estonian or Russian as mother tongues and children from bilingual families (not more than 1/3 of the group). There were two teachers and an assistant teacher working with the children, where one of the teachers only communicated in Estonian, and the other – in the Russian language. Thus, each of the teachers was simultaneously the teacher of their language as the mother tongue and as a second language. The teachers worked either half a day or the whole day interchangeably, they did not translate each other, but each of them consolidated the knowledge children had received in the other language. Both languages had the same status. The group environment demonstrated the clear visual distinction between the languages.

1.7.2 The Language Immersion Centre as Supporter of Early Language Immersion Teachers

The Language Immersion Centre which was established on October 2, 2000 (Estonian Language Immersion Centre, 2001) aimed to support the implementation of the language immersion programme and to provide teachers with guidance (ibid.). Among the latter activities targeted at early years teachers, the Centre coordinators invited experienced early language immersion teachers to the development of sample planning kits which were produced in time for implementation of each of the three of the above-described language immersion models. These kits of ready-made plans for teaching activity were designed in compliance with the areas of early development of the national curriculum and described daily theme-based exercises and learning games. The plans were developed for each month of the school year, and they were tailored according to

the language immersion model: the sample planning kit for the total early immersion model was developed for two years in the Estonian language only; the plans for the partial immersion model were developed for four years in both Estonian and Russian languages to provide teachers with examples of collaborative planning for the teachers of the two languages; and the planning kit composed for two-way immersion, which also included monthly plans for four years, contained language-specific outcomes for both Estonian and Russian as L1 and L2 (Language Immersion Centre, 2020). These plans, which were prescriptive from the standpoint of their structure and nature, were not compulsory to use; they were offered to preschools which had joined the language immersion programme as recommended guidelines for planning of teaching activity aimed to support teachers and offer them ideas.

The Centre also supported teachers in sharing their experience and ideas. Such collaborative professional development was organised in two main ways: first, the Centre organised a summer school for teachers from all the language immersion preschools. The tradition was established in 2005. Secondly, the Centre encouraged the sharing and exchange of experience through preschool visits: in 2009 the Centre initiated the so-called regional visits which meant that directors of schools or preschools with language immersion classrooms from a particular area would meet in either a school or preschool in the same area to assess the implementation of the language immersion programme. In addition, in 2010 the Centre launched the collaboration programme titled "Wednesday in Language Immersion" which implied that teachers from language immersion preschools visited each other on Wednesdays to observe the teaching practice and exchange ideas. The visits were organised and managed by the preschool specialist of the Language Immersion Centre (ibid.).

One of the tasks of the Language Immersion Centre was also to provide PD for early years educators working in language immersion classrooms in preschools. While the PD curricula are described in detail further, in subsection 1.9, it is important to describe the origin of the PD that the Centre offered. The in-service training in language immersion methodology for teachers and teacher assistants began in 2005, and the first trainers were the practicing preschool teacher, the director of the same preschool and the preschool specialist of the Language Immersion Centre, who had previously completed PD conducted by Finnish and Canadian experts. Thus, it is essential to point out that the PD events organised for the pedagogical staff working in early language immersion classrooms in preschools were based on the modelling of good practice and on

collaborative professional learning from the origin of this PD. While the activity of the Language Immersion Centre came to a halt in 2021 due to an administrative reform, PD events for language immersion teachers were still provided in the same way but organised by the Estonian Youth and Education Board.

1.8 Existing Research on Early Language Immersion in Estonia

Considering the role of teaching Estonian as a second language in ECEC settings (Koolieelse lasteasutuse seadus, 2002) and the launch of the preschool language immersion programme in 2003 (Immersion Centre, 2003), there has been research conducted on topics related to early teaching of Estonian in preschools in general and in early language immersion classrooms in particular. This subsection presents an overview of the existing research.

A significant research project in the area of early language immersion was conducted by researchers from Tallinn University Airi Kukk and her colleagues Ene-Silvia Saar, Maia Muldma, and Leida Talts (Kukk et al., 2012). The four-year project, which took place from 2007 to 2011 and was titled "Early Language Immersion: Meeting the objectives of the curriculum as seen from the aspect of the child-centred approach", focused on children who attended total language immersion classrooms in ECEC settings. The study assessed the children's readiness for school and their achievement of the objectives of the Estonian National Curriculum for Preschool Child Care Institutions (2008) as well as examined their coping with the school curriculum upon completion School Stage I (Years 1-3). This has been the most significant research regarding early language immersion in Estonia so far. The research project became the basis for Airi Kukk's doctoral dissertation titled "The Objectives of the Curriculum in the Transfer from a Pre-School Institution into a School and at the First Stage at School According to the Assessments of Teachers" (2010) as well as for several research articles. These articles, including Kukk et al. (2014) and Kukk and Õun (2014), focus on the extent to which children from early language immersion preschool classrooms are considered to achieve curriculum objectives upon finishing both kindergarten and primary school as well as to be prepared for school. The articles present evaluations and opinions of the children's teachers and parents. The research by Kukk and Õun (2014) studied teachers' assessments of kindergarten children's readiness for school and their further coping with achievement of objectives of the school curriculum. All the children who were analysed within the

frames of the research had attended early language immersion classrooms in ECEC settings. The assessment of first preschool and then schoolteachers indicated that the children were equally ready for schooling in both the Estonian and Russian languages. Moreover, the study revealed that when the children began learning a third language in Year 3, they did not have any decline in their existing language skills. The research findings showed that at the kindergarten level the preschool teachers assessed the children's physical and motor development with the highest scores. At the school level, the teachers considered humanities, physical education, and music as the areas in which the children performed the strongest. The children scored the lowest at conflict resolution and tolerance. Although this study focused on evaluation of children, the researchers also made some recommendations regarding teachers. The findings which are the most relevant in the context of this study are related to, first, the teachers' insufficient perception of their dual role as both the subject and the language teacher in the immersion classroom, and, more importantly, to the disconnection of the aim of the immersion programme and the teacher's professional identity or training. Kukk and Õun (2014) point out that while the aim of the language immersion programme is the integration of the subject and language learning, the teacher's professional identity and learning may focus on a narrow and specific subject. The study by Kukk et al. (2014) compared the teachers' assessment of children's readiness for school with the corresponding evaluations given by their parents. While both the teachers and parents considered the children to be well-prepared for school, the study revealed that the teachers tended to assess the children more highly than the parents. The research findings which are especially significant in the context of the present study revealed weak integration of content and language in the domain of environmental and natural science, which could be seen as having a negative impact on the children's acquisition of the corresponding vocabulary and understanding of concepts. The researchers suggest addressing the issue with PD modules on topics of integrated play-based learning.

The research dedicated to training of teachers for multicultural kindergartens in Estonia is represented by the study conducted by Raud, Džalalova, and Katri Raik (Raud et al.,2011). In their research the authors analysed the trilingual model of teacher training which was provided at Narva College of the University of Tartu. Describing the bilingual process of teaching that was implemented in the higher education institution at the time, the researchers pointed out that older students preferred instruction in their first language, which was Russian, and that some students struggled to reach the required level of

proficiency in Estonian, which was among the reasons students were not able to complete their studies. Although this research focused on pre-service teacher training, these findings are significant for this study as they indicate that mastering the state language had been an issue in teacher pre-service training even prior to the transition to Estonian-medium education.

Another research on the topic of teachers' Estonian language proficiency, although focusing on schoolteachers, is by Kiilo and Kutsar (2013). Their study looked at professional self-identity of Russian-speaking teachers involved in the reform of the partial transition to the Estonian-medium instruction at the upper-secondary school stage in Russian-medium schools which was conducted in 2007-2011. Although the target group as well as the scale and context of the reform are different from the current transition, the findings of this study are significant to consider as they are related to teachers' perception of their professionalism in a situation where they are to teach in the language which is not their first. The outcomes of the research by Kiilo and Kutsar that are most relevant in the context of this study are the following: 1) teachers recognized the Estonian language proficiency as becoming a professional standard; 2) teachers saw it challenging to deliver content knowledge and develop students' language skills; and 3) teachers did not have sufficient support from their colleagues and institutions.

Making a conclusion about existing research in the area of early language immersion, I can say that so far, the research has focused on the assessment of children's academic performance. The research conducted on topics related to teacher professionalism for working through the medium of the Estonian language or to the corresponding models of teacher training has not concentrated on early years teachers or their professional development. Thus, this study aims to fill in the gap in the existing research by investigating professional development needs of teachers working in early language immersion classrooms in preschools.

1.9 Research Rationale and Question

Although the transition to Estonian-medium education marked the end of the Language Immersion Programme in Estonian preschool education with its three language immersion models, the use of early language immersion pedagogy has become even more topical with all non-Estonian speaking children having to receive early years education and care only through the medium of the Estonian language. In description of the Estonian

as a Second Language area of early development, the 2024 National Curriculum for Preschool Child Care Institutions refers to aspects of early language immersion pedagogy which is discussed further in Chapter 2, such as language acquisition through everyday activities, integration of language learning with other areas of early learning as well as encouragement of language output in everyday situations and communication (Estonian National Curriculum for Preschool Child Care Institutions, 2024).

The early language immersion setting is a complex structure which requires a teacher to be equally competent in the two areas which are early development and second language learning in general as well as immersion pedagogy in particular. Integration of these two domains is a challenge not only for the work of practicing teachers (Stephen et al., 2012), but for teacher professional development as well.

1.9.1 Positionality

Being a trilingual person myself, I have had very different learning journeys with the two languages I speak in addition to my first language, and while my motivation for acquiring English and Estonian was different, my biggest breakthrough in the language learning process came through being immersed in the language environment and having the real need to communicate in the language. Being a native speaker of Russian and attending a Russian-medium school, I started learning Estonian at the age of 9, which was Year 3 of schooling. I had two lessons a week in the Estonian language, with teaching focusing on the development of reading skills and understanding of grammar. Even though my journey in English language learning began three years later in Year 6, due to the difference in the approach to teaching, I quickly became fascinated with the language, learning additionally on my own and taking private lessons before entering university to study to become an English teacher. During my university years I continued learning Estonian, but my language skills remained passive. This was the reason why my first experience of being immersed in the language was such a major milestone for me. Having a summer job in a hotel on the island of Saaremaa, in an all-Estonian environment, I was helpless with my theoretical knowledge of the Estonian language, but I had a real necessity to speak the language every day. This experience led to my professional interest in language teaching and learning, based on seeing the value of a language in feeling the ability to use it practically, first and foremost, in everyday interaction with people. My work as English language lecturer teaching practical English to adult learners provided me with the opportunity to see how the lack of communicative skills due to little exposure

to authentic language was the reason for learners' demotivation and lack of communicative skills in the target language. This made me think about the ways in which adults learn and encouraged my interest towards professional development, especially for teachers, and the ways to make it motivating and efficient. Later on, I became involved in the organisation of professional development for language immersion teachers during the period from 2013 to the summer of 2020 as an employee of the Language Immersion Centre and from the autumn 2020 onwards as a staff member of Narva College of the University of Tartu. I have had an opportunity to see the strengths and shortcomings of the system of PD provision from my own perspective. Seeing PD as a system, I was able to recognise that a lot of PD offered to early language immersion teachers was based on stakeholders' vision of what needs teachers may have, but not on the issues which teachers voiced themselves. Seeing the need for more respect towards teachers' agency in the area of their professional development, I decided to research the topic and study existing PD for early language immersion teachers to assess whether it addressed their actual needs and expectations. It was essential for me not only to study the teachers' experience with PD provision, but also to offer them a PD programme which would meet their expectations.

The Estonian Youth and Education Board (EYEB) provided professional development on the topic of language immersion pedagogy for preschool teachers. This PD was aimed to prepare teachers for working in the language immersion settings prior to starting the work in the language immersion classroom. The corresponding professional development curricula developed by EYEB were composed together with the language immersion teacher trainers, who were also immersion teachers/specialists in methodology. The PD was based on the national curricula and the recommended study materials that were available for teachers at the time. On the organizational side of the matter, EYEB provided professional development free of charge, offering all participants free meals as well as providing accommodation to those participants who did not live in the city where the training took place. Completion of this initial PD programme was a compulsory step for a language immersion classroom to be officially opened.

In the preschool context, the opening of an immersion group/classroom/strand quite often arose from parental demand (Language Immersion Centre, 2008). The parents would address the preschool administration and apply for opening of a language immersion group. Thus, parental demand could have been a starting point for a teacher's professional journey in the immersion context as they might have been offered to start

teaching in the language immersion settings after completing professional development in language immersion pedagogy. This was quite an issue especially in small towns where due to the decreasing number of children in kindergartens, the opening of the immersion group could have been the only motivator to keep Russian home language parents from changing the kindergarten (ibid.). In order to open the group, the administration needed at least one teacher with the required Estonian language proficiency, i.e., they had to be a native speaker of the Estonian language or have the C1 level proficiency in the Estonian as a second language (Language Act of Estonia, 2020). Of course, the teacher candidate also had to be interested in working in the immersion settings. Before the group was officially opened, the teacher had to complete the above-described professional development.

These professional development training modules were offered on the annual basis at approximately the same time, which had become a certain routine for immersion kindergartens and allowed them to plan their work, for example, opening of new/additional immersion groups: the first module of professional development was held in August and the teachers started their work in September. In October of the same year, they used to have the second professional development module when they were already able to share some of their first experiences of working in the immersion settings. Taking into consideration that in the partial and two-way immersion models one teacher worked in the Russian language, the professional development was offered both in the Russian and Estonian languages in different groups of PD participants.

The academic year 2023/24, which was a preparatory period before the transition reform started, brought to the fore the acute and immediate need for teachers who were proficient in the Estonian language and were able to provide non-Estonian speaking children with possibilities for holistic development in the Estonian language in a child-centred and playful manner. It was also the time which emphasised the teacher's Estonian language proficiency and its compliance with the upcoming requirements. The Institute of the Estonian Language developed and conducted Estonian language learning programmes for education specialists at B1, B2, and C1 levels (Eestikeelsele õppele üleminekut toetavaid koolitusi hakkab korraldama Eesti Keele Instituut ja ministeerium, 2024).

In the context of the transition, the role of early language immersion pedagogy and preschool language immersion teachers became especially significant. Until then, the only Russian-medium kindergartens that had experience of implementing Estonian-

medium instruction had been the ones which had also had early language Estonian-immersion classrooms. However, with the news about the reform, non-Estonian speaking families started preferring Estonian-medium preschools (Vapper, 2023) which required teachers of Estonian-medium ECEC settings to be competent in working with children whose first language was different from Estonian. As a result, these teachers were enrolled to attend the above-mentioned PD training modules. Thus, the provision of professional development that complied with these needs was a key issue not only of the language immersion programme, but also of the sustainability of the transition to Estonian-medium preschool education.

The professional development curricula offered to language immersion teachers could be called the starting package, providing novice immersion teachers with the most essential knowledge, skills, and attitudes in the field of second language acquisition and language immersion pedagogy. However, in most cases, this package was the only professional development immersion teachers were provided with within the frames of implementation of the immersion programme. Moreover, this initial package of professional development was not accessible by any preschool teacher willing to work in the immersion settings – the names of the participants-to-be were given to the EYEB coordinator by the directors of the kindergartens opening corresponding immersion groups. Thus, although this professional development package was essential for becoming a preschool immersion teacher in Estonia, it was also the source of many challenges.

These challenges were the connecting point of a number of contexts, primarily the political, educational, and professional ones. One of the most important questions to consider here is the absence of the objective instrument of measuring the teachers' professional needs prior to entering professional development and upon completing the EYEB professional development package curricula. The content of EYEB professional development curricula was developed over 10 years ago and its core stayed the same ever since, regardless of the teacher's experience prior to being assigned to compulsory professional development, which was also before the teacher started to work in a language immersion preschool classroom. The context of the preschool itself (how long it had been in the programme, how many immersion groups it had, what the language of instruction was in the preschool, etc.) was not taken into consideration either. It was up to the proficiency of the teacher trainers to integrate the more experienced and the less experienced participants in the training process. After the participants attended the

training, they would usually provide general feedback about the training as such, but not targeted feedback on the way the professional development prepared them for working as preschool immersion teachers.

In the situation when the significance of the experience and expertise of language immersion kindergartens increased, it was vitally important to offer targeted and research-informed professional development so that it specifically addressed teachers' professional development needs which teachers themselves defined, especially in the context of the transition to Estonian-medium education. Having been involved in organisation of PD events, including the above described training modules, I have been determined to, 1) develop my competence in the area of early language immersion pedagogy by studying the most recent research and current trends in the domains of early childhood education and care and language immersion; 2) to define the best practices in the area of teacher professional development; analyse the impact that PD events have on teachers, 3) to fill in the gap between the theory in the area of professional development for early immersion teachers and its current practice in Estonia by focusing on the professional development needs of preschool immersion teachers in Estonia and the way they might they be addressed and by answering the following research questions:

- What are teachers' specific PD needs in relation to early years immersion pedagogy based on current policy and practice?
- What are the perspectives of early years immersion teachers in north-east Estonia and Tallinn in relation to the provision of professional development?
- How could the PD needs of early immersion teachers be met or addressed through a collaborative approach?

1.10 Structure of the Thesis

The current study primarily focuses on the professional development needs of preschool language immersion teachers in north-east of Estonia and in Tallinn, where the majority of the former language immersion groups/classrooms are located. The study aims, 1) to analyse what PD needs the teachers have based on the current policy and practice, especially in relation to the transition to Estonian-medium education; 2) to study whether the teachers in north-east of Estonia and Tallinn are satisfied with the current professional development practices; 3) to offer the teachers a possibility to participate in

a collaborative PD initiative on the topic of early language immersion pedagogy which aims to foster teachers' collaboration and professional enquiry (Sachs, 2016).

The current chapter, Chapter One, discusses and evaluates the context of the study. I provide a brief overview of the current ethnic and linguistic situation in Estonia, the Estonian system of preschool education, describing the regulations and organisation of transition to the Estonian-medium education as well as teaching Estonian as a second language to non-Estonian speaking children aged between three and seven years. The chapter also highlights the main features of a typical language immersion programme as well as introduces the Estonian experience of implementation of such a language immersion programme. In Chapter 1, I also provide an overview of the way teachers' everyday work in early language immersion classrooms and their professional development was supported by activities of the Language Immersion Centre. The chapter continues with a summary of existing research regarding the Estonian experience of early language immersion and ends with presenting the research rationale and research questions.

Chapter Two, which is the Literature Review, is the research foundation that has shaped and guided the current research. As the background for the current study, the chapter presents an overview of sociocultural theory as the basis for discussion of the child's development as well as the development of the child's first and second languages. The chapter then presents a critical analysis of the most essential aspects of early childhood education and care which is embedded with the topic of early second language acquisition and language immersion in the ECEC settings. Finally, Chapter Two presents an analysis of the topic of teacher professional development which forms the framework for conducting a further analysis of data on teachers' PD needs and the ways they could be met.

Chapter Three provides details of the research methodology. This chapter explains the aims, structure and the sample of the research. It provides a detailed description of the research methodology and the four stages of the research. It also describes the structure and content of the PD initiative that the teachers take part in within the frames of the study.

Chapter Four presents the data of the research as compared against the theoretical framework presented in Chapter Two. This chapter provides an analysis of collected findings per research question and comments on their relation to the focus of the research.

Chapter Five, which is the concluding chapter, synthesises the results of the research further. This chapter explains the significance of the results of the study for the current ECEC policy and practice in Estonia in the context of transition to Estonian-medium education as well as it provides recommendations for further research.

1.11 Conclusions

The present introductory chapter has introduced the broad context of the current study: first, it highlighted the importance of Estonian language learning for the non-Estonian-speaking population of Estonia; then it defined expectations towards preschool education in the area of teaching Estonian as a second language, followed by describing the changes to the policy and early years teachers' qualification due to the transition to Estonian-medium education. The chapter also provided a brief overview of the experience of the Estonian language immersion programme and explained its significance for the transition reform. The activities of the Language Immersion Centre aimed to support early language immersion teachers and their professional development are also described together with the existing research regarding the implementation of the language immersion programme in preschools in Estonia. The chapter also introduced the challenges that Estonian ECEC teachers implementing early language immersion pedagogy have had in the area of training for implementation of the pedagogy, the biggest of them being connected with professional development. The next chapter, which is the Literature Review, is aimed to search for solutions to the challenges based on current international research.

Chapter Two

Literature Review

2.1 Introduction

The purpose of the current study is to examine what professional development needs immersion teachers working in the ECEC settings in Estonia have, to analyse how these needs might be addressed through answering the research questions: 1) What are teachers' specific PD needs in relation to early years immersion pedagogy based on current policy and practice? 2) What are the perspectives of early years immersion teachers in north-east Estonia and Tallinn in relation to the provision of professional development? 3) How could the PD needs of early immersion teachers be met or addressed through a collaborative approach?

Although research on teacher professional needs in the context of the Estonian language immersion programme is scarce, there exists abundant international research in the area of teacher professional development as a more general concept and, more specifically, professional development of language immersion teachers in the ECEC settings. Literature on the latter topic emphasises the dual expertise that is expected of teachers: on the one hand, it is professional competence in early second language (L2) learning, and, on the other hand, it is competence in early years pedagogy. Thus, within the context of the present study, it is essential to analyse international literature in both topic areas. Table 2.1 below illustrates the topics of the chapter that are outlined according to the research questions of the study. As can be seen from the table, Chapter 2 provides an in-depth overview of the aspects guiding this research. The chapter focuses on establishing the theoretical background which draws on previously conducted studies and researched key concepts in order to create the theoretical framework of this study.

Table 2.1 *Outline of Chapter 2*

PD needs of immersion teachers in Estonia and the ways to address them		
Research question	Aim of the analysis	Topics of the chapter
What are teachers' specific PD needs in relation to early years immersion pedagogy based on current policy and practice?	To analyse international practices in implementation of the early years immersion pedagogy in ECEC settings 1) in compliance with principles of the sociocultural view on child's development; 2) taking into consideration the age-based characteristics of L1 development and its role in the overall child's development 3) acknowledging the principles of L2 acquisition and language immersion pedagogy.	● Sociocultural view on child's development ● Development of the Child's Language ● Early Childhood Education and Care ● Key Principles of Second Language Acquisition (SLA) and Language Immersion
What are the perspectives of early years immersion teachers in north-east Estonia and Tallinn in relation to the provision of professional development?	To analyse international practices in the area of teachers' PD taking into consideration 1) notion of professional development; 2) characteristics of effective professional development; 3) the relationship between teacher professionalism and PD provision.	● Professional Development ● Characteristics of Effective Professional Development ● Teacher Professional Development ● Teacher Professionalism and PD
How could the PD needs of early immersion teachers be met or addressed through a collaborative approach?	To analyse international practices in the area of a collaborative approach to professional development, focusing on teachers' opportunities for co-operative enhancement of their professionalism.	● Collaborative approach to teachers' professional development

This chapter begins with an examination of the principles of sociocultural theory in relation to child's development. In the literature review I also introduce the process of child's L1 and L2 development, of early language immersion. The chapter is developed

further by the analysis of ECEC settings and the way they ensure holistic development of the child, including L2 acquisition. Having analysed aspects of L2 acquisition (SLA) in the context of high-quality early years pedagogy, there emerged the need to analyse professional development as the source of knowledge, skills, and attitudes a language immersion preschool teacher is expected to have. Thus, the chapter proceeds with the analysis of the notion of teacher professional development, its constituents, and factors which make teacher professional development effective. Finally, informed by the literature, which is reviewed and discussed, the chapter outlines the framework of professionalism and professional development which is guiding the present research.

2.2 Early Childhood Development: Theoretical Framing

The establishment of the theoretical framing of the current study considers the ideas and concepts in the area of early childhood development that have had an impact on shaping the contemporary approach to early years education. This subsection describes the aspects of Sociocultural Theory developed by Lev Vygotsky which has made and continues to make a significant impact on the contemporary practice of early years education (Bodrova & Leong, 2015; Smolucha & Smolucha, 2021), including preschool education in Estonia. Sociocultural theory is the key theoretical paradigm of the study seen as the framework for effective L2 instruction (Alkhudiry, 2022) due to its emphasis of social interaction as the key condition for child's cognitive and language development.

2.2.1 Vygotsky and the Sociocultural Perspective on Child's Development

Russian psychologist Lev Vygotsky focused on the role of children's social interactions with adults, both within family and education settings, and peers, as the trigger for children's cognitive development (Creed, 2013; Saracho, 2023). He argued that "ideally conducted upbringing is possible only on the basis of the correspondingly directed social environment […] where the person themselves should be viewed not as a complete creation, but as a constantly changing dynamic form of interaction between the human and the environment" (Выготский 1991, p. 241). The work of Vygotsky introduced several key concepts that lay the foundation of the approach to young children's development and learning, which is social constructivism. The core of the approach is the view of the child creating, that is, constructing their knowledge themselves in the process of interaction with the adult. The notion central to the process

of the construction of new knowledge is the zone of proximal development or ZPD. This is arguably the most well-known concept developed by Vygotsky, which he defined in the context of re-evaluation of the issue of imitation in the process of child's development. Vygotsky wrote,

> with the help of imitation during a collective activity, being supervised by adults, a child is able to accomplish much more, and to do so comprehensibly, independently. The difference between the levels of the tasks that can be performed under the adult supervision and the tasks independently performed by the child defines the child's zone of proximal development (Выготский 1991, p. 385).

The definition of the ZPD and the view of the active role of the child in the construction of their learning called for the definition of the new role the adult played in supporting, guiding, and assisting the child, scaffolding the process of their learning and development (Hedges, 2021; Colliver and Veraksa, 2021). The concept of scaffolding suggested by Jerome Bruner and his colleagues Wood and Ross in 1976 (Creed, 2013; Whitebread & Adams, 2019) summarised the new function of the adult, being in the position of not delivering the knowledge but guiding the child on their journey to discovering and constructing this knowledge for themselves. Scaffolding is described in greater detail below.

Social constructivism established by Vygotsky emphasised the role of language and social communication as "essential mediators of thought" (Whitebread & Adams 2019, p. 320) and constructors of the learning process (Creed, 2013; Richardson, 2020; Smolucha & Smolucha, 2021). It also introduced the important concept of private speech as the mechanism connecting the 'external speech' a child would produce in a fully-fledged conversation with an adult and the 'inner speech' as the flow of thought adults use to navigate an action. Private speech is typical for children of the early childhood age, it usually disappears by the age of seven-eight, when it becomes gradually replaced by inner speech (Whitebread & Adams, 2019). However, private speech can still appear in older children and even adults when they face a serious challenge.

Vygotsky's ideas have had a significant impact on the contemporary paradigm of early years education which he viewed as a critical period during which various interactions, language internalisation, and play lay the foundation for the development of a person's higher cognitive functions (Smolucha & Smolucha, 2021). Vygotsky considered play as crucially important for children's socio-emotional and cognitive

development (Smolucha & Smolucha, 2021; Hedges, 2021; Colliver &Veraksa, 2021), seeing it as a space which provided children with safe possibilities for engagement with imaginary scenarios and exploration of complex situations without being impacted by the real-world conditions (Colliver &Veraksa, 2021). Play is also a safe environment space with possibilities for interaction which are essential for the development of child's language which is described later.

2.3 Development of the Child's Language

This section discusses the development of the child's first language (L1), focusing on the main aspects and mechanisms in this complex process. The child's language development is viewed as a complicated phenomenon which relies on the interdependence of different skills and abilities.

Language development, combining both language acquisition and use, depends on the interaction of several "biological, cognitive, psycho-social and environmental factors" (Sharma & Cockerill, 2014, p. 85) that are illustrated in Figure 2.1 below. The figure shows the multilayered nature of language learning by mapping the various interrelated factors that impact the process of learning a language. The central notion of language learning is supported and shaped by the development of such core abilities and skills as hearing skills, cognitive ability, vision and visual perception, symbolic understanding, and social learning, which, in their turn, are interwoven with expressive language skills.

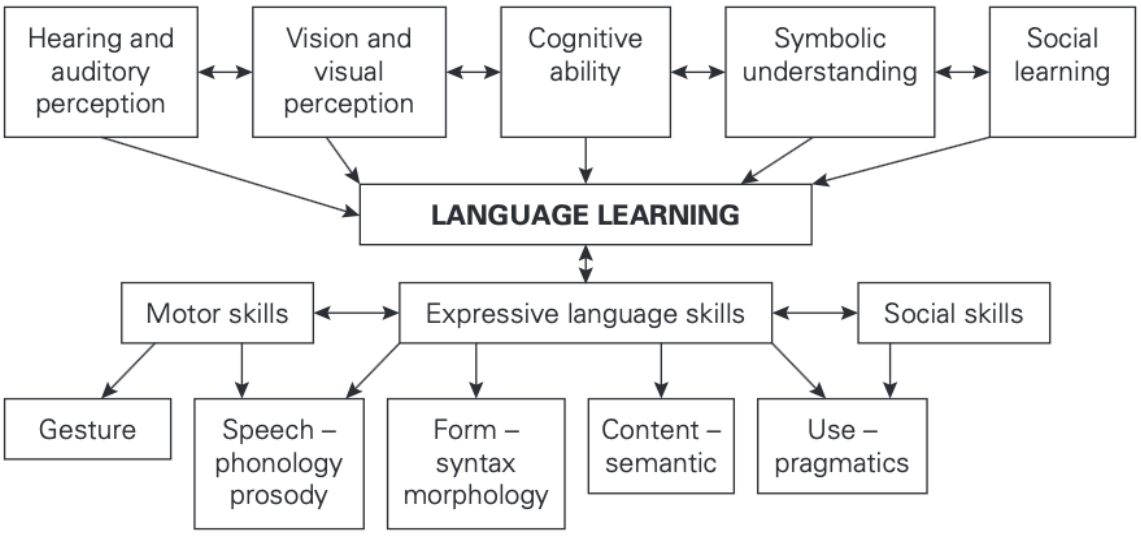

Figure 2.1 *Factors Influencing Language Learning*
(Taken from Sharma & Cockerill, 2014, p. 85)

Cognitive and language development of children are closely linked, as each "promotes the development of the other" (David et al., 2003 cited in French et al., 2022, p. 61). The inter-influence between language and cognitive development of children was also emphasised by Vygotsky, who believed that "thought is not merely expressed in words, it comes into existence through them" (1978 cited in Robson, 2020, p. 152). In addition, language learning is also closely connected to motor and social skills, which highlights the dynamic and integrative nature of communication development. Research (Winter et al., 2024) establishes clear connections between fine motor skills and development of three language aspects in children, which are receptive and expressive vocabulary as well as oral narrative skills. Taking into consideration that fine motor skills are meaningfully linked to young children's language development, it is essential for ECEC settings to offer activities that encourage fine motor skills development, such as drawing, crafting, and bead threading. Implementing these activities as part of everyday routines and integrating them with language learning will foster children's language development in a playful and engaging way.

As can be seen from the Figure 2.1, language learning is a complicated process combining the development of perceptive and expressive language skills. This process is impacted by the overall development of a child, including their cognitive development and the development of their senses, as well as the level of their social skills, i.e., their ability to participate in interaction. Vygotsky pointed out the communicative function of speech as the driving force to its development at the child's early age (Robson, 2020), with the social speech of the child later being developmentally divided into egocentric and communicative speech.

During preschool years children develop the skills they need to interact with people and things in their environment, feeling confident in building and managing friendships, resolving conflicts, managing their positive and negative feelings and emotions (Ashdown & Bernard, 2012; Leggett et al., 2016). By the age of three, children already understand a variety of social games and readily participate in them (Svetlova & Carpenter, 2017). The effect of such interactions established in early childhood may have long-term effects: for instance, a connection has been reported between the quality of preschoolers' interactions with their parents and later language and literacy development of the children (Reese et al., 2010).

Children are able to communicate efficiently before they actually use any language by taking advantage of gestures and other non-verbal communication strategies (Sharma

& Cockerill, 2014; Allen, 2017; French et al., 2022). The use of gestures is especially significant as the prerequisite to language development, as a connection has been established between the range of gestures a child uses at the age of 18 months and their later vocabulary development at the age of three and a half years (Allen, 2017).

The most significant language development takes place during the first four years of a child's life. Acquisition of L1 is quite an intense process, as at this stage, children spend around 3,000-5,000 hours a year being immersed in language input (Fleta, 2019). As a result, by the age of four, children should be able to interact with adults and peers as well as express their ideas in the language of their community (Hoff, 2008).

It is essential to point out that in the process of acquisition of the same language, there can be significant variability in the achievement of individual children: at every age there are differences in the size and composition of children's vocabularies, in the complexity of the sentence structures children use, as well as in the skill and style with which they are able to communicate (ibid).

Regarding the phonological development of a child, an important stage is the achievement of consistent sound production, which is typically achieved by the age of 18 months. The period from 18 months to seven years of age is the time when children develop and fine tune their phonological processes, that is, they "alter the sounds of the target language so that they fit within the repertoire of sounds they can produce" (Hoff, 2008, p. 528).

In the area of lexical development, it is essential to point out at least two aspects of vocabularies of small children: their individual variability in size and their content-based peculiarity. The former is dependent on the individual abilities of the child and mostly on their environment. Some studies suggest that children from low SES families develop vocabulary more slowly than children from high SES families (Hart & Risley, 2003), with the latter benefitting from stronger linguistic input by family members, including the mother (Hoff, 2006). The latter aspect, the content of the young children's vocabulary is different from the one of adults, being a reflection of children's comprehension of the word and primarily serving the function of labelling items in the surrounding environment. Thus, the vocabulary of a child is noun-predominant; in the case of English-speaking children with the size of vocabularies between twenty and fifty words, 45% of their vocabularies were made up by nouns, while the share of verbs was only 3% (Caselli et al., 1995 cited in Hoff & Shatz, 2007). The estimated size of the vocabulary of a child

at the age of 30 months is 200 words, with an average 6-year-old child using a vocabulary of 14,000 words (Hoff, 2008).

Language development includes not only an increase in the number of words a child uses, but also in their ability to combine these words in grammatically correct phrases and sentences, which is described as morphosyntactic development. The age of three years is an important milestone, as a child now produces full sentences and demonstrates an increased frequency of using sentence types, i.e., negative and interrogative sentences. One year later, a child typically uses a variety of complex sentences.

Taking into consideration the complexity of the phenomenon of language acquisition, it is essential to provide children with conditions and opportunities for development of the cognitive abilities, social and emotional as well as other skills which are the pre-condition for successful language acquisition. It is also essential to create a safe environment in which children can practice different scenarios of interaction both with peers and adults in a playful and safe manner. The setting of preschool educational institutions as such environments are discussed further.

2.4 Landscape of ECEC

In the context of this study, early childhood education and care (ECEC) is viewed as the setting which provides conditions for wellbeing and the environment for the sake of the holistic development of a child through a second language which is ensured by implementation of age-appropriate and child-centred pedagogy (Estonian National Curriculum for Preschool Child Care Institutions, 2008/2024).

Early childhood education and care as a phenomenon has an array of functions, including social, institutional, and pedagogical, which calls for a corresponding number of definitions of ECEC. The definitions which place early education and care within the context of the provision of social inclusion and care emphasize the allocation of formal and regulated arrangements for both education/learning and care to children of a particular age group (OECD, 2020; European Commission, 2014) during the period prior to the start of the compulsory school education. The commencement of obligatory schooling is not uniform, and it differs based on what a particular nation or region considers the ‘early childhood’ period (Albon & Huf, 2021). Due to this connection to the start of school education, early years education can also be viewed as the period aimed to ensure children’s readiness for school (Dockett, 2019; Roberts-Holmes, 2021) within

the environment which provides them with both comfort and security as well as stimuli necessary for the transition to the next stage of education (Shaughnessy & Kleyn, 2012). However, school readiness as the primary focus of ECEC may lead to changes in the purpose of early years education, which becomes aimed to prepare children for the test-based culture they are to experience in primary schools (Roberts-Holmes, 2021). Going beyond just acquisition of literacy and numeracy skills, "ECEC is an amalgam of education *and* childcare" (Albon & Huf, 2021, p. 243) which is reflected in the educare approach to preschool education implemented by Estonia, as it was outlined in Chapter 1.

More recently a new approach to early development and education has been voiced, especially in EU countries, including Scandinavian countries, Ireland, and Estonia, with introduction of Síolta, The National Quality Framework for Early Childhood Education (Centre for Early Childhood Development and Education [CECDE], 2006), enhancement of Aistear the Early Childhood Curriculum Framework (National Council for Curriculum and Assessment [NCCA], 2024), and development of the Estonian National Curriculum for Preschool Child Care Institutions (2008/2024). This approach views ECEC as an important period in a child's life that has its own significance and role, which is about providing a child with "holistic and continuous development in cooperation between the home and ECEC institution" (The National Curriculum for Preschool Child Care Institutions of Estonia, 2008, p.1). A holistic approach to the cognitive, social, emotional, and physical development of a child views ECEC as the foundation for lifelong learning and wellbeing (Finnish Education Evaluation Centre, 2019). In the case of early years language immersion settings, the provision of preschool education has a dual role as a place for learning and using a L2 and as a "provider of good quality early years education" (Stephen et al., 2012 p.22). The next subchapter discusses the child's cognitive, social, emotional, and physical progress as the constituents of the holistic development, their inter-connection with the language.

2.5 The Aim of ECEC

Based on the description of ECEC above, the aim of early childhood education and care is to create and provide conditions for children's wellbeing and holistic development within the age-appropriate learning environment through the implementation of child-centred pedagogy (Estonian National Curriculum for Preschool Child Care Institutions, 2008/2024). This pedagogical approach implies viewing children as "active participants,

who are central to the education and care process, as co-creators of knowledge" (Hayes & O'Neill 2019, p. 64). This term positions children as capable learners who actively engage in the process of their own learning by making choices and taking decisions. As suggested by Katz (2014, p. 21), the ultimate goal of early years education is to assist young children in making "better, fuller, deeper and more accurate sense and understanding of their own experiences and environments". This puts children in the active role of investigators of the learning environment and constructors of their new knowledge, while the role of teachers shifts to provision of the conditions and creation of the rich and meaningful learning environment as well as facilitation of the knowledge construction.

2.5.1 Teacher-Led vs Child-Led Pedagogy

With the previously described shift in the roles of the teacher and children within the ECEC settings, implementation of child-led or child-oriented pedagogy is becoming a more common practice internationally (NCCA, 2024; Estonian National Curriculum for Preschool Child Care Institutions, 2008/2024). There are several notions describing the educational approach in which the child is given the leading role while their activity is guided and monitored by the teacher. The difference between child-initiated and child-dominated education (Kinos & Pukk, 2010; Stipek & Byler, 2005 cited in Kimer et al., 2016) lies in the presence and role of the teacher as well as the continuum of their support to the child: in the case of the former, the teacher provides active guidance and supports child-led activities, while in the latter educational setting the teacher minimises their involvement allowing the child to self-direct their activity.

The above-mentioned approaches based on child-led pedagogy are described as driven by the interests of children and responsive to the immediate interests of parents and the community. From the content side, these approaches are referred to as being focused on the child's developmental goals, their interaction with the teacher and peers and the holistic development rather than prescribed outcomes (de Botton, 2010 cited in Mourão et al., 2019).

While the subsection focuses on child-led pedagogy, it is still necessary to define the teacher-led approach and describe its most prominent features. Teacher-led pedagogy is primarily defined as an instructional method where the teacher assumes the central role in directing the teaching process, delivering the content clearly and systematically, as well as managing the learning environment. Teacher-led pedagogy puts an emphasis on the

teacher's authority as the main source of knowledge, typically involving direct instruction methods such as lectures, demonstrations, and guided practice activities. The teacher plans, organises lessons, sets learning objectives, and monitors student progress to ensure curriculum goals are met (Browder & Spooner, 2019; Van de Pol et al., 2017; Kennedy M, 2916; Hattie & Timperley, 2017; Harris & Jones 2023).

Although both teacher-led and child-led approaches encourage the development of the child's academic skills, there is evidence that the latter may be more effective (Huffman & Speer, 2000 cited in Melhuish et al. 2014). The study conducted by Finnish researchers, Lerkannen et al. (2012 cited in ibid.) found that children were more engaged in kindergarten classroom activities, namely in mathematics and reading, in child-led classrooms. At the same time, studies summarised by Kimer and her colleagues (Kimer et al., 2016) emphasise the necessity of a balance between teacher- and child-initiated learning opportunities.

The impact of the either teacher-led or the child-led instruction and/or settings is essential not only for children's progress in specific domains of academic knowledge, but also for their overall holistic development. This includes the development of their social, to be more specific, communicative skills (Smidt & Embacher, 2020), which is vital for early language immersion settings (Stephen et al., 2012). Taking into consideration the social function of speech (Robson, 2020) and the role that different patterns of interaction play in the process of child's L2 acquisition (Alkhudiry, 2022), it is essential to provide L2 young learners with different collaborative learning activities. One of the main goals for communicative skills development is for children to practice using L2 for interaction with everyone in the preschool, from staff members to their peers.

2.5.2 Implementation of Child-Initiated Pedagogy

With the growing tendency to re-evaluate early years education toward the child-oriented approaches and recognition of child's autonomy, implementation of child-initiated pedagogies is growing in popularity (Kinos et al., 2016; Aljabreen, 2020). The core of child-initiated pedagogies lies in emphasising children's interests, motivation, and choices, and aims to enhance their cognitive development and autonomy through the implementation of democratic and participatory approaches. These child-initiated pedagogical approaches include Reggio Emilia, concentrating on child-initiated learning (Aljabreen, 2020). The Reggio Emilia philosophy originates from Italy where it was founded in in the city of Reggio Emilia in the north of the country after the end of World

War II. The pedagogical approach was developed by the Italian teacher and thinker Loris Malaguzzi in response to the need to strengthen the community and establish a new type of preschool education which would promote involvement of the community and prioritise learning and respect (Smidt, 2013; Rinaldi, 2021).

The pedagogy drawing from the principles of the Reggio Emilia approach is gaining recognition in the Estonian system of preschool education and its principles are integrated in the Estonian early years education. Teachers in kindergartens balance free play with teacher-structured activities that support the integration of areas of early development (Education Estonia, n.d.; Eurydice, 2023). The Estonian National Curriculum for Preschool Child Care Institutions (2008/2024) indicates links to the core principles of the Reggio Emilia inspired approach, especially in the following aspects:

- Child-centred learning and active participation. The Estonian National Curriculum for Preschool Child Care Institutions emphasises the role of play as the medium of learning where children act as active explorers of their own learning potential. It draws from the principles of the Reggio Emilia focus on children as active learners (Aljabreen, 2020). Early years teachers in Estonia are reported to consider the implementation of play-based and child-centred learning as the indicator of the quality of preschool education (Veisson & Kabaday, 2018). However, the research conducted among early years teachers in Tallinn and Harju County in 2016 (Kimer et al., 2016) revealed that teachers overestimated their use of child-centred methods, and they believed that they offered children more autonomy and support than it became evident to the observers;
- Learning through play and exploration. The Estonian curriculum document positions the play as the main medium of learning across different areas of early development, including language, mathematics and social skills, which echoes the Reggio Emilia inspired emphasis on experiential learning and discovery (Senent et al., 2021);
- Documentation and reflection. With the Estonian National Curriculum for Preschool Child Care Institutions stating the importance of assessment as the tool for understanding the child's peculiarity and needs as well as for supporting their development (2008/2024), the policy document emphasises the role of documented observation and analysis of children's progress. This parallels the role of documentation and intensive reflection in the pedagogy

complying with the principles of the Reggio Emilia approach (Aljabreen, 2020; Senent et al., 2021);

- Involvement of parents. Cooperation with parents is one of pillars of the Estonian preschool education (Estonian National Curriculum for Preschool Child Care Institutions, 2008/2024) which complies with the role of parental involvement in the Reggio Emilia approach (Aljabreen, 2020).

Estonian preschools also have experience of implementation of the principles of the Reggio Emilia approach. According to the information by the Estonian Reggio Emilia Association (Reggio Emilia Ühing, n.d.), the core aspects of this child-initiated pedagogy were introduced to kindergartens in Estonia 30 years ago. The webpage of the association also provides references to the preschools currently implementing the Reggio Emilia inspired approach (ibid.). The fact that among those kindergartens there are no preschools which are members of the language immersion programme or that used to have Russian as their medium of instruction is significant in the context of this study. It demonstrates that implementation of the child-initiated pedagogy in Estonia is limited and is more characteristic of Estonian-medium preschools, including private ones.

In addition to expanding the core aspects of the Reggio Emilia practice to former Russian-medium kindergartens, the aspect where the Estonian preschool education has room for development in implementation of the Reggio Emilia principles is the use of the so-called emergent curriculum (Senent et al., 2021), which means that the curriculum unfolds from children's interests and questions. With the Estonian system of preschool education where each preschool designs their own curriculum on the basis of the state framework curriculum document and where planning routines are described in the National curriculum document (The Estonian National Curriculum for Preschool Child Care Institutions, 2008/2024), the freedom for continuous co-constructing of the curriculum together with the children is limited. Moreover, the study by Tuul and her colleagues (Tuul et al., 2015) which was conducted among early years teachers on the topic of curricular autonomy revealed the following contradiction: while the teachers supported autonomy, they were expecting the curriculum to contain not only the general guidelines, but also methodological support and specific prescriptions for particular matters related to teaching practice. Thus, it can be concluded that while the preschool education in Estonia is based on principles that are similar to the pillars of the Reggio Emilia approach, the system needs to work on the actual implementation of the child-initiated pedagogy.

Another approach to child-initiated early education which provides children with possibilities to investigate real-world topics and practice problem-solving skills is project-based learning. It promotes child-centred learning through learning by integrating play, decision-making as well as the interdisciplinary approach to teaching. This approach of early years education fosters development of children's independence, learning and cooperation skills (Ferrero et al., 2021; Martinez Enriquez, 2025; Aisyah, 2025; Güley, 2024).

2.5.3 Play-Based Learning

The Right to Play is stated in the UN Convention on the Rights of the Child under Article 31 (United Nations, 1989). While play as activity provides numerous possibilities for children's interaction and communication, play-based learning is the pedagogical approach that enables the teacher to deliver the standard academic content, simultaneously providing children with possibilities for development of 21st century skills. These skills include collaboration, communication, critical thinking, creative innovation, and confidence (Hopkins et al., 2019) as well as increasing children's motivation (Walsh et al., 2006), developing their resilience (Chesworth & Brock, 2015), and allowing children to explore their identity and learning potential (Broadhead, 2006). Play-based learning has also been reported to be an effective method for enhancing both socio-emotional and academic development of children (Wall et al., 2015; Fesseha & Pyle, 2016). Play is also considered to be an appropriate context for children for operating within their ZPD as well as for expanding their potential with the support of peers and adults during collaborative play (Broadhead, 2006; Bodrova et al., 2019).

Recently, play-based pedagogy has been receiving more attention, including in the documents that regulate ECEC at the national level, for instance, in Estonia (Estonian National Curriculum for Preschool Child Care Institutions, 2008; Sylva et al., 2015; Nilsen, 2021). However, research (Fesseha & Pyle, 2016; Edwards, 2016; Walsh et al., 2019) suggests that early years researchers sometimes find it challenging to determine the role of play in the educational process. The reasons for that lay in, 1) the early years teachers' doubts in the value of play, especially in the context of the necessity to achieve certain academic results to ensure the child's readiness for school (Chesworth & Brock, 2015), 2) in the continuous need to define the relationship between play and intentional teaching. As early years teachers struggle to recognise play as a pedagogical activity and see its educational value, they start questioning the role of teaching and thus their role in

this process. It leads to teachers under-or over-involvement in play-based activities, including children's free play and generally affects the practical implementation of play in ECEC settings. Researchers (Sproule et al., 2019) advocate for a structured approach which balances play-based learning with more traditional methods based on the three-dimensional framework regulating the degree of playfulness, the establishment of control, and the nature of learning.

Based on the currently recognised approach to play-based learning and the teacher's participation in the process, which is rooted in sociocultural theory, play is the framework of mediation of learning through interaction, including with teachers and peers, participation and engagement with different resources (Wood, 2013; Walsh et al., 2019). Vygotsky also emphasised the role of make-believe or dramatic play, which he referred to as the leading activity for children of preschool age, meaning that this type of play fosters their development the most (Bodrova et al., 2019). The teacher is most effective when they are engaged in the play activity to "facilitate and scaffold learning" (Fesseha & Pyle, 2016, p. 363). Adults, first and foremost, teachers provide children with scaffolding during play by taking the role of observers and intervene in an appropriate way to enhance learning, acting as knowledgeable experts, as Vygotsky described (Broadhead, 2006). Moreover, teachers are to provide intentional scaffolding for the play as they would do in case of any academic content (Bodrova et al., 2019).

Playful learning offers an effective learning context within which children are involved through active playful educational activities and: 1) are active; 2) are engaged; 3) face the learning information that is meaningful to them; 4) are engaged in interactions within the social context; 5) feel joyful (Hirsh-Pasek et al., 2015; Hopkins et al., 2019). Research has also shown that children have a much more inclusive vision of play, as they consider activities that they actively participate in as play (Theobald et al., 2015). Considering the positive effect which active involvement in play has on children's motivation and engagement, teachers need to take into consideration the deep integration between learning and play, and foster links between them (ibid.).

Play, both free and guided, has significant importance for the development of children's language skills and the enrichment of their vocabulary (Broadhead, 2006; Rand & Morrow, 2021; French et al., 2022). Dickinson & Tabors (2001) have established a positive connection between the amount of children's talk during pretend play and vocabulary as well as early literacy skills development in ECEC settings. The research by Rand and Morrow (2021) provides examples of the positive influence of play on

development of children's vocabulary: previous research by Dickinson and Moreton (1991 cited in ibid.) revealed that the vocabulary of children talking to each other during pretend play displayed a positive association with their vocabulary in kindergarten two years later; while games focused on practising target vocabulary have been reported to improve children's receptive and expressive word knowledge. Various types of games and activities can also be used to teach children vocabulary and encourage the development of their emergent preliteracy and communicative skills. Roskos and Christie (2001) as well as Fesseha and Pyle (2016) suggest that play-based activities provide children with possibilities to use acquired vocabulary language and practise new words, which then become the basis for literacy skills development.

Play is foundational in early years education, shaping children's learning experiences, providing them with possibilities for cognitive development and practice of social interaction. Play-based learning creates developmental experience that fosters child's holistic development while enhancing their motivation and engagement in the process of learning. The role of play for development of the child' second language is discussed in the next subsection.

2.5.4 The Significance of Play in Early Language Learning

In the early years classroom, play-based activities can fall under the category of non-academic ones (Markova, 2017). While the previous subsection described the overall benefits of playful learning for the holistic development of a child, the current subsection focuses on the outcomes of a significant body of research (Markova, 2017; Strauss & Bipath, 2020; Schwartz et al., 2021; Erdemir & Brutt-Griffler, 2022) dedicated to the role of play-based activities in early language learning.

The first topic raised in the research is the impact of free play on enhancing language development, especially L2 output among learners at the preschool age. The study by Schwartz and her colleagues (2021) compared children's L2 production during teacher-led activities and free play. Stemming from the outcomes of the research by Mourão (2018 cited in Schwartz et al., 2021), who revealed the benefits of free play in the language learning environment equipped with the resources the teacher used in their activities, the researchers (Schwartz et al., 2021) comment on the importance to prepare children for free play through their shared participation in activities led and scaffolded by the teacher. Another study investigating the impact of free play on L2 development focused on bilingual children in ECEC settings (Markova, 2017). The outcomes of this

research reveal that free play and other non-academic activities made a more significant impact on development of bilingual children's L2 development. The study illustrates the ways in which peer interaction during free play enhanced children's use of L2 and expanded their ZPD. Provided that children enthusiastically participate in free play, they are engaged in peer interactions in L2 which demonstrate specific patterns of communication and behaviour enhancing L2 productions, such as peer language mediation, creative repetition, self-talk, and peer support in the form of corrective feedback. Such peer interaction improves children's vocabulary and L2 output, being more motivating for them than teacher-led activities.

Another study on the topic of significance of peer interaction for vocabulary development is by Erdemir and Brutt-Griffler (2022). The authors aimed to fill-in the existing gap in the research on the topic of the potential which peers' interactions have for supporting L2 development in ECEC settings. Taking into consideration that communication with peers during play has been described as scaffolding for L2 development, the researchers focused on identifying patterns of L2 vocabulary learning through play activities and interaction with peers. As the outcome of the study, the authors identified the ways in which peer communication acted as mediated language learning. The research described the vocabulary enrichment gains in the process of peer communication during play, also pointing out that playful activities supported consolidation of the theme-based vocabulary used previously by the teacher.

The topic of vocabulary expansion is echoed in the research conducted by Strauss and Bipath (2020). Their study focuses on integrating guided play into literacy skills development. Guided play is understood as playful learning activity which combines the nature of free play with the focus on learning outcomes and adult's mentorship and scaffolding (Weisberg et al., 2016; Strauss & Bipath, 2020). The research findings indicate that literacy instructions in the form of guided play activities enhanced learners' engagement as well as improved their ability to recognise the visual and grapho-phonemic structure of words. Playful activities also made the teaching more engaging and supportive, with teachers providing the learners with guidance and scaffolding.

The outcomes of the above-reviewed research (Markova, 2017; Strauss & Bipath, 2020; Schwartz et al., 2021; Erdemir & Brutt-Griffler, 2022) illustrate the significance of play for early language learning. Participation in playful activities, both guided and especially free play, enhances children's engagement and L2 use. Play provides children with opportunities for peer interaction, during which they not only consolidate previously

acquired vocabulary through using it in pretend-play, but also offer each other scaffolding, language correction, and feedback. The research suggests taking advantage of the opportunities for language development offered by play through purposeful implementation of guided and free play in ECEC settings, pointing out the role of children's interaction with learning environment during playful activities. The significance of learning environment is discussed in detail in the next subsection.

2.5.5 The Role of Learning Environment

Early years teaching needs to provide children with possibilities to explore the environments and not only have their own experiences, but also to comprehend and reflect on them (Estonian National Curriculum for Preschool Child Care Institutions, 2008/2024; French et al., 2022). The structure and organisation of the learning environment can also foster implementation of the child-centred pedagogy (Õun, 2009).

The structure of the physical learning environment and the types of displayed materials play a significant role in development of children's literacy skills: the research (Rand & Morrow, 2021) reveals that play environments which contain rich authentic print material encourage regular reading and writing behaviours, while the use of board games which are created around literacy concepts fosters development of children's decoding skills and oral fluency. In the context of the physical learning environment, the settings in early years classroom have been reported to impact play activities and language learning of children (Strauss & Bipath, 2020). This conclusion echoes the results of the previous research by Heidemann and Hewitt (2010) stating that "classroom environment and space arrangements are two key elements to enhance young children's play within the classroom context" (Heidemann and Hewitt, 2010 cited in Strauss & Bipath, 2020, p. 2). The role of the physical environment is significant in creating the foundation for literacy learning (Strauss & Bipath, 2020) through the use of sight words, books, and other language learning materials.

The learning environment in the ECEC setting comprises not only the physical environment with its setups and displays whose purposefulness and usability for instructional purposes are significantly important, but also interactions with adults, especially teachers, and peers, as well as the outdoor environment with the learning possibilities it offers (Estonian National Curriculum for Preschool Child Care Institutions, 2008/2024).

Communication with staff is reported to give a boost to children's overall development (Hansen, 2020) and language development in particular, which is especially important for children attending ECEC centres in a language different from their mother tongue (Kirsch, 2021). The richness of the linguistic environment is the key to the efficacy of early years immersion settings (Stephen et al., 2012), with the teachers using the caretaker speech which is described in the next subsection.

2.5.6 Teachers' Caretaker Speech

The idea of provision of comprehensible input, first proposed by Krashen, was developed by linguists further in comparative studies of role of input in L1 and L2 development (Gass, 2015). Regarding the L1 acquisition, the investigation aimed at analysing the language that parents and caretakers used when addressing the children, and this language was collectively referred to as 'motherese' in research literature (Lindholm-Leary, 2001). The following distinctive features were identified in the language used to address young children, "slow rate of speech; simplified grammar, vocabulary and concepts; repetitions; oriented to the here and now; and containing few corrections, with the corrections that do occur being based on the truth value, or content, of the sentence rather than on the grammar" (Lindholm, 1981 cited in Lindholm-Leary 2001, p. 50). L2 researchers (Long, 1981) distinguished "similar input features in speech addressed to second language learners; this special language is often termed 'foreigner talk'" (Lindholm-Leary 2001, pp. 50-51).

The language immersion pedagogy uses the term 'caretaker speech' to refer to such simplified language with the limited use of grammar and syntactic structures that target-language teachers apply during the first years of the programme. The teachers accommodate their talk to make it understandable for the learners because "it is crucial that the teacher is comprehensible to the children" (Baker &Wright 2017: 292), as well as to make sure that the learners acquire the essential vocabulary (ibid.). By carefully selecting the vocabulary and accommodating their speech to the needs of L2 learners, teachers provide their learners with both comprehensible input and scaffolding.

2.5.7 Development of Monolingual vs Multilingual Children in the ECEC Settings

Taking into consideration the growing number of Russian-speaking children in Estonian-medium preschools, which is described in Chapter 1, it is essential to discuss the topic of language development of both monolingual and multilingual children in the

conditions provided by early years education. The scoping research review by Zhijun Zheng and his colleagues (Zheng et al., 2021) highlights the supportive role the ECEC environment plays in supporting multilingual development in the context of the increasing linguistic diversity of young children. The researchers focused on analysing empirical research conducted on the ways in which early childhood educators support multilingual development in ECEC settings. The main supportive approaches identified during the research included translanguaging strategies, strategies promoting communication, including bilingual ones, as well as culture-based strategies. The outcomes of this research are echoed in another scoping review conducted by Jaramillo-López and her colleagues (Jaramillo-López et al., 2025). The review studied various research works that analysed the ways in which monolingual early years teachers supported multilingual children who spoke minority languages worldwide. The outcomes of the review support the results of the one by Zheng and his colleagues (Zheng et al., 2021): the teachers mostly used translanguaging strategies and bilingual approaches to scaffolding communication. The results of both scoping reviews showed that although teachers play a crucial role in bilingual development, most of them do not have sufficient knowledge about bilingual development. Competences of early years teachers in monolingual and bilingual ECEC settings in Germany, the language support competence in particular, are in the focus of the research by Ofner (2018). The research outcomes indicated that bilingual early years educators demonstrated higher knowledge, but not higher practical abilities than their monolingual colleagues. The research outcomes led to the conclusion that effective language support required targeted, practice-based professional development for teachers, not just theoretical training or bilingual programme placement (Ofner, 2018).

Focusing on the needs of the children, it is essential to view studies conducted by the research group of Langeloo and her colleagues (Langeloo et al., 2020; Langeloo et al., 2021; Langeloo et al., 2023). These researchers suggest that multilingual children develop differently in regard to their phonological awareness and vocabulary (Langeloo et al., 2020), which may call for the need to create different learning opportunities within the ECEC settings. Learning opportunities at large consist of "all the classroom experiences children have, including the quality and quantity of their interactions with teachers, and the activities they engage in" (Hamre & Pianta, 2007; La Paro et al., 2009; Langeloo et al. 2020, p.4). The research conducted by Langeloo and her colleagues (2020) evaluated the learning opportunities of monolingual and multilingual children based on

three components: the quality of general classroom interaction, the quality of individual teacher-child interactions, and child engagement. Regarding the first aspect, the study found that there was a negative association of quality of classroom organization with early literacy for multilingual children. The findings from this research conclude that the teacher's contribution to organization of the classroom and involvement of multilingual children depends on the children's level of proficiency in the classroom language. The second aspect of the study was found more significant for the monolingual children from the point of view of executive functioning, which is much more advanced in multilingual children due to everyday use of the inhibiting and languages switching mechanisms (Barac et al., 2014; Langeloo et al., 2020). The third component of child engagement did not show significant differences between monolingual and multilingual children. The study showed that although children are more highly engaged in small-group activities which is more beneficial for early literacy skills development, they can also be engaged in large-group activities provided these activities are teacher-led. Further research on the topic (Langeloo et al., 2021; Langeloo et al., 2023) studied the engagement of monolingual and multilingual children in ECEC settings and the way in which teachers use scaffolding in their interaction with children depending on the linguistic profile of a child. The outcomes of the former research (Langeloo et al., 2021) echo the findings of the previous one (Langeloo et al., 2020) while specifying that multilingual children are less engaged in various group settings and that teachers may have challenges to fully engage multilingual children, especially when the activity is based on the majority culture. The results of the research focusing on the interaction scaffolding that teachers provide to monolingual and multilingual children (Langeloo et al., 2023) revealed the following: the teachers applied more concrete and directive strategies, such as narrowing choices and modelling, when supporting multilingual children. At the same time, monolingual children were usually provided support in the form of more abstract and verbally complicated hints. The main issue revealed was that the third-position support strategies applied with multilingual children implied lower cognitive demand on the children with the teachers also treating these children as a homogeneous group, not recognising possible variations in their linguistic profile or cultural background.

These findings are significant for the current study in the context of the growing number of non-Estonian-speaking children in Estonian-medium preschools. Based on the research results, it is apparent that ECEC environment in its broad meaning, as both the physical setting and various forms of children's interaction with adults and peers, needs

to show more linguistic sensitivity and awareness of SLA issues as well as provide opportunities for full engagement and holistic development of both mono- and multilingual children. The latter topic is analysed through the prism of the curriculum integration in the next subsection.

2.5.8 Integration of All Areas of Early Development

The framework document of the Estonian National Curriculum for Preschool Child Care Institutions (2008/2024), which is the policy document regulating different aspects of ECEC provision in the country, aims to navigate the course of the holistic development of a child during the years which they spend in the ECEC setting. The integrated approach to teaching the content of the seven areas of early development is defined as one of the principles of organisation of the teaching and educational activity.

Different types of ECEC curricula are composed based on the prioritized combinations of academic knowledge, skills, and dispositions. According to Melhuish et al. (2014), depending on the breadth of its scope, curricula can be divided into: (1) 'global curricula' – wide-scope curricula, including not only literacy, numeracy, socio-emotional skills development, but also knowledge in such areas as science, arts and social studies; and (2) 'developmentally focused curricula' – curricula with the focus on a specific content area, for instance, language or mathematics, in order to develop corresponding skills, such as literacy or numeracy.

Children need to acquire a certain amount of academic content which is defined by the type of the early years curriculum that is implemented in the particular ECEC settings. This agreed amount can be defined as school readiness and measured by completion of the expected outcomes that are stated in the curriculum document (Estonian National Curriculum for Preschool Child Care Institutions, 2008/2024). The most important aspect of teaching this content is, however, doing it in a way that "encourages deeper learning and not merely rote memorization" (Hopkins et al., 2019, p. 245). The way in which children acquire content should allow them to apply the obtained knowledge in a variety of contexts as well as to use it as the basis for constructing new knowledge (ibid.).

The research by Hansen and Alvestad (2018) conducted in ECEC settings in Norway emphasises the role of the integrated curriculum in development of young children's language skills. The study reveals the significance of the holistic curriculum that integrates multiple areas of development and learning into everyday activities in creation of supportive learning environment. Such an approach allowed the teachers to

interweave language learning with other activities rather than to teach the language in an isolated way. The study also highlights careful planning of teaching activities and structuring them around children's interests, which enhances little learners' engagement in everyday activities and interactions with teachers.

In the area of the curriculum in early years immersion settings, the key notion is the integration of L2 development into all other areas of the curriculum (Stephen et al., 2012): L2 competence is not only one of the aims of the language immersion programme but also the condition that allows the child to acquire the content of all other areas of the curriculum. This is the reason why the necessity to develop children's language, in its turn, goes "beyond exploration and the use of familiar and routine words and phrases" (Stephen et al., 2012, p. 31). It is the use of L2 as the medium of instruction in all areas of development and the means of authentic everyday communication, which is typical for language immersion settings, as well as providing children with time and input which enables them to acquire L2 in a natural and authentic way (Fleta, 2019).

2.6 Key Principles of Second Language Acquisition and Language Immersion

The following subsection is dedicated to the concept of Second Language Acquisition (SLA) focusing on aspects that are applicable to 3-7-year-old children, such as the types of early bilingualism, the stages of L2 acquisition, the role of comprehensible input, the Output Hypothesis, aspects of language immersion pedagogy and SLA from the sociocultural perspective.

2.6.1 Development of the Child's Second Language

As the number of bilingual children all over the world is growing and becoming more prevalent than the number of children speaking just one language (Hoff, 2015; Fleta, 2019; Genesee, 2019; Paradis et al., 2021), it is essential for this study to discuss processes of L2 development. Depending on the period when the exposure to L2 begins, bilingualism can be divided into simultaneous and successive/sequential. In the case of the former, the child is exposed to two languages from birth onwards, and in the case of the latter, children typically start learning L2 in the period between from three to five years of age (Fleta, 2019; Genesee, 2019; Paradis et al., 2021), with the age of three years being essential for the present study as it is the time when most Russian-speaking children

in Estonia would start learning the state language as their L2 prior to the transition to Estonian-medium education.

The types of dual language learners can be differentiated depending not only on the time of the contact with the language, but also on the status of the language within the community, as it is illustrated by Figure 2.2. The figure illustrates different types of bilinguals by distinguishing between simultaneous bilinguals and second language learners in the context of majority and minority languages. It showcases the way in which the timing of language acquisition and the status of the language in the society impact the process of the development of the two languages. As the figure shows, even in the case of simultaneous bilinguals the status of the language impacts the chances of the child being exposed to it both in the family and in the community.

	Majority language	Minority language
Simultaneous bilinguals	Both languages are widely spoken and have high status. Acquisition of both languages occurs before 3 years of age.	One or both languages are not widely spoken or high status. Acquisition of both languages occurs before 3 years of age.
Second language learners/ sequential bilinguals	First language is widely spoken and has high status. Education through the second language may be the majority or minority language of the community.	First language is not widely spoken or does not have high status. Education through the second language is usually the majority language of the community or wider region.

Figure 2.2 *Types of Dual Language Learners Along Two Dimensions: Language Status and Age of Acquisition*
(Taken from Paradis et al., 2021, p. 22).

It is, however, beyond the scope of the present study to discuss the second language status and its influence on the process of language acquisition. The aim of the present subsection is to discuss whether the processes of L1 development are applicable to L2 acquisition.

Research shows that in the case of sequential bilingualism the most important difference is in the "onset and the end points of acquisition" (Fleta, 2019, p. 59), as, different from the situation with L1, the child already has the experience of acquiring a language. However, some stages of L2 acquisition can be compared to the L1 development (Hoff, 2015; Fleta, 2019), for example, mistakes that sequential bilinguals make during the stage of interlanguage are similar to developmental mistakes that children make while acquiring their L1 (Hoff, 2015). The stages of L2 acquisition and

their applicability to the pedagogy of early language immersion are discussed further below.

L2 acquisition can also have a negative effect on the child's L1: L2 can become dominant or even replace the first language completely (ibid.). This may happen in the so-called subtractive bilingual environment, which is characteristic of the experience of minority-language learners who obtain their education in the majority language at the expense of their L1 development (Baker, 2011; Tracy, 2015). Such models of bilingual education are referred to as weak (Baker, 2011). The notion of subtractive bilingualism and the corresponding learning environment is topical for the current study due to the growing number of non-Estonian speaking children in Estonian-medium ECEC settings, which was mentioned in Chapter 1. Another important related issue that the models of bilingual education perceived as 'weak', as noted by Baker (2011), tend to share is their inability to provide teachers with proper training in second language teaching methodology. For instance, as Baker (ibid.) points out in relation to submersion forms of education, teachers do not have either the skills or the experience to accommodate their classroom practice in compliance with the needs of the language minority learners, first and foremost due to the lack of formal training in English as a Second Language (ESL) methodology. The notion of SLA and its main aspects which are essential knowledge for a teacher in the bilingual classroom is discussed further.

2.6.2. The Evolution of Second Language Acquisition as a Concept

One of the cornerstones of SLA is the study of mechanisms that drive the inner processes of language development. Chomsky (1957) achieved a breakthrough on the topic by suggesting that children have an "innate faculty" supporting their language learning. This was a significant shift from the previously applied behaviourist approach that viewed language learning, similarly to any other learning, as "the formation of habits" (Mitchell et al. 2019, p. 40) shaped over time through reinforcement of desirable reactions to stimuli coming from the environment surrounding the learner. With the publication of Chomsky's famous works *Syntactic Structures* (1957) and *Transformational-Generative Grammar* (1965), learners were now seen as having inborn abilities and knowledge that guided them through the process of language learning. This innate ability was considered to provide the learners with the instant feeling of whether the use of a certain structure or word is appropriate or correct or not.

After this turning point, the development of SLA took the direction of studying the way children acquire their first language (Slobin, 1970, 1985; Brown, 1973), with the research results showing that regardless of the language young children were learning, these young learners demonstrated "striking similarities" in their "language learning behaviour" (Mitchell et al. 2019, p. 43). In the process of language acquisition, children from all over the world seemed to complete the same developmental stages, to apply the same structures to convey similar meanings, and also to make the same mistakes.

The further course of SLA development, which was the establishment of parallels in the processes of L1 and L2 acquisition, was significantly influenced by Stephen Krashen's theories (first developed in the late 1970s and then refined in 1981, 1982 and 1985) and his distinction between language learning and language acquisition regarding L2 development. As seen by Krashen, 'acquisition' occurs subconsciously during natural meaning-focused communication in a similar way to L1 acquisition, while 'learning' occurs consciously with explicit form-oriented study of the language as a set of rules and norms within a classroom environment (Mitchell et al., 2019).

The influence of this 'acquisition vs. learning' distinction is apparent in language immersion pedagogy, having the following characteristics:

> classroom language communication aims to be meaningful, authentic and relevant to the child's needs; […] Learning L2 in early immersion becomes incidental and subconscious, similar to the way a first language is acquired. Emphasis is placed on understanding before speaking. (Baker & Wright, 2017, p. 242) The teacher uses repetition of key words, scaffolds the child's understanding of vocabulary related to the items around them to ensure the comprehension of the language.

Recent research into Krashen's theory (Lichtman & VanPatten, 2021) reframes Krashen's 'acquisition vs learning' distinction into the differentiation between implicit and explicit learning which develop separately.

2.6.3 Stages of Second Language Acquisition

As mentioned previously, there are two types of bilingualism which are differentiated depending on the time when a child is exposed to L2: simultaneous and successive/sequential bilingualism. The focus of this research is successive or sequential bilingualism.

According to research (Serratrice, 2018; Paradis et al., 2021), for successive bilinguals, their first encounter with the second language typically coincides with the start

of attending preschool or some regular type of childcare, i.e. a type of formal education. As young children start acquiring their L2, they go through the following similar stages of language development (Tabors, 2008 cited in Paradis et al., 2021):

1. Home language use: at this stage a child only uses their L1 to communicate in the second language environment, even if no one except for them speaks it. Home language or L1 is the only means of communication that a child has at this stage.
2. Nonverbal period: this stage in SLA is also referred to as the 'silent period', which is a term introduced by Krashen, because a L2 learner is not producing any language. Krashen suggests that L2 learners need time "to listen to others talk, to digest what they hear, to develop receptive vocabulary, and to observe others' actions" (Krashen, 1985 cited in Bligh 2014, p. 3). This is the time when young children acquiring a L2 are developing their language skills, starting from the receptive ones. However, the idea of 'silent' was contested by Saville-Troike (1988), whose study of young English learners revealed the children's extensive verbal activity during their supposedly 'silent period'. Her research demonstrated the significant role that private speech played during this period of SLA, functioning as a learning strategy. The results of the study were further developed by Lantolf (2006) who argued that children who appeared silent were engaged in the active process of internal reorganisation of L2, using the intrapersonal speech to explore linguistic patterns. Private speech helps L2 learners to rehearse forms, plan discourse, and focus their attention (Lantolf & Thorne, 2007). Lantolf (2006) emphasises that the period is misnamed due to being 'silent' only socially, but not cognitively or linguistically. Still, it is essential that this stage of SLA is not communication-less: children use non-verbal means of communication, especially gestures, to establish communication and make themselves understood (Paradis et al., 2021).
3. Formulaic language use: when young L2 learners are ready to start using the language, they do so not in complete sentences, but in chunks of language i.e., words of word phrases, which are comprehended as a whole or "processed without recourse to their lowest level of composition" (Wray 2002, p. 4). Examples of formulaic expressions in English are "Excuse me",

"I don't know". The use of these sentence-like utterances helps children engage in social interaction thus increasing their further exposure to L2 (Paradis et al., 2021).

4. Productive language use: at this stage children are able to produce sentences that consist, either partially or completely, of the words and phrases they have come up with themselves. However, children complete a stage of transition from formulaic to productive language when they use "semi-formulaic or semi-productive" language (Paradis et al., 2021, p. 169), especially the so-called 'frame-and-slot constructions'. These constructions are simple sentences consisting of phases equivalent to an English "I am" or "I do" plus a noun or an adjective where the 'I plus verb' construction is the frame allowing for a variety of variations to be made with different slots. These constructions are good for making and memorising sample sentences on topics of everyday communication.

Taking into account that all children go through similar stages of SLA, it is further essential to consider the pedagogical and environmental aspects of preschool language immersion settings that support a child in transitioning from passive to productive stages of L2 development.

2.6.4 Comprehensible Input, Output and Interaction

Stephen Krashen's investigation of meaning-oriented acquisition and form-oriented learning led to the proposition of the Input Hypothesis. Suggesting that every learner has an innate "Language Acquisition Device", Krashen put forward the hypothesis stating that:

> the learners do not need to produce L2 utterances (output) in order to develop; the opportunity for regular parsing and interpretation of suitable comprehensible input [that is defined as L2 input just beyond the learner's current L2 competence] will be sufficient to develop the interlanguage competence (Mitchell et al., 2019, p. 55).

Krashen's ideas related to the Input Hypothesis have become the basis for extended further research in the area of L2 acquisition, drawing attention to linked issues. One of these issues influencing the comprehension of the input is the role of the input provider (Gass, 2015), the type, and quality of the input. The language that a young learner hears from their teacher has a crucial importance as very often the teacher's input is the only source of L2 that the learner is exposed to (Fleta, 2019). The previously mentioned

concept of caretaker speech (Stephen et al., 2012) is used to refer to the teacher's input in L1 and L2 development (Gass & Madden, 1985). Regarding L1 acquisition, the investigation aimed at analysing the language that parents and caretakers used when addressing children (Lindholm-Leary, 2001). The following distinctive features were identified in the language used to address young children: slow rate of speech; simplified grammar, vocabulary and concepts; repetitions; and corrections based on the meaning, not on the form (Lindholm-Leary, 2001).

The language immersion pedagogy uses the term 'caretaker speech' to refer to such simplified language with the limited use of grammar and syntactic structures that L2 teachers apply during the first years of the programme. The teachers accommodate their talk to make it understandable for the learners because "it is crucial that the teacher is comprehensible to the children" (Baker & Wright, 2017, p. 292), as in the case of L2 learning in the ECEC settings, the new language is "introduced, understood, practiced and automatized orally" (Cameron, 2001, p.18 cited in Fleta, 2019, p. 59).

Despite the significance of Krashen's Input Hypothesis, the theory has received a significant amount of criticism mostly for its imprecision in the description of the level of the actual input and the "Language Acquisition Device" itself (Mitchell et al., 2019). However, further research into Krashen' theory accepts the role of rich comprehensible input in language acquisition, recognizing input as the data source from which learners construct linguistic systems (Lichtman & VanPatten, 2021).

Further research into the impact of the classroom interaction on the development of students' L2 skills led to development of the Output Hypothesis which was proposed by Swain (1985) based on her observations of French immersion students. Although the students she studied had been in the programme for an extended period of time, there was a significant difference between the level of their sub-skills: their receptive skills in French were very advanced, while their productive skills were very far behind, where the "types of responses elicited from students tended to be word or brief phrases" (Met, 2008, p. 65). Swain attributed this to the fact that the input the students were receiving in the classroom mostly involved reading and listening in the target language, without having to put L2 writing or speaking skills to much practice, as well as the fact that teacher talk prevailed in the classroom (ibid.). These observations led Swain to question that "comprehensible L2 input was sufficient to ensure all-round interlanguage development" (Mitchell et al., 2019, p. 59). The claim that Swain made was that it is production (i.e., output) that really pushes L2 learners to undertake complete grammatical processing thus

being the most effective force in development of L2 syntax and morphology. Output also plays a significant role in enabling the L2 student to become aware of gaps in their knowledge and improve their target language production (Swain & Lapkin, 1995; Gass, 2015).

For the purpose of L2 acquisition, it is thus essential for classroom interaction to not only consist of the teacher's input that meets the needs of learners, but also to accommodate for the output comprising the cycle of production, feedback, noticing and modification (Gass, 2015). Such interaction process fosters development of interlanguage and more accurate and precise use of the L2 by the learner.

2.6.5 The Importance of Exposure

If a child is not exposed to two languages from birth, the question of the best age for starting with the second language acquisition, either through exposure in the community or through childcare, is highly topical. The traditional recommendation to start as early as possible has been "partially based on the quest for more learning hours [as well as] also motivated by the belief that young children are 'better' at learning languages than older learners" (Lightbown & Spada, 2020, p.423). However, research conducted by Muñoz (2006; 2012) as well as by other scholars (Lightbown, 2008; Muñoz & Spada, 2019) illustrate that exposure is a much more influential factor regarding the effectiveness of L2 learning. This exposure needs to be "sustained and systematic" (Paradis et al., 2021, p. 167). Extensive language input and diverse possibilities for interaction in L2 are essential for young learners so that they could develop their ability to learn the language implicitly (Muñoz, 2012).

2.6.6. Second Language Acquisition from the Sociocultural Perspective

The new direction in the research on second language acquisition, which was initiated by James Lantolf and his colleagues in the 1980s, not only put the language learning process in the context of a social interaction situation, but re-evaluated learning as such based on the social theory by Lev Vygotsky, which is known as sociocultural theory (SCT) in the field of L2 learning (Mitchell et al., 2019; Lantolf et al., 2018).

2.6.6.1 Mediation. Sociocultural theory views learning itself as a "mediated process" (Mitchell et al. 2019, p. 288), which implies that meaning-making is facilitated through cultural tools such as language, communication, resources, and relationships (Hedges, 2021). Vygotsky described mediation as the process of people's use of symbolic

means or tools to regulate their relationship with themselves and others (Выготский, 1991). When referring to the psychology of language, which is one of these symbolic tools, Vygotsky pointed out that the most outstanding factor of the domain is the fact that the language seems to perform two completely different functions: on the one hand, it serves as a means of the social coordination of other people's experience, while, on the other hand, it is the most important tool for our thought. We always think in a language, i.e., we talk to ourselves and organize our behaviour inside ourselves in the same way in which we organize our behaviour depending on the behaviour of other people (Выготский, 1991, p. 205). In other words, language has an important role to play both in a person's mental activity and in their interaction with other people. This dual role of the language became one of the grounding principles of sociocultural theory and its application to L2 learning.

There are different ways in which a process can be mediated, for instance, according to Lantolf (2000; Ellis 2005, p. 219), "interaction serves as a form of mediation, enabling learners to construct new forms and perform new functions". Mitchell et al. (2019) suggest mediating the learning process through, on the one hand, the task-based classroom management, and, on the other hand, engagement of the learners with meaningful concepts related either to everyday routines or content knowledge.

2.6.6.2 Formulaic Speech. The formulaic language has been discussed above as fixed utterances produced by a child after they are past the nonverbal period and attempting to communicate in a second language. These chunks of vocabulary play a significant role in vocabulary development and the formation of smooth communicative skills (Elmahdi & Bajri, 2023). However, formulaic expressions are a useful tool for mediation of the learning and language acquisition process. First, set expressions supported by appropriate visuals are used for sequencing the children's day and the environment around them, including the pictures / visuals with word and phrase tags on the walls and doors. According to Wray (2002, p. 144), "formulaic sequences are selected as a response to specific needs in communication and processing. Precisely which formulaic sequences different L2 learners use should depend on their different priorities, and on situations in which they find themselves". Thus, in the case of 3-4-year-old children in early total language immersion groups, their specific needs in communication convey the messages about their basic needs (being hungry, thirsty, needing to use the bathroom, needing the teacher's attention, wanting a particular toy/book, etc.), and thus

the expected formulaic expressions to be used by these young learners would be the ones they hear their teachers use in the situations of talking about eating or drinking, using the bathroom, play or reading time, etc.

Young L2 learners also transfer these formulaic expressions from their classroom experience to a broader context, as described in the research conducted by Mhic Mhathúna (2008) in the Irish-medium preschool setting. During the research, which consisted of storytelling sessions in an Irish-medium preschool in Dublin with subsequent observations and surveys for the preschool staff and parents, the participating children demonstrated gradual shift from comprehension of the meaning of the stories that were read to them and answering to basic questions about the content of the stories using scaffolding and formulaic expressions, to producing more independent answers regarding the content of the stories. However, what is more important in the context of formulaic sequences, is that the children would make connections between similar situations in the preschool routines and the book content (e.g., throwing the banana skin into the bin during the lunchtime or recollecting seeing penguins in the Zoo during an outing) and automatically use the formulaic language which is appropriate in the given classroom situation.

2.6.6.3 ZPD and Scaffolding in Language Immersion Education. The concepts of the zone of proximal development, or the ZPD, and scaffolding, which were previously discussed in the subsection on theorists of the field of early childhood development, have also influenced the area of language immersion pedagogy. Scaffolding is referred to as the support for acquisition of the subject content and language skills or simply the teacher's guidance in the learning process. However, the use of the notions of "support" and "guidance" does not seem to include either the engagement of the learners, the supervisory role of the teacher, or the students' gradual progress towards achievement of the learning outcomes to the extent of the following definition: [scaffolding is] “the process of supportive dialogue which directs the attention of the learner to key features of the environment, and which prompts them through successive steps of a problem” (Wood, Bruner, & Ross 1976 cited in Mitchell et al. 2019, p. 289).

Scaffolding has the following key characteristics (based on Stone, 1998; Daniels, 2007 cited in Mitchell et al. 2019, p. 289):

1. The recruitment by an adult of a child’s involvement in a meaningful and culturally desirable activity beyond the child’s current understanding or control.

2. Assistance … using a process of "online diagnosis" of the learner's understanding and skill level, and the estimation of the amount of support required.
3. Support which is not provided in a uniform prescription, but may vary in mode (e.g. physical gesture, verbal prompt, extensive dialogue) as well as in amount.
4. The support provided is gradually withdrawn as control of the task is transferred to the learner.

In other words, a scaffolded learning process is the one where the teacher engages the learners in a pre-planned and designed, culturally appropriate educational activity which is challenging for them, where the teacher applies formative assessment to monitor whether the learners keep up with the level of the content and the pace of the learning process; where after the formative assessment has been completed, the teacher uses differentiation to address the individual needs of learners; and gradually minimises their involvement as the learners' supervisor when they are ready to take responsibility for their own learning, by constructing it and assessing their own progress.

Scaffolding is a core and essential aspect of language immersion pedagogy. The most apparent way of scaffolding the language learning process and creating the conditions for the ZPD in language immersion relates to the organization of the classroom setting. The immersion classroom, filled with posters, flashcards, pictures, word tags, and other language artifacts is designed to mediate language learning. Designing the learning environment in the classroom in this way, the teacher creates the possibility for the ZPD for each student and the whole classroom (Swain et al., 2015).

The understanding of the fact that scaffolding of the learners' output is necessary (Met, 2008; Fortune & Tedick, 2015) for assisting these learners in producing more extensive language skills has led to the development of a range of communicative activities. These activities are organized in such a way that the learners are led through the step-by-step performance of a speaking or writing activity, producing more meaningful language at every stage.

A variety of scaffolded activities, including peer and environmental scaffolding, can be used in the early language immersion setting, as reported by Mhic Mhathúna (2008) in her research on supporting children's participation in second-language storytelling sessions in an Irish-medium preschool. First, the children's process of reading comprehension was supported by a question-and-answer style of storytelling, with the story told in the form of answers to questions. The questions corresponded to particular

illustrations, supplemented by gestures, onomatopoeia, actions, etc. In this way, the children only had to concentrate on describing the pictures and repeating the recurring words after the teachers and their peers (peer scaffolding). This allowed the children to learn the main sequence of events fast and to concentrate on learning the recurring key words and phrases. As the children progressed, the teachers started to ask questions regarding more details, gradually leading the learners towards the questions, the answers to which were not so apparent from the illustrations. This already motivated the learners to produce their own language. The research also provides specification on organization of the work of the preschool staff which has allowed to arrange such meaningful and scaffolded storytelling sessions. The way members of staff distributed their duties is referred to as environmental scaffolding.

The use of concepts of SCT in the field of early L2 acquisition provides possibilities for making the process of L2 learning more meaningful, life-related, and learner-centred. The scaffolded interaction process supports the L2 learner through comprehension of mediated language input and through progressing within their ZPD, i.e., producing their output, first in the form of formulaic expressions, and then, developed further, in more meaningful and extended constructions of their own.

2.6.6.4 Overview of International Research in the Area of Early Language Immersion. Taking into consideration various needs of learners is essential in the context of modern early years education due to the increasing diversity in the linguistic and cultural backgrounds of children in early language immersion classrooms (Lindholm-Leary, 2022; Mård-Miettinen et al., 2022). In these conditions, early immersion remains a powerful mechanism for advancement of bilingualism, biliteracy, and linguistic equity (Mård-Miettinen et al., 2022). Depending on the national context, early language immersion can be used for reviving and supporting an endangered language (Hickey, 2022), providing possibilities for bilingualism and biliteracy (Lindholm-Leary, 2022) as well as supporting bilingualism for diverse learners (Mård-Miettinen et al., 2022). Although the above-mentioned national contexts are different from the Estonian one, it is essential to recognise the core benefits of early immersion which can be transferred to and applied in various classrooms. Research confirms that early language immersion learners demonstrate better language proficiency and higher academic performance results than their peers in monolingual classrooms (Hickey, 2022; Lindholm-Leary, 2022). The experience of the language immersion in Finland also confirms that an early language immersion environment is suitable for diverse learners, including those with

exceptionalities (Mård-Miettinen et al., 2022). Building teachers' awareness of international research and experience is an essential part of teacher professional development which is described further.

2.7. Teacher Professional Development

Previous subsections of this chapter which explained the topicality of scaffolding, child-led and play-based education in the context of early language immersion have underpinned the discussion of the role of the early years immersion teacher and their competence. Although the issue of training and professional development of early years immersion teachers was described previously in Chapter 1, within the context of the Estonian preschool education, this discussion needs to be extended to include the Estonian context of preschool education with the focus on the support that teachers need to implement the previously discussed concepts in practice. Thus, this subsection focuses on the issue of teacher professional development (PD).

Prior to an in-depth discussion of professional development, it is necessary to establish a working definition of the notion. The literature emphasizes the challenge of finding one comprehensive definition of PD (Evans, 2008; Friedman & Phillips, 2004; Webster-Wright, 2009; Dall'Alba & Sandberg, 2006). The process of determining professional development is complicated by a significant number of interpretations rooted in approaches to the notion of PD and its objectives (Friedman & Phillips, 2004; Dall'Alba & Sandberg, 2006; Scanlon, 2011), where the spectrum of meanings of professional development varies from the life-long process of learning and development of one's professional mastery to a means of measurement of one's suitability for a position or a particular form of learning activity.

2.7.1. Professional Development: A Definition

A working definition of professional development used in this study takes into consideration the concepts of continuous professional learning (Webster-Wright, 2009) and continuous professional learning and development or PLD (Hadley et al., 2015). Combining these factors, this study understands professional development as formal and informal learning activities, experiences and interactions that provide an individual with possibilities for acquiring, developing, and updating knowledge, skills, as well as attitudes that distinguish them as a representative of a certain profession.

2.7.2. Characteristics of Effective Professional Development

There has been (Boud & Hager, 2012; Webster-Wright, 2009) a growing concern with professional development shifting its focus from enhancing learning towards content delivery which is measured by mere participation in training activities. The most serious effect of this is separating learning from practice and the professional environment (Boud & Hager, 2012). In fact, a more significant amount of professional development takes place not at formal organized events, but informally, through gaining practical experience within the actual environment where professionals themselves are to demonstrate and maintain efficient and effective practices (Webster-Wright, 2009).

In the light of the growing significance of informal environment and practical experience exchange as initiators of professional development, the traditional model of PD needs reframing taking into consideration the following aspects (based on Paechter, 1996; Evans, 2008; Webster-Wright, 2009):

- PD as a concept focuses on providing a continuous learning experience rather than knowledge delivery on a specific topic. The latter has been brought about by the knowledge-deficiency idea as the basis for PD. The type of knowledge itself is undergoing transformation with more requests for professional knowledge rooted in the local context (McWilliam, 2002).
- PD provides a holistic learning experience rather than presents a set of inter-related 'aspects'. Learning is a process of "interaction among the learner, the context, and what is learned" (Webster-Wright, 2009, p. 714), thus effective PD experience has to address them simultaneously and in a cohesive manner.
- PD aligns with the needs of professionals themselves, taking into account the context and everyday realia of their professional practice.
- PD includes opportunities for both attitudinal and functional development of professionals, i.e., both modifying people's attitudes towards their work and improving the ways they do their work.
- PD is oriented to ongoing development of not only professionals themselves, but the profession as such. PD is not just about commitment to life-long learning within a profession through professionals updating their professional knowledge and acquiring new techniques. Professional development also includes learning through professional reflection and mediation in the professional context, which leads to advancement of the profession itself.

In summary, effective professional development focuses on providing a continuous holistic learning experience within the context of the professional environment that complies with the needs of professionals and takes into consideration particularities of the ways they learn. Having considered the definition of professional development as such and the factors of its effectiveness, the discussion now focuses on PD in the context of teacher's profession only.

2.7.3. Teacher Professional Development

This subsection discusses teacher professional development in relation to the general definition of PD which has been accepted for the present study, but as applied to the discourses that shape the discussion around teacher professionalism. Teaching is a profession with a rich variety of forms of educational activities offered in different learning environments, contexts, and situations (King, 2016; Desimone, 2009; Dall'Alba & Sandberg, 2006), where the range of these activities is very wide from formal in-service training events to a teacher's own interaction with a curriculum or learning material or informal conversation with a colleague. Thus, it is best to view PD as a continuous process which is "embedded in teachers' daily lives" (Desimone, 2009, p. 182).

The ultimate aim of PD is to initiate change not only in teachers' classroom practice, but also in their attitudes and beliefs thus improving the educational experience and, eventually, learning outcomes of their students (Guskey, 2002; Yoon, et al., 2007; Desimone, 2009; McElearney et al., 2019; Markussen-Brown, et al., 2017; Darling-Hammond et al., 2017; Kalinowski et al., 2019). The connection between changes in teachers' classroom practices and their beliefs has been especially topical for PD initiatives and practices (Borg, 2018; Guskey, 2002; Durrant, 2019), including those for teachers working with students whose home language differs from the language of instruction (Kalinowski et al., 2019). The widespread assumption has been that changes in teachers' classroom practice start from changing their beliefs initiated by PD. This assumption has been based on the deficit discourse in PD (Kennedy, 2007; Kennedy, 2014; Wasik & Hindman, 2020). Consequently, it is up to the PD design and model to provide opportunities for the changes in beliefs to happen through providing PD participants with (new) knowledge, views, and ideas to compensate for the ones they are lacking. However, Guskey's model of teacher change (2002) through professional development experience proves the opposite: in order for the teachers' beliefs to change, they need to first see the change bearing fruit in their classroom.

Views on the aims of PD undergo change and development over time, which can be a reflection of the transformation in attitudes and directions within the education system. This can be seen, for example, in the Estonian document of the Framework Requirements for Teacher Training. The first document which was adopted in 2013 stipulated provision of "support to teacher's professional, special, and position-related development" as the aim of teacher's PD. Moreover, the document prescribed that a teacher ought to complete at least 160 hours of PD within a five-year period (Õpetaja koolituse raamnõuded, 2013). A later version of the document which was adopted in 2015 provided the definition of teachers' PD which is less focused on the teacher's position and is more inclusive of the learner. The Framework Requirements for Teacher Training of 2015 stated that:

> the aim of teachers' professional development is to create for teachers, opportunities for self-analysis and professional development as well as to develop an inspirational and innovative attitude. This attitude is the way in which teachers can best use acquired knowledge and skills in their work in supporting learner's development (Õpetaja koolituse raamnõuded, 2015, para 16).

The Framework Requirements document of 2015 as well as its later version of 2019, which is still in force, no longer require teachers to complete the minimum compulsory amount of PD during a specific amount of time. Instead, they state that planning and delivery of PD ought to be based on the results of requirements for teachers' competences described in the Teacher's Professional Standard; results of the teacher's self-analysis and the feedback of their work; teacher's needs for PD as seen by the teacher, taking into consideration the development of the educational institution and state priorities regarding the system of education (Õpetaja koolituse raamnõuded, 2015; Õpetaja koolituse raamnõuded, 2019).

2.7.3.1 Teacher PD Through the Lens of Sociocultural Theory. The topic of teacher professional development and growth has also been discussed in the context of sociocultural theory (Eun, 2008; Shabani, 2016) and the notion of the ZPD. Anchored in Vygotsky's view on development as a process which is continuous, cumulative as well cyclical and which consists of regressions as well as progressions (DiPardo & Potter, 2003; Eun, 2008), the research by Eun (2008) applies the concepts related to children's learning, including the ZPD, to learning of adults, focusing on professional development in the context of the teaching profession. The study focuses on eliciting core concepts of

Vygotsky's developmental theory in the models of PD suggested by Guskey (2000) which are presented in Table 2.2 below. This table showcases such fundamental aspects of the Vygotskian developmental theory as social interaction, internalisation, mediation and self-analysis and reflection. It also documents their presence and impact in the form of activities under the umbrella of Guskey's models of PD (2000), which are: training model; observation/assessment model; involvement in a development/improvement process model; individually guided model; inquiry or action research model; mentoring model; and study groups/collaborative models.

Table 2.2 *Professional Development within a Vygotskian Theoretical Framework*

Key theoretical concepts	Related professional development practices
Social interaction	Workshops, colloquia, seminars, mentoring, study groups.
Internalization	Individually guided activities (video self-assessment, journal writing)
Mediation	Continuous follow-up support that includes the three types of mediators: tools (material resources); signs (newsletters and journals); and other humans (professional networks).
Psychological systems	Development of professional development programs that focus on changing teachers' attitudes as well as instructional practices.

(Eun, 2008, p. 144)

The outcomes of Eun's study which are drawn on the basis of presenting the core activities of Guskey's PD models framework through the lens of the developmental theory by Vygotsky highlight the role of teachers' interaction with their colleagues, especially within the frames of targeted activities, provision of follow-up support to teachers, and giving them sufficient time for reflection upon the new knowledge and skills acquired during PD. The research by Shabani (2016) which is grounded in the findings of the previously discussed study by Eun (2008) proposes the five main implications which are to be taken into consideration in the design and implementation of teacher PD: 1) *social nature of PD* which is about providing teachers with opportunities to engage in collaborative learning activities, highlighting peer coaching and mentoring as the elements of PD which facilitate the ZPD progression; 2) *sufficient time for gaining PD* which is guided by the principle that development is gradual and focuses on providing teachers with the sufficient time resource to test the knowledge and skills acquired during PD and then reflect upon their implementation; 3) *importance of ongoing external support/scaffolding* which includes the support provided to teachers as follow-up of PD

and is grounded on the findings of the research by Eun (2008) regarding the role of tools and signs in the mediation process of teacher learning during and after PD; 4) *mutual benefits of mentoring and practicum* which are centred around the understanding that both the mentor and the mentee develop through participating in collaborative activities, sharing problems as well as through negotiating and finding the new meaning; and 5) *the role of social context in PD* which highlights the importance of the context that a teacher works in and the necessity to take this unique environment into consideration when designing PD. The recent research by Guskey (2025) also draws attention to the significance of taking context differences into account. As he points out, consideration of the context in which teachers work can have a crucial impact on the way they "perceive new ideas and adapt those ideas to their classroom and their students" (2025, p. 57).

Further research (Shabani et al., 2010; Warford, 2011; Fani & Ghaemi, 2011; Kuusisaari, 2014) extends the notion of learner's ZPD to teachers and their professional development, echoing the results of the previously discussed study by Eun (2008) in the application of mediation, social interaction, collaboration, and reflection to teachers' PD. The concept of the Zone of Proximal Teacher Development (ZPTD) which was coined by Warford (2011) as a model of the teacher's psychological and methodological growth which happens in the course of PD bridging theoretical knowledge with practical experience. The model consists of four stages taking the teacher participant from self-reflection and motivation, which is the reversal of the traditional ZPD to automatisation and internalisation of pedagogical concepts ending in their recurrence. Based on the research results, Warford calls for creation of opportunities for teacher collaboration and long-term support of teachers paired with reflective practices. The research by Fani and Ghaemi (2011) echoes the findings of previous studies by Shabani and his colleagues (2010) and Warford (2011) and highlights the factors which affect the ZPTD as well as suggests the ways in which teachers can improve their ZPTD, from self-scaffolding to discussions with learners. The research by Kuusisaari (2014) expands the research on the teacher ZPD focusing on factors which enhance or boost development. The study outcomes revealed that for progress to take place, the collaboration between teachers needs to be creative as well as involve active and critical engagement. Thus, it can be concluded that significant parallels can be drawn between the implication of the core notions of the Vygotskian developmental theory and teacher professional growth which takes place through PD. Social interaction, collaboration, mediation, and reflection are the crucially important aspects of teacher PD.

2.7.3.2 Features of Efficient Teacher PD. There has been a significant amount of research (for instance, Garet et al., 2001; Hunzicker, 2010; Kalinowski et al., 2019) dedicated to the effectiveness of teacher professional development and aimed to determine the exact features that make a PD programme efficient. Having conducted a critical analysis of the aforementioned research, the current study accepts the list of seven features of effective professional development presented by Darling-Hammond et al. (2017). Effective professional development:

- **is content focused.** The core of PD lies in teaching strategies that are related to specific content areas of the curriculum and support teacher learning within the context of the classroom.
- **incorporates active learning.** Active learning enables teachers-participants to get involved in the development of teaching strategies which they are then expected to implement in teaching their students. Such PD is based on the use of authentic materials and interactive strategies which foster professional development within the context and allow a shift away from traditional PD provision which is disconnected from actual teachers and their classrooms.
- **supports collaboration**. Effective teacher PD creates opportunities for teachers to share their experience and ideas, also within their professional context, which includes establishment of learning communities.
- **uses models of effective practice.** High-quality PD employs curricular models, including lesson planning, conducting and student assessment, which provide teachers-participants with a clear idea of best professional practices.
- **provides coaching and expert support**. Such support is based on sharing specific practice on teaching methodologies that complies with needs of teachers-participants themselves.
- **offers feedback and reflection**. Effective PD creates opportunities for teachers to reflect on their practices and to receive feedback.
- **is of sustained duration**. High-quality professional development needs to have a sufficient time resource for it to provide participants with opportunities for learning and reflection. The duration of teacher professional development is also essential from the standpoint of its influence on students' outcomes. It has been estimated (Yoon, et al., 2007) that in order for teacher PD to have a significant and positive effect on learners' achievement, it needs to be of a sustained duration.

Another aspect to consider in the discussion of teacher PD and its effectiveness is the teacher's role in PD provision. Teachers have often been portrayed as playing the role of "passive recipients" (Durrant, 2019, p. 42) in professional development who are trained against a predetermined set of criteria or are instructed on how to implement a particular reform. The current shift in teacher's professionalism (Durrant, 2019; Sachs, 2016) is aimed to encourage teachers to become the agents of change, i.e., to acknowledge the changes they can make both in the educational experiences of learners and in the school as a professional environment.

2.7.4. Teacher Professionalism and Professional Development

There is a dual interdependence between teacher professionalism and teacher professional development. On the one hand, teacher professional development fosters strengthening of a teacher's professionalism through improving their professional knowledge, skills, as well as work-related attitudes and dispositions. On the other hand, existing professional culture and corresponding expectations of a teacher's knowledge, skills, and attitudes predetermine the form and content of professional development which the teacher is provided with. The nature of the constituent parts of teacher professionalism that is to be enhanced through a PD experience is dependent on a particular discourse of professionalism itself. Sachs (2016) suggests the four types of teacher professionalism which strengthen different types of professional development as can be seen in Figure 2.3. The figure shows the four types of teacher professionalism divided by the two axes: one which indicates progression from the functional to attitudinal development and the other that shows the development from organisational/managerial towards occupational/democratic professionalism. Thus, controlled professionalism sees a teacher as a technician with a certain set of skills who is controlled by and accountable to policy-makers. Under compliant professionalism, a teacher is seen as a craft worker who has more freedom to modify their teaching practice on condition that they comply with policy changes. Collaborative professionalism demonstrates the shift in attitudes towards the teacher's role, which is now seen as that of a reflective learner, while still preserving the necessity of compliance with appointed procedures. Activist professionalism recognises the teacher as a producer of new knowledge and the researcher for new practical solutions while celebrating teacher collaboration.

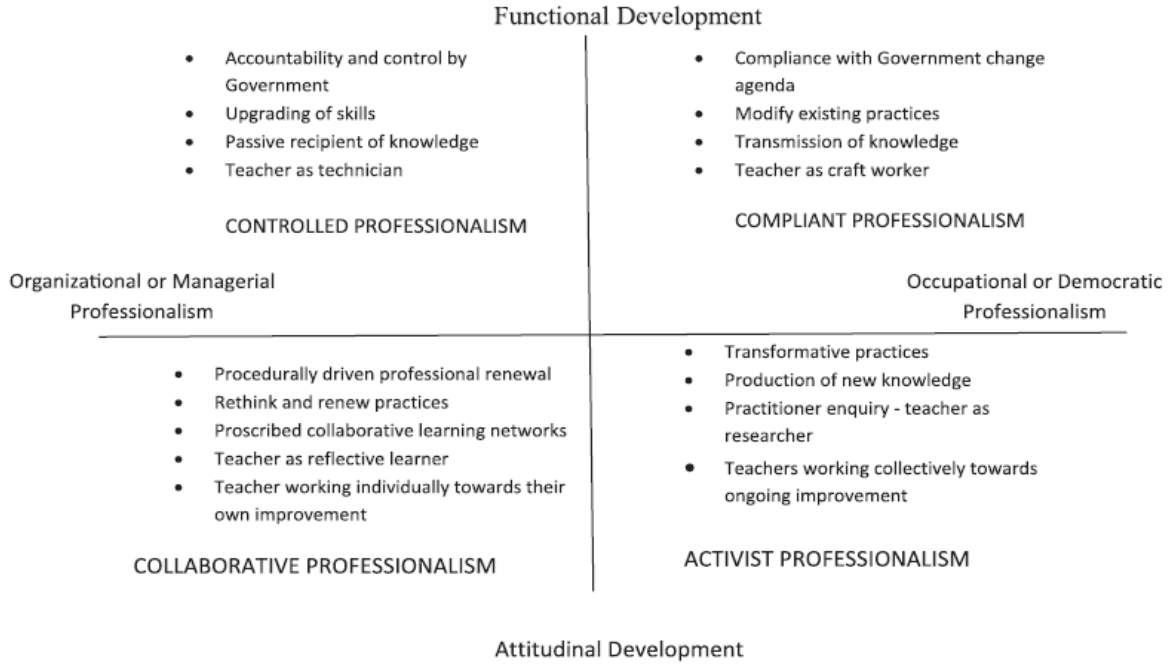

Figure 2.3 *Types of PD and Teacher Professionalism*
(Sachs, 2016, p. 421)

As the criteria for effective teacher professional development have been listed previously, it is now essential for the current study to bring together the two notions, which are teacher professionalism and teacher professional development, and to define which types of professionalism support high-quality professional development of teachers.

Teacher professional development based on neither controlled nor compliant professionalism enables teacher-participants to experience engagement "in learning opportunities that are supportive, job-embedded, instructionally-focused, collaborative, and ongoing" (Hunzicker, 2011, p. 2) which is one of the criteria for efficient professional development of teachers. The PD experience which is offered under the umbrella of these two types of professionalism is more likely to be of the deficit model, i.e., aimed to update specific skills and modify existing teaching methodologies to improve the current classroom situation (Kennedy, 2014). The overall aim of teacher professional development advanced and provided within the frames of managerial professional professionalism is transmissive, but not transformative (Sachs, 2001; Kennedy, 2014). Discussing effectiveness of teacher professional development strengthening controlled or compliant professionalism, it is imperative to note the role of teachers-participants, which has been highlighted in the previous subsection. As it is seen from Figure 2.3, both in

compliant and controlled professionalism the teacher is either a passive participant or a receiver of transmitted knowledge, which does not align with high-quality professional development.

On the other hand, the quadrants of collaborative and activist professionalism reflect the holistic approach to learning experience that is based on professional needs. These quadrants align with the proactive position manifested by teacher agency as well as reflect the afore defined and other features of effective professional development (Desimone, 2009; McElearney et al., 2019; Opfer & Pedder, 2011; Bolam et al. cited in King, 2016), which include:

- focus on content (content knowledge and methodology of teaching it),
- active learning and involvement,
- shared values and vision,
- collective responsibility for students' learning,
- possibilities for reflection,
- collaborative participation and learning,
- sustainable duration of professional development,
- respectful, supportive and secure environment (within the school).

While certain combinations of these characteristics form the core of various models of teacher professional development, all of these features sustain a democratic delivery of professionalism emphasizing teachers' collaboration, professional development, active involvement, and possibilities for reflection. Professional development leading to student achievement has to be "needs-based and collaborative, challenge thinking and lead to action" (Durrant, 2019, p. 47) which are the characteristics of activist teacher professionalism.

The need for transformative PD practices is also emphasized in the ECEC settings (Waters & McDonald, 2020; Gealy et al., 2020) where they are defined as professional development that has influenced pedagogical and praxeological work of an individual thus shaping both their practice and the educational experience of children they work with (Waters & McDonald, 2020).

2.7.5 Teacher's Knowledge

The concept of knowledge which has been referred to as a constituent part of professionalism fulfils a number of functions in relation to the notion of profession (Scanlon, 2011). The most essential ones in the context of this study are as follows:

knowledge, on the one hand, marks the actual process of one's becoming a professional with the acquisition of knowledge (ibid.) and, on the other hand, it distinguishes particular kinds of professions from one another, with the knowledge base of a profession being its "professional self-definition" (Johnson, 2009, p. 21). The latter includes the specific teacher knowledge (Scanlon, 2011; Conway et al., 2009; Taole & Mawela, 2019; Brock, 2012) which is contiguous to this research. Knowledge plays a special role in teachers' identity, as "it has been more or less assumed that teachers who *know* more teach better" (Cochran-Smith & Lytle, 1999, p. 249) and as teachers "need to be knowledgeable and know how to use their knowledge" (Wood, 2007, p. 281).

The discussion around teacher knowledge is similar to the one on the definition of a profession. Some scholars are unsure whether it is possible to equip teachers with the knowledge that can prepare them for any situation to happen in the classroom (Taole & Mawela, 2019), others refer to a very specific list of types of knowledge which form the teacher knowledge base (Scanlon, 2011). The teacher knowledge base is extensive, consisting of "content knowledge, general pedagogical knowledge, curriculum knowledge, pedagogical content knowledge, knowledge of learners, knowledge of educational contexts and knowledge of educational ends and purposes" (Shulman, 1987, p. 8 cited in Scanlon, 2011, p. 22). The knowledge language immersion teachers need to have is an amalgam of the three vast knowledge areas: first, a range of aspects related to acquisition of the first and second languages; second, the content knowledge; and third, the specific pedagogical knowledge which enables an immersion teacher to teach the content through a L2, including methodologies of academic language teaching and corresponding student assessment methods (Galguera, 2011; Faltis &Valdés, 2016; Hood, 2020).

2.7.6 Teacher's L2 Knowledge and the Use of L2 and L1 in the Classroom

The issues of the teacher's knowledge of L2 as well as their confidence in the use of the second language for their teaching have been a topic discussed in several studies (Turnbull & Arnett, 2002; Littlewood & Yu, 2011; Chambless, 2012) focusing on the teachers' use of L2, which has been in the role of the target language (TL), and L1 in their classrooms. While the topic of the balance between the use of L1 and L2 is out of scope of this research, it is still essential to investigate the outcomes of the above-listed studies to see what factors impact or hinder the teacher's exclusive use of L2 as TL in the classroom and their choice to speak L1 instead, considering that their L1 is the same as

the L1 of the children in the classroom. All of these studies emphasise the essential role that the teacher's use of TL, especially their oral proficiency (Chambless, 2012), plays in the classroom: the TL input created by the teacher provides the learners with the exposure to the language and develops the language environment which stimulates and enhances the learners' language output. However, despite the importance that the teacher's TL use has for the development of the learners' language skills, teachers sometimes make the choice to use their and the learners' L1 when interacting with the children. The studies by Turnbull and Arnett (2002) and Littlewood and Yu (2011) highlight that teachers decide in favour of using L1 in case of issues regarding classroom management, especially if they have little working experience or if they work in a challenging classroom (Turnbull & Arnett, 2002). The researchers concluded that teachers use L1 to maintain classroom discipline and organisation (Littlewood & Yu, 2011), relying on speaking the students' first language as teachers considered that to be a convenient and effective solution (Turnbull & Arnett, 2002). The studies by Littlewood and Yu (2011) and Chambless (2012) also address the issue of the teacher's proficiency in the target language and the impact it has on their use of TL in the classroom. Both studies highlight that the teacher's mastery of the target language plays a role in their patterns of using L2 and L1 in their practice. Littlewood and Yu (2011) emphasise that teachers' confidence in the TL impacts their consistency in using the TL in the classroom. On the other hand, teachers with lower TL proficiency find it challenging and uncomfortable to use this language in situations requiring spontaneous reactions or communication. The outcomes of the research by Chambless (2012) echo the findings of the previous study by Littlewood and Yu (2011), pointing out that teachers with low proficiency tend to use the TL in the classroom less frequently, with their language skills also making an impact on the quality of the language they speak. This, in its turn, reduces the effectiveness of their communication with the students. The discussion of the issue of teachers' knowledge of L2, including in the ECEC context, is continued further in the next subsection.

2.7.7 Teacher's L2 Knowledge in Professional Development

The discussion around teachers' knowledge about L2, especially in the ECEC context, involves the relationship between declarative or theoretical knowledge (know-that) and practical or procedural knowledge (know-how) as well as their role in teacher education (Alstad, 2020). Research results have shown that professional development has some effect on teachers' procedural knowledge (Zaslow et al., 2010; Markussen-Brown

et al., 2017) and some (Zaslow et al., 2010) or no (Markussen-Brown et al., 2017) impact of their declarative knowledge. Research conducted with ECEC teachers working in bi- or multilingual settings have also shown that they have lacked declarative knowledge on the way learners' L1 can be purposefully used to support the development of their L2 skills, including the use of interpretation and scaffolding activities.

The L2 teacher knowledge base in teacher education is built upon major aspects: first, the actual content of L2 programmes (what a L2 teacher needs to know), second, the pedagogies that are taught within the L2 programme (how a L2 teacher should teach), and third, the way the teacher training institution delivers both the knowledge on both the content and the pedagogies (how a L2 teacher learns to teach) (Johnson, 2009). Building an extensive knowledge base is impossible without the recognition of practitioner knowledge which teachers accumulate while learning and teaching L2 in a variety of contexts (ibid.).

The teacher knowledge about the target language they work in is the second tier in the Teacher Language Awareness framework (Lindahl et al., 2013; He & Lin, 2018). The first tier of the framework, which is the language use, is very topical for the current study regarding the requirements to early years teachers' Estonian language proficiency in the context of the transition to Estonian-medium education. The teacher's fluency in the language they teach in is crucial because it is one of the fundamental principles of implementation of the language immersion pedagogy (Fortune & Tedick, 2008; Cammarata & Tedick, 2012). The teacher's high proficiency in the immersion language is significantly important as it is a precondition for providing children with meaningful and authentic input in both educational activities and everyday communication which is relevant to the child's needs (Baker & Wright, 2017). However, as discussed in the previous subsection, if the teacher is insecure about their TL skills, it affects their communication style in the classroom (Chacón, 2005; Eslami & Fatahi, 2008). In addition, studies (Bell & Borden, 2022; Huhn et al., 2021) reveal that teachers' lack of confidence in their TL proficiency has a negative impact on their feeling of professional efficacy and self-worth. The teacher's proficiency in the TL is essential, but not the only aspect of the professional identity of the language immersion teacher which is discussed in the next subsection.

2.7.8 Professional Identity and PD Needs of Language Immersion Teachers

Research regarding language immersion teachers (Cammarata & Tedick, 2012; Kong, 2015; Cammarata & Haley, 2018; Tedick & Zilmer, 2018) indicates that they face the challenge of the dual focus of their professional role, which is integrating teaching of both content and language. Based on research (Peltoniemi, 2015; Cammarata & Cavanagh, 2018; Mård-Miettinen et al., 2022) it can be suggested that the reasons for teachers' struggling to implement integrated teaching lie in lack of or insufficient pre-service language immersion teacher training. Although teachers' pre-service training per se is out of scope of this study, it is essential to consider its role in the formation of the professional identity of immersion teachers and its possible impact on their PD needs. Firstly, the availability of the pre-service language immersion teacher training is described as a challenge. Peltoniemi (2015) points out the existing lack of education for immersion teachers at the pre-service level with Canada and Finland being the only exceptions. In other countries which actively implement language immersion pedagogy at the national level, such as the USA, the Basque Country, and Estonia, future language immersion teachers are mostly offered the same training programmes as other teachers, but with inclusion of either subjects or modules focusing on language immersion (Peltoniemi, 2015). In Canada and Finland, where universities offer immersion teacher training programmes (Peltoniemi, 2015; Mård-Miettinen et al., 2022), challenges include educating the number of the teachers which is sufficient for meeting the requirements of the expanding immersion programme and maintaining its quality. The significant difference between the pre-service immersion teacher training in the countries is the L1 of the students enrolled and the language of instruction. While Canada accepts both native and nonnative speakers of French and provides them with teacher training in English, Finland focuses on enrolling nonnative speakers of Swedish and trains them as immersion teachers through the Swedish language (Mård-Miettinen et al., 2022). Secondly, it is essential to consider the significance of the content-related side of the pre-service training for language immersion teachers. Research (Cammarata & Cavanagh, 2018; Tedick et al., 2024) draws attention to the role of pre-service training in providing future immersion teachers with integrated knowledge which, as Cammarata and Cavanagh (2018) specify, is to include the three domains of content, language, and literacy. However, these researchers (Cammarata and Cavanagh, 2018), whose study focuses on the knowledge base of immersion teacher educators, reveal the gaps in the knowledge of teacher trainers

themselves. Thus, the research outcomes indicate misconceptions and weak links between the above-mentioned three domains. Thirdly, research (Tedick et al., 2024) mentions the role of pre-service training in promoting the identity shift which is essential for the later integration of the content and language. For instance, the results of the research by Portolés and Martí (2020) regarding teachers' beliefs about multilingual pedagogies before they start their initial training are significant in the context of this study. The research results can lead to the root of the challenge with the professional identity of teachers in multilingual classrooms as they reveal that even after the pre-service training was completed, the research participants still held to their beliefs in myths regarding early language learning, for instance, the younger the learner is, the better they learn the language (Portolés & Martí, 2020). The research by Christison (2023) which also focused on pre-service teachers' attitudes to teaching multilingual students showed that even after completing the teacher language awareness course, the participants of the research still felt that they lacked preparation to comply with the needs of multilingual learners. Both studies (Portolés & Martí, 2020; Christison, 2023) call for more attention to multilingual pedagogy in pre-service teacher training and its embedment in all teacher training curricula.

With the limited or insufficient availability of pre-service training for language immersion teachers, the role of in-service education is essential for a lot of teachers to gain the essential knowledge, skills and attitudes (Peltoniemi, 2015). The change of teachers' beliefs in the course of PD needs systematic attention and it is as significant as providing them with specific recommendations regarding their teaching practice (Cammarata & Haley, 2018). In addition to fostering changes in teachers' attitudes, the research on the topic of PD for language immersion teachers (Cammarata & Tedick, 2012; Cammarata & Haley, 2018; Tedick et al., 2024) emphasises the significance of providing teachers with opportunities to recognise the interconnectedness of content and language and the development of pedagogical content knowledge for language and systematic attention to language skills. The outcomes of the recent study by Tedick and her colleagues (Tedick et al., 2024) clearly demonstrate that sustained structured PD can transform teachers' expertise in content and language integrating, with the strongest positive impact being on teachers' proactive planning abilities.

The research by Cammarata and Haley (2018) highlighted the value of collaborative PD which allowed its participants to plan lessons and reflect on them together. These results are supported by the outcomes of the research by Lyster (2019) which focused on

the significance of instructed SLA in teacher PD. It showed that teacher collaboration, including both across languages and areas of content, fostered teachers' professional growth. Thus, it can be concluded that PD for language immersion teachers needs to provide them with opportunities for the integration of language and content while enhancing their collaboration on lesson planning, the teaching process and lesson reflection. The significance of reflection for teacher PD is discussed in detail in the next subsection.

2.7.9 Reflection as an Essential Aspect of Teacher Professional Development

Another essential aspect that needs to be added to the process of teacher PD along with acquisition and practice of knowledge and skills is reflection. Guskey (2000, p.19) described professional development as a "cycle of reflection and improvement". It is an inseparable part of the continuum of teacher lifelong learning, as systematically reflective teaching makes teacher professional development possible and activates it at the same time (Williams, 2010 cited in Taole & Mawela, 2019, p. 38). The state of constant questioning and analysing of one's 'becoming' a professional is, overall, a compulsory feature of a new reflexive professional (Scanlon, 2011), but reflexive practice is at the heart of the teaching process and teacher professional development, because it helps a teacher to:

- take a hard look at one's own teaching,
- identify specific new or hidden weaknesses in one's teaching,
- devise improved behaviours, attitudes, or beliefs, and
- put new ideas into practice (Jacobs et al., 2011 cited in Taole & Mawela, 2019, p. 38).

The study by Ebadi and Gheisari (2016) views the process of reflection in the teaching profession through the lens of sociocultural theory. The research studied the way in which a teacher transformed their teaching style through conscious reflection in the course of PD. Teacher professional development is seen as the process during which a teacher internalises theoretical and scientific concepts through reflective practices and social interaction. Based on the research results, Ebadi and Gheisari (2016) argue that critical reflection which is supported by theoretical knowledge and engagement in practical activity can play a significant role in the improvement of teacher awareness and their professional performance.

There are different ways of reflective practice, including more individual and collaborative ones, from observation and reflective journals to blogs, which provide numerous opportunities for professional development of teachers. On the other hand, it cannot be suggested that teachers already come to the profession as reflective professionals, they might not have the necessary skills to get engaged in the expected reflective practice (Taole & Mawela, 2019). One of the ways in which teachers can acquire necessary skills for reflection is through collaboration with their colleagues and through collaborative learning. The role of colleagues and support of teacher PD within the organisation is discussed further.

2.7.10 The Role of Organisational Culture in Supporting Teacher PD

Early years teachers' motivation for professional development can be impacted by the climate within the preschool which is described by the notion of the organisational culture in the current study. Organisational culture has been described as an amalgam of values, beliefs, working culture, and behavioural norms in an organisation which form and shape its identity (Sivevska & Runceva, 2023; Yanqiong & Caiga, 2024; Zhang, 2021). In the context of the present study, the organisational culture is also seen as including information exchange from the management to teachers and among teachers, with the focus on information regarding PD events, and attitudes towards teacher professional development.

Research (Sivevska & Runceva, 2023; Yanqiong & Caiga, 2024; Zhang, 2021) indicates that organisational culture and attitudes to professional development within a preschool have an impact on teachers' motivation to engage in professional advancement. The study by Yanqiong and Caiga (2024) highlights the role of the strong and supportive organisational culture in creating the environment which fosters collaboration and development. Provided preschool teachers work within such environment, they are motivated to engage in self-development, collaborate with colleagues through experience exchange and participation in professional learning communities. The research by Sivevska and Runceva (2023) emphasises the complex structure of preschool as an organisation and allocates the responsibility for establishment of the collaborative and supportive environment onto the preschool principal whose task is to foster teachers' professional development. Taking into consideration the significance of the organisational culture for collaboration among teachers and their cooperation in

professional development, the next subsection focuses on teachers' collaborative learning.

2.7.11 Teachers' Collaborative Learning

With teachers' cooperation being at the core of rethinking of teacher professionalism (Sachs, 2003), teachers' collaborative learning is gaining a more significant meaning than experience exchange, but a new form of professional development. The previously discussed research on the application of Vygotskian developmental theory to teacher PD (Eun, 2008; Shabani et al., 2010; Kuusisaari, 2014; Shabani, 206) points out the significance of teacher collaboration as an effective means to expand their ZPD. Using the notion of the social origins of higher mental functions as a foundation, Eun (2008, p.145) states that "professional development, in order for the *development* part to be realised, must rely on social interactions … between and among people". Collaborative learning as the new form of PD no longer focuses on mistakes or deficiencies but aims to cope with challenges of a dynamically developing area, such as modern education (Guskey, 2000). What is essential is that professional development cannot bring about the desired improvement or change without being sustainable. One of the key features of sustainability is organizational support (Guskey, 2000), including such forms as school culture, professional learning communities (PLC) (King, 2016), and mentoring. Teachers' learning communities as an approach to PD put emphasis on collaborative learning, view teachers as life-long learners, as well as consider professional development itself to be "a process of continuous improvement" (Damjanovic & Blank, 2021, p. 574). Bolam et al. (2005 cited in King, 2016, p. 579; Tam, 2022) argue that PLCs are essential for the sustainability of new practice and their use in school and determines the following eight characteristics of effective PLCs:

- shared values and vision,
- collective responsibility for students' learning,
- collaboration focused on learning,
- individual and collective professional learning,
- reflective professional inquiry,
- openness, networks and partnerships,
- inclusive membership,
- mutual trust, respect and support.

Several of these characteristics are simultaneously the critical aspects of effective professional development, which have been mentioned above. This suggests that professional learning communities and the principles of their establishment and functioning, which are the essence of democratic professionalism, can be viewed an example of effective professional development.

What is more important, the added value to the development of knowledge and the sustainable implementation of changed practice is the new altered pattern of professional development itself. New collaborative relationships are being established in the communities where scholars co-construct the new knowledge together with practicing experienced and novice teachers, and these relationships replace the old expert-novice relationship.

Collaborative professional relationship is the essence of mentoring as a form of PD. It can be described as a purposeful instructional activity conducted by a more experienced professional in order to support and give direction to the professional growth of their less experienced colleague (Onchwari & Keengwe, 2008). In the field of early years education, mentoring as a form of PD can fulfil several aims: first and foremost, it is used for introducing new teachers into the profession to offer them not only professional advice and practical guidance of a more experienced teacher, but also empowerment and encouragement (Cummins, 2004; Onchwari & Keengwe, 2008; Molla & Nolan 2019). Mentoring has been considered the PD model which is most closely related to expanding teachers' ZPD (2008). For the teacher-mentor, this role can be seen as a validation of their expertise in the ECEC field, and for such experienced early years teachers it can be the reason to stay in the profession, which is another function of mentoring as a form of PD (Cummins, 2004). The research by Shabani (2016) emphasises the mutual benefit of mentoring for both the mentor and the mentee, as they are provided with an opportunity to restructure their previous views and meanings in the collaborative process of searching for solutions. And finally, mentoring can be an effective way for teachers to learn and implement new practices. Being a collegial approach, it makes adopting a new way of teaching more effective through discussing, planning, practising it, and then reflecting on it with colleagues (Onchwari & Keengwe, 2008). Eun (2008) highlights the importance of collaborative learning among teachers working together, pointing out that in-school PD can be more efficient that externally offered professional development, as "social interaction would be more facilitated when people are interacting with others they know

very well" (2008, p. 146). Thus, teacher collaborative learning is an efficient PD form which allows for development of both novice and experienced teachers.

2.7.12 Professional Development within the Continuum of Teacher Lifelong Learning

Teachers see continuous self-development as a professional obligation (Nissilä et al., 2022). The teaching professional life cycle has traditionally been viewed as the continuum of the '3 Is' phases, which stand for the initial, induction, and in-service periods of teacher education (Conway et al., 2009). Teacher professional development has been considered a separate stage of teacher education which comes after the formal pre-service preparation (for instance, Schwille & Dembélé, 2007 cited in Conway et al., 2009). However, there are changes in global and national educational systems as well as the new challenges due to growing demands on teachers and diversity in students' profiles in classrooms (Hargreaves, 2000; Conway et al., 2009; Taole & Mawela, 2019). These challenges have led to the situation in which "more and more teachers are now having to teach in ways they were not themselves taught" and "to re-evaluate their professionalism and to make judgements about the kinds of professional learning they need to get better in their job" (Hargreaves, 2000, pp. 151-152). This has led to the situation where professional development is not just one of the I's which has a starting and a finishing point but is a continuous process of learning embedded in the teacher's professional journey.

2.8 Summary of Chapter Two

Teacher professionalism consists of a set of systematic knowledge, skills, duties and attitudes that distinguish this profession from others. Formal and informal learning activities that are aimed to develop and update the knowledge, skills, and attitudes are referred to as professional development which seeks to align with teacher's needs and to result in high quality education provision for their students. While traditionally teachers have not been actively engaged in decision-making over the content and delivery of their professional development, with the shift towards collaborative and activist professionalism, teachers are becoming more active in producing their own new knowledge in professional learning communities through reflective and collaborative learning practices.

Language immersion teachers working in the ECEC settings ought to have competences referring to both domains, which are, on the one hand, SLA and language immersion pedagogy, and, on the other hand, early years education and development. These two spheres of pedagogy are interwoven by such aspects as i) awareness of the children's ZPD and provision of scaffolding which supports their overall development and second-language acquisition; ii) establishment of the learning environment that supports children's development; iii) implementation of child-centred pedagogy, including play-based learning.

Professional development for preschool language immersion teachers needs to take into consideration the ways to enable purposeful second language acquisition through content instruction (Tedick & Zilmer, 2018) placed within the ECEC settings. Taking into consideration the knowledge, skills, and attitudes teachers are expected either to acquire or update through professional development, it is essential for PD to be practical, collaborative, and job-embedded as well as to provide teachers with opportunities for reflection. This is also the way researchers (Molla & Nolan, 2019) describe mentoring as an effective programme of teacher professional development. The main conclusions of the chapter, including those on the topic of teacher PD, are presented in Table 2.3 below. The table illustrates the conclusions of the conducted literature review based on the research questions and the topics related to them. The outcomes of the literature review presented in the table as conclusions establish the framework for the planning of the research design and data collection.

Table 2.3 *Conclusions of Chapter 2*

PD needs of immersion teachers in Estonia and the ways to address them		
Research question	Aim of the analysis	Conclusions
What are teachers' specific PD needs in relation to early years immersion pedagogy based on current policy and practice?	To analyse international practices in implementation of the early years immersion pedagogy in ECEC settings 1) in compliance with principles of the sociocultural view on child's development; 2) taking into consideration the age-based characteristics and needs of the learners and 3) acknowledging the principles of SLA and	● Current ECEC provision is based on the sociocultural approach to learning emphasising the necessity to consider the child's ZPD and ways to scaffold their learning

	language immersion pedagogy.	● Children's holistic development needs to be supported in ECEC settings through implementation of child-centred and play-based education as well as through systematic introduction of child-initiated pedagogies, such as the Reggio Emilia inspired approach ● Play and peer interaction during play activates children's interest towards L2 learning and enhances children's L2 use ● Language immersion pedagogy has it distinct features which a teacher needs to be taking into consideration in planning their teaching and creating the learning environment.
What are the perspectives of early years immersion teachers in north-east Estonia and Tallinn in relation to the provision of professional development?	To analyse international practices in the area of teachers' PD taking into consideration 1) features of teacher professionalism; 2) characteristics of effective professional development;	● Teacher Professionalism consists of teacher's attitude, knowledge,

	3) the relationship between teacher professionalism and PD provision.	and skills including the target language proficiency ● Teacher PD needs to take into consideration the core principles of Vygotskian developmental theory, including social interaction and targeted meaningful collaboration, mediation, reflection, as well as provision of sufficient time for development to take place. ● Effective Professional Development provides a holistic learning experience, allowing the participants to collaborate and co-create new practices ● PD based on collaborative and activist types of teacher professionalism comply with characteristics of effective teacher development

How could the PD needs of early immersion teachers be met or addressed through a collaborative approach?	To analyse international practices in the area of the collaborative approach to professional development focusing on teachers' opportunities for co-operative enhancement of their professionalism.	● A collaborative approach to teachers' professional development, including in the form of PLC, complies with the principles of the Vygotskian approach to learning and development and meets the expectations to effective teacher development and provides teachers with support.

In the current situation in Estonia, when there is a lack of research on teacher professional needs in the context of implementation of the early language immersion pedagogy in preschools, the current study is highly relevant. The literature review conducted in the present chapter has analysed the dual expertise that is expected of preschool language teachers and has attempted to describe PD opportunities that they could find beneficial. It is essential to investigate if these opportunities could be used to address the actual PD needs of the teachers working in Estonian-medium early language immersion classrooms.

Chapter Three

Methodology

3.1 Introduction

This chapter outlines the principles of the mixed methods approach adopted for the study, introducing each of its planned stages and outlining the benefits and possible limitations of each stage. The participants of the mixed methods study are described; the rationale for their selection or invitation to take part at each stage of the study is explained alongside the corresponding timeframe. The chapter also discusses ethical considerations associated with the study and describes the limitations of this research alongside the approaches adopted to reduce them.

As illustrated in Chapter One, the current study aims to analyse the PD needs of early language immersion teachers in Estonia and to model good practice by providing them with the PD experience that meets their needs in the area of immersion pedagogy, taking into consideration the current policy and practice in Estonia. A mixed methods approach was implemented to investigate the primary research questions which are: 1) What are teachers' specific PD needs in relation to early years immersion pedagogy based on current policy and practice? 2) What are the perspectives of early years immersion teachers in north-east Estonia and Tallinn in relation to the provision of professional development? 3) How could the PD needs of early immersion teachers be met or addressed through a collaborative approach? The sub-questions arising from this overarching question are outlined in Table 3.1 under the corresponding stages of the research. The table outlines the research sub-questions which guide the present study and maps them onto the four sequential stages of data collection and analysis. Stage 1 is a needs' analysis survey of approximately 100 immersion teachers drawn from 70 kindergartens; Stage 2 is the semi-structured interviews with teachers from five selected kindergartens; Stage 3 is the professional development initiative for seven (N=7) teachers from the five selected kindergartens, and Stage 4 is the semi-structured interviews with the participants of the PD initiative after it has finished. Each sub-question is aligned with the corresponding stage(s) of the study in order to illustrate the way in which different methodological approaches contribute to addressing various aspects of the research focus, which is the PD practices and needs of early language immersion teachers. I found that

mapping the study with the assistance of the research sub-questions provided me with support to sharpen my research focus and to identify the type of data to be collected at each stage of the study. As it can be seen, most of the research sub-questions are answered at Stages 1 and 2 of the research, while the questions related to Stages 3 and 4 aim to specify and expand the data collection.

Table 3.1 *The Research Sub-questions of the Present Study*

Sub-questions	**Stage 1 (Survey Research)**	**Stage 2 (Semi-structured Interview)**	**Stage 3 (PD Initiative)**	**Stage 4 (Semi-structured Interview)**
1. In what way does the current policy impact the language immersion practice in ECEC in Estonia?	X	X		
2. In what way does the current policy impact teachers' PD needs?	X	X		
3. To what extent do preschool immersion teachers in Estonia think that their PD needs are met by the current provision?	X	X		
4. What are teachers' opportunities to access PD?	X	X		
5. What specific PD topics are teachers interested in?	X	X	X	

6. What specific PD topics do teachers need more support in?	X	X	X	X
7. What is the teachers' experience of collaborative learning?		X	X	X
8. How did the teachers evaluate the experience of receiving PD on early immersion pedagogy through collaborative learning?			X	X

3.2 Mixed Methods Research

Mixed methods research (MMR) is usually implemented firstly, to investigate questions which cannot be answered by using only either qualitative or quantitative research methods alone, and, secondly, to make use of the advantages and avoid possible weaknesses of either of the methods (Check & Schutt, 2012; McKim, 2017; Creamer, 2018). In addition, triangulation of different types of data improves the validity of the research (Creamer, 2018). The current study implements both quantitative and qualitative research methods. The quantitative data collected at the initial state of the research established the current situation in the area of teachers' PD provision, enabling me as a researcher to receive a general broader overview of the opportunities that teachers had to attend PD events and the topics that interested them. The methods applied to collect qualitative data allowed to me to gain a thorough insight into teacher's specific experience with PD in the area of early language immersion.

A strong research question is the starting point of any type of research. In the case of a mixed methods study, identifying a clear core research problem or question is fundamental for defining the further design and methods of the research (Tashakkori & Creswell, 2007; Creswell & Plano Clark, 2011). Creswell and Plano Clark (2018) propose three core types of mixed methods research design:

i. the convergent design, which means that quantitative and qualitative data are collected and analysed, either compared or combined, simultaneously;

ii. the explanatory sequential design, where triangulation involves the collection and analysis of quantitative data which is followed by the collection and processing of qualitative data;

iii. the exploratory sequential design, where the process of triangulation begins with the collection and analysis of qualitative data which leads the research process to the collection and analysis of quantitative data. (Creswell and Plano Clark, 2018, p. 66)

The research questions that guide the current study call for an explanatory sequential design, as answering them requires first, having a broad overview of the situation with the teachers' PD, which can be provided by quantitative data, and then detailed insight into teachers' experiences and opinions. The research design is discussed in detail in the next subsection.

3.2.1 Research Design

The present study can be characterised as having the explanatory sequential design. The quantitative data are collected through the teacher survey at Stage 1 of the research, followed by qualitative semi-structured interviews at Stage 2, the PD programme at Stage 3, and post-PD programme semi-structured interviews at Stage 4. The design of the present study is illustrated by Figure 3.1. The figure explains the structure of the research, displaying the research tasks at each stage of the study and demonstrating the interconnectedness between the quantitative and the qualitative strands of the research.

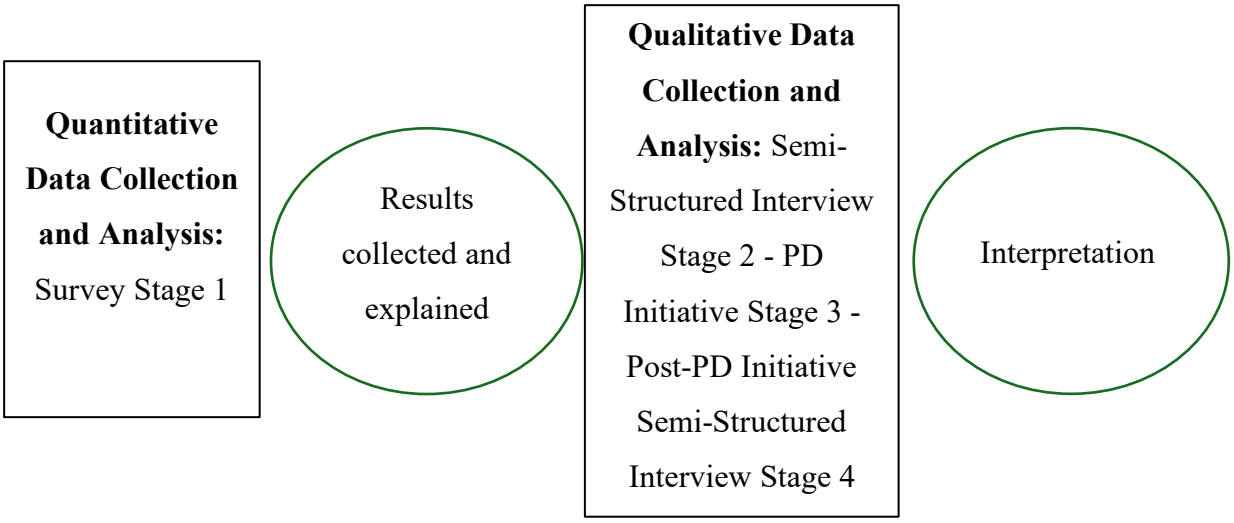

Figure 3.1 *The Explanatory Sequential Design of the Study*
(based on Creswell and Plano Clark, 2018, p. 66, Figure 3.3b)

The present study uses the case-selection variant of the explanatory sequential design variants, which means that the researcher concentrates on the qualitative strand of the study (Stages 2-4 in the case of the present study), using the quantitative strand (Stage 1 of this study) at the beginning to determine and select participants that best meet with the study criteria (Creswell and Plano Clark, 2018). The point of integration between the strands occurs at the end of Stage 1, when its results are used for selecting participants for Stages 2-4 as well as for specification of the focus interview questions at Stage 2 and the content of the PD programme at Stage 3.

The research has a qualitative priority, as three of the four stages of the research are based on the use of qualitative research methods (Stages 2-4). The research results of the quantitative Stage 1 are the starting point for the qualitative stages, as well as for selecting participants for the subsequent qualitative stages.

The quantitative and qualitative strands were timed sequentially: the survey at Stage 1 was followed by semi-structured interviews at Stage 2. Stage 3 was the PD initiative and classroom observation in which participants from Stage 2 took part. Stage 4 was the final qualitative stage of the research where the participants of Stages 2 and 3 took part in the semi-structured interview and shared their experience of taking part in the PD initiative.

The quantitative and qualitative strands were mixed by embedding one form of data, which is the results of the survey at Stage 1, within a larger design of procedure, which is the design and provision of the PD initiative, consisting of the PD programme and classroom observations.

3.3 Research Paradigm of the Study

The present study is based on the transformative-emancipatory paradigm (Mertens, 2007; Creamer, 2018). A research paradigm as a set of philosophical assumptions (Creamer, 2018) is characterised by four dimensions: ontology which is the nature of assumptions about truth and reality; epistemology which stands for assumptions about the relationship between the knower and reality and the participant; methodology which is the assumptions about the nature of research methods; and axiology which represents assumptions about the role which values play in the research (ibid.). The transformative-emancipatory paradigm as adopted to the present study is described in Table 3.2. This

study is guided by the transformative-emancipatory paradigm, highlights collaboration, empowerment, and social justice within the frames of educational contexts. The paradigm is particularly suitable for studying PD of early language immersion teachers, as it focuses on their active involvement in identifying and addressing their own professional development needs. Table 3.2 below provides an outline of the key dimensions of this paradigm, which are ontology, epistemology, methodology, and axiology, demonstrating their relation to the study's focus on the influence that teachers have on their own PD provision.

Table 3.2 *The Paradigm of the Study*

Paradigm Dimension	Immersion Teachers' Influence on their PD Provision
Ontology	The topic of PD needs assessment and decision-making in PD provision in relation to early language immersion pedagogy.
Epistemology	Teachers having experience of collaborative learning and supportive mentoring.
Methodology	Teachers themselves identifying their PD needs, being supported in decision-making about suitable PD solutions.
Axiology	Teachers are offered ways in which their PD needs might be met, which improves the quality of their work.

The transformative-emancipatory paradigm was chosen for the present study as it allows for the improvement of the current provision for PD in relation to immersion teacher pedagogy in Estonia. As described in Chapter One, PD training modules in immersion pedagogy are currently provided by the Estonian Youth and Education Board and only represent the compulsory professional development required from existing early years teachers before they can start working in the language immersion ECEC settings. With the cancellation of the requirement for the obligatory 160 hours of PD during each five years of pedagogical work in 2015, which is described in Chapter Two, teachers are more likely to attend occasional PD seminars or participate in in-house training sessions for the whole staff. This situation may have led to gaps in teachers' ability to implement language immersion pedagogy and to teachers becoming more aware of their own PD needs in this area.

The transformative-emancipatory paradigm addresses the teachers' current need to improve their competence in the area of teaching in the multilingual and multicultural environment as determined by the TALIS 2018 research results in Estonia (Teachers and School Principals as Life-Long Learners, 2019). The experience of taking part in the research also provides teachers with different opportunities for professional development, which is one of the strategic aims defined by the Estonian Development Strategy for the Area of Education 2021-2035.

3.4 Data Collection

This subsection provides an overview of the data collection methods that were used within the frames of this research. Here I introduce the procedures of obtaining quantitative and qualitative data, explaining the reasons for choosing the particular method as well as discussing the advantages and possible drawback of each approach to data collection.

3.4.1 Collecting Data through Teachers' Survey

An online quantitative survey (Appendix A) was sent to preschool immersion teachers at Stage 1 (Cohen et al., 2018; Pickard, 2013). The survey was based on the three primary research questions and the sub-questions listed in Table 3.1. It also considered principles of effective PD, collaborative learning, and the quadrants model of teacher professionalism and PD suggested by Sachs (2016) as described in Chapter Two. The quadrants represent the four types of teacher professionalism which form the framework strengthening different types of teacher PD. The quadrants of the framework are as follows:

i. *controlled professionalism* which is based on the organizational or managerial view of professionalism, and which stimulates functional development;
ii. *compliant collaborative professionalism* which is also organizational or managerial in its essence, and which strengthens attitudinal development;
iii. *collaborative professionalism* which is democratic or occupational in its nature and which strengthens functional development;
iv. *activist professionalism* which has democratic or occupational professionalism as its basis, and which stimulates attitudinal development.

Using closed and open questions as well as Likert scales, the study aimed to collect predominantly quantitative data regarding the following aspects:

- teachers' background information, including the length of their working experience within the language immersion ECEC settings and their proficiency in the Estonian language;
- teachers' perception of aims and features of PD;
- teachers' preferences for types and topics of PD;
- teachers' evaluation of the current provision of PD;
- the topics in the area of early immersion pedagogy on which teachers would like to receive PD.

The method of an online quantitative survey has been selected for Stage 1 because it allows for a cross-sectional analysis of:

- preschool language immersion teachers' needs in relation to early immersion pedagogy;
- the extent to which teachers' needs were met in the current PD provision;
- the types of teachers' PD needs based on the quadrants of PD and teacher professionalism.

The questionnaire consisted of closed questions and Likert scales (Cohen et al., 2018; Carifio & Perla, 2008). The survey also included some open questions which provided the participants with the possibility to comment on their answers to closed questions and Likert scales. At the end of the survey the participants had the opportunity to express their interest to participate in further stages of the research and to leave their contact information following a separate link to the additional questionnaire aimed to collect emails of the teachers willing to take part in Stages 2-4 of the research.

The online survey method was chosen due to its cost-efficiency, convenience for the participants and thus the possibility of having a good response rate (Cohen et al., 2018). The teachers taking part in the survey could complete it at a time and place of their convenience. The participants had their anonymity protected through the use of the coding system for preschools and through omitting any personal data of the participants in the final interpretation of the results (ibid.).

Despite its benefits, the method of an online survey also has drawbacks (Cohen, et al., 2018; Pickard, 2013), the biggest of them being sample-related issues, such as ensuring that submissions only come from the designated sample, having poor response rate. Taking into consideration that questionnaires are administered online, the researcher

also depends on participants' access to the Internet and the level of their skills in using technology (Pickard, 2013). Despite the perceived drawbacks, the total of forty-nine participants engaged with the online survey and the findings are presented later in Chapter 4.

3.4.2 Collecting Data through Semi-Structured Interviews

The qualitative data obtained at Stages 2 and 4 of the study was collected through semi-structured interviews referred to as Pre-PD Interview for Stage 2 (Appendix B, Appendix C, and Appendix D) and Post-PD Interview for Stage 4 (Appendix E, Appendix F, and Appendix G). These interviews were conducted with participants selected after Stage 1 of the research; where the same number of teachers, which was seven in total (N=7), was interviewed at both Stage 2 and Stage 4 of the research. The process of the participant selection and their profiles is described in detail in Subsection 3.7 Participant Profiles below.

The method of the semi-structured interview was chosen for two purposes. On the one hand, it provided the opportunity to gain participants' opinions in addition to obtaining information. On the other hand, due to the balance that the semi-structured interview provides, it allowed me to guide the discussion while ensuring the flexibility of the interaction between the interviewer and the participant (Brinkmann, 2013). In order to ensure that the interview process is reflexivity-based and reciprocity-driven (Whiting, 2008; Galletta, 2012), I tried to achieve the phases of the semi-structured interview process described by Whiting (2008, pp. 37-38):

1. *Apprehension Phase aims to build rapport*. During the interviews at this stage, I asked the teachers about their experience either of working in the language immersion classroom (interviews at Stage 2) or of participation in the PD initiative (interviews at Stage 4). I made sure not to limit the time which the participants took to answer these questions, nor to interrupt them with my comments or additional questions. Some evidence of the achieved rapport was the letter which one of the participants sent to me after the post-PD interview had been taken. In the letter she explained that she generally does not like to talk much during one-on-one conversations, but she felt that she wanted to let me know about her gains from the PD initiative. She wrote that the seminars of the PD programme "were well-structured and designed". She liked that I used "active learning methods so that all the participants were actively engaged all the time". The feedback I consider the most important were the following words from the teacher,

"Thank you for the positive attitude! I really liked the readiness to listen and support. I felt that I was understood and valued".

2. *Exploration Phase aims to elicit in-depth responses*. At this stage I asked the teachers open-ended questions aimed to obtain data and hear teachers' experience as well as know their opinion about PD. The depth of the teachers' responses ranged from detailed description of their experience to short answers depending on the personality of the participant.

3. *Co-operative Phase aims to ensure that the interview flows naturally.* For me the indicator of this stage was when teachers shared additional details about their work, interrupted me with additional questions or details and shared their opinions, as well as asked for advice. This happened especially during interviews at Stage 4 after I had been to their classrooms and the teachers could refer to particular situations which happened during the classroom observation or comment on progress or issues with certain children in the classroom.

4. *Participation Phase occurs when the ideal rapport is achieved*. I think that we achieved this phase when the teachers suggested their own solutions for the ways current PD provision could be improved, and future PD provision could be organized. Specific examples are provided in the data analysis in Chapter 4.

5. *Concluding Phase presupposes that interviews should end positively*. As the interviewer, I always ended the interviews with words of gratitude to the teachers thanking them for finding time and possibility to take part in the research on the whole and in the interview in particular.

For me as researcher every interview was a possibility for self-reflection and improvement, when I revisited my notes which I had made during the interview and looked back at the comments that the participant had made. This process of reflexivity (Galletta, 2012) helped me to paraphrase questions or suggest examples for next interview which I conducted. The interviews were conducted either in Estonian or in Russian, based on the respondents' preference. One of the teachers, whose first language is Russian, chose to do her pre- and post-PD interviews in Estonian.

3.4.3 Collecting Data through Classroom Observation

The data obtained at Stage 3 of the research as a part of the PD initiative was collected through classroom observation. I attended the teachers' classrooms and observed their interaction with children during classroom activities. The main

consideration I had at this stage of data collection was my positioning as a researcher in the observation process in ECEC settings (Moss, 2016; Speldewinde, 2022), also taking into consideration the linguistic aspect pointed out by Moss (2016), as Estonian is not my first language. Barbara Kamler (2001, p.11 cited in Speldewinde, 2022, p. 211) compared research through observation in classroom to writing, characterising it as "a kind of composing - a selecting and ignoring - a looking and not looking". The classroom observation was a part of the PD initiative and was designed to comply with characteristics of 1) effective PD, such as providing coaching and export support and offering feedback and reflection (Darling-Hammond et al.,2017) and 2) efficient PLC, including mutual trust, respect and support (Bolam et al., 2005 cited in King, 2016, p. 579; Tam, 2022). This is the reason why it was essential for me to position myself as a coach who was in the classroom, first and foremost, to provide the teacher with the feedback and necessary support. I was mindful not to disturb the everyday teaching and learning activities and so I arrived at least thirty minutes early before the teaching activity began, with the exception of two teachers who worked as teachers of Estonian as a second language and conducted 30-minute language lessons in a separate classroom. In the cases of these Estonian language teachers, the classroom teacher would take a small a group of children to the language lesson to the Estonian language classroom and then return to accompany them to their regular classroom after the Estonian lesson was over. Thus, with these two teachers I did not have an opportunity to communicate with the children before the teaching activity began. In case of the other five teachers, I would come at the time after the children had finished breakfast and had about thirty minutes of free play before the teaching activity began. I would take the opportunity to play or do puzzles with the children speaking in Estonian to them. This time allowed me to establish rapport with the children so that they would not be distracted by my presence during the activities. My interaction with the children also helped me understand their level of Estonian language proficiency: if the children understood me speaking in the Estonian language, if they could respond using single words in Estonian or preferred to use Russian. In fact, I considered this time as the starting point of my observation of the teacher's interaction with the children, as I took notice of whether the teacher themselves used this play time for communication with the learners. The use of this opportunity for interaction is described in Chapter 4 of the study.

While I observed the teacher conducting the teaching activity, I sat behind the children, not interfering with any activities or making any photographs of the children.

While observing, I filled-in the Observation Tool sheet (Appendix H, Appendix I, and Appendix J) and made notes in my diary. I used the Observation Tool from COLT Observation Scheme A & B (Spada & Frohlich, 1995) and the Class Observation Tool: All Ages (National Association for the Education of Young Children [NAYEC], 2019) as a framework and adapted it to fit the context of this particular study. After the teaching activity was completed and the children were engaged either in a different activity led by the assistant teacher or had free play, I made sure I had time to thank the teacher for the opportunity to conduct the observation and to provide them with feedback about their activity, making some suggestions in case the teacher asked for my opinion. For instance, when I was talking to Teacher 4 after the observation had finished, she shared with me her concerns regarding the children still being confused about the morning greetings and routines, although they had been attending the classroom for almost five months. We started discussing her concerns, and I asked the teacher how often she introduced new activities for morning routines, considering that the children in the classroom were only 2-3 years old. The teacher replied that they and her tandem teacher would do that every week. I advised her to narrow down the vocabulary for morning routines and to stick to a certain repertoire of activities, which would be repeated daily. Later in their Stage 4 interview the teacher shared with me that they followed my advice and were able to see the progress in the children's vocabulary development.

This subsection presented an overview on the procedures and instruments of quantitative and qualitative data collection at all the stages of this study. The process of data analysis is described in the next subsection.

3.5 Data Analysis

For the analysis of the quantitative and qualitative data collected through various approaches described in the previous subsection, I chose the method of reflexive thematic analysis (TA) as it is flexible and enables the researcher to actively engage with the data, using both deductive and inductive approaches (Braun & Clarke, 2012; Braun & Clarke; 2020; Braun & Clarke; 2022). My data analysis based on the six-phase approach to conducting TA is illustrated below in Table 3.3. The table provides a comprehensive overview of the process of data analysis, which followed the six-phase approach to TA. This structured approach promoted a systematic and rigorous examination of the collected data, including the survey results, semi-structured interviews, the recordings of Zoom

session, and my notes. The need to translate the collected data from Russian or Estonian into English was a time-consuming, but still very useful experience, as it gave me the opportunity to have a thorough engagement with the data. Each phase of TA, which ranged from familiarisation with the obtained data to the final write-up, highlighted the particular engagement strategies and tools which I employed to extract meaningful themes. Such step-by-step analysis process ensured that the findings were deeply rooted in the data and corresponded with the primary and sub-research questions that guide this study.

Table 3.3 *Six-Phase Thematic Analysis of the Data*

TA Phase	Data Used	My Engagement with the Data
1. Familiarisation with the data	Survey results, interview recordings, recordings of Zoom sessions, my notes	Translation of survey results from Estonian into English; transcription of ten interviews and their translation from Estonian into English; transcription of four interviews in Russian and their translation into English; transcription of Zoom sessions of PD initiative and their translation from Estonian into English. Making preliminary notes in relation to primary research questions and research sub-questions.
2. Coding	Translated survey results, translated texts of interviews and Zoom sessions; interview recordings, recordings of Zoom sessions, my notes	Generation of initial codes by searching for key words related to research questions, including PD, training, early years teacher, policy, current, language immersion education, collaboration, etc.
3. Searching for themes	Translated survey results, translated texts of interviews and Zoom sessions; interview recordings, recordings of Zoom sessions, my notes	Arrangement of codes into broader themes with the help of NVivo software. This coding was based on the primary research questions with the initially selected themes being “PD interests”, “PD interests for immersion”, “teacher collaboration”, and “learning from colleagues”. Additional themes for coding related to early language immersion pedagogy included “scaffolding interaction”, “children output” and “children engagement”.

4. Reviewing themes	NVivo project, translated survey results, translated texts of interviews and Zoom sessions; interview recordings, recordings of Zoom sessions, my notes	Deep interaction with the data, definition of emerging themes. Reviewing the data, including the recordings in the original languages. Several key themes, discussed in Chapter 4, emerged at this stage of data analysis. Such themes are, for instance, "teachers Estonian language confidence" and "teacher's mental wellbeing".
5. Defining themes	NVivo project, interview recordings, recordings of Zoom sessions, my notes	Finalisation of the themes, naming them, and defining their relevance to the research questions.
6. Writing up	NVivo project, translated survey results, translated texts of interviews and Zoom sessions; interview recordings, recordings of Zoom sessions, my notes	Composing a draft of data analysis, clearly articulating the significance of each theme, illustrating it with characteristic examples from the data which are supported by visuals.

The selected method of TA enabled me to conduct a deep analysis of collected data and to engage with it in a more meaningful way: through translation of the data and reviewing it both deductively and inductively I was able to find and determine a number of themes (Appendix K) that exceeded the scope of the topics for discussion that I had initially envisaged by formulating my research questions.

3.6 Ethical Considerations

Taking into consideration ethical concerns which arise when conducting research in classrooms where there are young children (Farrell, 2016), it was essential for me to address all the issues related to the ethics of this study prior to conducting the study itself. Although the research was conducted in ECEC settings, the children were not the focus of it. The study concentrated on the teachers and their PD needs, not on the children or their learning experience in language immersion classrooms. Nevertheless, in the course of planning the research I made myself familiar with the ethical considerations around conducting research in ECEC settings in Estonia. I received the approval from the Research Ethics Committee of Dublin City University (Appendix L) prior to starting to pilot the teachers' survey of Stage 1 of the research and then applied for the committee's approval regarding the update of the sample of the participants, which is explained below in subsection 3.7.1.2 Recruitment of Participants of Stage 1: Group 2. Piloting of the

questionnaire ensured that there were no risks to participants anonymity or the process of data collection.

Taking into account ethical considerations, I ensured that there was no harm done to the participants and made sure to inform them about all the aspects of the research and data collection. I sent detailed letters to preschool directors (Appendix M) together with the link to the teachers' survey at Stage 1 of the research. The participants of Stages 2-4 were informed about the details of the data collection process with the Plain Language Statement (Appendix N) and the Informed Consent Form (Appendix O).

Estonian preschools have procedures related to data protection, according to which at the beginning of the school year parents of each child sign consent forms related to their child being observed, photographed in ECEC settings and to publication of such photographs. Based on these requirements, I was asked to send the Letter to Parents (Appendix P) explaining my presence in the classroom during my observation of teaching activity to the preschool director. The director then sent the document to all the parents of the children attending that particular classroom through the electronic preschool information system eliis.ee. This was the official procedure for receiving parents' consent to my presence in the classroom. In case any parent had not granted their permission, their child would have been offered an alternative activity in a different classroom, which is the policy of preschools.

The ethical concerns related to participants of Stages 2-4 of the research were mainly connected with my positionality as a researcher and my background. Having had the experience of planning and organisation of PD events for early language immersion teachers, my main concern was not to fall into using the patterns of PD programmes I had been involved in, but to design my PD initiative based on the actual needs of the research participants and in compliance with the core instructional strategies used by language immersion teachers. Other ethical considerations were based on the participants' different experience of language immersion and their Estonian language proficiency. It was essential to make every participant feel that their opinion was valuable in the discussion, regardless of the length of their working experience in early language immersion classrooms or their ability to speak the language. The participant profiles are described further, in the next subsection.

3.7 Participant Profiles

The current subsection introduces the research participants and explains the rationale for their selection. I considered the notion of representation of the population of preschool language immersion teachers in the Noth-East of Estonia and in Tallinn in choosing the sample (Cohen et al., 2018; Check & Schutt, 2012). Among the considerations there were:

i. The language of communication and instruction used by the teacher;
ii. The preschool's status as the member of the language immersion network and implementation of at least one of the early language immersion models described in Chapter 1;
iii. The location of the preschools.

3.7.1 Recruitment of Participants

Answering these questions in a sequence provided a clear picture of not only the 'typical' preschool language immersion teacher in Estonia but also enabled me to determine the sampling strategy of the research. The aforementioned Questions i and ii were interrelated because the language(s) of instruction was/were determined by the immersion model which was implemented by a preschool before September 1, 2024. As described in Chapter One, at the time when the survey was conducted, preschools in Estonia offered three language immersion models, which were total, partial, and two-way early language immersion. Based on the relationship between the children's population and the language of instruction for the three models, it can be said that Estonian was used as the language of instruction in the case of all of them. Total early immersion was aimed at Russian-speakers who spent two years in the Estonian-medium ECEC settings from the age of five to seven. In the partial immersion programme, Russian-speaking children spent four years, from the age of three to seven, in the bilingual Estonian-Russian ECEC settings, where for at least four hours, 50% of the time, all activities, both educational and routines, were conducted through the medium of the Estonian language, the immersion language. The organisation of the two-way immersion model was similar to the partial immersion one; however, the major difference lay in the learner population consisting of the equal proportions of Estonian and Russian speakers.

The present study focused only on Estonian-medium teachers who worked in preschool language immersion groups. The specific model that a teacher worked in did

not play a significant role in the selection of the sample, as teachers were supposed to use the same best practices of early language immersion described in Chapter Two, regardless of the specific model, including to follow the "one person-one language" principle.

The location of the preschools (see Question iii above) was highly significant for the sampling process due to the reasons related to ethnic Russian-speaking population and their residency which are described in Chapter One. Based on the data collected by the Youth and Education Board in 2021, the total number of language immersion teachers in preschools in Estonia was 211, taking into consideration all of the three models and including Russian-medium teachers working in partial and two-way language immersion classrooms. For the purpose of this study, a total of 101 teachers (N=101) were selected by population sampling for Stage 1 of the research. These were Estonian-medium language immersion teachers from preschools located in the North-East of Estonia and in Tallinn where the highest percentage of the ethnic Russian population reside. The process of the calculation of the population sample is shown in Table 3.4 below. This table presents the population sample, which was used in this study, concentrating on the Estonian-medium immersion teachers who work in Tallinn and the North-East of Estonia. The sample was carefully selected to reflect a diverse representation of early language immersion models in Estonian preschools, including total, partial, and two-way immersion. By examining the distribution of Estonian-speaking early years teachers in language immersion classrooms across different immersion models and regions, this study ensures that there is a comprehensive understanding of the teaching landscape within Estonia's early language education. The detailed breakdown of the sample is provided in Table 3.4, which illustrates both regional and methodological diversity.

Table 3.4 *Population Sample of Estonian-medium Immersion Teachers in Tallinn and North-East of Estonia*

	Tallinn immersion preschools	Immersion preschools in the North-East
Estonian-medium teachers in total immersion	12	15
Estonian-medium teachers in partial immersion	28	45
Estonian-medium teachers in two-way immersion	1	0
Total of Estonian-speaking immersion teachers	41	60
Total of Estonian-medium immersion teachers	**101**	

In order to recruit participants for Stage 1 of the research, I contacted the administration of the immersion preschools via email, sending the information about the research and the consent forms in plain language in the form of the above-mentioned letter to the preschool director and the link to the survey. To ensure a better response rate, I also contacted the representative of the Language Policy Department of the Ministry of Education and Research whose responsibilities included coordination of the network of language immersion preschools and asked them to send the preschools a letter supporting the research and encouraging kindergartens to take part in the survey. If a preschool was willing to participate in the survey, the director forwarded the survey link to the language immersion teachers who worked through the medium of the Estonian language.

3.7.1.1 Recruitment of Participants of Stage 1: Group 1. On April 10, 2023, I sent emails to sixty-seven kindergartens with the expectation to receive as many answers as possible from at least one hundred Estonian-medium teachers working in language immersion classrooms in the North-East of Estonia and in Tallinn. By May, after the letter from the representative of the Ministry of Education and Research (and my reminder), I received a total of thirty-four replies, which made the response rate around 34%. This was above the 20%-30% response rate which is considered typical or acceptable in the case of online surveys (Minnaar & Heystek, 2016). These respondents worked in preschools that had been members of the language immersion preschool network for different lengths of time, including those that were at the launch of the preschool language immersion programme in Estonia in 2003.

3.7.1.2 Recruitment of Participants of Stage 1: Group 2. Wishing to increase the response rate to the teachers' survey, in summer 2023 I contacted the teacher trainers who conducted Module 1 of the initial PD programme for preschool language immersion teachers which is described in Chapter 1. My plan was to ask the participants of their course to answer the questions of my survey as, judging by the fact that they had signed up for the PD in early language immersion methodology, they could have been considered to fit the criteria of the target group of the survey. Having received the Research Ethics Committee approval for updating the participants' sample, I asked the teacher trainers for their agreement to allow me to address the course participants. After the teacher trainers agreed to assist me in addressing the course participants, I arrived at the site of the PD event which took place on August 14, 2023. After introducing the research and the consent forms in plain language to the participants, I asked them to answer the survey

questions. As the participants started reading the survey question about their working experience in early years immersion settings, it turned out that most of them had little or none of it. These teachers had been working in the Estonian language with non-Estonian speaking children but in Estonian-medium mainstream preschools not in language immersion classrooms. It was significant for the current study in the context of preparation for the transition to the Estonian-medium education and the use of the appropriate pedagogical approach in all ECEC settings.

The main differences between the participants from Groups 1 and 2 are presented in Table 3.5 below. The table provides an overview of the two groups of the participants based on their number, their first language, the type of the preschool they work in, and the language background of children in their early years classrooms.

Table 3.5 *Differences between Participants from Groups 1 and 2*

Participants	**Number (n=)**	**Teacher's L1**	**Type of preschool**	**Children in preschool classrooms**
Group 1	34	65% are with Russian as L1; 35% are with Estonian as L1	Language immersion preschool (membership in language immersion network)	Almost exclusively children with Russian as L1
Group 2	15	20% are with Russian as L1; 80% are with Estonian as L1	Preschool with Estonian as the medium of instruction	The majority of children with Estonian as L1, some non-Estonian speaking children (mostly with Russian and Ukrainian as L1)

3.7.1.3 Recruitment of Participants of Stages of 2-4. Initially, I had planned that the participants of Stages 2-4, who would have been the same group of people, would have been selected by purposive sampling from the participants of Stage 1. These teachers would have been selected as representatives of five preschools in total based on the length of their experience in the language immersion programme from one to twenty years. In 2003, the Estonian language immersion centre launched the total early language immersion programme in nine preschools (Immersion Centre, 2003), all of them located in four different towns in the North-East and in Tallinn. The aim was to invite two teachers, preferably with different lengths of immersion experience from one to 20 years, from one kindergarten in each location to take part in Stages 2-4 of the research. However, selecting participants through such purposive sampling turned out to be too ambitious, as in reality people had changed jobs and places of residence during these 20 years. Thus, selecting people that would comply with the above-listed criteria of the purposive subjects was not feasible. Instead, I decided to offer the participants from Stage 1 the possibility of continuing to take part in the further research and to contribute to Stages 2-4 if they wished to. The participants could do so by ticking the corresponding box and providing me with their contact information at the end of the teachers' survey. This experience was useful for development of my reflectivity and reflexivity as a researcher: it made me more aware about my attitudes towards the idea of research commitment and data analysis; I realised the importance of explicit documentation and communication of my actions; and I also became more critical towards my methods and assumptions.

After Group 1 answered the questions of the teachers' survey at Stage 1, four of the survey respondents indicated that they were interested in continuing to semi-structured interviews at Stage 2, with three of them actually continuing to Stages 2, 3, and 4 of the research. None of the participants of Group 2 wished to contribute to participation in the research further after they answered the teachers' survey questions at Stage 1. Thus, by the late-August 2023, I was in the situation where I had only three participants for Stages 2-4 of the research, which I did not consider a sufficient number, wishing to increase the participation rate (Cohen et al., 2018). I contacted directors of kindergartens with whom I had cooperated previously when working in a Language Immersion Centre. I explained to each director that I had designed a PD initiative consisting of a PD programme and classroom observation. Then I asked the director if they thought they had a teacher or teachers who would be interested in taking part in this initiative. This is the way in which I was able to engage four more teachers to take part in the research. In total, seven teachers

participated in Stages 2-4 of the study. Their brief introduction is provided in the next subsection below.

3.7.2 Participants' Background

Profiles of the teachers who took part in Stages 2-4 of this study are presented in Table 3.6 below. As can be seen from the table, their teaching experience in the language immersion ECEC settings ranges from two and a half months to twenty-one years; two teachers have the experience of working both in early language immersion classrooms and fulfilling the responsibilities of the teacher of Estonian as a second language. The latter means that the teacher works in a separate room providing Estonian-language lessons to children of different ages, working with one small group of children at a time. The participants of this study also have different linguistic background: one of the teachers speaks Estonian as her first language, two of the participants are bilingual, and the four other teachers speak Estonian as their second language. The majority of the research participants work in total early immersion classrooms, with only two of them (Teachers 2 and 6) being teachers in the two-way language immersion one. They have been working in tandem in the same classroom for seven years with Teacher 2 being the Estonian-medium teacher and Teacher 6 using the Russian language. However, in the context of the transition reform, the teachers and parents have agreed to put more emphasis on the development of the children's Estonian language skills (Tapa Vikerkaare Lasteaed, 2023) in order to prepare them for learning through the medium of Estonian only at school. This agreement resulted in Teacher 6 switching to the use of the Estonian language during teaching activities and using Russian only in interaction with the children. Teacher 4 works in the bilingual classroom where the leading teacher uses Russian, and the research participant is the Estonian-speaking tandem teacher.

Table 3.6 *Participants of Stages 2-4*

Teacher N	Teacher's Profile			
	L1	*Qualification*	*Working experience*	*Attendance of PD events*
Teacher 1	Estonian	Early years teacher.	21 years in language immersion and teacher of Estonian as L2.	Regular attendance of PD events on early years education and immersion topics. Teacher trainer, author of study materials.
Teacher 2	Estonian	Early years teacher	8 years, including seven years as Estonian-medium teacher in two-way language immersion	Regular attendance of PD events on early years education and immersion topics. Extensive experience of PD on two-way immersion.
Teacher 3	Russian	No formal teacher training	Three years in ECEC settings, in the project "Estonian-speaking teacher in a Russian-medium classroom"	PD in the frames of the project
Teacher 4	Russian	Early years teacher	Five years, now works with 2-3-year-old children	Some PD events on language immersion pedagogy
Teacher 5	Russian	Teacher of Estonian as L2	She has been working as a teacher of Estonian as a second language from 1996, first at school, then at kindergarten. She has worked both as a teacher in a language immersion classroom and as an Estonian language teacher in kindergarten. Now she works as an Estonian language teacher	Regular attendance of PD events on language immersion pedagogy, high interest towards self-education.

			with SEN children.	
Teacher 6	Russian	Early years teacher	She has been working as a Russian-medium teacher in the two-way language immersion classroom from 2017. From the school year 2022/2023 she and her tandem teacher (Teacher 2) changed to Estonian as the medium of instruction in the classroom, so she became an Estonian-medium teacher.	Regular attendance of PD events. Extensive experience of PD on two-way immersion.
	Estonian	In pre-service training to be an early years teacher	1 year in Estonian-medium preschool, 2.5 months in early language immersion classroom	No PD on language immersion pedagogy; one PD event on the topic of children's development.

Based on the data in the table, it can be seen that all the participants of the research Stages 2-4 are females. The gender profile of the participants is a clear representation of the genders in early years teacher population, with the number of male teachers in ECEC settings in Estonia being just one per cent (Statistics Estonia, 2022). Now after I have described the research participants, I present the coding system which I used in the frames of the research.

3.8 Participant Coding System

The participant coding system was used at Stages 2-4 of the study with the aim to preserve anonymity of the collected data and to adhere to ethical considerations. As presented in the previous subsection, each teacher was identified by a number in the

collection of the data from the semi-structured interviews of Stages 2 and 4 of the research, during the PD initiative, including classroom observations. As it is known that all the teachers are females and go by the pronoun “she, her”, these pronouns were used in the data analysis in Chapter 4.

The PD initiative was used as the core of the coding system: the interviews which were conducted at Stage 2 of the research prior to the PD initiative were coded as Pre-PD Interviews, while the interviews which took place after the PD initiative was completed were coded as Post-PD Interviews. The code for the interview also contained the teacher’s number. Thus, the interview with Teacher 1 at Stage 2 of the study was coded as Pre-PD Interview_Teacher 1. Classroom observations which were a part of the PD initiative at Stage 3 of the research were coded with the name of the research task “Classroom observation” and the number of the participant, for instance, Classroom observation_Teacher 6. As the research participants have been presented, in the next subsection I focus on description of the exact timeline of the research.

3.9 Research Timeline

Having presented the preliminary plans and actual strategies employed for targeting the research participants in the previous subsection, I present the exact timeline of the research. Having received the approval of the Research Ethics Committee, I began the research with piloting of the teachers’ survey for Stage 1. The Estonian-language version of the questionnaire was sent to students of the 2022 university course “Basics of Language Immersion”. It should be noted that at the time of the piloting, the students were not studying in any of my courses and their participation in the piloting was completely voluntary. Three students volunteered to participate in the pilot, two of them answered the questionnaire. The students’ feedback assured me that the questionnaire was comprehensible, clear, user-friendly, and that it fitted in the suggested timeframe. The results of piloting provided me with confidence to proceed with the rest of the research stages which are illustrated below in Figure 3.2. The figure illustrates the timeline of the research which took one whole year from the piloting to the post-PD semi-structured interviews. It should be noted that in planning Stages 2 and 3 of the research, especially the PD-intervention at Stage 3, I had to take into consideration that the time of the summer vacation and September was not suitable. The latter is significant because the academic year in preschools starts on September 1, which means that the whole first month of

autumn, teachers are busy with ensuring the establishment of educational routines, and they try to avoid participating in any PD events during this time.

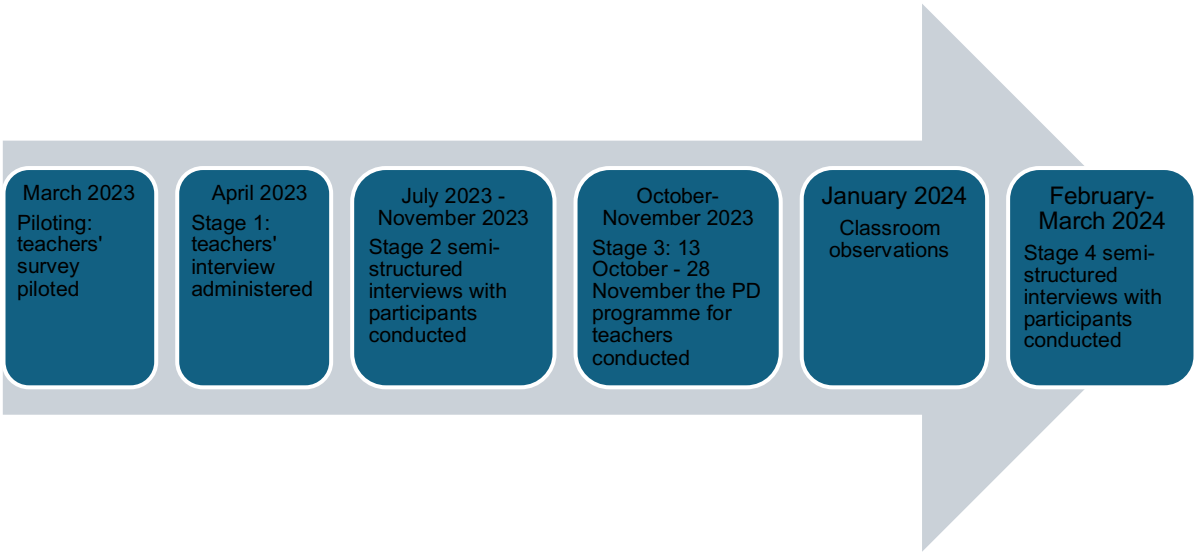

Figure 3.2 *The Research Timeline*

As the timeline shows, the division into the stages is blurred, especially between Stage 2 and Stage 3 regarding the timing of the semi-structured interview. Initially, when designing the research, I had a plan to complete Stage 2 before moving to the PD initiative. However, due to the above-described situation in which I had to address the kindergarten management directly to search for participants, it had taken me more time than anticipated and I extended the deadline. By the beginning of the PD initiative on October 13, I had conducted only one interview, which was in July, as all the other participants had asked me to postpone theirs due to the issues of timing and convenience.

Looking back at this experience, the conclusion I can make is that the data obtained during those interviews did not interfere with the content of the sessions of the PD initiatives. On the contrary, it provided me with a better understanding of the processes and feelings that the participants could be going through, which allowed me to be more flexible and attentive to their needs regarding the PD experience. In the next subsection I describe method of the semi-structured interviews which I used for Stages 2 and 4 of my research.

3.10 Semi-Structured Interviews

Semi-structured interviews as a qualitative research method were used for the qualitative strand of the research at the two stages: at Stage 2 and Stage 4. This is a

commonly used method of collecting qualitative data (Kallio et al.; Brown & Danaher, 2019) which can provide deeper insights into participants' perspectives (Striepe, 2021).

Despite their wide use, semi-structured interviews may present ethical and methodological challenges for researchers (Brown & Danaher, 2019), which is why thorough preparation and attention for conducting the interviews are essential. For instance, Kallio and her colleagues (2016) suggest enhancing research objectivity and trustworthiness through development of a semi-structured interview guide consisting of five stages. On the other hand, Brown and Danaher (2019) emphasise the rapport during the interview and the relationship dynamic. They suggest implementation of CHE principles which are: Connectivity, Humanness, and Empathy. Considering the context of the present study and its focus on collaboration, the application of CHE principles was essential as the interview participants showed their personal and professional experiences.

The present study implemented semi-structured interviews prior to and after conducting the PD initiative, which is at Stages 2 and 4 of the research. At Stage 2, the interview aimed to collect data related to the participants' experience of working in the early language immersion classroom. The teachers were also asked about their prior experience of receiving PD in different forms and on various topics, including the ones related to implementation of early language immersion pedagogy. The interview also included questions regarding the teachers' experience of learning from their colleagues.

The semi-structured post-PD interview at Stage 4 of the research focused on the teachers' experience of taking part in the PD initiative and their attitude to collaborative learning within its frames. The interview also included questions about the impact of the PD initiative on the participants' teaching as well as provided them with a possibility to suggest ideas for ways to meet their PD needs in the future.

Although there are some challenges related to ethics and methodology of the interviews, and to ensuring that the message is conveyed clearly (Brown & Danaher, 2019), I found that this method of collecting data allowed me to establish the rapport with the teachers taking part in the research and to reach the level of cooperation and exchange of ideas which was necessary for the discussion to go beyond the topics I had envisaged when planning the interviews. One of the indicators of the established rapport is that during the interviews the teachers shared their experiences of taking part in national events, of working with special needs children, as well as discussing the transition to the Estonian-medium education and their organisational culture.

3.11 The PD Initiative

The PD initiative, which was Stage 3 of the research, aimed to establish a model of professional collaborative learning, inspired by the best features of a learning community and the ideas of the quadrants of attitudinal professional development (Sachs, 2016) presented in Chapter Two. The suggested PD initiative that I designed looked forward to meeting the needs of the participants identified at Stages 1 and 2 and corresponded to features of effective professional development (Desimone, 2009; McElearney et al., 2019; Opfer and Pedder, 2011; Bolam et al. cited in King, 2016) which are provided as a support to the PD and Teacher Professionalism Quadrants framework in Chapter Two:

- *focus on content (content knowledge and methodology of teaching it):* the PD initiative focused on the teachers' PD needs in relation to early language immersion pedagogy which were determined through the online quantitative survey (Stage I) and semi-structured interviews (Stage 2);
- *active learning and involvement:* the PD initiative was designed as a series of practical experience exchange sessions based on teachers' PD needs, led in by the researcher;
- *shared values and vision*: the common ground for teachers' PD needs was identified at Stage 1 of the research and strengthened through semi-structured interviews at Stage 2. Thus, the PD initiative was based on teachers' shared values and views of early language immersion pedagogy;
- *collective responsibility for students' learning:* as one of the biggest aims of teachers' PD is to improve students' performance, the ways of improving their results would be a focus of experience exchange within the PD programme;
- *opportunities for reflection* and *collaborative participation and learning:* the experience of taking PD collaboratively, based on the main principles of a learning community, which was modelled through the programme was based on providing the participants with opportunities for collaborative learning and reflection. The researcher also made her own reflections in the observation diary. The diary was filled in after each session of the PD programme as well as during and after teacher observations. The observation diary was another source of qualitative data;

- *respectful, supportive and secure environment (within the school):* it was planned that PD initiative sessions would be held in the ECEC settings in language immersion kindergartens.

The PD initiative consisted of two parts: the PD programme and classroom observations. The topics and the content of the PD programme were planned around the core instructional strategies of language immersion teachers (Snow, 1987) which are described in subsection 1.6. In addition to being based on these teaching techniques, the PD programme also considered the research on early language immersion. The first PD session informed the participants about the roles early language immersion programmes have in different contexts of national education systems (Hickey, 2022; Mård-Miettinen, 2022; Lindholm-Leary, 2022). The participants also discussed the significance of early language immersion programmes and the shared understanding of the core instructional strategies in the context of increasing diversity among learners in early language immersion classrooms.

The PD programme included one six-hour PD event in the face-to-face format and five Zoom sessions (Appendix Q). During the PD sessions I focused on modelling the early language immersion practice which the teachers were expected to implement in their classroom, especially on active learning and involvement as well as on content knowledge and methodology of teaching it. The design of a typical PD session was as follows: I started the session with a playful activity so that the teachers would experience taking part in a game-like activity in an Estonian language, which was the first language only for two participants. These activities were, for instance, describing a picture to other participants. For this exercise I sent a simple picture from study materials recommended for preschools to half of the teachers via email the moment we started the session. Then I asked those teachers who did not receive the picture to prepare a pen and some paper and to draw a picture listening to the other teachers' description of it. The aim of the activity was to draw the teachers' attention to the way language input is provided and received. Another game-like activity included explaining abstract notions, including friendship, bravery, tolerance, in such a way that a non-Estonian child would understand. This exercise aimed to demonstrate that such notions do not have to be translated but can be explained using simple phrases and sentences. Another example is the exercise about explaining a phrase containing an adjective and a noun, for example, "a small dog". I had prepared 7 phrases, then I asked each participant to pick a number from 1 to 7. After that I sent the participant a private Zoom message with the phrase they had to explain to the

rest of the group using language, body language or any objects. This activity aimed to demonstrate the use of scaffolding. After each of the above-described activities was completed, I would initiate a round of feedback about the participants' experience and about the meaning of the activity. The session then continued with a theoretical overview of the material on the topic of the session, which was presented through Power Point presentations (Appendix R) supported with videos of early language immersion classrooms in the USA, Finland, and Estonia. Then I would give participants questions for discussion which they had in breakout rooms (Appendix S and Appendix T). After a short break I would usually offer a practical activity, such as a discussion of an activity or a game, watching a video, which was followed by a whole group discussion and then experience exchange. The latter had a special significance, as the teachers would ask questions not only to me but to each other and would extend the discussion of specific approaches and techniques, co-creating new knowledge.

After the PD programme was completed, I proceeded to the second part of the PD initiative which were the classroom observations. The procedure of the data collection through observation has been described earlier in subsection 3.4.3.

3.12 Limitations of the Study

The current study was a small-scale study and as such is subject to certain limitations. The most significant limitations are related to the sample. The first limitation is the teachers' qualification in early years pedagogy and language immersion. Due to the shortage of teachers who speak Estonian at the required level of proficiency, preschools have to offer employment to people who may be native speakers of the language or have C1 proficiency, but do not have a qualification in early years education. An example of such teachers is one of the participants of this study, Teacher 3. It means that they may not have received the necessary theoretical knowledge and practical skills in the area of child development and early years pedagogy. In the first year of their work, such teachers are supervised by the preschool management and a more experienced colleague who usually becomes their mentor. These novice teachers are usually advised to attend PD events, especially those that focus on practical solutions and activities in the classroom. The related issue is the Estonian language proficiency of the teachers who already work at preschools. For example, in the city of Narva 55% of teachers do not have the necessary Estonian-language skills. It means that their PD needs may be significantly more diverse

and go beyond early language immersion pedagogy. The second limitation refers to finding teachers with different levels of experience of implementing early language immersion pedagogy for Stages 2-4. The teachers who began working in the programme when it was launched at the preschool level in 2003 may have already retired, or changed the area of employment, etc. It was also a challenge to find novice teachers, because the number of new preschools joining the language immersion programme had declined.

Another limitation related to the sample is the location of the preschools the research participants work at. They are located in Tallinn and in the North-East of Estonia, which means that the research outcomes cannot be applied to all the teachers working in preschools which have been members of the language immersion preschools network, including the ones in the south of Estonia. The limitation in the application of the research results is also the fact that all of the teachers who took part in all stages of the research work in preschools that used to be Russian-medium. The participants who are employed in Estonian-medium kindergartens only took part in Stage 1 of the research.

A further limitation related to the sample is the diversity in the age and needs of children the participants work with: one of them works with children who are 2-3 years old (Teacher 4); another teacher who is the teacher of Estonian as a second language works with all children in the preschool aged from three to seven (Teacher 1); and Teacher 5 works as the teacher of Estonian as a second language in mixed-age groups of children with special education needs. Such a diversity limits application of the research results in the context of the learners' population.

There are also limitations in relation to the sources that the researcher can use. Most of the statistics regarding the Language Immersion Programme have been kept in the form of Annual Reports, which cannot be considered research literature. Secondly, the detailed statistical data on the language immersion programme are not publicly accessible, they have to be requested from the official of the Education and Youth Board or the Ministry of the Education and Research. Thirdly, the existing research on the early language immersion pedagogy in Estonia is limited, which is described in Chapter 1.

I reduced the limitations of the study by relying on my reflexivity as a researcher. Having a clear theoretical framework for my research which I developed on the basis of the literature review conducted in Chapter 2 ensured that I collected and analysed the data objectively. Despite the perceived limitation, this is a robust study because forty-nine people took part in the online survey and seven teachers participated in the PD initiative

that complied with the recommended characteristics of an effective PD event and the main characteristics of a professional learning community.

3.13 Conclusion

This chapter presented research design of the study, explained its stages and timeline as well as introduced the research participants. In the chapter I also described the ethical considerations related to the research, clarified the procedures of the data collection and analysis as well as defined the benefits and possible limitations of the study.

This research is based on the explanatory sequential design, where I used the initial quantitative strand, which was the online teachers' survey, to receive a broad overview of the situation regarding the PD provision for early language immersion teachers in the North-East of Estonia and in Tallinn. The subsequent qualitative strands of the study, represented by semi-structured interviews and the PD initiative, aimed to collect detailed data regarding specific experiences of the teachers regarding their PD, including learning from and with colleagues, and regarding their expectations for their future professional development.

In this chapter I have provided a detailed description of the participants, their recruitment and background. I also discussed the challenges that I faced with invitation of participants and collecting the data from them. The collected data were analysed using the six-phase thematic analysis. I selected this approach to data analysis due to its flexibility, and it granted me the possibility to interact with the data and discover emerging themes in the course of completing different phases of the analysis.

In this chapter I have provided a thorough overview of the different stages of the research as well as my tasks and actions as the researcher during these stages, including my interaction with the participants during the semi-structured interviews and sessions of the PD initiative. For each stage of the research, I discussed ethical considerations and provided references to supporting materials that can be found in appendices.

Chapter Four

Findings and Analysis

4.1 Introduction

The present study builds and expands upon the limited research literature in the fields of early language immersion and early years teachers' professional development (PD) in Estonia. In this chapter, I report on the research findings arising from the focus of the research: What are the professional development needs of preschool immersion teachers in Estonia and how might they be addressed? The study aims to contribute to the literature and to bridge the identified gap in the existing knowledge by investigating the following three research questions:

1. What are teachers' specific PD needs in relation to early years immersion pedagogy based on current policy and practice?
2. What are the perspectives of early years immersion teachers in north-east Estonia and Tallinn in relation to the provision of professional development?
3. How could the PD needs of early immersion teachers be met or addressed through a collaborative approach?

To answer these questions, I created and delivered a PD programme to the teachers. I analysed the quantitative data collected during the teachers' survey as well as qualitative data from classroom observations and semi-structured interviews conducted with the participants prior to and after the PD programme. Arising from the data analysis, I generated the following themes, presented in Figure 4.1. The figure maps the overview of the themes which were generated in the course of the Thematic data analysis and then grouped according to the research questions of the study. As the figure illustrates, the themes related to the current implementation of early language immersion pedagogy are discussed under the subsection guided by Research Question 1. The themes related to teacher PD are analysed under the umbrella of Research Question 2, while the aspects of the collaborative approach to teachers' PD are investigated within the frames set by Research Question 3.

RQ1: What are teachers' specific PD needs in relation to early years immersion pedagogy based on current policy and practice?

- Ensuring child engagement in routines and educational activities
- Implementation of child-led learning
- Scaffolding content learning and immersion language acquisition
- Teacher's immersion language proficiency

RQ2: What are the perspectives of early years immersion teachers in north-east Estonia and Tallinn in relation to the provision of professional development?

- Aims of the ECEC Teacher's Professional Development
- The teachers' access to PD opportunities and attendance at PD events
- The teachers' overall satisfaction with the current PD provision
- Benefits of PD
- Available and Preferred Types of PD
- Teachers' PD Interests
- PD in the Area of Language Immersion Pedagogy.

RQ3: How could the PD needs of early immersion teachers be met or addressed through a collaborative approach?

- Learning from colleagues
- Forms of collaboration as a form of professional development
- Benefits of learning form colleagues within the PD initiative
- Experience of participation in the PD initiative

Figure 4.1 *Research questions and corresponding themes*

The research questions and related themes are discussed further in the next subsections. Prior to that, I provide an overview of the chapter layout. First, the chapter presents a brief reminder of the changes that were introduced into the sphere of Estonian preschool education from September 1, 2024, due to the transition to Estonian-medium education. In relation to these changes, the chapter continues with an overview of the current practice in language immersion classrooms in north-east Estonia and in Tallinn based on the findings of this study. This discussion shapes the further presentation of the data related to Research Question 1, focusing of the teachers' specific PD and learning needs in relation to early years immersion pedagogy. The chapter continues with the investigation of the findings related to the participating teachers' perspectives in relation to the PD provision which is the focus of Research Question 2. Finally, the findings related to the teachers' experience of a professional learning community (LC) are

presented focusing on its role in a collaborative approach to PD in relation to early immersion pedagogy, which is the topic of Research Question 3.

4.2 The Teachers' Specific PD Needs in Relation to Early Years Immersion Pedagogy Based on Current Policy and Practice

The current Estonian policy regarding ECEC is discussed in detail in Chapter One. Summarising the most essential aspects of the legislation regulating the provision of preschool education in Estonia, especially in relation to the transition to the Estonian-medium teaching, it should be noted that:

- in compliance with the Qualification Requirements to Teachers of Preschool Child Care Institutions (Koolieelse lasteasutuse pedagoogide kvalifikatsiooninõuded, 2023), an early years' teacher is to have higher education (in any area, i.e. not necessarily in the field of early years pedagogy), pedagogical and management competences as well as the Estonian language proficiency as required by the Language Act (2023);
- as of September 1, 2024, all ECEC classrooms for children of 1.5-7 years of age must operate in Estonian as the language of instruction (Ministry of Education and Reform, 2025);
- as of September 1, 2024, early years teachers are to be either native speakers of the Estonian language or to have the language proficiency at the C1 level of the Common European Framework for Reference of Languages. As mentioned previously in Chapter 1, in the Estonian Language Act (2023) the definition of the compulsory levels of the Estonian language proficiency is guided by the levels defined in the Framework document. Assistant teachers, who have less teaching responsibilities and are not required to have higher education, are to have the Estonian language proficiency at B2 level; this category of pedagogical staff has been granted an extension, and the requirement regarding their language proficiency comes into force as of September 1, 2026.

These policy documents, which are the Language Act, the Qualification Requirements, and the Ministry of Education and Research's decree on the transition reform, regulate the sphere of preschool education in Estonia. They have had the following impact on the organisation and provision of preschool care and education

services: 1) some teachers enter the system of early years education without having acquired the knowledge in the area of child's development or early years pedagogy; these teachers take PD on specific topics as stages in children's development, planning and organization of teaching activity, which could be compared with first aid. These PD events do not provide the solid basis that PD is supposed to build upon; 2) the C1 proficiency examination is quite academic and universal, measuring a person's language acquisition in terms of the five language subskills, it does not include any professional vocabulary or competences. Thus, achieving the C1 level proficiency in the Estonian language does not mean that the teacher is able to conduct pedagogical activity in the language; 3) the requirements to the Estonian language proficiency of teachers and assistant teachers have created the situation where some preschools converted the "two plus one" classrooms (two teachers and one assistant teacher) into "one plus two" classrooms (one teacher and two assistant teachers). This resulted in teachers who used to work in the Russian language and have the B1 Estonian language proficiency having had to become assistant teachers. Such situations have led to tensions between teachers working in the same classroom and in preschools in general. This has been highlighted by preschool directors and headteachers during various PD events which I both organized and took part in. The impact of the transition on teachers' cooperation in ECEC settings is a topic that needs further research.

These developments have impacted current policy and early years practice, therefore addressing the first research question requires an analysis of the participating teachers' current classroom practices regarding aspects of both early years education and language immersion pedagogy. The present practice was studied using the data received from the teachers' interviews at Stage 2 and the classroom observation at Stage 4 of the research. The data are organised around the key aspects of classroom management and teaching and described under the following four themes: 1) Children's involvement in activities and classroom management; 2) Implementation of child-led learning; 3) Scaffolding content learning and immersion language acquisition; and 4) Teacher's immersion language proficiency.

4.2.1 Children's Involvement in Activities and Classroom Management

The data regarding children's involvement in activities and classroom management in the classroom were collected from the teachers' comments on children's involvement as well as the corresponding observations made during the classroom visits.

The main findings related to children's involvement in activities and classroom management, encouraging children's involvement, that emerged from the data collection are that 1) the teachers evaluate the children's involvement in activities based on learners' certain dispositions, i.e. children's concentration, attitude to learning, during educational activities and teacher-led educational games, 2) the teachers believe it to be an important aspect of their role to encourage children to display these expected dispositions during educational activities, and 3) classroom management is seen as an important condition not only for children's learning in general, but for language acquisition in particular.

4.2.1.1 Children's Involvement in Activities. As was previously described in Chapter 1, all early years teachers in Estonia are expected to plan educational activities (Preschool Child Care Institutions Act of the Republic of Estonia, 2012; Estonian National Curriculum for Pre-school Child Care Institutions, 2008 revised in 2024). Teachers prepare their educational activities based on the preschool institution's curriculum which consists of the seven main areas of early development, also described in Chapter One. Teachers in language immersion classrooms are required to plan the language outcomes in addition to content-specific knowledge. With the launch of the language immersion programme in 2003, a set of prescriptive monthly plans was developed by the then existing Language Immersion Centre and shared with language immersion teachers to support and guide them through the process of activity planning and preparation. This set of plans was revised in 2008 and 2015 for the launches of the partial and two-way language immersion models. These plans are still available and often used by language immersion teachers for Estonian-medium instruction in ECEC settings.

Preparation of educational activities requires teachers' time and effort, especially if the teacher's first language is not Estonian. As Teacher 4 commented in her pre-PD interview, *"Well, preparation requires more time because every educational activity has to be developed in my head, on a piece of paper, word for word, learned by heart"* (Pre-PD Interview_Teacher 4[2]). With such an approach, educational activities are pre-planned and pre-constructed for children based on the curriculum topics, which leaves little space for implementation of activities that are initiated by the children's interest (Chesworth, 2016; Chesworth, 2019).

[2] The teachers' interviews were conducted at Stage 2 (pre-PD interviews) and Stage 4 (post-PD interviews) of the research. The coding system is explained in detail in Chapter 3.

The teachers are concerned with children's involvement in activities, such as paying attention and being eager to answer. Such displays of children's participation in the learning process are seen as a clear sign of engagement and knowledge acquisition (Pre-PD Interview_Teacher's 3, 5, 2, 4), with the teachers establishing the connection between the children's engagement and the quality of teaching, including language learning. For instance, Teacher 5 commented, *"Children…must be interested all the time. If there is no interest, then the language does not develop either"*. Teacher 2 mentioned that she likes learning from colleagues how to make educational activities interesting, because she really likes *"capturing children's attention"*. However, one of the participants found it doubtful that the children in the classroom can all be motivated to pay attention, commenting *"it is impossible to have 19 children equally interested"* (Pre-PD Interview_Teacher 3). Another finding related to the issue of interest is that the teachers considered it to be an important aspect of their role to capture and retain children's interest in educational activities, including the use of different objects, like a "magic pouch or box" as well as the implementation of ICT. These objects are often used as mediation instruments, helping the children to establish links between the familiar and new language and content. For example, Teachers 2 and 3 hid the item associated with the topic of the day in the "magic pouch" and the "magic box" respectively. First the children made their guesses guided by the teachers' key words describing the item, then they had to recite the poem in order to open the pouch or the box, and then the teacher opened the pouch or the box revealing its contents to the children, thus keeping the teaching process diverse and dynamic (Classroom observation_Teacher 2, 3). Teachers 4, 7 and 5 preferred to use ICT means. Teacher 4 described her use of programmable toys such as Bee-Bots and Ozobots to practice vocabulary in topics of colours, animals and their babies (Pre-PD Interview_Teacher 4). During the classroom observation Teacher 4 was also seen using the Smart board to show children a Power Point presentation on the topic of winter weather. Teacher 7 used a Bee-Bot to practice vocabulary on the topic of outdoor activities in winter: 4-6-year-old children programmed the Bee-Bot to arrive at the card with the winter outdoor activities, such as skiing or skating, which have been named and repeated during the educational activity. Teacher 5 also used the Smart Board actively to show the children a video as well as to practice vocabulary with them, when they worked in three groups drawing the parts of fish she named (Classroom observation_Teacher 5). Although the teachers were encouraging children's participation in educational activities and teacher-led educational games, the actual interests of children

were not taken into consideration for planning or activity development, as the content and mode of the games and the activities had been pre-planned and -organised (Chesworth, 2016; Chesworth, 2019; Waddington & Esteban-Guitart, 2024).

4.2.1.2 Classroom Management and Organisation. The findings obtained during classroom observations revealed that the teachers prioritise classroom management. Some teachers regulate the order in which the children answer questions by using name tags that are pulled out from a box or specific gestures, like pointing at a child and calling out their name (Classroom observation_Teacher 2, 4, 5, and 6). There is one participant, Teacher 3, who is very concerned about classroom being silent. During the pre-PD interview she mentioned the word "discipline" several times, commenting on its importance not only for learning in general, but also for the target language acquisition, in the teacher's opinion. If there is no discipline, the teacher *"does not have a chance to be heard"* (Pre-PD Interview_Teacher 3). Behaviour management is a complicated phenomenon which is related to child-centredness of (Şahin-Sak et al., 2018). In the case of this specific teacher, her rather controlling approach in terms of classroom management can be explained by her lack of training in early years pedagogy.

The analysis of the findings suggests that all the teachers put emphasis on encouraging children's engagement in educational activities and maintaining it with the help of different objects as well as with words of praise and encouragement. Based on classroom observations, the teachers seem to view the children's participation as the main factor for successful learning of the immersion language, paying attention to classroom management and organisation of the children's involvement by using name tags or cards (Kuhl, 2010; Vandergrift & Goh, 2012 cited in Fleta Guillén and Schwartz 2018 (Fleta Guillén & Schwartz, 2018). However, the content and organisation of the educational activities do not take into consideration the interest of children, being planned and organised by the teachers. The pedagogical approach, which is the way the activities are conducted, is discussed under the next theme.

4.2.2 Implementation of Child-Led Learning

The next theme is child-led learning which is closely connected to the previous theme and was reviewed in subsection 2.5.2, as an essential aspect of early years immersion pedagogy. This analysis which was based on the findings from the classroom observations and teachers' interviews focused on the ways in which the teachers used

pedagogical play to support children's acquisition of the immersion language (Kangas et al., 2023). They also implemented guided play to support preliteracy skills development of the children (Strauss & Bipath, 2020). The findings of the observations are presented in Figure 4.2. This figure illustrates the frequency with which early years teachers implemented various elements of pedagogical play. It highlights six different play-based teaching methods which range from the use of poems and games as well as enhancing children's interaction with the learning environment to the use of ICT. As demonstrated in the figure, the main aspects of child-led pedagogy which are used by all the teachers are poems with movements and interaction with the learning environment. The activities related to the former include either greeting poems at the beginning of the morning assembly or the poems on the topic of the day. Based on classroom observations, the exercises which included children's interaction with the learning environment include either through putting cards on the wall, writing on the board as well as using technology such as a Smart Board or programmable toys, such as Bee-Bots. Most of the teachers also use toys or real-life objects, in particular, as the way to introduce or consolidate the vocabulary on the topic of the educational activity. The findings also reveal that the element of the child-led pedagogy that the teachers use the least is songs with movement, which can be explained by the fact that all preschools have a music teacher whose task is to offer children active learning through musical activities.

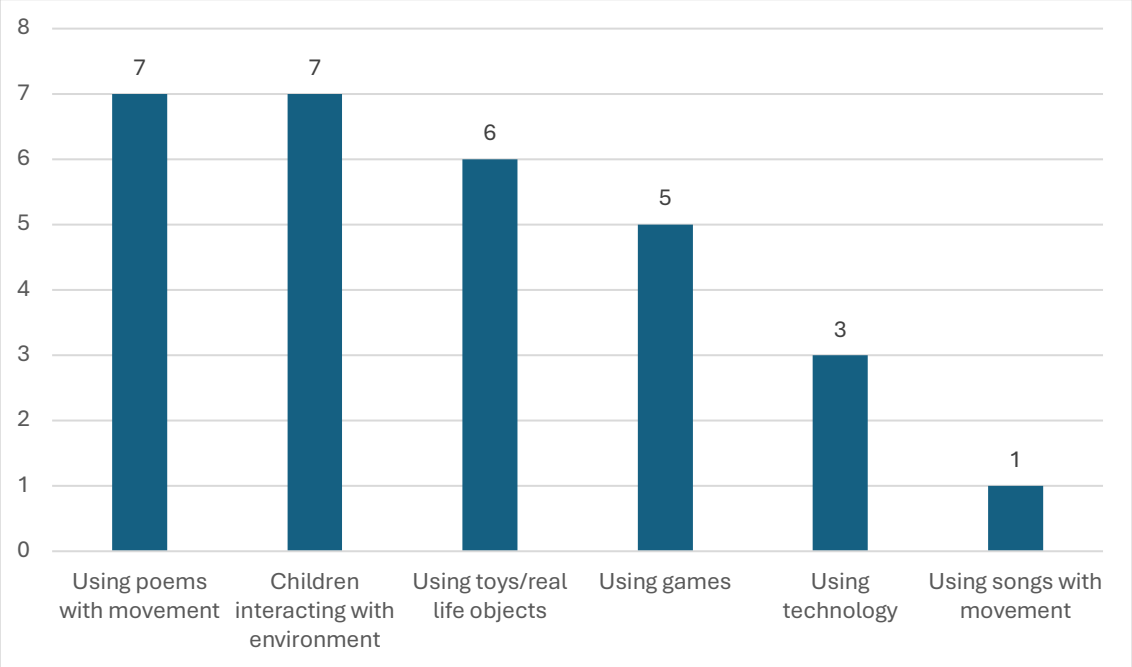

Figure 4.2 *Elements of Pedagogical Play Used by the Teachers*

The findings from the classroom observations were supplemented with the comments from the teachers' pre-PD interviews which had been identified as relevant to the topic of "Child-led learning". Although all the teachers were observed to use elements of pedagogical play, most of them did not comment on their importance during the pre-PD-interviews. Only one participant referred to play and play-based teaching and its importance using general comments, such as: *"we are trying to do everything through a game"* (Pre-PD Interview_Teacher 4). In addition, the teachers commented on such aspects of child-led learning as: 1) specific goal setting, where *"it is necessary for the teacher to be both in the context of the "Insects" topic the teachers precisely plan for activities which help children learn about insects, and the activities they use to evaluate if the children have acquired the corresponding vocabulary as well as follow-up activities in case they have not"* (Pre-PD Interview_Teacher 1); 2) adaptation of goals based on the classroom situation, as *"if the children do not like a game, it is not the reason to put it aside, but to do it in a different way and try again"* (Pre-PD Interview_Teacher 1); 3) using pretend play to motivate the children's vocabulary development, for example as Teacher 2 said, she "*pretends not to understand how something could be and why. And thus, the children try to explain, they look for various variants to make it clear for me…bring the books and show pictures"*. These representative examples from the pre-PD interviews show that the teachers also value and recognise the importance of play for holistic development of children, which is also emphasised in the Estonian National Curriculum for Preschool Child Care Institutions (implemented in 2008).

The combined findings from the classroom observations and the pre-PD interviews were analysed against the framework of playful teaching in linguistically and culturally diverse preschool classrooms (Kangas et al., 2023) focusing on the implementation of a child-led and playful pedagogical approach in the context of linguistic and cultural enrichment. The five elements of the framework are: 1) teacher's active participation and presence; 2) balanced repetition with flexible plans and adaptive goals; 3) playful language fostering joy in play; 4) non-verbal and kinaesthetic communication with enabling tools; and 5) emerging play marked by interaction and lasting intensity. The results of the analysis indicate that the teachers are actively present in all activities and ensure their presence by sustaining the children's interest either by using poems or games with movement, or by directing the children's interaction with the environment. One participant (Teacher 1) recognized the importance of adapting their goals and the teaching process based on children's needs, commenting that a teacher needs to engage in regular

self-reflection to assess whether their teaching has developed and directed children or if they need anything different. It is important to note that this teacher has the longest experience in the language immersion ECEC settings; her teaching style is child-oriented. The teacher adopted playful approaches to organise children's learning and support their linguistic development, providing the learners with possibilities for producing output in the immersion language (Kinos & Pukk, 2010; Kimer et al., 2016): the children played games, such as "Fishing" or "Broken Phone" and practised vocabulary on the topic of waste management during a game with toy bins of different colours where they placed cards with different types of waste. During the observation it was obvious that the above-mentioned games are an integral part of this teacher's working routine, because she only needed to offer the children to play the game and name it, and then the children either stood in a circle and started reciting the poem for the "Fishing" game or sat on the carpet in a line when the teacher suggested playing the "Broken Phone". Another teacher demonstrating the playful approach in her activities is Teacher 5 who has adopted a playful approach to support specific language learning outcomes in classroom with SEN children. For example, the teacher arranged word tags with the names of winter months on the board. First, the children and the teacher name the months together. Then the teacher asked the children to close their eyes and removed one tag. When the children opened their eyes, she asked them which month was missing. The teacher also integrated the use of ICT into her playful approach to vocabulary teaching on the topic of "Fish". After the children were introduced to the words meaning different body parts of a fish, such as "body", "fins", "tail", "head", "gills" and had some vocabulary practice, the teacher divided them into three groups, asked the children in each of the subgroups to stand behind one another in front of the Smart Board. Then the teacher named a part of the fish's body, for instance, "body", and the first three children from the three teams simultaneously drew it on the Smart Board. After they had drawn the fish's body, they had to repeat the word and then went to the back of their group, so that the next children could draw the next body part until the whole fish was complete. This activity enabled the children to focus on one particular feasible linguistic task at a time, while also being active and participating in an interesting teamwork-based exercise.

The analysis of the findings under the theme of implementation of child-led learning indicates that most of the teachers use elements of pedagogical play while the teaching process remains teacher-focused. These findings support the results of previous research conducted in Estonian ECEC settings (Kimmer et al., 2016) which revealed that

preschool teachers in Estonia need PD to be able to use child-centred teaching practices efficiently and consistently. The teachers in this study did not use playful language or make jokes in the Estonian language; they used non-verbal means of communication mostly complementing their speech to ensure the children's understanding of the immersion language. The issue of providing meaningful Estonian-medium input and supporting its comprehension is discussed in the next subsection.

4.2.3 Scaffolding Content Learning and Immersion Language Acquisition

With regard to the teachers commenting that they either used the help of their Estonian-speaking colleagues (Teacher 6) or invested more time in preparation for teaching activities (Teacher 4), the research aimed to explore how the teachers supported the children in the acquisition of content knowledge and the Estonian language during their current teaching practice. The data for analysis were collected during the classroom observations and from my observation notes, focusing on the types of content scaffolding that the children were provided with. The findings are provided in Table 4.1. The table gives an overview of the different types of content scaffolding which the teachers employ to support their learners in the acquisition of knowledge and development of the Estonian language skills. The data in the table illustrate the number of teachers using these scaffolding types ranging from using body language, supporting materials and real-life objects to modelling expected language output.

Table 4.1 *Types of Content Scaffolding Provided by the Teachers*

Type of Content Scaffolding	Number of Teachers
Asking guiding questions	1
Using gestures	3
Using toys and real-life objects	3
Using flashcards, pictures and visuals	4
Using Power-Point Presentation and Smart-Board	2
Modelling expected phrases and sentences, using repetition	6

The findings in the table show that the teachers use a variety of techniques to support the children's acquisition of content and the Estonian language, giving the preference to visuals to foster the establishment of the connection between the meaning and the form. Thus, the teachers used flashcards and pictures while repeating key words

and phrases to ensure that the children make links between the object in the picture and the sound of the word or the phrase.

The discussion of the results under this theme has shown that using Estonian for teaching activities requires considerable effort and preparation from teachers, especially if they do not speak Estonian as their first language. In this regard, using model phrases and sentences, as well as their repetition is the scaffolding choice that supports both the child and the teacher. Application of non-verbal means of communication, such as gestures, body language, facial expressions, visuals, and even music has also proven helpful in providing children with support in interaction between the teacher and the children both by researchers (Kuhl, 2010; Vandergrift & Goh, 2012 cited in Fleta Guillén and Schwartz, 2018) and the findings of the current study. The latter are discussed further in more detail.

The importance of rich and diverse interactions for the overall development of a 3-7-year-old child is discussed in Chapter 2, with subsection 2.5.4 referring to the role which the teacher plays in second language acquisition in language immersion ECEC settings by structuring purposeful and scaffolded interaction in the target language. In this subsection the analysis of the findings demonstrated the ways the teachers who participated in the study supported the children in their classrooms in using the Estonian language for communicating with the teacher-participants both during the teaching activities as well as before and/or after them. The findings from observations of the teachers in their classrooms as well as teachers' comments on communication with the children during the interviews were used for the analysis.

The classroom observations revealed that all teachers but one, consistently used caretaker speech, which means that in order to scaffold their interaction with a young learner, a teacher speaks clearly, emphasising key words with stress and intonation as well as using repetition and gestures (Lindholm-Leary, 2001; Stephen et al., 2012). Teacher 7 spoke with the children clearly but was not heard to emphasise or repeat key words or adjust the speed of her speech. At the time of the observation, this teacher had worked in immersion settings for less than six months and had previously worked in Estonian-medium kindergarten which explains her tendency to use less repetition and choose more sophisticated words. For example, when speaking about outside activities in winter, which was a common topic for all classrooms I observed, she used a phrase *"roogib lund"* (Estonian for "cleaning snow") which I only heard in her classroom as it is considered too difficult for L2 learners of Estonian. The word "roogib" could not be

identified according to the proficiency level by the corresponding software of the Estonian language institute, while the same software evaluated the word "lund" (Estonian for "snow") as belonging to A1 level of the CEFR.

The participant teachers encouraged the children to use Estonian not only by using repetition of everyday phrases and thematic words in chorus. During the classroom observations I noticed all the teachers addressing the children individually as well as motivating them to use a full word or sentence when answering a question. The teachers used a "we-form", such as "we speak in full sentences" so that their request would not sound as a command. This can be viewed as an aspect of inclusive play where the teacher makes themselves involved in the activity and present in it from the position of a partner.

The analysis of the findings related to scaffolding of content learning and immersion language acquisition based on research such as Creed (2013) and Whitebread and Adams (2019), which is discussed in Chapter 2 of this study, suggest that most teachers who participated in the research regularly and consistently use caretaker speech to support the children's input comprehension. The teachers' focus seems to be on assisting the children in making connections between the meaning and the form; the children's output tends to be predetermined and guided by the teacher through the use of modelled words and phrases as well as structured questions. The issue of modelling vocabulary and grammar structures may be linked to teachers' own proficiency in the Estonian language which is explored in the next subsection.

4.2.4 Teacher's Immersion Language Proficiency

As previously discussed in Chapter One and further explored in Chapter Two, the teacher's proficiency in the immersion language has a crucial importance for the process of the child's acquisition of this language. The teacher's consistent use of the target language in the study process and interactions with the learners not only provides them with the linguistic model and the necessary language input but also helps to create the learning environment which enhances the children's language output and encourages them to use the TL (Turnbull & Arnett, 2002; Littlewood & Yu, 2011; Chambless, 2012).

To explore the participants' Estonian language proficiency, the results of the teachers' survey responses at Stage 1 of the research as well as their comments during semi-structured interviews (Stage 2) were analysed. The teachers' survey (see Appendix A), which was conducted with two groups of participants, included the following question (Question 11) related to the participants' Estonian language proficiency: "What statement

matches most closely your current Estonian language proficiency? Please choose all that apply" with the options of the answer being:

- "Estonian is my first language",
- "I hold C1 certificate in Estonian as a second language",
- "I speak Estonian fluently on everyday topics",
- "I have a good command of academic Estonian within the topics of the National Curriculum for Preschool Child Care Institutions",
- "I find it challenging to use Estonian in the classroom",
- "I find it challenging to use Estonian for spontaneous interaction".

The analysis of the participants' responses showed that more than half of the teachers have acquired Estonian as their second language, with the number of native speakers of the language being: 12 out of 34 respondents (35.2%) in Group 1 and 12 out of 15 respondents (80%) in Group 2. The former group mostly consists of teachers who have been working in language immersion preschools for quite a while, some since the programme launched in 2003. The high number of the native Estonian speakers among the respondents in Group 2 is explained by the fact that most of these teachers work in Estonian-medium kindergartens that have started implementing language immersion pedagogy due to the growing number of non-Estonian speaking children in their classrooms, including children with Russian as their home language and children from families of Ukrainian war refugees. The lack of immersion teachers whose home language is Estonian has been highlighted as a big issue by one of the participants (T1) who said,

> *I am always astonished by one thing: Estonian language learning seems to have been a priority for a lot of years, there are a lot of parents, very many children want their children to study in Estonian, go to Estonian kindergartens, Estonian school. But among Estonians we have very few teachers who are willing to teach their language as a second language to children. It has been a question for me, but why*. (Pre-PD interview_Teacher1).

The situation described by the teacher is also supported by the study data presented above, considering that only 35% of language immersion teachers in Group 1 speak Estonian as their first language.

The participants who do not speak Estonian as their first language are the focus of the analysis in this sub-section as they form the majority of the Estonian-medium

teachers in language immersion classrooms. Three of the 34 participants of Group 1 (9.1%) of the survey participants, pointed out that using Estonian for spontaneous interaction is a challenge for them. For instance, Teacher 4 shared her feelings saying, *"You know, sometimes I do not know how to say [in Estonian] 'Pull up the waistband'. Such words. Or 'pull up the socks'. I just say 'make it nice'. And I show on myself what needs to be done"* (Pre-PD interview_Teacher 4). These findings echo the outcomes of previous research by Littlewood and Yu (2011) that revealed that teachers with low proficiency in the TL feel uncomfortable using it for spontaneous interaction. Teacher 6 commented on her everyday vocabulary in Estonian by saying, "*Maybe, this vocabulary of mine could be bigger, if it were my everyday language as well"* (Pre-PD Interview_Teacher 6). This data is significant because the employment of teachers who are fully proficient in the language of instruction is one of the fundamental features of a language immersion programme (Fortune & Tedick 2008; Cammarata & Tedick, 2012). Fluency in the immersion language is crucially important as it is a precondition for providing children with meaningful and authentic classroom language communication which is relevant to the child's needs (Baker & Wright, 2017). In the present study, the teacher's inability to provide meaningful and engaging communication may cause misunderstanding between the children and the teacher which may impact their interactions. As Teacher 3 pointed out during her pre-PD interview, *"In the second language is a separate topic. If in the previous classroom I felt like a stranger, I would always say that I had the "stranger feeling"*, *then now I do not feel that way. However, I have noticed that there are children who have started to ignore me, like 'I can't hear you at all'"*. The teacher's comment, especially considering that Teacher 3 works in a tandem with a Russian-speaking teacher who is also present in the classroom, indicates how the experience of second language learning can impact the establishment of the teacher-learner connection.

The four teachers who participated in the semi-structured pre-PD interviews and whose home language is not Estonian also point out that they face challenges in using the Estonian language in everyday communication, whereas the teacher's confidence in using the target language is essential for creating learning opportunities (Canh & Renandya, 2017). Teacher 3 described her own journey of Estonian language learning for everyday and professional communication, having come from a different professional area and received no prior teacher training:

I learned [Estonian] being a grown-up when I arrived here in Estonia. I had some fear and doubts about my ability to work in the Estonian language… yes, I had vocabulary, but I had a different vocabulary. I worked more with documents, correspondence, some communication. And surely, in kindergarten there was a completely different set of words, and I would say that I spent the first year trying to figure out which vocabulary I would have in kindergarten. (Pre-PD Interview_Teacher 3)

The teachers' doubts about their language proficiency are reflected in their communication style in the classroom (Chacón, 2005; Eslami & Fatahi, 2008), especially in their (un)willingness to use the time outside teaching activities for communication with the children. For instance, during observation of Teacher 3's classroom I noticed that when the children had 30 minutes of time for board games and puzzles before the teaching activities began, she did not use this time for individual communication with them. On the other hand, at the similar activity time between the breakfast and teaching activities, Teacher 4 walked around the classroom and asked the children simple questions in Estonian, even though most of the children had only begun speaking their mother tongue. Regarding the Estonian National Curriculum for Preschool Child Care Institution (2008) which highlights the development of children's speaking and listening skills through their active involvement in routines and educational activities, this non-use of the morning time for providing children with individual support can be called a missed opportunity for children's linguistic and overall progress.

Taking into consideration, the upcoming transition to Estonian-medium education, the teachers work on improving their Estonian language skills by attending Estonian language courses (Teachers 4 and 6). However, as Teacher 4 commented in the interview, the language courses do not bring any feeling of joy or accomplishment,

Nobody is going so enthusiastically like, "Now I am going to Estonian language lessons, and I will learn a lot there". But everybody [uses a disappointed and tired intonation] is like, "Estonian, not again. Oh my God, when will we have time to live, to prepare for educational activities, to write plans, to manage to do it all". (Pre-PD Interview_Teacher 4)

These feelings of teachers need to be taken into account as their negative feelings towards their target language proficiency and, correspondingly, its improvement can be

a sign of teacher burnout (Nayernia & Babayan, 2019). The teachers' proficiency and confidence in use of the target language does not only affect their teaching efficiency and the feeling of professional self-worth (Huhn et al., 2021; Bell & Borden, 2022), but it can also be an obstacle for teachers access to professional development. Taking into account that all PD events offered by accredited universities are provided in the Estonian language, insufficient language ability of teachers is the reason some of them do not even attempt to enrol themselves for PD events, as pointed out by Teacher 3 during her pre-PD interview, who said *"that some teachers cannot receive PD in such an authentic Estonian language just because they do not yet have the corresponding proficiency and cannot comprehend [the PD content]. Although the pain is also that they sometimes do not try, do not risk doing that"*. The situation is also complicated by the fact that the Estonian-medium PD offered by universities usually requires the participants to have at least B2 proficiency in the Estonian language, and this requirement can be a barrier for teachers.

Although the participants of the research have the required level of the Estonian language proficiency, they continue to improve their language mastery. While Teacher 4 is attending Estonian language courses, Teacher 3 has decided to search for an environment where Estonian is spoken through attending professional development events in the Estonian language. In addition to attending language courses teachers also try to create an Estonian-language environment by speaking to their colleagues in the Estonian language (Teacher 4), watching work-related content in Estonian on YouTube (Teacher 3) as well as by applying the knowledge and skills obtained with the help of parents and colleagues who are native speakers of Estonian. Participant 6 described it as follows, *"I have ears, I hear what parents tell the children, I hear what others say, and, as it is said, I can use it for my benefit. We have an Estonian-medium classroom next to ours, I borrow some things from there. So, in this respect, my word bank is growing"* (Pre-PD Interview_Teacher 6).

During her interview Teacher 3 commented on the situation that teachers need to be encouraged, even required to use the Estonian language even though their current language proficiency may not be up to the expected standard yet. In order to reach the required level of the target language ability and to maintain it through PD, which is a challenge according to Bell and Borden (2022), PD events should include the language-learning focus. This need has also been referred to by the participants of the current study who are wishing for more varied and need-oriented opportunities for the target language

learning in their PD, such as: job-shadowing and going through games and activities during PD events (Teacher 4) or an online environment for high-quality translation and language learning which would be supported by the state (Teacher 6).

The correct and fluent use of Estonian in the immersion ECEC is essential not only for conducting everyday routines, but also for planning and conducting teaching activities (Canh & Renandya, 2017; Richards, 2015). I explored the issues related to the teachers' Estonian language use for and during teaching activities mostly through semi-structured interviews with the teachers at Stage 2 and through observations of their classroom activity at Stage 4. I also included the question about the teachers' proficiency in the Estonian language in the scope of the topics of the Estonian National Curriculum for Preschool Child Care Institutions in the options of the answers to Question 11, which was also analysed in the previous theme, and the question about the teachers' desire to include a course in professional Estonian (e.g. classroom management language) in their potential PD (Q18) in the teachers' survey at Stage 1 of my research.

Teaching activities, as described in Chapter I, play a key role in the educational part of the Estonian ECEC system. In the case of early language immersion classrooms, the teacher's input gains even more profound significance providing room for the integration of curriculum content and the immersion language, which was discussed previously in Chapter Two with reference to Stephen et al. (2012). The starting point for analysis of the teachers' proficiency and fluency in their professional language was their reference to Estonian as the content language in their reply to Question 11 in the teachers' survey. The results received from the two groups of teachers are illustrated in Table 4.2. The table illustrates the teachers' confidence in using content-related vocabulary in the Estonian language, presenting the results across the two groups of participants. The data reveal the number of the teachers who reported feeling confident using the Estonian language when speaking on content-related topics within the curriculum. The comparison between the two groups of participants highlights a noteworthy difference between the teachers in Group 1 and Group 2. As can be seen, less than half of the teachers in Group 1, where the majority of the respondents do not speak Estonian as their first language, feel confident using the content-related vocabulary in the Estonian language.

Table 4.2 *Teachers who feel confident using the content-related vocabulary in the Estonian language*

Teachers' Group #	Number of teachers who are confident /overall number of respondents	% of teachers to the overall number of respondents
Group 1	15 / 34	44%
Group 2	1 / 15	6.7 %

As the format of Question 11 allowed the respondents to choose several variants of answers simultaneously, I decided to analyse if any teachers combined their proficiency in content Estonian with any other aspect of language skills. As there is only one participant from Group 2 who chose this reply option, I decided to analyse their results together with the teachers from Group 1. Another examination of the data indicated that 14 of 16 teachers from Table 4.1 chose several response options in addition to Estonian Content Language Proficiency. The outcomes of 14 teachers who chose multiple answers are illustrated by Figure 4.3. The figure illustrates the teachers' self-reported proficiency in the Estonian language, combined with their fluency in the language and their ability to use content-related vocabulary. The chart maps the teachers' responses based on different combinations of language skills which contain formal proficiency levels, such as Estonian as L1 and the C1 level in the Estonian language proficiency; everyday fluency as well as the ability to participate in a spontaneous interaction. The figure illustrates that the teachers working through the medium of the Estonian language have varying degrees of both the language proficiency and the readiness to use the language.

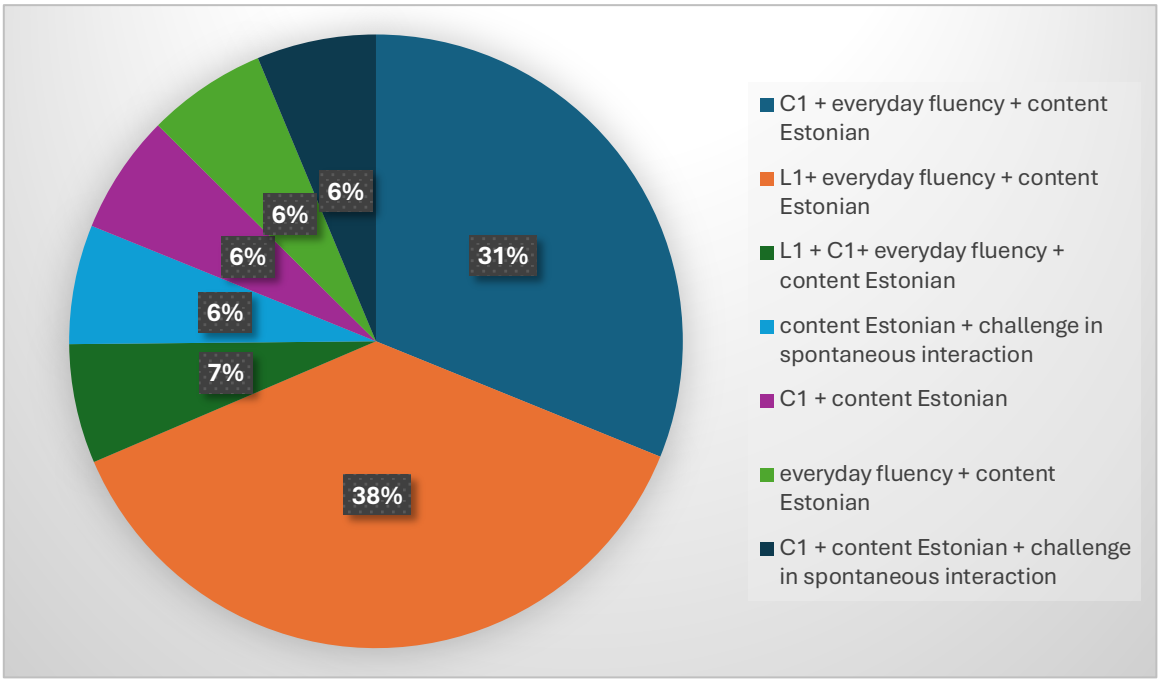

Figure 4.3 *Teachers' Answers Illustrating their Estonian Content Language Proficiency*

The largest category consists of teachers whose first language is Estonian and as they were qualified early years teachers, they may take their proficiency in Estonian content for granted. This is illustrated by the fact that none of the teachers from Group 2 chose a course in General Estonian language as their PD interest. On the other hand, teachers belonging to the 38% of those who are proficient in Estonian as a L2 need to contribute their time and effort to preparation for teaching activity also in terms of their use of the Estonian language. Even in case a teacher is proficient in the target language, using specific vocabulary which is required in the ECEC settings can still be a challenge. As one of the teachers said during the interview at Stage 2, *"I had vocabulary, but I had a different vocabulary. I worked more with documents, correspondence, some communication. And surely, in kindergarten there was a completely different set of words, and I would say that I spent the first year trying to figure out which vocabulary I would have in kindergarten."* (Teacher 3).

For the teacher whose first language is not Estonian, learning some vocabulary by heart or practising it in advance may be essential as in early years language immersion classroom the teacher is to follow "the one person – one language rule", whose importance for the Estonian language immersion programme was discussed in Chapter 1. The Estonian-medium teacher is supposed to speak Estonian at all times, even if her colleagues and/or other teachers in the classroom speak Russian to her and the children, as is the case for some teachers (Teacher 4, Teacher 1, Teachers 6 and 2) who participated

in the interviews and the PD programme within my research. Sometimes using the Estonian language only presents a challenge for teachers themselves, especially in certain situations in the classroom.

Teachers' desire to convey a certain message instantly or to establish a quiet atmosphere can be the reasons for teachers to yield to circumstances and to use the children's first language. *"Sometimes I make such a mistake that I use something like code-switching: when I need to make something clear fast or there are problems with discipline and a lot of noise, then I have to speak Russian."* (Teacher 3). This finding echoes the results of previous research (Macaro, 2001; Schwartz & Gorbatt, 2017) showing that novice teachers tend to switch to learners' L1 in situations when the teacher feels the time pressure or needs to solve a classroom management issue. This outcome of the present research is also significant in the context of previous studies by Littlewood and Yu (2011) and Chambless (2012) which emphasised the connection between the teacher's lack of confidence in their proficiency in the TL and their choice to use learners' L1 in the situation of classroom management and organisation, as the teacher finds the use of L1 to be a more convenient choice for effective communication.

However, sometimes language-switching is not the teacher's initiative, but the consequence of administrative decisions made in preparation for the transition to the Estonian-medium education. Thus, the ECEC classroom which implemented two-way immersion since 2017 had to cease the full-scale immersion activity to switch to Estonian-medium classroom starting from September 2023. Such changes to the organisation of the classroom work meant that the teacher who used to speak Russian had to switch to Estonian. The parents did not support the complete change of the arrangements and asked the administration to keep the everyday teacher-children communication Russian-medium at the parents' meeting which took place of September 11, 2023 (Tapa Vikerkaare Lasteaed, 2023). One teacher provided the following comment on the situation in her interview,

> *I conduct all teaching activities in Estonian language only, I do some routine moments in both Estonian and Russian, because the children are used to [me speaking Russian], it is wearing me down and it is wearing the children down. I am not enjoying it.* (Teacher 6)

Such a situation is not typical for an early years language immersion classroom in Estonia because following the "one person – one language" rule has been one of the pillars

of the Estonian language immersion programme, as it is described in Chapter 1. Using the children's first language is not typical either for kindergarten teachers of Estonian as L2. These teachers would have Estonian language classes with smaller groups of children for 20-30 minutes one-two times a week. Two of such Estonian as a second language teachers participated in the research. It is significant that both these teachers who have two or three 30-minute classes with children every week implementing language immersion pedagogy also emphasize the necessity to integrate the language and subject content. *"We do not teach language as such, we teach language through some content, through some knowledge that we want to give children with the help of some material"*. (Teacher 1).

At times the knowledge or the specific content topic can be a challenge for the teacher, especially if Estonian is not her first language. During her interview Teacher 6 described her struggle with choosing the right word meaning "skeleton" among the range of synonyms,

> *Last week we had the topic of "Me and my body". The children seemed to be interested, and we decided to go deeper into the topic and study internal organs. And this is when I started having problems. How to say "the skeleton"? Which of the three words (Est: luustik, skelett, luukere) is the right one? What is the difference between them?* (Teacher 6)

Being a non-native speaker of Estonian, I would feel similarly to Teacher 6. To find the right word and clarify the differences between the three terms I consulted the official web dictionaries of the Estonian Language Institute at sonaveeb.ee and my former colleague who is a native Estonian speaker and a specialist in the Estonian language. It has turned out that the differences between the words are quite specific: "luustik" is a network of bones, a general term; "skelett" is a borrowed word meaning an organised set of bones; "luukere" is also an organised set of bones, but some of them may be missing, this word can also be used in a metaphorical sense as in "skeleton in the closet". The best word for the teacher to use was "luustik"; and the above-written is just a fragment of the preparation a non-native speaker of Estonian has to do prior to conducting teaching activities.

As discussed under this theme, over half of the Estonian-medium language immersion teachers in North-East of Estonia and in Tallinn do not speak Estonian as their first language, which has an impact on their teaching practice and interaction with the

children in the classroom as well as on their feeling of professional self-efficacy (Bell & Borden, 2022; Huhn et al., 2021). This finding that the teachers felt that their professional ability was lacking due to insufficient language proficiency and that they required emotional support is the unexpected (Mac Naughton & Rolfe, 2020) yet one of the key findings of the present study. While the teachers' insufficient proficiency in the state language is a constraint for the attendance of PD events, the teachers who have passed the necessary language examinations still lack authentic vocabulary and confidence to speak Estonian in the situations of spontaneous communication.

4.3 Teachers' Perspectives in Relation to the PD Provision

Teachers' opinions about PD perspectives framed the second research question, which is "What are the perspectives of early years immersion teachers in north-east Estonia and Tallinn in relation to the provision of professional development?". This subsection discusses the following themes related to the teachers' satisfaction with the professional development they receive that were identified during processing of the findings: Aims of the ECEC Teacher's Professional Development; The Teachers' Access to PD Opportunities and Attendance of PD Events; The Teachers' Overall Satisfaction with the Current PD Provision; Benefits of PD; Available and Preferred Types of PD; Teachers' PD Interests; and PD in the Area of Language Immersion Pedagogy.

Language immersion teacher training in Estonia, where the majority of the early years teachers receive their preparation in the area of language immersion pedagogy as part of their in-service, not pre-service training, is described in Chapter 1. Taking it into consideration, this analysis begins with the more general topic of PD for early years teachers and is followed by a more focused discussion on the issues of the language immersion classroom. Thus, the topic of the aims of the ECEC teachers PD is discussed under the next theme.

4.3.1 Aims of the ECEC Teacher's Professional Development

The analysis of the literature presented in subsection 2.7.3 concludes that the key aim of teachers' PD is change in their classroom practice, attitudes and beliefs. However, in-service training offered to teachers can also serve other purposes, including organisational, informational, and so on. The key finding in relation to the study is that the teachers value professional development, first and foremost, as a possibility to

transform and improve their existing teaching practice. Sometimes teachers can also have personal reasons for taking part in PD events (Appova & Arbaugh, 2018). To explore which aims of ECEC teachers' PD are considered essential by the participants of the present study, I asked them a corresponding question in the teacher's survey (see Question 13 in Teachers' Survey, Appendix A) and in the semi-structured interview at Stage 2 of the study.

When replying to Question 13 of the survey, the teachers were asked to evaluate the importance of the aims of PD from "not important" to "very important". The results of the teachers' evaluations for Group 1 and Group 2 are illustrated by Figure 4.4 and Figure 4.5 respectively. The figures demonstrate the ways in which the teachers perceive the importance of various aspects of ECEC teachers' PD, based on the data received from the responses of Group 1 (n=34) and Group 2 (n=15). The comparison of the results of the two groups shows that in either of them the teachers found that all aspects of PD deserved some extent of importance. The most striking difference between the two groups is that the teachers from Group 2 mostly used the options of "important" or "very important" in their answers. The higher level of PD prioritising in this group can be explained with these participants' relatively short (0-5 years) experience in ECEC language immersion classroom: having had less experience in working with non-Estonian speakers, the teachers from Group 2 put more emphasis on PD and its importance.

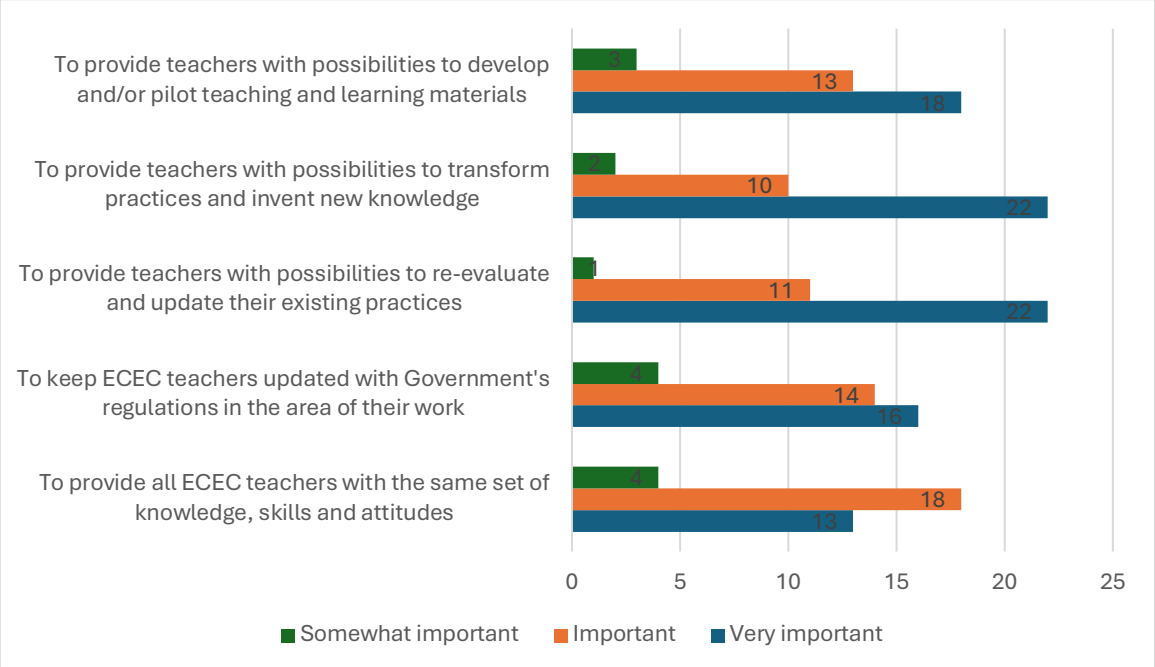

Figure 4.4 *How important do you think the following aspects of ECEC teacher's professional development are? (Group 1, n=34)*

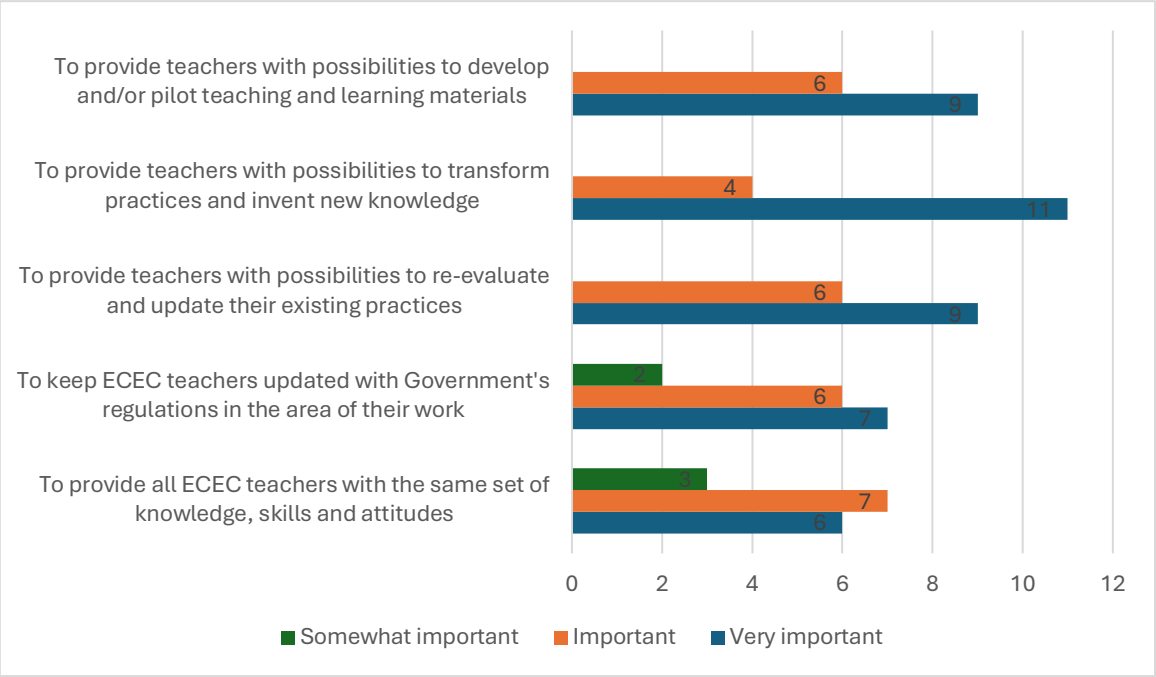

Figure 4.5 *How important do you think the following aspects of ECEC teacher's professional development are? (Group 2, n=15)*

The participants' experience of working as Estonian-medium teachers in language immersion ECEC settings is presented in Table 4.3 below. This table provides an overview of the teachers' working experience in the Estonian-medium ECEC classrooms which implement the language immersion approach. The experience of the teachers of the two groups is categorised based on the following time spans: 0-5 years; 6-10 years; 11-15 years and 16-20 years. The reason why the categorisation stops with the 20 years of experience lies in the date when the preschool language immersion programme was launched in Estonia, which was in 2003.

The key finding emerging from Figure 4.4 and Figure 4.5 as well as Table 4.3 is that regardless of the length of the teachers' experience working with children whose first language is not Estonian, the participants from both groups value PD as a possibility to either re-evaluate or change their existing practice, which is to "become a better teacher" (Appova & Arbaugh, 2018). Part of this process for the teachers is growing their self-efficacy (Múñez et al., 2017).

Table 4.3 *Teachers' Experience of working as an Estonian-medium teacher in language immersion ECEC settings*

	Working experience			
Teachers	**0-5 years**	**6-10 years**	**11-15 years**	**16-20 years**
Group 1	19	10	-	5
Group 2	14	1	-	-

During the interviews at Stage 2 of the research the teachers also discussed PD as motivation to improve their teaching; to make it more engaging for children and, consequently, for the teacher herself (T5). The participants also talked about professional benefits of PD. For instance, Teacher 1 commented that PD provides a teacher with *"confidence, she knows what she is doing, why she is doing it, she knows how she is doing it, she has the courage to use new techniques"* (T1). Teacher 3 supported the topic of professional confidence, adding that PD can be a source of personal mental well-being as well: in her context, the teacher commented on the challenges she faces and how this leads her to feel doubtful about her professionalism both as an early years specialist and as a language immersion teacher. For her, having a mentor who would help her stop *"fretting herself"* (T3) is an essential part of PD so that she could develop her sense of professionalism and *"start feeling better as a person"*. Múñez and colleagues (2017) suggest that the frequency of preschool teachers' involvement with PD has an impact on their perceived usefulness, it is essential to investigate the teachers' access to PD opportunities. This theme is discussed further below.

4.3.2. The Teachers' Access to PD Opportunities and Attendance of PD Events

As previously discussed in subsection 2.7.3, in the period between 2013 and 2015 Estonia had a requirement for teachers to complete 160 hours of PD during a five-year period of work. This obligation had an impact on teachers' attendance at PD programmes and events until its removal in 2015. In order to evaluate teachers' satisfaction with the current PD provision, it is essential to consider which factors currently influence teachers' access to opportunities for professional development as well as their attendance of PD events. The analysis is based on the data received from the teachers' survey at Stage 1 and the from the participants' answers during the semi-structured interviews at Stage 2 of the research.

Question 14 of the teachers' survey aimed to collect data about the frequency of teachers' attendance of PD events on different topics. The findings are provided in Table 4.4, which demonstrates the data on teachers' attendance of PD events across the two groups of the research participants. The findings are categorised based on the participation frequency which ranges from once a month to rarely/never across the five different PD topics: early child's development; play-based learning; language immersion pedagogy; teaching SEN children; and the development of teaching and learning materials. The teachers' patterns of attendance of PD events are compared between Group

1 (n=34) and Group 2 (n=15), which provides an opportunity to make conclusions both about teachers' involvement in PD activities within each group and about the tendencies in PD attendance which are common for the two groups of early years language immersion teachers. The table illustrates that eight of the 49 teachers or 16%, either attend PD events on the topic of language immersion pedagogy rarely or have never done so. Two of the teachers have received no or nearly no PD on any of the topics in the table. The findings also indicate discrepancies between the PD topics:

- Five of the teachers have had no or nearly no PD on the topic of early childhood development while they have undertaken PD themselves in the areas of play-based learning (either once in six months – 2 teachers or once a year - 1 teacher) or language immersion (once in six months – 2 teachers or once a year – 2 teachers) and study materials development (once in six months – 1 teacher).
- Another cohort of five teachers had no PD or almost none on the topic of teaching SEN children. Although this issue is out of the scope of this study, the teachers commented on challenges in working with special needs children during their pre-PD interviews. Four out of the seven teachers refer to the necessity to adapt their teaching style or arrangement of activities due to SEN children in their classrooms, including having to use the child's first language, not the immersion language. For instance, Teacher 7 mentioned that the one SEN child in her classroom would not accept hearing Estonian and would not calm down until the teacher addressed them in the Russian language. Teacher 2 pointed out that she feels *"the lack of knowledge on the topic of special needs children, not even those that are officially diagnosed but those who have concentration difficulties. At the moment, besides this concentration issue, the children also have trouble with speech development."* Teacher 3 also referred to feeling helpless and not knowing what to do as that the number of SEN children and corresponding challenges has grown.

Table 4.4 *Teachers' Attendance of PD events*

PD topic	Frequency of attendance	No. of teachers Group 1 (n=34)	No. of teachers Group 2 (n=15)
Early child's development	Once a month	-	1
	Once during 6 months	9	3
	Once a year	19	6
	Rarely/never	5	6
Play-based learning	Once a month	2	-
	Once during 6 months	15	4
	Once a year	15	10
	Rarely/never	3	1
Language immersion pedagogy	Once a month	3	-
	Once during 6 months	11	4
	Once a year	16	7
	Rarely/never	4	4
Teaching SEN children	Once a month	-	1
	Once during 6 months	3	2
	Once a year	13	7
	Rarely/never	17	5
Development of teaching and learning materials	Once a month	3	-
	Once during 6 months	11	4
	Once a year	13	6
	Rarely/never	7	5

The findings in Table 4.4 illustrate that the majority of the teachers who participated in the survey attend PD events once a year, which cannot be considered frequent and, in line with the research by Múñez et al. (2017), indicate that teachers have a negative perception of their usefulness.

The data on the teachers' access to PD opportunities collected during the pre-PD interviews has shown a greater variability in attendance: from "seldom" (Teachers 4 and 5) to "once or twice a month" (Teacher 2), "at least four times a year" (Teacher 1) and being able to "satisfy all PD wishes" (Teacher 3). The participants of the pre-PD interviews also commented on the reasons for their attendance or non-attendance of the PD events:

- **The kindergarten management's attitude to teachers' PD.** For instance, Teacher 1 commented that she gets to attend all the PD events she is interested in because "*the kindergarten and the management are interested in teachers' receiving new interesting ideas, thoughts, experiences"*. The opinion was also shared by Teacher 6 who called her management "adequate" referring to their willingness to provide teachers with PD opportunities and by Teacher 2 who has been attending a PD programme together with the kindergarten director

for two years. On the other hand, Teacher 7 commented that the lack of the management's interest towards teachers' PD makes the teachers feel demotivated and indifferent in terms of their development. The findings suggest that the management's attitude to PD varies greatly depending on kindergarten and that it can have a serious impact on teachers' attendance of PD events. These outcomes support the research findings (McChesney, 2022; Nguyen & Tran, 2023) highlighting the role that management's attitude plays in effectiveness of teachers' PD. The findings also echo the results of the research by Sivevska and Runceva (2023) which highlight the significant role the preschool principal plays in fostering teachers' PD.

- **Lack of information about PD opportunities.** One of the participants commented on having limited information about PD opportunities (Teacher 4), saying that on the one hand, the teachers in the kindergarten do not have information about PD events as *"the information about PD is not openly shared with everybody"*. On the other hand, the participant referred to the information flow within the organization, where it is the headteacher who approaches the teacher with an offer and information about a specific PD possibility. The availability of information about PD events can be a subject to the information flow within an organisation which a teacher has no control over. The information exchange within an organisation is a part of the organisational culture, which, as research (Yanqiong & Caiga, 2024) indicates has an impact on the teachers' engagement in PD.
- **Teachers' concern about lack of payment/reimbursement**. Two of the teachers referred to possible issues regarding teachers' payment in cases where they attend PD events during their working time. Teacher 2 commented on having heard from colleagues working in other kindergartens that *"they do not have these days paid for and that they have to work additionally in return for the PD day"*. Both Teacher 2 and Teacher 4 also commented on the issue of expenses reimbursement where the PD event is not held in the city where they live: while Teacher 2 always has her travel expenses compensated, Teacher 4 says that the absence of reimbursement for meals and accommodation puts her off participation in an exchange programme that would help the teacher to improve her Estonian language proficiency. Even in

the case of state-funded PD events, there are related expenses that can be a decisive factor of participation in a PD event for some teachers.

- **Excessive workload.** During the pre-PD interviews the participants (Teachers 3, 6 and 7) also commented that early years teachers in general are overloaded with work and thus do not have time for PD. They referred to immersion teachers' having to prepare teaching activities for the following day while already feeling tired from the workload. As Teacher 6 mentioned, *"What we lack is rest. Normal, physiological rest because 5-day work, working 5 days with half-day shifts, such a schedule on the whole is relatively difficult for personal life. That is why people burn out"*. Moreover, as Teacher 3 said, *"being at home we keep contemplating these thoughts [about conducting tomorrow's teaching activity]... and thus, it turns out that we take work home with us, and we have an unlimited amount of work"*. The emotional overload which the teacher refers to is related to the above-discussed mental wellbeing of a teacher and their feeling of professional self-worth (Skaalvik & Skaalvik, 2010; Tebben et al, 2021). This finding is echoed in the previous studies (ibid), as feeling overloaded and frustrated, teachers are unable to find motivation for professional development.
- **Lack of motivation to develop professionally.** The key finding here relates to teachers' motivation towards professional development reveals the connection between the teachers' willingness to take part in PD and specific benefits they see it bring. For instance, two of the teachers also referred to themselves or their colleagues having no motivation to contribute their time and effort to professional development and learning. Teacher 7 described her colleague who did not see any sense in attending PD events thinking that she already had enough knowledge and skills to do their job. Teacher 6 commented that the main reasons for the teachers' insufficient interest towards PD opportunities is *"laziness"* and that "*they just do not care"*. The participant also pointed out that teachers' participation in PD events and their self-improvement does not result in them having a high salary or more free time, as it is in the case of schoolteachers. This finding can be related to previous research on teachers' motivation to participate in PD events (Richter et al., 2019; Gorozidis et al., 2014; Rzejak et al., 2014) which showed that for the majority of teachers, occupational promotion is the factor that motivates

them the least. However, the situation with preschool teachers described by Teacher 6 does not seem to provide teachers with either confidence or desire to dedicate their time and effort to professional development.

The findings of the theme on teachers' access to PD opportunities and attendance at PD events suggest that the current PD opportunities are based on controlled or compliant professionalism (Sachs, 2016) and can be described as not complying with characteristics of effective PD (Darling-Hammond et al. (2017) as, 1) there is no coherence between the topics of the PD the teachers are provided: the teachers learn about aspects of language immersion pedagogy, without having studied the basics of child's development, and 2) some of the participants are assigned to PD events rather than choose them for themselves. The essence of the discussion of the findings related to teachers' motivation to develop professionally and to transform their current practice is well reflected in the comment of Teacher 1, who said that

> *Actually, a lot comes down to the teacher herself. Is she interested? Does she want to attend PD events? Does she want to use the content she acquired during PD? Because you can go to a PD event, sit there, write quietly and think 'this is great' and then you return home and continue doing your usual routine. If the teacher does not dare to break the routine and to do things a little differently, then any PD is useless.* (Pre-PD interview_Teacher 1).

The data collected on this theme, including the lack of teachers' motivation to attend PD, requires further investigation, especially in the area of the teachers' satisfaction with the current PD provision, which is the next theme.

4.3.3 The teachers' overall satisfaction with the current PD provision

The data related to the teachers' contentment with the current PD opportunities was collected from the participants' responses to Questions 16 and 17 of the teachers' survey and the corresponding comments made by the teachers during the pre-PD interviews.

Question 16 asked the teachers to assess their satisfaction with the current PD provision on the scale from one to five, where one meant "not satisfied at all" and five stood for "completely satisfied". The answers of the 49 teachers are presented in Figure 4.6, which illustrates the degree of the teachers' contentment with the existing PD provision. The data is represented in the form of a bar chart, illustrating the responses based on the above-described five-point scale. The findings indicate that 39% of the

teachers are satisfied with the current PD provision, while the number of the participants who are completely satisfied with the present PD opportunities is less than half that at 18%. The average score of satisfaction is 3.6 out of 5 which is above satisfactory.

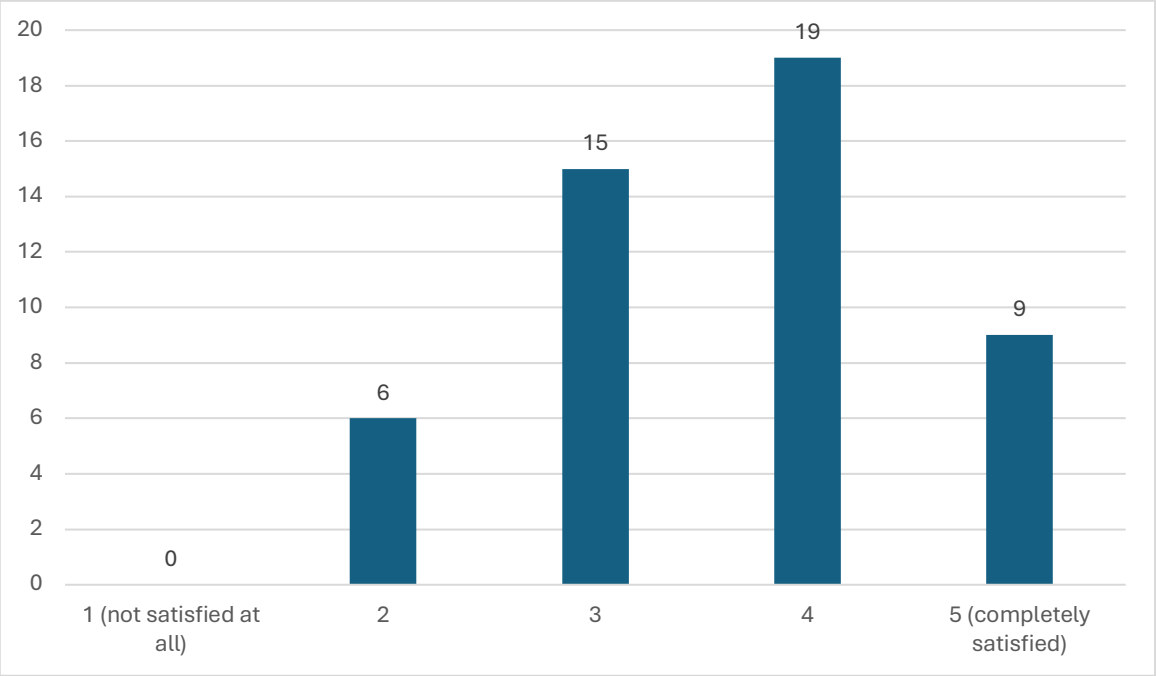

Figure 4.6 *Teachers' Satisfaction with the Current PD Provision*

The teachers' comments on what impacts their satisfaction with PD provision suggest that the impression made by the lecturer at the PD event plays an essential role. As Teacher 6 pointed out in her pre-PD interview regarding the PD course she attended, *"I would say that I was fascinated by one lecturer and had opposite feelings about the others"* (T6). The same teacher as well as Teacher 2, who work in a tandem, expressed their ultimate satisfaction with the PD programme on the topic of two-way immersion conducted in 2014-2016. As the former teacher commented, the PD provided her with a wholesome picture of the way a two-way language classroom should function, *"now I know the way it should be. I have this clear vision: I come, I start, I do, I conduct [teaching activities], I am content with myself almost always in this respect"*. The participant's description of the impact the PD programme has made on her suggest that it corresponded to the features of effective PD (Darling-Hammond et al., 2017), such as modelling effective practice, focusing on content, and incorporating active learning.

Additional data on the teachers' contentment with PD was gathered through their answers to Question 17 which focused on the teachers' assessment of the extent to which PD provision in the following thematic areas meets their PD needs: the area of child

development; the area of second language acquisition; the area of working with SEN children; the development of teaching and learning materials; the use of ICT to enhance teaching and learning in the classroom; classroom management in the preschool immersion settings. The findings are provided in Tables 4.5A and Table 4.5B. These tables illustrate the extent to which the PD provision complies with the actual PD needs of teachers in Group 1 (Table 4.5A) and Group 2 (Table 4.5B). Each table highlights the above-listed six areas of PD, and the responses in each area are categorised based on the degree to which the PD provision in each given area aligns with the teachers' needs: not at all, somewhat, fully.

The data suggests that the teachers' PD needs are least satisfied in the area of working with SEN children, taking into consideration that five of the participants, as reported above, have had little or no PD on this topic. The teachers' answers also indicate that in all the areas of PD, the number of participants whose PD needs are "somewhat met" considerably exceeds the number of those participants whose PD needs are completely met with the current PD provision. There are also PD topics where the number of participants who are dissatisfied with how PD complies with their needs for professional development also exceeds the number of fully satisfied ones: in the area of working with SEN children the former number is three times higher than the latter for both groups of the teachers.

Table 4.5A *The Extent of Compliance of the PD Provision to the Teachers' PD Needs: Group 1 (n=34)*

Area of PD	The PD provision meets the teachers' PD needs		
	not at all	somewhat	fully
Child development	1	23	10
Second language acquisition	4	17	13
Working with SEN children	10	20	3
Development of teaching and learning materials	4	19	10
Use of ICT to enhance teaching and learning in the classroom	3	18	13
Classroom management in the preschool immersion settings	6	18	10

As can be seen in the table below, in Group 2 the number of the teachers whose PD needs are not met in the area of study materials development is four times higher than the number of the participants feeling that their corresponding PD needs are fully met.

Table 4.5B *The Extent of Compliance of the PD Provision to the Teachers' PD Needs: Group 2 (n=15)*

Area of PD	The PD provision meets the teachers' PD needs		
	not at all	somewhat	fully
Child development	1	12	2
Second language acquisition	0	11	3
Working with SEN children	3	12	0
Development of teaching and learning materials	4	10	1
Use of ICT to enhance teaching and learning in the classroom	2	10	3
Classroom management in the preschool immersion settings	2	11	2

The key finding regarding the teachers' satisfaction with the current PD provision indicate that 57% of the participants are overall satisfied with the present opportunities for professional development and learning. However, there are areas of PD where the teachers feel that their PD needs are not fully met. As the data also show that the teachers' feelings assess their satisfaction with PD opportunities, it is essential to investigate what the participants consider to the benefits of professional development and learning.

4.3.4 Benefits of PD

The data related to the advantages of PD described by the teachers was retrieved from the transcriptions of their pre- and post-PD interviews. The key findings on the topics of the benefits of PD are the follows:

- **Improving the quality of the teacher's work**. As Teacher 3 pointed out, PD is necessary for her to *"do the job better"*. Teacher 6 partially shares the opinion, while also stating that PD sets the standard for *"working properly"*.
- **Keeping the teacher motivated**. Teachers 2 and 7 pointed out that PD provides them with new knowledge and skills that keep them willing to continue in the profession and gives them satisfaction.
- **Providing the teacher with confidence**. Teacher 1 believes that PD sets the teacher the benchmark and provides them with confidence in what, why, and how they do it. This confidence also encourages the teacher to use new methods and techniques as well as to look for new solutions in teaching and relations with colleagues. This finding illustrates that PD is a way to support development of the activist professionalism (Sachs, 2016), which includes

fostering the aspect of research in the teacher's practice. Teacher 3 commented that PD helps her *"to start feeling better as a professional and as person"* (Pre-PD Interview_Teacher 3).

The findings reveal that the benefits of PD are more related to the way the teacher feels in the classroom rather than to specific knowledge or skills they receive through PD. The relations between the teachers' attitude to their classroom practice and the actual possibility for change in their teaching is very topical for PD initiatives (Borg, 2018; Guskey, 2002; Durrant, 2019). However, the data needs further investigation in the area of teachers' PD interests and the types of PD they prefer.

4.3.5 Available and Preferred Types of PD

The data related to the types of PD that are available to teachers and preferred by them was based on the participants' responses to Question 15 of the teachers' survey and on comments made by the teachers during the pre-PD interviews. Question 15 of the teachers' survey asked the teachers how likely they were to participate in the types of PD which were listed below, ranging from a lecture to independent reading of curriculum documents as well as different forms of collaborative learning, including joint planning sessions and peer reflection meetings. The participants' answers are provided in Table 4.6 A and Table 4.6 B. The tables provide the data regarding teachers' preferences as to the likelihood of their participation in PD events on topics or early language immersion. The teachers' responses are organised into the four categories of likelihood, which are highly unlikely, unlikely, likely, and highly likely. Such categorisation of the findings provides an overview of the variation of the teachers' preferences regarding the attendance of different PD events in the area of early language immersion. The findings suggest that the teachers tend to choose the following types of PD: 1) events that are led by practitioners or specialists; 2) PD forms which provide them with expert knowledge, such as reading research articles; and 3) collaboration and networking PD events.

Interestingly, the participants of the survey seemed more favourable to webinars than the teachers who were interviewed at Stage 2 of the research. Although the latter pointed out that they had been offered webinars or blended forms of PD more frequently, they still preferred face-to-face instruction over the webinars (Teachers 1, 2, 3, and 6). Speaking about reasons for their preferences, the teachers pointed out that: 1) face-to-face PD events usually deal with more practical issues and participants can ask questions, while *"webinars usually leave no time for questions"* (Teacher 1); 2) purely web-based

courses can be challenging to take part in as it takes extra motivation and self-discipline to do all tasks on time (Teacher 3); 3) the Zoom option is not as enjoyable (Teachers 2 and 6); and 4) being on-site allows for ideas exchange, which means that *"you do not only receive knowledge, but can also talk about some of your ideas, maybe you could even have your ideas developed or corrected*" (Teacher 6). The participants from Group 1 also value opportunities for collaborative learning, such as planning or developing activities together with their colleagues.

Table 4.6A *The Teachers' Choices for Participation in Different Types of PD: Group 1(n=34)*

Type of PD	Likelihood of attendance			
	Highly unlikely	Unlikely	Likely	Highly likely
1. A lecture delivered by a specialist on Early Years or Language Immersion education	3		19	12
2. A workshop on Early Years or Language Immersion education led by a practising teacher	1	1	10	22
3. A regular meeting of members of the network of ECEC teachers to reflect on their individual experience	1	6	17	10
4. A collaborative session with other teachers to develop a new task or material	1	5	13	15
5. A joint planning session with colleagues	1	4	17	12
6. Reading research article on the topic of early language immersion	1	5	21	7
7. Reading research article on the topic of play-based learning	1	3	20	10
8. Reading legislation/curriculum in the area of early years education	1	8	14	11
9. Participating in a webinar on the topic of early language immersion	1	3	18	12
10. Watching an educational video on the topic of child development	1	1	17	15
11. A regular meeting of members of the network of preschool language immersion teachers to reflect on their individual experience	1	9	12	13

As seen from the table below, the participants from Group 2, who mostly work with non-Estonian speaking children in Estonian-medium preschools which do not yet implement immersion pedagogy, are most interested in opportunities to learn about early language immersion.

Table 4.6B *The Teachers' Choices for Participation in Different Types of PD: Group 2 (n=15)*

Type of PD	Likelihood of attendance			
	Highly unlikely	Unlikely	Likely	Highly likely
1. A lecture delivered by a specialist on Early Years or Language Immersion education		1	10	4
2. A workshop on Early Years or Language Immersion education led by a practising teacher			7	8
3. A regular meeting of members of the network of ECEC teachers to reflect on their individual experience		3	10	2
4. A collaborative session with other teachers to develop a new task or material		4	8	3
5. A joint planning session with colleagues		1	7	7
6. Reading research article on the topic of early language immersion			11	4
7. Reading research article on the topic of play-based learning			8	7
8. Reading legislation/curriculum in the area of early years education		1	7	7
9. Participating in a webinar on the topic of early language immersion		2	8	5
10. Watching an educational video on the topic of child development		1	5	9
11. A regular meeting of members of the network of preschool language immersion teachers to reflect on their individual experience		2	9	4

The findings on the theme of the PD types preferred by the teachers suggest that the research participants tend to choose PD events that support collaborative and activist professionalism (Sachs, 2016) which channel the teacher's proactive position as the agent of change and reflect features of effective professional development (McElearney et al.,

2019; Opfer & Pedder, 2011). As the preferred PD types have been analysed, it is essential to study the topics of teachers' PD interests, which is done in the following theme.

4.3.6 Teachers' PD Interests

The data related to the teachers' PD interests was obtained from the transcriptions of their pre-PD interviews. It should be noted that main findings on the theme which are presented in Table 4.7 below mostly comply with the areas of the teachers' PD needs described under subsection 4.3.3 The Teachers' Overall Satisfaction with the Current PD Provision. Table 4.7 provides an overview of the PD areas of interests of the teachers, highlighting the topics which the participants wish to explore within each area. The presented data illustrate a wide range of teachers' interests ranging from pedagogical approaches and study material development to games for language learning and supporting SEN children. Each data entry in the table includes the number of teachers who have mentioned it as their area of PD interest and provides the code for the teachers. In this way the table illustrates both individual PD interests as well as those that are shared by the participants.

Table 4.7 *The Teachers' PD Interests*

The area of PD interest	The topic	The *n* of the teachers
Early years language teaching	Second language acquisition at the early age	1 (Teacher 1)
	Early years language learning	1 (Teacher 3)
	Games for language teaching	1 (Teacher 6)
	Child development and play	1 (Teacher 7)
Pedagogy	Pedagogical approaches	1 (Teacher 6)
	Montessori pedagogy	1 (Teacher 3)
Study materials development	Study materials	2 (Teachers 4 and 5)
	Use of ICT	1 (Teacher 4)
	Educational cartoons	1 (Teacher 5)
	Language learning videos	1 (Teacher 5)
Working with SEN children	Working with SEN children	3 (Teachers 2, 4, and 7)
	Working with children with concentration difficulties	1 (Teacher 2)
	Working with children with speech delay	1 (Teacher 2)
Psychology	Psychology	1 (Teacher 6)

The fact that the topics brought up by the teachers, which they refer to as their long-term interests, for instance, Teacher 3 referred to *"language as such as an old interest"* of hers, repeat the main areas of teachers' PD needs suggests the topicality of the issues in current ECEC settings of Estonia and the necessity to further investigate the teachers' PD needs in the area of language immersion pedagogy.

4.3.7 PD in the Area of Language Immersion Pedagogy

The findings within this theme were retrieved from the participants' responses to Question 18 of the teachers' survey and the teachers' pre-PD interviews. The aim of Question 18 of the teachers' survey was to find out which topics in the area of language immersion pedagogy the teachers would like to receive PD on. The teachers were offered 15 topics to select from. Figure 4.7 illustrates the top five choices of the 49 participants. The results highlight the areas in which the participants seek professional development and support in order to improve their teaching in early language immersion classrooms. The most prominent areas of teachers' PD interests are designing activities for enhancing learners' output in the target language (chosen by 38 teachers), techniques and activities for scaffolding SLA as well as supporting children with special educational needs (both areas selected by 37 teachers). The topics which seem attractive as areas for PD for fewer participants are the enhancement of the quality of the spontaneous teacher-child interaction as well as use of digital tools to improve one's teaching (both areas of interest selected by 28 teachers). The findings suggest that the topic of scaffolding (Mitchell et al., 2019) used for supporting SLA (Swain et al., 2015) and for constructing of the learning process (Creed, 2013) is of high topicality to teachers who look for various solutions to support the young learners in understanding and use of the immersion language through use of afore-mentioned study materials and ICT. The necessity to use different study materials, including digital means is also referred to by the teachers in their pre-PD interviews. For instance, Teacher 5 commented on having a Smart board in her classroom but not being able to use it efficiently.

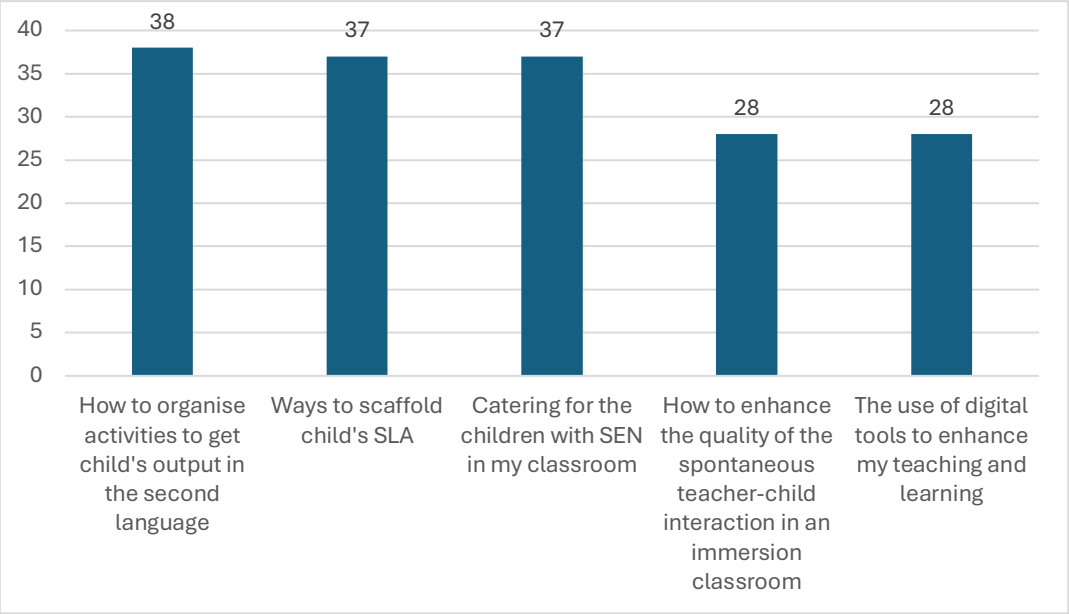

Figure 4.7 *Teachers' PD Interests in the Area of Language Immersion Pedagogy*

In addition to more specific topics of the language immersion methodology which were pointed out in Question 18, the participants of the pre-PD interviews pointed to receiving professional development on systematic aspects of implementation of the language immersion pedagogy. For instance, Teacher 4, who had just started working in the language immersion classroom and been guided mostly by *"trial and error, by [her] own ideas"* said that she needed systematic knowledge about methodology as a whole and the way how to start with immersion. Teachers 6 and 7 pointed out the necessity to receive PD on games for language learning, moreover the former commented on the need to know how to transform games and make them more complicated as the children become more proficient in the immersion language (Met, 2008; Fortune & Tedick, 2015).

4.3.8 Summary of Key Findings on Research Question 2

Making conclusions about the teachers' satisfaction with the current PD provision, it can be stated that: 1) the organizational culture, especially in the area of working time, information flow, and reimbursement schemes, need to be altered in order to improve teachers' access to PD events; 2) there are improvements necessary in the linkage between the content areas of topics regarding early years development and language immersion pedagogy, which could be an area of improvement for universities and other organisations providing teachers' PD; 3) the availability of the topic of teaching SEN children needs more attention and development; 4) teachers need to be offered more face-to-face PD events which they prefer, as face-to-face instruction provides them with opportunities for

networking and communicating with the teacher trainer and colleagues; 5) the teachers prefer to learn from practitioners and specialists.

4.4 The Role of a Collaborative Approach in Meeting Teachers' PD Needs

Teachers' views on cooperation with their colleagues and learning from them as a way to meet their PD needs framed the third research question, which is "How could the PD needs of early immersion teachers be met or addressed through a collaborative approach?". This subsection discusses the following themes: Learning from Colleagues; Forms of Collaborative Professional Development; Benefits of Learning from Colleagues within the PD Initiative; and Experience of Participation in the PD Initiative.

4.4.1 Learning from Colleagues

The data related to teacher collaboration was collected from the teachers' descriptions of their cooperation provided during pre-PD interviews and the participants' answers to Question 15 of the teachers' survey, which, as mentioned under theme 2E aimed to reveal the types of PD teachers prefer. The findings on this theme indicate that the teachers value the possibility of learning from colleagues, especially if they can learn practical and engaging activities or pedagogical approaches. When commenting on their collaborative learning experience, the teachers pointed out that they mostly learn from other teachers, 1) in the kindergarten in which they work at during either intentional observation of the colleagues' teaching activity or as a part of everyday conversations and exchange of ideas; 2) during in-house PD events, which either take place on a regular basis, for instance, during teachers' meetings or are organised by the preschool administration; and 3) during experience exchange moments as a part of PD events. These situations of a collaborative approach to PD and the corresponding findings are discussed further.

Based on data collected during this research, learning from colleagues can happen either, 1) intentionally, or 2) as an informal experience exchange in work-related situations and during such conversations, as evidenced below:

4.4.1.1 Intentional Collaborative Learning. This type of collaborative learning includes asking their colleagues for help and learning from colleagues while observing their teaching. The main findings regarding intentional collaboration reveal that the teachers are open for seeking and offering support. The former is closely connected with

seeking language related support, if the teacher whose first language is not Estonian. Thus, Teacher 6 pointed out about improving her Estonian language skills with the help of fellow teachers, *"I am asking for it, I am interested why something is this or another way"*. The non-Estonian teachers also acquire vocabulary while observing the colleagues' teaching activities, with the above-mentioned teacher commenting, *"I hear what others say, and, the way it is said, I can use it for my benefit"*. This data demonstrates that the observations of colleagues' work can also be intentional and a part of in-house training, especially of novice teachers. The practice of novice teachers attending their colleagues' classroom activities and analysing them was established when universities together with preschools had the so-called induction year policy. It was a programme for the novice teachers' first year on the job, which consisted of appointing a mentor from among colleagues. The mentor supported the mentee, i.e., the novice teacher in planning their teaching activity and analysing activities conducted by the other teacher which the mentee had observed (Tallinna Linnupesa lasteaed, 2014). The possibility of observing colleagues' work indicates the preschools' favourable working climate and appreciation of collaborative learning which enhance the early years teachers' commitment to their work (Chang et al., 2024). It also helps to build trust among colleagues as well as to define good teaching practices and enhance them in the process of professional collaboration. In general, the practice of attending co-workers classrooms is common: during the pre-PD interviews Teacher 4 recalled observing other teachers' activities during her first year of work, while Teacher 7 who by the time of the interview had been working in the kindergarten for two and a half months mentioned her intention to visit colleagues' classrooms for observation; and Teacher 2 pointed out that such observations are organized in her kindergarten as a part of "doors open" activities for teachers which are meant as experience and ideas exchange. Teacher 1 identifies observations as a useful way to ask questions and learn why the colleagues conduct teaching activities in a specific way. The 'doors open' activities support teachers' collaboration in defining features of quality teaching and working together towards ensuring that this quality is met in every classroom within the preschool. Thus, intentional collaborative learning helps to reflect on the existing practice and transform it.

4.4.1.2 Exchange of Ideas. One teacher indicated that the exchange of ideas and pedagogical approaches sometimes takes place during casual conversations at work. For instance, at the pre-PD interview Teacher 6 described the situation when her request for

assistance with Estonian vocabulary grew into the discussion of the teaching activity and her colleagues' providing her with ideas. She commented, *"I am not afraid to use other people's ideas. But I add my own twist to them"*. Such invisible learning from each other which is a part of colleagues' natural communication supports the idea of PD as "continuous improvement" (Damjanovic & Blank, 2021, p. 574). While having such everyday discussions, teachers unnoticedly enrich each other's practice with ideas, thus motivating colleagues and themselves to analyse their teaching and improve it.

A further finding to emerge from the data is the exchange of ideas and pedagogical recommendations as a natural part of PD events, which the teachers also appreciate. For instance, during the PD initiative I organised, one teacher described the ways in which they use their learning environment, including the stairs, for highlighting and practicing essential vocabulary with children. As shared later by teacher 6 in the post-PD, she and her tandem teacher (Teacher 2) got inspired by the idea of using the stairs. Teacher 6 said that Teacher 2 and she, who used the same computer for Zoom sessions of the PD initiative, always had some paper ready to write down ideas (Post-PD Interview_Teacher 6). In fact, one of the teachers pointed out that the PD participants' communication is *"where most of this learning comes from"*, thus highlighting her recognition of the role of experience exchange at organised professional development occasions (Pre-PD Interview Teacher 2). According to the participant, the description of real-life classroom situations or activities coming from fellow practitioners is the knowledge the teachers seek during PD events. Teacher 3 recalled learning how to integrate vocabulary practice into the fruit break, and Teacher 5 commented on being introduced to interesting activities and approaches during teachers' presentations at PD trainings. These findings echo the results of previous research on the features of effective PD (Durrant, 2019; McElearney et al., 2019; Opfer and Pedder, 2011; Darling-Hammond et al., 2017) highlighting the collaborative and engaging nature of efficient professional development. The findings indicate that the teachers prefer learning from colleagues in the following situations: 1) activities on specific topics (Teacher 1), which corresponds to effective professional development being content-focused; 2) use of active learning methods (Teacher 3), which complies with the incorporation of active learning as a feature of effective PD; 3) receiving explanation on why an activity is conducted in a certain way (Teachers 1, 4 and 3), which indicates that the teachers are interested in having an opportunity for reflection and feedback, which are also essential for effective professional development.

Another key finding and key aspect of teachers' collaborative approach to PD is professional development that teachers of a preschool organise and conduct for themselves. In her pre-PD interview Teacher 2 referred to the above-mentioned "doors open" activities, which include kindergarten teachers coming to one teacher's classroom for observation. This is the kindergarten's way to facilitate the exchange of new knowledge and skills between teachers, including knowledge attained as a result of teachers' PD outside of the preschool. The teacher's comment on her feeling of professional accomplishment when she conducts those exemplary activities, which she describes as *"such inner motivation for me"*, shows the way in which contribution to a professional learning community (PLC) increases the teacher's self-efficacy reported by researchers (Avidov-Ungar et al., 2023; Mertler, 2017; Riveros et al., 2012). These findings are also significant in the context of the mutual benefit as well as attitude and practice transformation of both the mentor and the mentee(s) which were highlighted in previous research by Shabani (2016). Teacher 1 described the system of the established in-house PD which is organised as follows: at regular meetings of the teaching staff each classroom makes a presentation about a project they are implementing or a teaching activity that went well and the children enjoyed. This form of PD shows the characteristics of effective PD (Darling-Hammond et al., 2017), first and foremost, the focus on the content; modelling effective practice; incorporating active learning and supporting collaboration. Moreover, in-house PD events foster the implementation of collaborative and activist teacher professionalism (Sachs, 2016). As noted above, the findings based on the teachers' answers to Question 15 confirm that the participants prefer collaborative forms of PD with the workshop delivered by a practising teacher and collaborative sessions on planning and study materials development being the top PD forms selected by the teachers. The above examples indicate that teachers have experiences of collaborative learning: they have observed their colleagues teaching and provided them with feedback as well as they have shared and gained knowledge and experience through learning together with and from their colleagues. The detailed analysis of their experiences is now presented.

4.4.2 Forms of Collaborative Professional Development

The data related to teacher collaboration was collected from the teachers' descriptions of their collaboration provided during pre-PD interviews and the participants' answers to Question 15 of the teachers' survey, which, as mentioned under

subsection 4.3.5 aimed to reveal the types of PD teachers prefer. The data from the teachers' answers show the importance of collaboration in the process of the participants' professional development. Teachers from both Group 1 and Group 2 demonstrated a marked preference for joint activities. In relation to joint planning sessions, 24 out of 49 participants indicated that they were 'likely' to attend this type of PD event, while 19 out of 49 participants were "highly likely" to do so. A regular network meeting was "likely" to be attended by 27 out of 49 participants and "highly likely" by 12 out of 49 participants. A collaborative session to develop a new task or material was "likely" to be attended by 21 out of 49 participants and "highly likely" by 18 out of 49 participants. Other findings on this theme which were obtained from the teachers pre-PD interviews indicate that the teachers value the possibility of learning from colleagues, especially if they can learn practical and engaging activities or pedagogical approaches. When commenting on their collaborative learning experience, the teachers pointed out that they mostly learn from other teachers, i) in the kindergarten in which they work at; ii) during in-house PD events; and iii) during experience exchange moments as a part of PD events. These situations of collaborative learning and the corresponding findings are discussed further in the next subsection.

4.4.2.1 A Collaborative Approach to Professional Development within the Same Kindergarten. Based on the present research, learning from colleagues can happen either, intentionally, or as an informal experience exchange in work-related situations and during such conversations, as evidenced below. According to the participants, the former type of collaborative learning includes asking their colleagues for help and learning from colleagues while observing their teaching. The main findings regarding intentional collaboration reveal that the teachers are open to seeking and offering support. Teacher 6 described her experience of turning to colleagues from the neighbouring classroom for help as follows:

> *I needed to specify some of those vocabulary things for myself, I have already learned to do that. They immediately asked me what I was going to do. I started telling them what and how I was going to do. They asked me if I wanted to take a sheet of paper and make an outline of a child. I thanked them for the idea which I borrowed and carried it into life although I had not planned this. I understood that it suited me, so I borrowed the idea and used it. This is a recent example from yesterday.* (Pre-PD Interview_Teacher 6)

The situation of professional cooperation is often connected with seeking language related support if the teacher's first language is not Estonian. Thus, Teacher 6 also pointed out about improving her Estonian language skills (Bell & Borden, 2022; Huhn et al., 2021) with the help of fellow teachers, *"I am asking for it, I am interested why something is this or another way"*. Teacher 4 commented that she would even like to have to have Estonian-speaking teachers to play some games with her so that she could acquire the necessary vocabulary, *"let's say you get together in the sort of language café and you take some board game there. And then you play this game there like children and [practice] all these different phrases, like "go there", "take this"* (Pre-PD Interview_Teacher 4). The non-Estonian teachers also acquire vocabulary while observing the colleagues' teaching activities, with the above-mentioned participant commenting, *"I hear what others say, and, the way it is said, I can use it for my benefit"*. (Pre-PD Interview_Teacher 6).

Classroom observation is another form of professional collaborative learning which is used in kindergartens to exchange experience and to support novice teachers during their induction year. Teacher 7, who by the time of the interview had been working in the kindergarten for two and a half months, mentioned her intention to visit colleagues' classrooms for observation. Teacher 4 also commented on visiting her colleagues and observing her colleagues' teaching activities during the first year of her work in the kindergarten (Pre-PD Interview_Teacher 4). However, she went on to express her disappointment in not being welcome to attend other teachers' activities any longer, as her colleagues believe that her presence *"means additional preparation"* (ibid.).

The possibility of observing colleagues' work indicates the preschools' favourable working climate and appreciation of collaborative learning which enhance the early years teachers' commitment to their work (Chang et al., 2024). Classroom observations can also be a part of in-house PD events which are discussed further.

4.4.2.2 A Collaborative Approach to Professional Development during In-House PD Events. Other findings on the topic of classroom observations reveal that this professional development activity can be a part of a planned collaborative approach to professional development for all teachers in a particular preschool. Such practice is called a "doors open" day and it means that during this day teachers can visit each other's classrooms, observe teaching activities, educational games, etc. For instance, Teacher 2 pointed out that "doors open" activities are organised in her kindergartens as a way to

facilitate the exchange of new knowledge and skills between teachers, including knowledge attained as a result of teachers' PD outside of the preschool. Teacher 2 described the benefits and the confidence she gains from this form of a collaborative approach to PD. She recounted how she received *"inner motivation" from seeing her colleagues' reaction when she demonstrated some games and activities, "if I have 'open door' activities, I try to include these new methods and games so that everyone goes like, "Wow! Such a great activity!" This is such inner motivation for me, this is the kind of person I am who can teach something to others"* (Pre-PD Interview_Teacher 2). Teacher 1 identifies observations as a useful way to ask questions and learn why the colleagues conduct teaching activities in a specific way, *"you go and you see that she is doing a very interesting thing, and then I ask her "Why are you doing it?" and then she explains to me that, for instance, this is very good for developing logics"*. (Pre-PD Interview_Teacher 1).

Classroom observation and "doors open" days are not the only examples of in-house PD events. Teacher 1 described the system of the established in-house PD system which is organised as follows: at regular meetings of the teaching staff each classroom makes a presentation about a project they are implementing or a teaching activity that went well and the children enjoyed. This form of PD shows the characteristics of effective PD (Darling-Hammond et al., 2017), first and foremost, the focus on the content; modelling effective practice; incorporating active learning and supporting collaboration. Moreover, in-house PD events foster the implementation of collaborative and activist teacher professionalism (Sachs, 2016). These findings emphasise the significance of teacher collaborative learning within the preschool and support the outcomes of previous research by Eun (2008) which concluded that in-school PD events may be considered more efficient than external professional development as interaction with people whom teachers know well enhances their development.

The establishment of the preschool methodological centres on the premises of language immersion preschools which are described in Chapter 1 took organisation of in-house PD events to another level. Now PD events which are conducted in these preschools and are available for their pedagogical staff also attract participants from other kindergartens in the area, allowing for more extensive exchange of experience and ideas. One of the research participants, Teacher 4, attended a PD event in the methodological centre in Narva, where local teachers, *"observed how educational activities, including these morning assemblies are conducted"* (Pre-PD Interview_Teacher 1). These centres

are an example of modelling effective practice (Darling-Hammond et al., 2017) through sharing practical experience in real ECEC settings. Activities offered to teachers by these centres are also significant in the context of the enhancement of ZTPD, as they represent targeted collaborative tasks which require active engagement. In this way the research findings echo the outcomes of previously conducted studies on teacher learning and ZTPD (Warford, 2011; Fani & Ghaemi, 2011; Kuusisaari, 2014) emphasising the role of targeted interaction between teachers in their professional development.

4.4.2.3 A Collaborative Approach to Professional Development through Experience Exchange during PD Events. As it has been described above, the exchange of ideas and pedagogical approaches sometimes take place during teachers' casual conversations at work. For instance, the previously described situation recalled by Teacher 6 during her pre-PD interview when her request for assistance with Estonian vocabulary grew into the discussion of the teaching activity and her colleagues' providing her with ideas. She commented, *"I am not afraid to use other people's ideas. But I add my own twist to them"*. Such invisible learning from each other which is a part of colleagues' natural communication supports the idea of PD as "continuous improvement" (Damjanovic & Blank, 2021, p. 574). A further finding to emerge from the data is the exchange of ideas and pedagogical recommendations is a natural part of PD events, which the teachers also appreciate, and which was pointed out by several participants. In fact, one of the teachers pointed out that the PD participants' communication is *"where most of this learning comes from"*, thus highlighting her recognition of the role of experience exchange at organised professional development occasions (Pre-PD Interview Teacher 2). The findings show that the description of real-life classroom situations or activities coming from fellow practitioners is the knowledge the teachers seek during PD events. For instance, Teacher 3 recalled learning how to integrate vocabulary practice into the fruit break, which is a part of preschool daily schedule. Before the children start eating fruit, which varies every day, they answer the teacher's questions about what fruit it is, what shape and colour it is. The teacher also shared that she changes her vocabulary practice routine, and that they "*have already started to play during the fruit break"* (Pre-PD Interview Teacher 3). Continuing the discussion of experience exchange on the topic of teaching routines, Teacher 5 commented on being introduced to interesting activities and approaches during teachers' presentations at PD trainings. Teacher 6 highlighted that communication with other teachers during PD events gives a boost to develop her

professional ideas, *"that you do not only receive knowledge, but can also talk about some of your ideas, maybe you could even have your ideas developed or corrected"* (Pre-PD Interview Teacher 6). These results support the outcomes of previous research (Kuusisaari, 2014) which revealed that teachers' collaborative participation in activities requiring active involvement and critical judgement boosts their professional development and extends their ZPD. The support-related findings of the current study also echo the results of previous research on the features of effective PD (Durrant, 2019; McElearney et al., 2019; Opfer and Pedder, 2011; Darling-Hammond et al, 2017) where it is characterised as supporting collaboration, using models of effective practice, and incorporating active learning. The research findings show that the teachers appreciate not only learning about efficient practices but also participating in them. The findings also revealed other benefits that teachers received from the PD initiative which are discussed further.

4.4.3 Benefits of Learning from Colleagues within the PD Initiative

The previously described data related to benefits from teacher collaboration was compared to the teachers' comments about their gains from professional collaborative learning experienced during the PD initiative they were offered as a part of the study. The PD programme which was inspired by such pillars of the professional learning community as the shared values and vision; collaboration focused on learning; an individual and collective approach to professional development; and mutual trust, respect and support (Bolam et al., 2005 cited in King, 2016, p. 579; Tam, 2022). The design of the PD initiative is described in detail in Chapter 3.

The participants provided their feedback regarding learning from each other within the PD initiative during their post-PD interviews, which were Stage 4 of the study. Similarly to their opinions on collaborative learning expressed during pre-PD interviews, all seven teachers highlighted that they were interested in the experience exchange that was part of the PD initiative and that they found it interesting. All the teachers but one also pointed out that it was useful. Teacher 5, who works with special needs learners, commented that she could not assess the usefulness of the experience exchange because, as she said, *"I have different children, and I work in a different direction"* (Post-PD Interview_Teacher 5). The practical value of learning from colleagues, which was previously revealed by findings from Question 15 of the teachers' survey and from the pre-PD interviews, was echoed in the findings from the post-PD interviews as well.

Teacher 6 who usually took part in Zoom sessions with her tandem teacher, Teacher 2, remembers in her interview that from time to time during the sessions they would mute their microphone to exchange thoughts and impressions on other teachers' activities,

> *We even had such a moment when we said, 'Wow, we need to make a note of that or we have not even thought of that'. If it were one to one training, the impact might have been greater, but there would not have been thus effect that you know that others actually do things this way.* (Post-PD Interview_Teacher 6)

Teacher 3 pointed out that such practical examples, especially heard from the teachers who have led children from the early age up to school, give other teachers, including herself faith and confidence. Teacher 4 also commented that she tried implementing the practical tips that she heard about from other during the PD initiative in her work.

Hearing from other teachers' experience was also beneficial for personal self-analysis and growth. Teacher 1 pointed out the role of looking at one's own teaching through the activities described by other participants,

> *Actually, we do not see ourselves from the outside. And when we conduct a self-analysis, there are things which we do not think about ourselves because these are the things that are so clear to us or because we automatically behave that way. But now, observing others and listening to them, we find that this could be done slightly differently, or this needs to be improved; or I can do this thing very well; that thing is very good, I would like to try it myself. Then I started to analyse myself more…* (Post-PD Interview_Teacher 1)

This finding echoes the results of previous research (Scanlon, 2011; Jacobs et al., 2011 cited in Taole & Mawela, 2019, p. 38) emphasizing the importance of teacher's reflexive practice for their professional development. Teacher reflection is an essential aspect of their professional development which ensures mediation of the obtained knowledge and skills, according to the research on the application of the Vygotskian developmental theory to teacher PD (Eun, 2008; Shabani, 2016; Shabani et al., 2010; Warford, 2011; Fani & Ghaemi, 2011; Kuusisaari, 2014). Comparing the results of the current study to the research focusing on the role of mediation in teacher PD (Eun, 2008; Shabani, 2016), which is discussed in subsection 2.7.3.1 Teacher PD Through the Lens of Sociocultural Theory, it is essential to note that the PD initiative provided the teachers

with all of the three types of mediators: *tools* in the form of the study materials and guided games used during the sessions; *signs* through the use of suggested reading material and regular e-mail communication with the researcher; and *other humans* represented by the participants of the PD initiative.

Considering support as one of the pillars of the collaborative approach to professional development, it was essential to analyse findings related to receiving support from colleagues, especially in the case of participants (such as Teacher 3 and Teacher 4) who expressed their need for mentoring or linguistic guidance in their pre-PD interviews. In her feedback Teacher 4 said that owing to the PD initiative and the Estonian-speaking participants of it, she overcame her language barrier and now has more confidence to speak Estonian, *"I have overcome my fear to communicate in the Estonian language because I had such a barrier that I do not have now. I do not care if I say correctly, I still try to communicate"* (Post-PD Interview_Teacher 4). Both Teachers 3 and 4 who had previously described situations in which they would use the children's first language, commented that after the PD programme they stopped using the Russian language when communicating with their learners. This shift in their practice came from both becoming aware of the principles of SLA and language immersion pedagogy as well as from the growth of their own Estonian language proficiency and confidence in using the language.

Teacher 3 who commented on the teacher's feeling of self-efficacy and the necessity to feel encouraged pointed out that having other colleagues learning with her provided her with the feeling of support,

> *Observing each and every one, you understand that we are trying to do the same thing, and we are coping with it. It is good that you can see others at this moment, feel their support, 'We are together, we are developing together'*. (Post-PD Interview_Teacher 3)

The findings convey the message of the teacher's feeling of having the support which has a key significance for teachers' feeling of being professionally effective as noted by Lipscomb et al. (2022). The significance of the colleagues' support which is highlighted by the findings of this study echoes the results of previous research by Eun (2008) and Shabani (2016) that emphasise the social nature of PD.

The teachers also provided comments on other aspects of their participation in the PD initiative, including their professional gains as language immersion teachers. The

teachers' main takeaways from taking part in Stage 3 of the research are discussed further in the next subsection.

4.4.4 Experience of Participation in the PD Initiative

As the aim of the PD initiative was enhancement of the participants' knowledge and skills in the area of early language immersion pedagogy, this subsection presents the findings related to the way in which the experience of taking part in the PD programme contributed to the teachers' professional development in this area compared to their corresponding comments about their PD needs prior to the PD initiative.

4.4.4.1 Gaining Professional Confidence. After completing the PD programme, Teacher 4 who had previously commented on lacking systematic knowledge about immersion pedagogy started noticing progress in her learners who *"understand absolutely everything"* as well as in her own approach to teaching. She commented, *"I always used to have the fear that I was doing something wrong. Now it has disappeared. It seemed to me that I was doing something or somehow wrong. After your visit, I realised that I was going in the right direction"* (Post-PD Interview_Teacher 4). Teacher 2 also commented on having the feeling of being "on the right track" after completing the PD programme. Teacher 3 also revealed both feeling confident in herself as a teacher as well as having better Estonian-language communication with her learners, *"Now I am actually living under this impression that all the limitations were in my mind, and now I am not afraid. Or maybe the children and I have reached the stage where we have the basic vocabulary that already allows us to talk to each other on any topic [in the Estonian language]"*. (Post-PD Interview_Teacher 3). In her post-PD interview Teacher 7 pointed out that participation in the PD initiative provided her with support and helped her change herself as a teacher, including through building her understanding of the way *"the language learning works"* (Post-PD Interview_Teacher 7). Based on these findings it can be concluded that the PD programme is an example of empowering practice that supported development of the participants' activist professionalism (Sachs, 2016): the PD initiative within this research provided the participants with transformative practices, helped them to obtain new knowledge, and enhanced their enquiry-based thinking on topics related to children's language development. Another aspect of the activist

professionalism that the PD initiative supported was the production of new knowledge. The corresponding findings are discussed further.

4.4.4.2 Production of New Knowledge. The new knowledge produced by the teachers as a result of participation in the PD programme included different aspects of early language immersion pedagogy:

- Teachers 2 and 4 commented on the organisation of an efficient learning environment and how they are now paying more attention to the way the learning environment in their classroom is organised, including displays on the walls. These findings are essential in the context of previous research on the role which children's interaction with the learning environment plays in their overall development (Õun, 2009) and development their literacy skills in particular (Strauss & Bipath, 2020; Rand & Morrow, 2021);
- the context of early language immersion in other countries (Teacher 1, 5). The participants pointed out the benefit of the videos they watched with immersion experiences from other countries, including USA and Finland, commenting that *"needs are different depending on our location. And the approaches to the child and the child as a learner are different"* (Post-PD Interview_Teacher 1). These findings support the outcomes of the research (Shabani, 2016; Guskey, 2025) which emphasise the significance of the social context that teachers work in and the necessity to take into consideration and under discussion in teacher PD;
- Teacher 1 highlighted child-led pedagogy and commented that she started to analyse her own teaching and the role that children and children's active position in knowledge building play in it,

Having analysed it, I now see that I often do too many things for children instead of letting them do that. So, I do not allow the child to reach this knowledge themselves, as there is too much haste happening. (Post-PD Interview_Teacher 1) The teacher then described the way in which she changed her approach to planning to provide the children with more possibilities to express themselves. These outcomes illustrate the role of reflection, which is echoed by the results of previous research (Shabani et al., 2010; Warford, 2011; Fani & Ghaemi, 2011), for teacher professional development and transformation of their practice.

The PD initiative also provided two participants (Teacher 5 and 6) with benefits that were not directly related to early years pedagogy. Both participants pointed out that the Zoom sessions of the PD programme were beneficial for them as a means to upgrade their ICT skills.

4.4.4.3 Willingness to Contribute to Further Collaboration as a Part of PD. As a part of their post-PD interviews the teachers were asked whether they see themselves continuing collaboration as a part of their PD in a professional learning community (PLC)-like environment which was simulated as a part of the PD initiative. The data obtained from their answers indicates the following:

- Participation in the collaborative PD initiative provided the teachers with opportunities for communication (Teachers 5 and 6). Teacher 6 commented on the importance of stress-free communication when the teacher knows that they are accepted in the community, which is especially important in case the teacher is conscious about using Estonian, being a non-native speaker of the language. Thus, the participant highlights the importance of inclusive membership, mutual trust, respect and support, which are some of the key features of an effective PLC (Bolam et al., 2005 cited in King, 2016, p. 579; Tam, 2022).
- The collaborative learning experience was perceived as a possibility for a new form of self-analysis. Teacher 1 highlighted the importance of reflection (Scanlon, 2011) and pointed out that hearing other teachers describing the actions that she might be already doing automatically as a part of her teaching, encouraged Teacher 1 to *"take notice of them and engage in a deeper self-analysis"*. While researchers such as Taole & Mawela (2019) point out that not all teachers may have the skills necessary for reflexive practices, the findings indicate that participation in a PLC can be the way to encourage them (Avidov-Ungar et al., 2023).

The participants (Teachers 1 and 3) commented on existing professional learning communities and the opportunities they provide. Teacher 3 recognised the variety of opportunities for joining different teachers' groups, including different communities online and in social media. On the other hand, Teacher 1 highlighted the work conducted in one of the preschool methodological centres where the centre coordinator has managed to establish a real learning community of preschool immersion teachers by not only

offering the necessary exchange of professional knowledge, also giving the space and time for "*sharing concerns and successes"* (Teacher 1). Teacher 1, as well as Teachers 2, 3, and 6 emphasised the idea of face-to-face communication as a part of successful operation of a PLC, as, according to teacher 6,

> *People are ready to talk much more in an informal atmosphere when they do not feel like in a lesson, but during this direct live communication like while having a cup of coffee. Sometimes people talk about who does what in their classrooms, speak about the problems they face and fears they have.* (Post-PD interview_Teacher 6)

This finding echoes the outcomes of previous research (Bower et al., 2017) whose participants pointed out the lack of communication and opportunities for experience sharing is one of the main factors hindering blended learning.

4.4.5 Summary of Research Question 3

The findings related to the role of a collaborative approach in meeting teachers PD needs in relation to early immersion pedagogy indicate that all the participants have experienced involvement in collaboration as a part of PD even prior to their participation in this study. The teachers have actively taken part in exchange of knowledge, collaborative activities in an atmosphere of trust and respect which are the features of an effective professional learning community. The data show that the main benefits of the professional collaborative development for the teachers are related to their professional self-efficacy and wellbeing rather than to particular aspects of language immersion pedagogy. The aspects of feeling professionally competent that have been highlighted by the teachers as a significant benefit of the PD initiative include having a safe environment to talk about one's professional concerns, to share effective and well-tried methods as well as to communicate in the Estonian language without feeling pressured.

4.5 Conclusion

The findings of the study were analysed with respect to the following three research questions:

1. What are teachers' specific PD needs in relation to early years immersion pedagogy based on current policy and practice?

2. What are the perspectives of early years immersion teachers in north-east Estonia and Tallinn in relation to the provision of professional development?
3. How could the PD needs of early immersion teachers be met or addressed through a collaborative approach?

The analysis of the key findings revealed that changes to the current policy resulting from the transition to Estonian-medium education have had an impact on the teaching practice of early years specialists working in language immersion in the North-East of Estonia and in Tallinn. The teachers, especially those whose first language is not Estonian, have to put in time and effort not only in preparing for educational activities and planning them, but also in improving their Estonian language proficiency, which affects their feeling of professional self-efficacy. The research outcomes also reveal that even if the teacher has the required proficiency in the Estonian language, they still find it challenging to communicate in Estonian in spontaneous interactions with children or in the situations in the classroom which need teacher's immediate reaction or intervention due to concerns with classroom management.

The findings also revealed that the teachers are mostly satisfied with the current PD provision, although the availability of PD events depends on the management's attitude towards teachers' professional development and the corresponding organisational culture within a preschool. The findings also revealed inconsistency in the content areas of PD, which can affect the teacher's approach in the classroom, and a significant difference in frequency of attendance at PD events on different topics.

Most of the participants of the study have experienced membership in a professional learning community either from participation in PD events or as a part of in-house professional development and experience exchange. The research findings reveal that there are preschools in which experience exchange and learning from colleagues have been established as a permanent practice and a part of the preschool's functioning. As professional collaboration and communication are such an integral part of the preschool's teacher work, the participants of the study do not necessarily have the realisation of belonging to a PLC. However, the teachers indicated the need for colleagues' support, especially in relation to using the Estonian language and improving their language proficiency. The findings also reveal that the teachers are overly concerned with the issues of discipline and classroom management which, along with maintaining the children's interest, are seen as the key factors of successful learning. In addition to these findings, the data has also revealed that the majority of the teachers need support and guidance in

the implementation of child-led pedagogy. The data obtained through classroom observation did not contain elements of child-initiated pedagogy which illustrates the significance of teacher-led planning and teacher-guided activities and games. These findings reveal that the preschools represented by the teachers who took part in Stages two to four of the research do not implement child-initiated pedagogy and need guidance and teacher PD in order to use these child-led approaches, including the approach inspired by the core principles of the Reggio Emilia pedagogy, as described earlier in Chapter 2, and other forms of project-based learning.

Chapter Five

Conclusions and Recommendations

5.1 Introduction

The current research focuses on the professional development (PD) needs of preschool language immersion teachers in the North-East of Estonia and in Tallinn. It aims to critically analyse and examine teachers' satisfaction with the current PD provision as well as their PD interests and needs investigating ways in which teachers' expectations towards their professional development could be addressed. I considered this topic to be worthy of attention and research due to the increasing need for implementation of early years language immersion pedagogy, which has only escalated with the transition to Estonian-medium education at the preschool stage since September of 2024. This situation requires teachers to have the corresponding knowledge, skills, and attitudes to be able to provide non-Estonian speaking children with possibilities for holistic development in Estonian-medium preschool classrooms. At the moment, only one university in Estonia, Narva College of the University of Tartu, equips teachers with this professional competence in pre-service education. Thus, the role of PD on topics related to early language immersion pedagogy is significant and cannot be overlooked.

This research was planned and designed with the aim to answer the following research questions: 1) What are teachers' specific PD needs in relation to early years immersion pedagogy based on current policy and practice?; 2) What are the perspectives of early years immersion teachers in north-east Estonia and Tallinn in relation to the provision of professional development?; and 3) How could the PD needs of early immersion teachers be met or addressed through a collaborative approach?

This chapter takes into consideration what has been learned in the course of conducting the research and seeking answers to the research questions. Based on the outcomes of the conducted study it explains why the accumulated knowledge and the research results are significant and in which ways they can contribute to future research, policy, and practice. This chapter provides a brief overview of the most essential findings of the literature review in the areas of early childhood education and care (ECEC), second

language acquisition (SLA) and language immersion pedagogy as well as teacher professional development that guided the research and shaped the research design. The methodological design of the research is reviewed together with the methods selected to collect and analyse the data. The chapter then summarises the research findings while highlighting the limitations of the present study. Stemming from these findings, I proceed to document my contribution to knowledge and professional growth. Based on this contribution, the chapter is concluded by suggesting a number of recommendations for policy makers, ECEC practitioners, and future researchers. It is intended that these recommendations will offer alternative avenues for developing PD for preschool teachers in Estonia which implement early language immersion pedagogy, ultimately improving the quality of teaching in early years language immersion classrooms.

5.2 Overview of the Research Project

As explored in Chapter 1, preschool education in Estonia, which is not compulsory, yet popular (IELS 2018 report results for Estonia, 2020), is available for children between eighteen months and seven years of age. The general education system in Estonia, including the preschool stage, is currently going through a major reform of transition from using Russian as a medium of instruction to Estonian-only education. The ultimate aim of the initiative is to provide all children in Estonia, regardless of their first language, with quality education in the state language, which is the Estonian language (Ministry of Education and Research, 2025). The reform is making the biggest impact in the North-East of Estonia and in Tallinn, where the majority of the ethnic Russian population reside (Statistics Estonia, 2024). Prior to the current transition to Estonian-medium education, Estonia has already made attempts to implement Estonian-medium education for non-Estonian speakers, first and foremost, through the establishment of the early language immersion programme in preschools in 2003-summer of 2024. The language immersion "one person – one language" principle having been the fundamental rule for the Estonian language immersion programme (Swain & Lapkin, 2005; Cammarata & Tedick, 2012) remains significant in the context of current transition to Estonian-medium education both in classrooms in the former Russian-medium preschools and in those classrooms in the Estonian-medium preschools which are attended by non-Estonian speaking children. The implementation of the transition reform has also led to new qualification requirements for early years teachers: as of September 1, 2024, preschool teachers are to be either native

speakers of the Estonian language or to have the language proficiency at the C1 level of the Common European Framework for Reference of Languages. These requirements have resulted in changes in organisation of teachers' work in ECEC settings, and they have also had an impact on availability of PD opportunities for teachers.

As explained in Chapter 2, this study views ECEC as the environment which provides conditions for wellbeing and the holistic development of a child through a second language by means of implementation of age-appropriate and child-centred pedagogy (Estonian National Curriculum for Preschool Childcare Institutions, 2008/2024). Taking it into consideration, the acquisition of children's first (Sharma & Cockerill, 2014; Allen, 2017; Fleta, 2019) and second language (Fleta, 2019; Genesee, 2019; Paradis et al., 2021) was discussed. The literature review conducted on the topics of pedagogical approaches supporting the implementation of early language immersion, including child-led pedagogy (Melhuish et al., 2014; Kimer et al., 2016; Smidt & Embacher, 2020); play-based learning (Dickinson & Tabors, 2001; Hopkins et al., 2019; Wall et al., 2015; Fesseha & Pyle, 2016; Walsh et al., 2019) and constructing of supporting learning environment (Hansen, 2020; Kirsch, 2021), especially for children whose first language is different from the classroom language. The literature review also prepared the theoretical framework for analysing early years pedagogies implemented in ECEC settings in Estonia. The literature analysis on the topics related to early language immersion pedagogy, such as stages of SLA in the case of sequential bilinguals (Serratrice, 2018; Paradis et al., 2021); the correlation between input, output (Lindholm-Leary, 2001; Met, 2008; Stephen et al., 2012; Gass, 2015; Baker & Wright, 2017; Mitchell et al., 2019), and the importance of exposure to the target language (Lightbown, 2008; Muñoz and Spada, 2019; Paradis et al., 2021) as well as the ZPD and scaffolding in language immersion education (Swain et al., 2015; Mitchell et al. 2019). These topics formed the content basis for the teachers' survey and the PD initiative conducted within the research. Taking into consideration teacher PD as the focus of the study, a literature review was conducted on issues connected with teacher professional development. Professional development is an ongoing process which is an integral part of teacher's everyday activity (Desimone, 2009). Teacher PD takes different forms, including formally organised PD events and collaboration (King, 2016; Desimone, 2009; Dall'Alba & Sandberg, 2006). Regarding of the form in which PD is provided, there are characteristics defining its efficiency (Garet et al., 2001; Hunzicker, 2010; Kalinowski et al., 2019; Darling-Hammond et al. 2017), such as focus on the content; involvement of

active learning, provision of coaching and expert support as well as feedback and reflection. Taking into consideration that an aim of efficient teacher's PD is enhancing teacher professionalism, the issue of teacher's professional competency and its relation to professional development were analysed based on Sachs' (2016) framework. Teacher PD complying with the above-described characteristics of efficient PD for teachers is fostered by the collaborative and activist types of teacher professionalism which emphasise renewal and transformation of practices, teacher self-reflection and enquiry as well as collaborative learning of teachers, which can be organised in a PLC (Damjanovic & Blank, 2021; Tam, 2022). The findings of the literature review have shaped the design and the theoretical framework of my research.

The research design and methodology are presented in Chapter 3. This study uses a mixed methods approach as it was apparent that either qualitative or quantitative research methods alone would not be sufficient to answer the research questions. In this case the best solution was to use a mixed methods approach (Check & Schutt, 2012; McKim, 2017; Creamer, 2018). Having considered the advantages and disadvantages of each of the core designs of a mixed methods approach, the explanatory sequential design (Creswell and Plano Clark, 2018) was selected as the most suitable for the purposes of this study. The research was planned and developed in four stages, which are described in detail in Chapter 3: at Stage 1 quantitative data were gathered through teachers' survey; at Stages 2 and 4 I obtained qualitative data through semi-structured interviews with teachers which were conducted prior to and after the PD initiative which I had developed and conducted as Stage 3 of the study. The PD initiative consisting of a PD programme and classroom observations was designed to reveal 1) the aspects of current practice that had been impacted by changes to the current policy resulting from the transition to Estonian-medium education; 2) teachers' specific PD needs in relation to early years language immersion pedagogy; 3) teachers' satisfaction with the current PD provision; 4) the role of a collaborative approach to PD in meeting teachers' PD needs. Data gathering through classroom observations was guided with the use of the observation tool which was based on the Observation Tool from COLT Observation Scheme A & B (Spada & Frohlich, 1995) and the Class Observation Tool: All Ages (NAEYC Site Visit, 2019) and adapted in compliance with the needs and focus of this study. The collected data were examined using the method of reflexive six-phase Thematic Analysis (TA) which had been chosen due to its flexibility and the ways it allowed me as a researcher to engage with the data actively (Braun & Clarke, 2012; Braun & Clarke; 2020; Braun & Clarke;

2022). The data analysis was conducted using help from the NVivo software to define initial themes and codes.

Chapter 4 presents the research findings and analyses them in compliance with the research background described in Chapter 1 and the theoretical framework established as the result of literature review in Chapter 2. The main outcomes related to implementation of early years pedagogy in Estonia based on the current policy regulating preschool education are the following. Even though teachers whose first language is not Estonian feel pressure to perform well in the language of instruction during both teaching activities and everyday interaction with children, they make the effort to prepare Estonian-medium teaching activities and deliver them in scaffolded way. Teachers' insufficient Estonian language proficiency negatively impacts their access to PD opportunities and professional self-efficacy, which is the reason why, as the findings indicate, they require emotional support. Teachers who speak Estonian as their second language tend to be concerned with issues of classroom management and children's engagement and are less likely to implement child-led and play-based learning. As Chapter 4 explains, teachers recognise the value of professional development. However, the findings indicate that their access to PD events differs significantly due to reasons related to the organisational culture and the management's attitude to teacher PD, teachers' working load, and their personal motivation for professional development. The research findings show that 39% of the teachers are satisfied with the current PD provision, however only 18% of the teachers completely satisfied with the present PD opportunities. The research outcomes show that although 57% of the teachers were satisfied overall with the present possibilities for professional development and learning that they had, there were some areas and topics of PD where the teachers' needs were not fully met, such as working with SEN children and developing study materials. As Chapter 4 describes, the teachers prefer face-to-face PD events, which is also explained by their expectation to have informal conversations and experience exchange with other early years teachers, as well as to receive their emotional support. The research findings demonstrate that the teachers have experience of collaboration as a form of PD either in their own preschool or as a part of larger-scale PD events and that they value the opportunities for professional development which they can have through this form of PD.

5.3 Overview of Limitations of the Study

Taking into consideration that this study was a small-scale one, there are some limitations associated with it, which are described in detail in Chapter 3. An overview of the limitations in presented in Figure 5.1 below. The figure describes the limitations of the study based on the sample of participants, taking into consideration the children who the participants work with as well as other possible limitations.

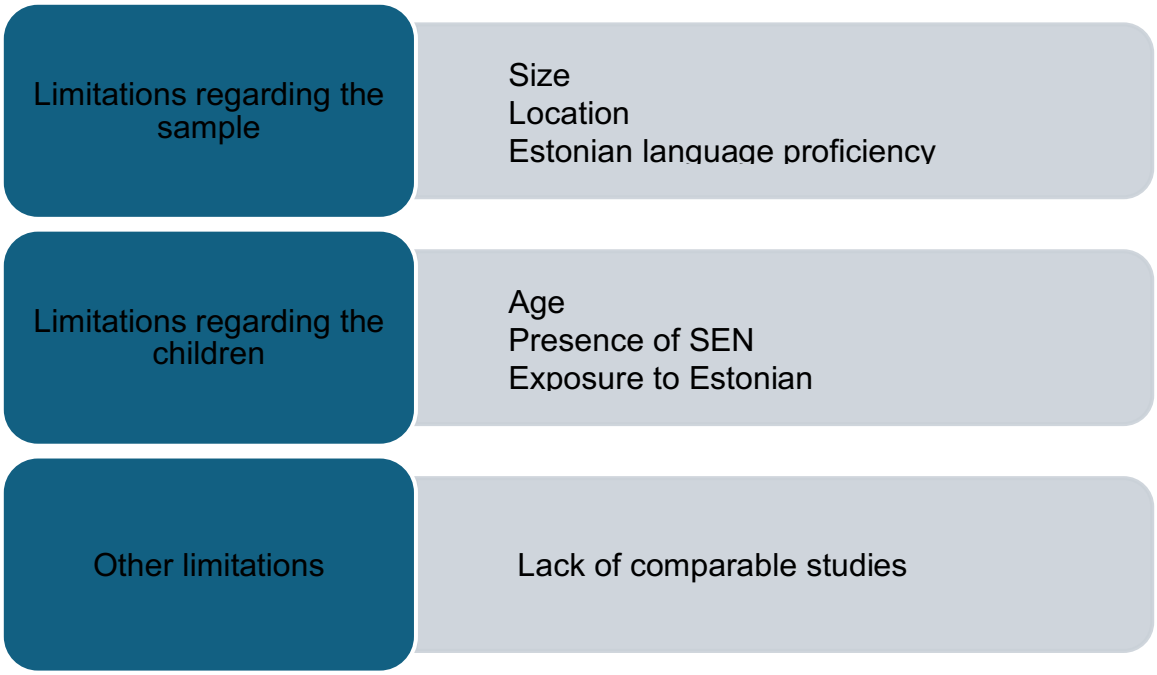

Figure 5.1 *Limitations of the Study*

The most significant limitation is related to the research sample. In addition to the limitation related to the Estonian language proficiency of the teachers, which was previously discussed in Chapter 3, there are other limitations associated with the teacher population. The findings of the research were obtained on the basis of the data collected from language immersion teachers in the North-East of Estonia and in Tallinn, which means that the research outcomes cannot be applied to all teachers in Estonia. Another limitation related to application of the results is connected to the fact that teachers in Estonian-medium preschools which are increasingly attended by non-Estonian-speaking children also implement language immersion pedagogy. Teachers from this target group took part in the teachers' survey at Stage 1 of the research, however, none of them participated in the rest of the study. The limitations related to the participants also included the differences in their qualification and experience of working in early language immersion settings, which were previously described in Table 3.6. These differences had to be taken into consideration in the course of the PD initiative in order to make sure that

each participant could contribute to experience exchange and collaboration and felt welcome and respected.

There were also limitations associated with the population of children who the participants work with. The teachers worked with children of different ages, from two to seven years old; one of the teachers worked with SEN children only. Although the children were not in the focus of the research, however their age and specific needs could impact on the teacher's choice of classroom methods and activities.

In order to reduce the limitations, I employed my reflexivity as a researcher: first, I identified my bias which could have come from my experience of working in the language immersion centre and having the responsibility to organise PD events for early years teachers. Establishment of a solid theoretical framework for my study helped me to stay objective and critical in my data analysis. Secondly, reflexivity helped me to improve my methodological rigor by constantly reflecting on my research design, sample, and methods of data analysis. The use of reflexive thematic analysis was especially helpful in my dynamic interaction with collected data.

My reflexivity was also helpful in my planning and establishment of the interaction with the participants during Stages 2-4 of the research. Taking into consideration that Teacher 1 had the longest experience in early immersion ECEC settings and Teacher 7 had the shortest experience, these two participants became my points of reference in planning and organisation of the PD initiative. When planning the sessions with the participants, I would imagine the knowledge and activities which would be essential for the novice teacher and enriching for the teacher with greater experience. I used the Zoom environment to introduce some of the interactive games and activities which, as Teacher 1 commented during her Stage 4 interview, she took the notice of and tried using herself.

Despite the identified limitations associated with the research, this is a robust study (Cohen et al., 2018) because forty-nine teachers participated in the online survey and seven teachers took part in the PD initiative. The latter was developed and conducted according to research-based features of efficient PD for teachers and to the core principles of PLC, which support development of collaborative and activist types of teacher professionalism. The study on the whole is compressive and rigorous (ibid.), and the data collected and analysed as an outcome of this research allows to make contributions to knowledge, as well as recommendations regarding policy, practice and future research on the topic of implementation of early language immersion methodology in preschool education of Estonia.

5.4 Contributions to Knowledge

The process of planning, preparing and conducting the present study has been a professional development journey for myself as a researcher and as a university specialist working in the area of teacher PD provision, including professional development for early years teachers. The research findings have enabled me to obtain and accumulate knowledge regarding the three main areas of my research: early years education, language immersion, and teacher professional development. It was also essential for me to see these areas not as separate domains of study, but to discover their interdependence for child's holistic development.

5.4.1 Contribution to the Field of Knowledge in the Area of Early Childhood Education

The sphere of early childhood education and care has been in the focus of this study from the beginning. First and foremost, as the learning environment for the comprehensive and integrated development of children whose L1 is not Estonian; as the working environment for teachers in the early years classroom implementing language immersion pedagogy; as the collaborative environment for teachers' cooperation, experience exchange, and professional development.

The research findings provide an insight into two areas of ECEC which are organising and conducting the study process and providing children with opportunities for acquiring Estonian as a second language. The former area includes the use of child-led and -initiated pedagogies as well as organisation and management of the educational process.

5.4.1.1 Contribution to Knowledge about Organisation and Management of the Educational Process in ECEC settings. The corresponding research findings contribute to the existing knowledge about the way teachers organise the educational process and manage the early years classroom. The essential knowledge is the teachers' concern regarding classroom management and the significance of well-managed classrooms for the success of the educational process, including language learning. The effectiveness of a teaching activity is evaluated by the extent of the attention children pay to the activity, their willingness to take part in it, which is measured by certain dispositions, such as the eye contact with the teacher, repeating after them or signalling the desire to reply to the teacher's question. As the teachers in the classroom implementing early language immersion methodology usually follow prescriptive

planning, making sure they cover and integrate different areas of early development, children's attention to an activity is seen as essential so that they can understand the teacher speaking Estonian language and can follow the pre-planned structure of the educational activity. Having the specific routine that teachers follow can be considered their way to cope with Estonian-medium teaching, especially if the teacher is not completely confident in their TL proficiency. However, this certain rigidness in the daily schedule leaves little room for spontaneous interaction with the children which can be beneficial for providing children with authentic language input and assisting the teacher in gradually gaining confidence to use the Estonian language. The research findings reveal that due to the use of prescriptive planning, which helps the teacher ensure they integrate content-teaching with teaching Estonian as a second language, teachers in early language immersion classrooms refrain from the implementation of child-led and child-initiated pedagogies, such as project-based learning or the Reggio Emilia inspired approach. This knowledge is essential because it provides an overview of the pedagogical tendencies in preschools going through the transition to the Estonian language, which is also essential from the perspective of the implementation of child-led learning on the landscape of preschool education in Estonia. Although there has been research on the topic of implementation of child-led pedagogy in ECEC settings in Estonia (Kimer et al., 2016), this study is the first to document the corresponding findings in classrooms of early language immersion pedagogy. Thus, the research outcomes are a significant contribution to the knowledge about child-led practices in ECEC settings and the way they could be enhanced. It is essential to point out that the research data revealed a correlation between the teacher's proficiency in the Estonian language and their implementation of child-led activities. The knowledge about the role of teachers' Estonian language skills in their teaching and in use of opportunities for interaction with children is very timely and essential for the development of support measures within the frames of the transition reform.

5.4.1.2 Contribution to Knowledge about Teaching Estonian as a Second Language in ECEC Settings. The research findings make an important contribution to the knowledge about teaching Estonian as a second language to young children by providing an overview of the approaches that teachers use to guide and assist children in the acquisition of the language. It is significant that teachers use an array of methods and techniques to make the Estonian-medium input comprehensible to children. Teachers

adjust their manner of speaking by using the caretaker speech; they use different objects and visuals, including flashcards, pictures as well as toys and real-life objects. Teachers actively integrate ICT in the educational process. It is also essential knowledge that teachers scaffold learners' output by modelling their responses, providing children with prompts in the form of phrases and short sentences. These findings make an essential contribution to the existing knowledge of the means and methodologies which are used for teaching Estonian as a second language in early years classrooms. Although the second language learning of children with special educational needs and PD of teachers working in such classrooms is out of scope of this research, the collected data encourages me to state that the above-described approaches to teaching Estonian as a second language proved suitable with SEN children also.

5.4.2 Contribution to the Field of Knowledge in the Area of Early Language Immersion

Amid the reform of the transition to Estonian-medium learning, preschool education was the first stage of the state education system to change the language of instruction entirely and in the scope of all the early education classrooms, including the ones for children with special educational needs. One of the consequences of the transition was the loss of the partial and two-way language immersion models and the expansion of the total language immersion model per se. As the participants of the research worked in early years classrooms implementing different models of language immersion as well as teaching Estonian as a second language (the Estonian-medium teacher project, teaching Estonian as a second language through separate language classes), the findings of this study make an important contribution to the knowledge about teachers' preparation for the reform and their adaptation to working only through the medium of Estonian. It is essential to point out that while the majority of the teachers who participated in the study are aware of the main principles of early language immersion pedagogy, they continue to view it, first and foremost, as a means to teach the language rather than a pedagogy aimed at the holistic development of a child through a second language. While integration of content learning and language acquisition is at the core of language immersion, some of the observed early years classrooms need to enhance the amalgamation of the areas of early development and Estonian language learning. While it can be concluded that teachers mostly follow the principle of the exclusive use of the Estonian language, the research results provide a comprehensive overview of the situations when they make the choice to use children's L1. This knowledge is essential in

the context of the growing diversity of languages and cultures among children in ECEC settings in Estonia, and teachers need to be equipped with methodologies and techniques to cope with classroom situations in the target language only.

This study and its results are also significant in the context of international research. The Estonian experience in the implementation of a language immersion programme is known mostly in the context of the school programmes. This study is important for introducing early language immersion in ECEC settings in Estonia and for voicing teachers' PD needs in the context.

5.4.3 Contribution to the Field of Knowledge in the Area of PD for Early Years Language Immersion Teachers

One of the most important contributions to knowledge made by the study is a comprehensive overview of the PD opportunities for preschool language immersion teachers in Estonia and their satisfaction with the current PD provision. This is the first time such a study has been conducted on the landscape of preschool education in Estonia, which makes its outcomes significant knowledge on the topic. The research outcomes revealed the specific PD topics that the teachers would like to receive PD on, including working with SEN children. The findings explained the reasons why teachers may have limited access to PD opportunities, including the impact of the organisational culture, which can help to address these shortcomings and improve teachers' attendance of PD events.

The outcomes of the study highlight the significance of collaborative learning for teachers implementing early language immersion pedagogy: opportunities for experience exchange either at PD events or as a form of teacher cooperation within the preschool not only give teachers practical ideas but also provide them with necessary emotional support. The examples of teacher collaborative learning that are established in some preschools represent significant knowledge about the ways a collaborative approach to teacher PD can be organised and nurtured. Having a comprehensive overview of the ways in which early years immersion teachers, especially novice ones, can be supported by their management and colleagues is timely for the transition reform, as it will enhance not only teachers' professionalism, but also indicate the emotional support they are seeking.

Considering that implementation of early language immersion pedagogy in ECEC settings is an under-researched topic in Estonia, the findings of this research make a significant contribution to knowledge about the way teachers comprehend the pillars of

the pedagogy and follow the principles of language immersion in their everyday work. The research findings revealed the ways in which teacher PD in the area of early language immersion could be improved through a better organisation of PD topics and increased attention to the integration of second language learning into the child's holistic development.

In the midst of the transition reform, the research findings regarding the teachers' Estonian language proficiency and their confidence in using the language provide an insight into the ways for designing and conducting teacher PD in a manner which enables teachers to improve their Estonian language skills, including the development of their professional vocabulary. The outcomes of my research established a relationship between the teacher's Estonian language proficiency, their feeling of professional self-efficacy and the consistency in implementation of language immersion pedagogy in ECEC settings. This knowledge is highly timely and important for both pre- and in-service training of early years teachers.

Professional development opportunities are offered to teachers in different forms, with the growing popularity of blended learning. The outcomes of this study are a significant contribution to the knowledge about the reasons why teachers prefer face-to-face instruction and about the added value of networking opportunities during such PD events. This knowledge is important for the planning and organization of teacher PD that complies with the effective characteristics described in Chapter 2 and highlighted in the analysis of research results in Chapter 4. Provision of opportunities for efficient professional development will also help teachers to enhance their activist professionalism which, as its ultimate goal, results in the transformation of their existing practice, production of new knowledge as well as further improvement in teacher collaboration.

5.4.4 Contribution to My Professional Knowledge

Conducting the research has been significantly beneficial for my acquisition of new knowledge in the area of academic research as well as in the area that the research is focused on, which is the professional development of early years language immersion teachers in Estonia. My research journey has developed my research skills and capacity, in particular, my reflectivity and reflexivity as a researcher. Prior to planning, designing and carrying out the study, my assumptions regarding teacher PD were mostly influenced by my practical experience of organising PD events for language immersion teachers, where my part in planning the actual content and design of teacher professional

development was humble. These PD events for language immersion teachers, which are described in Chapter 1, focused on giving the participants basic knowledge of the principles of early immersion pedagogy as well as providing them with examples of hands-on activities and recommendations on planning teaching activity. Having conducted the literature review on the three main areas of the research united by the theme of second language learning, I have realised the importance of a balanced approach to teacher PD, where language immersion pedagogy is an integral part of early years education and care and where the foundation of the training lies in the teachers' knowledge of child's holistic development, which is the foundation of child-led pedagogy both in the first and second language. The results of the teachers' survey and my classroom observations have revealed that such a holistic approach is required by teachers working in preschools in the North-East of Estonia and in Tallinn. This realisation of the role of language immersion pedagogy in early years education has equipped me with the necessary knowledge and skills to review not only my approach to planning the content and organisation of teacher PD. It has improved me as a lecturer as I have been able to deepen and expand my knowledge base as a language immersion teacher educator.

Conducting the research has been my most complex professional journey, during which I have learned to interact with the research participants and with the data that I collected. It was essential for me to build my communication with the research participants on principles of respect and appreciation of their experience. I made efforts to create the collaborative atmosphere in which the teachers were able to express themselves in their L1 and practice their L2 at the pace that they found suitable. In the process of conducting the research I have improved my knowledge of the use of active teaching methods, especially in an online learning environment. I have been able to develop activities which can be implemented both online and in face-to-face instruction.

By using a mixed methods approach for gathering the data as well as the applying the reflexive thematic analysis I shaped the research while being shaped by the research process, having to constantly analyse my positioning within the study and interact with the data identifying emerging themes and findings.

My exploration within the field of PD of early years immersion teachers in Estonia provided me with essential knowledge regarding early years education in Estonia, and especially the practices of the implementation of early language immersion pedagogy in ECEC settings. The research outcomes also equipped me with timely knowledge about the current practice of PD and teachers' preferences and expectations regarding their

professional development. Conducting the research also gave me an in-depth understanding of the necessity to enhance teachers' active role in their PD through planning and designing efficient PD events based on collaborative learning and experience sharing as well as on transforming current practices and improving them.

5.5 Recommendations for Policy

Based on the results of the previously conducted research (Stephen et al., 2012; Robson, 2020; Winter et al., 2024) and the findings of this study, I have several recommendations that can be made for policy regarding the support that can be provided to preschool education in the context of the transition to the Estonian-medium education.

Firstly, I recommend updating the National Curriculum for Preschool Childcare Institutions of Estonia in the part of Estonian as a second language as an area of early development. The expected outcomes need to be brought in compliance with the requirements of transition to Estonian-medium education. It is also essential to highlight the role of a holistic approach to teaching Estonian as a second language, which calls for expanding the sections of the document dedicated to the other areas of early development and enhancing the role of language acquisition through the related teaching activities.

Secondly, I recommend supplementing the National Curriculum with methodological guidelines for the implementation of early language immersion pedagogy for the transition reform. When the curriculum document entered into force in 2008, the four supplementary materials were developed in the following year. The topics covered in these guidelines were "Organisation of the teaching activity", "Development of key skills at preschool age", "Areas of early development", and "Assessment and support of children's development". These supplementary materials are publicly accessible on the national curricula webpage oppekava.ee. Considering the scale of the transition reform and the growing number of children in the Estonian-medium preschools, I see it as essential to emphasise the role of immersion pedagogy in the holistic development of children through acquisition of Estonian as a second language. This methodological material can be developed in collaboration with universities which would provide the research-based theoretical insights and with practicing teachers who have been implementing early language immersion pedagogy successfully. The latter can enrich the material with practical examples supporting the research outcomes and providing guidelines on actual games, teaching activities, and routines.

Thirdly, considering the role of Ministry of Education and Research in outsourcing teacher professional development through universities, I recommend that the policy makers request PD providers to develop PD events and programmes that are tailored to teachers' needs. Especially in the light of the transition reform, it is essential to collect data about teachers' actual needs and preferences regarding their professional development and to use the findings for planning of targeted PD provision.

In addition to the above-suggested changes in development of PD provision, I also recommend putting more emphasis on bringing practicing teachers' expertise to teacher PD. As the results of this study show, early years teachers prefer professional development events that are conducted by practitioners and specialists. Thus, I suggest that the Ministry and universities increasingly encouraged teachers whose expertise and outcomes have been acknowledged to share their experience with colleagues. It is essential for policy makers to involve practitioners in every aspect of the transition reform, from planning to conducting teaching.

5.6 Recommendations for Practice

Considering that the discussion of the current practice and its enhancement has been the focus of the research, the findings of the study can be used to make recommendations for ECEC language immersion practice, ECEC organisational culture, and on the practice of PD provision for teachers.

5.6.1 ECEC Language Immersion Practice

The findings related to current language immersion practice in ECEC settings have revealed that implementation of early years immersion pedagogy has room for development and improvement. As was previously discussed in Chapter Four, inconsistency in complying with the core features of language immersion pedagogy is to some extent explained by teachers' insufficient language proficiency and their lack of professional confidence. Thus, the recommendations on ECEC language immersion practice aim to enhance the current practice rather than eradicate shortcomings related to teachers' Estonian language skills.

5.6.1.1 Teacher-Child Interaction. Based on previous research (Lindholm-Leary, 2001; Stephen et al., 2012; Sharma & Cockerill, 2014; Fleta, 2019; Robson, 2020; Alkhudiry, 2022), I recommend reconsidering the role, quality, and patterns of the

teacher-child interaction in classrooms implementing early language immersion pedagogy. It is essential for early years teachers to recognise the fundamental role that language development plays in holistic development of a child and the role of social interaction for second language acquisition. Thus, I recommend that teachers take advantage of classroom routines using them for interaction with children, which means accompanying children's activities with speech and providing them with scaffolding also during times of play-based activities, such as puzzle making and teacher-guided play. During the PD initiative which I conducted I used play-based activities at the beginning of each PD session to demonstrate simple ways in which play can be integrated in language teaching and learning. I felt that teachers had appreciated it when one of the teachers told me that she started using the same approach in PD events that she conducted for her colleagues.

Scaffolding children through use of caretaker speech is essential, especially during the silent period to ensure comprehension of the input in the second language. The use of this supportive adapted speaking manner needs to be a common practice not only in preschools currently transitioning to the Estonian as the medium of instruction, but also in Estonian-medium preschools which are attended by non-Estonian speaking children. Scaffolded and supportive communication with children should be at the core of all activities in ECEC settings, including child-led activities, which are discussed further.

5.6.1.2 Focus on Child-Led Activities. The findings of previous research (Melhuish et al. 2014; Kimer et al., 2016) and the results of this study show that the extent of use of child-led activities in ECEC settings needs to be increased. I recommend implementing project-based learning which allows to focus on children's interests and to shape teaching activity on consideration of topics that motivate children and enhance their engagement. One of the examples of such child-led project-based learning is the Reggio Emilia approach, which centres on children developing projects according to their interests (Coşkun & Durakoğlu, 2015; Chen & Abdul Rahman, 2018). Having children interested in the topic also makes classroom management more efficient, which solves related issues that are currently a concern of teachers, as the findings of the study show.

The findings suggest paying greater attention to child-led activities in the preschool's curriculum and changing the paradigm of prescriptive planning. Realising that teachers might find it challenging to transfer from thoroughly planned teaching activity to child-led and project-based planning, I suggest that preschools could provide

variations for existing planning patterns, advising teachers the ways in which prescriptive plans can be gradually changed to comply with children's interest. The development of such guidelines for planning can require collaboration of the whole teaching staff of a preschool, which is related to cooperation and support practice within the preschool, as discussed further.

Considering outcomes of research on play-based education (Kinos & Pukk, 2010; Wall et al., 2015; Chesworth,Media 2015; Fesseha & Pyle, 2016; Kimmer et al., 2016; French and McKenna, 2022; Kangas et al., 2023) and the findings of this study I recommend improving early years teachers' awareness of the essence of play-based education and the role of the teacher in play-based teaching. Teachers need to recognise the difference between play-based pedagogy and playful teacher-led activities. To support early years teachers in implementation of the former, the findings presented here indicate the necessity to make amendments and developments to prescriptive planning practices to focus on the role of play-based activities that enhance children's engagement, motivation, as well as development of their social skills and acquisition of Estonian as a second language.

5.6.1.3 Implementation of Play-based Learning. Taking into consideration teachers' potential doubts about the role of play in achievement of academic results, I recommend encouraging teachers to consistently take part in PD events on topics of play-based pedagogy, which, as research proves (Guskey, 2002; Yoon, et al., 2007; Desimone, 2009; McElearney et al., 2019; Markussen-Brown, et al., 2017; Darling-Hammond et al., 2017; Kalinowski et al., 2019) foster changes in teachers' beliefs and brings about the change in their classroom practice.

Taking into account that the transformation of classroom practice takes time and considering that seeing results of changes in teaching patters fosters changes in teachers' attitudes and beliefs (Guskey, 2002), I recommend introducing play-based pedagogy gradually, in line with children's interest and experience. I see a significant importance in the involvement of preschools with methodological centres, which are described in Chapter 1, in establishing this practice and introducing it to other preschools. Changes in classroom practice need to be unified and supported within the whole preschool, which requires corresponding attitudes from the preschool management that is discussed in the next subsection.

5.6.2 Organisational Culture

The notion of organisational culture is introduced in Chapter 2 and discussed in Chapter 4 to describe the attitudes to teachers' learning and collaboration that are fostered in the preschool and channelled through communication between administration and the teaching staff. The findings of the study reveal that teachers' attitude to their professional development and their access to PD possibilities are dependent on the organisational culture within a preschool. Thus, I recommend establishing the culture of supportive and encouraging attitude to teacher professional development. I suggest improving the information flow and access to PD events. In case of the latter, the challenge of finding substitute teachers can be solved with closer cooperation with universities that can organise students' internships as a part of a teacher substitution programme. I also recommend enhancing PD choices and opportunities which are shaped by teachers' needs and interests. It is essential to provide PD possibilities which consider teachers' working experience in early language immersion settings. It is significant on the one hand, to offer different PD events to novice and experienced teachers while on the other hand, PD events based on a collaborative approach can become the platform for respecting and sharing all experiences. The practice of collaborative learning which, as research outcomes also demonstrate and which is described in detail in Chapter 4, is common in some preschools. This practice needs to be expanded and ought to become an integral part of the organisational culture in all preschools, especially those which are attended by non-Estonian-speaking children.

The PD initiative that I conducted as part of this study revealed that teachers need a comfortable environment for sharing experience, which is especially significant for teachers who are not confident in their Estonian language proficiency. The classroom observation which was carried out within the PD initiative revealed that teachers were eager to receive feedforward on their teaching activity and discuss specific questions related to their classroom practice. Thus, I recommend that preschools enhance provision of in-house mentoring, providing teachers in transition classroom with methodological and emotional support. The need for the latter that was referred to by several participants was the unexpected outcome of the research (Mac Naughton & Rolfe, 2020). The issues related to attitudes towards teacher PD also need to be discussed together with the preschool's staff, which can be done as a part of in-house PD. Recommendations regarding PD provision are discussed in the subsection below.

5.6.3 Practice of PD Provision for Teachers

Based on findings of research (Durrant, 2019; Õpetaja koolituse raamnõuded, 2015; Sachs, 2016; Darling-Hammond et al., 2017; Kalinowski et al., 2019) and outcomes of this study regarding, I recommend changes in both the content and organisation of teacher PD provision. As mentioned above, these changes need to be implemented both at the level of policy making through initiating them and at the level of PD providers, first and foremost, universities that are responsible for offering teachers PD that enhances their professionalism.

5.6.3.1 Recommendations for PD Organization. The results of the present study indicate that teachers prefer PD events which support and enhance their collaborative and activist professionalism (Sachs, 2016). The types of PD which foster teachers' self-reflection, re-evaluation, and transformation of their current practice as well as their collaborative learning are described by criteria of effective teacher development (Darling-Hammond et al., 2017) which are discussed in Chapter 2 and referred to in the analysis of the research outcomes in Chapter 4. I recommend that these criteria are used to develop evaluation of planning and conducting of PD events in order to ensure their quality and orientation to transformative practice. I suggest using such an evaluation protocol as the basis for designing feedback questionnaires that are distributed to teachers after they have completed a PD event.

It is also essential that participation in PD provides a teacher with an opportunity to extend their Zone of Proximal Teacher Development (Shabani et al., 2010; Warford, 2011; Fani & Ghaemi, 2011; Kuusisaari, 2014). The necessary conditions include consideration of the context a teacher works in and the possibility to transfer the obtained knowledge, skills and attitudes to this environment. It is also essential to provide the teacher with sufficient time for implementation of the new practice and making sure they have an opportunity to adapt it based on their needs.

As discussed previously, the recommendations, based on this research, are to involve practicing teachers and specialists in conducting PD programmes, including the ones which are organised by universities. I suggest closer cooperation between preschools and universities also in provision of in-house PD events. The current practice of involvement of university lecturers in collaboration with preschool methodological centres, which I have been a part of, needs to be established on a regular basis. I suggest that such an amalgam of research and practical solutions will foster teachers' enquiry and

enhance their research competence, which is an essential part of shaping of the teacher activist professionalism.

The especially significant findings of the research, which are discussed in Chapter 4, are the teachers' need for methodological and emotional support. Based on these outcomes, I recommend that a PD initiative or programme of a significant length and volume is supplemented with a teacher support component. By this component I mean including a certain number of hours dedicated to classroom observation and mentoring of the teacher. It is essential to promote mentoring as the activity that is beneficial for both the mentor and the mentee (Eun, 2008; Shabani, 2016) as it enables both of them to reflect on their professional attitudes and practices and transform them. I suggest that the specialist conducting a PD initiative conducts these follow-up activities after the face-to-face PD events are over. Visiting the teacher's classroom, conducting observation, and giving the teacher feedforward will support them in several ways: first, it will help the specialist see whether the teacher needs support in implementing the knowledge and skills obtained through PD; it will provide the teacher with personalised feedforward about their practice, and it will give the teacher the possibility to receive emotional and methodological support.

The organisation of PD provision also needs to be a continuous process which ensures and supports the continuum of teacher professional development. Thus, I recommend the establishment of a series of PD programmes that are offered to teachers at different stages of their career as well as taking into consideration the various changes to the context, for instance, the teacher having to move or take on additional working tasks.

5.6.3.2 Recommendations for PD Content. Based on the findings of this study I recommend both update of existing PD programmes and development of new ones in order to include the topics argued below. Based on this research, the first issue which needs to be discussed within any PD programme for early years teachers is the one of teacher-positioning in implementation of child-centred and play-based pedagogy. While the research findings included examples of playful and child-led activities which supported holistic development of a child, the issues of the teacher's role in the child-led classroom and classroom management were highly problematic for some participants. It is essential to discuss the balanced approach to the teacher's involvement in play-based activities and to guide teachers in understanding the essence of play-based and child-led

pedagogy. I recommend using PD events also to highlight the role of play in providing children with diverse opportunities for interaction which are highly significant for their acquisition of Estonian as a second language.

Taking into consideration that the teacher's proficiency in the Estonian language can hinder their readiness and ability to implement play-based pedagogy, I recommend including a language module in PD programmes or providing teachers with language scaffolding in the case of short PD events. I would like to highlight that I am not suggesting providing teachers with translation into the Russian language. I recommend development of the language scaffolding as an integral part of PD for participants whose first language is not Estonian. In my opinion, it needs to be in the form of supplementary materials aimed to give teachers a possibility to acquire and practice vocabulary that is related to the PD topic. Having this language module may also encourage teachers to speak Estonian more actively during informal communication at PD events, which is the part that they now may stay away from due to lack of confidence in their language proficiency.

Providing teachers who are not native speakers of Estonian with language scaffolding during PD events can also improve the teacher-child interaction in their classrooms. I recommend developing PD programmes specifically on this topic as well as highlighting it within any PD event. For reasons described in the analysis of the findings in Chapter 4 teachers need to be instructed and advised on their role in creating diverse and meaningful patterns of communication during the whole day of the child's being in the ECEC settings, not only during scheduled teaching activities. I recommend emphasising application of principles of sociocultural theory, first and foremost, the ZPD and the significance of social interaction, for acquisition of Estonian as a second language. This can help teachers comprehend the key role of language development in holistic development of a child.

Another topic which I recommend being included in all PD events is the one of the teacher's wellbeing and burnout prevention. The findings of this study revealed that in the situation of the transition to the Estonian-medium education teachers felt overloaded and experienced additional pressure due to requirements to their language proficiency. I believe that teachers' working load can also be decreased by the introduction of child-led activities and the project-based approach, which may require changes to use of prescriptive planning as well as alterations to their working routine. In the context of the reform, it is also significant to emphasise teamwork between teachers, assistant teachers

and teacher assistants. The introduction of these arrangements regarding the classroom pedagogical staff, which are described in Chapter 1, call for reconsideration of the supplementary role of assistants and for their increased inclusion in teaching activity. Such improvements in classroom teamwork can also improve the situation with teachers' excessive workload and burnout.

The findings of the research also demonstrated that it is necessary to improve consistency of delivery of topics under the umbrella of early language immersion pedagogy. As described in Chapter 1 and analysed in Chapter 4, PD events currently provided to immersion teachers are focused on explaining the pedagogy through practical examples and hands-on activities. I recommend making changes in the content of PD programmes on language immersion pedagogy by illustrating to teachers the importance of the holistic development of the child and the role of language acquisition in that process.

5.7 Recommendations for Future Research

The current study was motivated by my aim to fill in the gap in the research of PD of early language immersion teachers in Estonia. The outcomes of the research suggest promising material for future research in the area of ECEC and early language teaching.

5.7.1 Recommendations for Future Research in the ECEC Area

Taking into consideration the significance of the themes of child-led education in the results of this study I recommend conducting future research on the topics of child's choice and agency, as well as the positioning of the teacher in child-led pedagogy. I suggest carrying out a study aimed to investigate early years teachers' attitudes towards child-led activities and practices of their implementation. This study would allow to reveal teachers' perceptions of children's choice in early years education and the teacher's positioning in the child-led preschool classroom. Taking into consideration that in Estonia there exists a network of preschools which implement the Reggio Emilia inspired approach, I suggest doing research into the overall awareness about child-initiated pedagogies, factors that hinder their implementation, and readiness to join the above-mentioned network.

This research topic is closely related to the theme of the role of prescriptive planning in preschool education of Estonia, which, in my opinion, needs studying as well. The

planning patterns implemented in Estonian preschools are guided by policy documents, as described in Chapter 1. Each preschool describes their principles of planning of teaching activity in the preschool curriculum. I recommend conducting research of different planning patterns and the effectiveness of their use in ECEC settings, including the classrooms which are undergoing the transition reform. In my view it is essential to develop quality criteria for planning practices in order to support teachers in shifting from prescriptive plans based on separate areas of early development towards integrated child-led planning, including project-based planning.

Planning practices in a preschool are a part of arrangements within the institution, i.e. a part of the organisational functioning and culture. The outcomes of the research enable me to suggest aspects of working culture as topics for future research. Firstly, I recommend conducting a study aimed to investigate the relationship between the management's beliefs regarding teacher professional development and teachers' readiness for PD in the context of the transition reform. I believe that it is essential to study the management's perceptions of second language learning and its provision in the ECEC settings in relation to the sustainability of implementation of early language immersion pedagogy in corresponding preschools. Another important theme for future research is the impact of the transition reform on teamwork among the teaching staff. Considering the changes in former teachers' position due to the new policy on the language proficiency, I recommend studying the effects of these changes on teamwork within classrooms and preschools on the whole as well studying ways to improve collaboration between teaching staff in preschools involved in the reform.

5.7.2 Recommendations for Future Research in the Area of Early Language Teaching

Taking into consideration the changes in organisation of Estonian as a second language due to the transition to the Estonian-medium education, described in Chapter 1, which put a halt on the implementation of two-way and partial language immersion models, I recommend conducting research on the ways the changes affected these classrooms and the solutions they used in order to enhance the transition process. I see it as essential to carry out this research especially in those classrooms where the children who began attending bilingual classrooms have been through the process of the change of the medium of instruction. Research into the approach to the methodology of teaching as well as PD of teachers in such classrooms is beneficial for studying the implementation of the early language immersion practices for the ongoing reform.

Another topic I recommend for future research is early years teachers' professional self-efficacy and emotional wellbeing in the process of the transition to Estonian-medium education. The outcomes of this study reveal that the issue of teachers' wellbeing is significant for their professional competence and for prevention of their burnout. I see it essential to study the concerns that the teachers have and that affect their emotional state and feelings of professional confidence. The results of this study are significant for providing teachers the support they need through PD and in-house mentoring as well as for development of tailored PD programmes.

5.8 Concluding Statement

This study is significant for Estonian preschool education due to its focus on PD needs of early years immersion teachers, their opinions about the current practice of PD provision and their expectations regarding future opportunities for their professional development. The topic of the research is very timely as preschool education in Estonia is going through the reform of the transition to Estonian-medium education. This initiative has an impact not only on the previously Russian-medium preschools, but on the practice of early years education of Estonia on the whole due to the growing number of non-Estonian-speaking children in the traditionally Estonian-medium preschool classrooms and due to the impact that the reform is making on pre- and in-service training of early years teachers. At the moment, Narva College of the University of Tartu is the only higher educational institution which addresses the issues of linguistically diverse preschool classrooms and implementation of early language immersion pedagogy in their early years teacher training curriculum. PD events on topics of language immersion which are available for early years teachers are not offered in the sufficient volume and depth to provide teachers with a comprehensive view of the role of second language acquisition in holistic development of the child scaffolded through child-led and play-based activities.

This study is the first doctoral research addressing the implementation of early language immersion in ECEC settings in Estonia through the lens of teacher professional development. The study ties together the evidence-based best examples of early language immersion in preschool education and the current practice of working with non-Estonian-speaking children in preschool classrooms in the North-East of Estonia and in Tallinn. Taking into consideration the different background and working experience of research

participants, the research findings provide the basis for making a comprehensible overview of language immersion practices in Estonian kindergartens, including implementation of the pedagogy in classrooms with SEN children.

The significance of this study lies in the fact that it fills in the gap of research on professional development of early years language immersion teachers, making timely and substantial contribution to knowledge about teacher professional development as well as teachers' needs regarding their PD. The main topics resulting from the research are presented in Figure 5.2 below. The figure illustrates that these topics create a cycle of inter-related issues: teachers could make a better contribution to the implementation of child-centred pedagogy if they had more confidence in their use of the Estonian language. Teachers' proficiency in Estonian also provides them with better access to PD events where they would receive support and have opportunities for collaboration with colleagues.

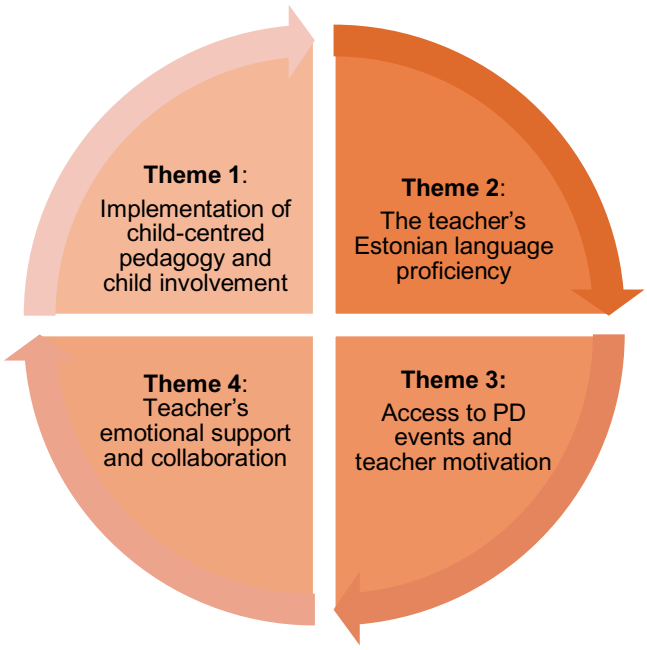

Figure 5.2 *The Main Topics of the Study*

The study also revealed the challenges that the teachers in the North-East of Estonia and in Tallinn encounter in the process of their professional development especially in the context of the transition to Estonian-medium education. The outcomes of the research are important as they show the struggles teachers whose first language is not Estonian have with ensuring the Estonian-medium teaching process in their classrooms. The findings of the research reveal the bottlenecks regarding the issue of the Estonian

language proficiency as the precondition for accessing PD opportunities. Moreover, having identified the impact of the Estonian language skills in the teacher's practice and professional development, the research outcomes also exposed the teachers' need for emotional support, which has not yet been reported by the research in Estonia.

The PD initiative developed and conducted as a part of this study in compliance with characteristics of efficient PD address the gaps in teachers' professional competence to implement early language immersion pedagogy and offered the participants an encouraging and supportive learning experience based on collaboration and modelling of good practices. The teachers evaluated the PD initiative highly, providing feedback on the way the PD programme and the support provided as a part of classroom observations helped them to feel more confident in their classrooms. This PD initiative can be used as a model of teacher PD for the process of the transition to Estonian-medium education, as it has proven its effectiveness and usefulness to teachers as well as orientation towards developing collaborative and activist teacher professionalism.

The findings of the study can guide future development of early years teacher training curricula for both pre- and in-service teacher training. The research outcomes have identified the necessity to emphasise the role of second language acquisition in the holistic development of children whose first language is not Estonian. Considering the impact of the reform on preschool education, the knowledge and skills which the PD initiative provided its participants with, must become the essential knowledge of every early years teacher in Estonia.

References

Aisyah, E. N. (2025). Implementing project-based learning with loose parts in early childhood education. *Golden Age, 6*(1), 44–57. https://doi.org/10.14421/ga.v6i1.9390

Albon, D. & Huf, C. (2021) *What matters in early childhood education and care*? The contribution of ethnographic research. *Ethnography and Education, 16*(3), 243-247 https://doi.org/10.1080/17457823.2021.1916978

Aljabreen, H. (2020). Montessori, Waldorf, and Reggio Emilia: A comparative analysis of alternative models of early childhood education. *International Journal of Early Childhood, 52*(3), 337–353. https://doi.org/10.1007/s13158-020-00277-1

Alkhudiry, R. (2022). The Contribution of Vygotsky's Sociocultural Theory in Mediating L2 Knowledge Co-Construction. *Theory and Practice in Language Studies*, *12*(10), 2117–2123. https://doi.org/10.17507/tpls.1210.19

Allen, M. L. (2017) Cognitive development beyond infancy. In B. Hopkins, E. Geangu & S.

Linkenauger (Eds.) *The Cambridge Encyclopedia of Child Development. Second edition* (pp. 288-296). Cambridge University Press

Alstad, G. T. (2020). Preparing teachers for early language education. In M. Schwartz (Ed.), *Handbook of early language education* (pp. 1–23). Springer. https://doi.org/10.1007/978-3-030-47073-9_22-1

Alushariduse ülevaade [Overview of Early Years Education]. (2025). https://haridussilm.ee/ee/tasemeharidus/oppetasemed/alusharidus/ylevaade

Ametniku, töötaja ning füüsilisest isikust ettevõtja eesti keele oskuse ja kasutamise nõuded [Requirements to the Estonian Language Proficiency and Use by Civil Servant, Employee and Individual Entrepreneur]. (2024). https://www.riigiteataja.ee/akt/127072024003

Ambridge, B. (2017). Language acquisition. In B. Hopkins, E. Geangu, and S. Linkenauger (Eds.) *The Cambridge Encyclopedia of Child Development. Second edition* (pp. 375-384). Cambridge University Press.

Appova, A., & Arbaugh, F. (2018). Teachers' motivation to learn: Implications for supporting professional growth. *Professional Development in Education, 44*(1), 5–21. https://doi.org/10.1080/19415257.2017.1280524

Arksey, H., & O'Malley, L. (2005). Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology*, *8*(1), 19–32. https://doi.org/10.1080/1364557032000119616

Ashdown, D. M., & Bernard, M. E. (2012). Can Explicit Instruction in Social and Emotional Learning Skills Benefit the Social-Emotional Development, Well-being, and Academic Achievement of Young Children? *Early Childhood Education Journal, 39*(6), 397–405. https://doi.org/10.1007/s10643-011-0481-x

Avidov-Ungar, O., Merav, H., & Cohen, S. (2023). Role perceptions of early childhood teachers leading professional learning communities following a new professional development policy. *Leadership and Policy in Schools, 22*(1), 225–237. https://doi.org/10.1080/15700763.2021.1921224

Baker, C. (2011). *Foundations of bilingual education and bilingualism / Colin Baker.* (Fifth edition). Multilingual Matters.

Baker, C., & Wright, W. E. (2017). *Foundations of bilingual education and bilingualism / Colin Baker, Wayne E. Wright.* (Sixth edition.). Multilingual Matters.

Barac, R., Bialystok, E., Castro, D. C., & Sanchez, M. (2014). The cognitive development of young dual language learners: A critical review. *Early Childhood Research Quarterly, 29*, 699–714. doi:10.1016/j.ecresq.2014.02.003

Barrouillet, P. (2015) Theories of cognitive development: From Piaget to today. *Developmental View*, 38, 1-12. doi: 10.1016/j.dr.2015.07.004

Bell, T. R., & Borden, R. (2022). Examining target language proficiency among in-service K-12 language teachers. *Foreign Language Annals, 55*(3), 623–645.

Выготский, Л. С. (1991). Педагогическая психология. / Под ред. Давыдова В.В. Москва: Педагогика.

Björklund, S., Mård-Miettinen, K. & Savijärvi, M. (2014). Swedish immersion in the early years in Finland. *International Journal of Bilingual Education and Bilingualism*, *17*(2), 197-214. https://doi.org/10.1080/13670050.2013.866628

Blackmore, J., Sachs, J., & Grogan, M. (2007). Performing and reforming leaders: Gender, educational restructuring, and organizational change. State University of New York Press.

Bligh, C. (2014). *The silent experiences of young bilingual learners: A sociocultural study into the silent period*. Brill.

Bodrova, E., & Leong, D. J. (2015). Vygotskian and post-Vygotskian views on children's play. *American Journal of Play*, 7(3), 371-.

Bodrova, E., Leong, D. J., Germeroth, C., & Day-Hess, C. (2019). Leading children in their "leading activity": A Vygotskian approach to play. In M. Fleer & B. van Oers (Eds.), *International handbook of early childhood education* (pp. 436–456). Cambridge University Press. https://doi.org/10.1017/9781108131384.024

Bolam, R. & McMahon, A. (2005). Literature, definitions and models: Towards a conceptual

map. In C. Day & J. Sachs (Eds.), International handbook on the continuing professional development of teachers (pp. 33-64). McGraw-Hill Education.

Borg, S. (2018). Teachers' beliefs and classroom practices. Routledge.

Boud, D. & Hager, P. (2012). Re-thinking continuing professional development through changing metaphors and location in professional practices. *Studies in Continuing Education, 34*(1), 17-30. https://doi-org.dcu.idm.oclc.org/10.1080/0158037X.2011.608656

Bower, M., Lee, M. J. W., & Dalgarno, B. (2017). Collaborative learning across physical and virtual worlds: Factors supporting and constraining learners in a blended reality environment. *British Journal of Educational Technology, 48*(2), 407–430. https://doi.org/10.1111/bjet.12435

Brackett, M. A., Bailey, C. S., Hoffmann, J. D., & Simmons, D. N. (2019). RULER: A Theory-Driven, Systemic Approach to Social, Emotional, and Academic Learning. *Educational Psychologist, 54*(3), 144–161. https://doi.org/10.1080/00461520.2019.1614447

Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper (Ed.), *APA handbook of research methods in psychology: Vol. 2. Research designs: Quantitative, qualitative, neuropsychological, and biological* (pp. 57–71). American Psychological Association. https://doi.org/10.1037/13620-004

Braun, V., & Clarke, V. (2021). Can I use TA? Should I use TA? Should I not use TA? Comparing reflexive thematic analysis and other pattern-based qualitative analytic approaches. *Counselling and Psychotherapy Research, 21*(1), 37–47. https://doi.org/10.1002/capr.12360

Braun, V., & Clarke, V. (2022). Conceptual and design thinking for thematic analysis. *Qualitative Psychology, 9*(1), 3–26. https://doi.org/10.1037/qup0000196

Brinkmann, S. (2013). *Qualitative interviewing* (1st ed.). Oxford University Press.

Broadhead, P. (2006). Developing an understanding of young children's learning through play: The place of observation, interaction and reflection. *British Educational Research Journal, 32*(2), 191–207. https://doi.org/10.1080/01411920600568976

Brock, A. (2012). Building a model of early years professionalism from practitioners' perspective. *Journal of Early Childhood Research*, *11*(1), 27-44. https://doi-org.dcu.idm.oclc.org/10.1177/1476718X12456003

Browder, D. M., & Spooner, F. (2019). The effects of teacher-led and teacher-guided interventions on students' learning outcomes: A meta-analysis. Journal of Special Education, 53(3), 151-163. https://doi.org/10.1177/0022466919834900

Brown, A., & Danaher, P. A. (2019). CHE principles: Facilitating authentic and dialogical semi-structured interviews in educational research. *International Journal of Research & Method in Education, 42*(1), 76–90. https://doi.org/10.1080/1743727X.2017.1379987

Buyl, A. & Housen, A. (2014). Factors, processes and outcomes of early immersion education in the Francophone Community in Belgium. *International Journal of Bilingual Education and Bilingualism*, *17*(2), 178-196. https://doi.org/10.1080/13670050.2013.866627

Cammarata, L., & Cavanagh, M. (2018). In search of immersion teacher educators' knowledge base: Exploring their readiness to foster an integrated approach to teaching. *Journal of Immersion and Content-Based Language Education, 6* (2), 189–217. https://doi.org/10.1075/bct.110.jicb.18009.cam

Cammarata, L., & Haley, C. (2018). Integrated content, language, and literacy instruction in a Canadian French immersion context: A professional development journey. *International Journal of Bilingual Education and Bilingualism, 21*(3), 332–348. https://doi.org/10.1080/13670050.2017.1386617

Cammarata, L. & Tedick, D.J. (2012). Balancing content and language in instruction: the experience of immersion teachers. *The Modern Language Journal*, *96*(2), 251-269. https://doi.org/10.1111/j.1540-4781.2012.01330.x

Canh, L. V., & Renandya, W. A. (2017). Teachers' English proficiency and classroom language use: A conversation analysis study. *RELC Journal, 48*(1), 67–81. https://doi.org/10.1177/0033688217690935

Carifio, J., & Perla, R. (2008). Resolving the 50-year debate around using and misusing Likert scales. *Medical Education*, *42*, 1150-1152. https://doi-org.dcu.idm.oclc.org/10.1111/j.1365-2923.2008.03172.x

Centre for Early Childhood Development and Education. (2006). *Síolta: the national quality framework for early childhood education: Handbook / Centre for Early Childhood Development & Education [CECDE]*. St. Patrick's College, Centre for Early Childhood Development & Education.

Center on the Social Emotional Foundations for Early Learning. (2010). Handout 1.2 Definition of social emotional development CSEFEL Infant-Toddler Module 1. http://csefel.vanderbilt.edu/resources/training_infant.html

Chacón, C. T. (2005). Teachers' perceived efficacy among English as a foreign language teachers in middle schools in Venezuela. *Teaching and Teacher Education, 21*(3), 257–272

Chambless, K. S. (2012). Teachers' oral proficiency in the target language: Research on its role in language teaching and learning. *Foreign Language Annals, 45*(S1), S141–S162. https://doi.org/10.1111/j.1944-9720.2012.01183.x

Chang, I.-H., Lin, C.-Y., & Chiu, C.-H. (2024). *Effects of caring climate on career commitment for preschool teachers: The mediating roles of interpersonal trust and cooperative learning*. *Early Years*. https://doi.org/10.1080/09575146.2024.2315071

Check, J. W., & Schutt, R.K. (2012). *Research methods in education.* Sage Publications, Inc.

Chen, C., & Abdul Rahman, M. N. B. (2018). Preschool teachers' educational perspectives in the implementation of the Reggio Emilia approach: Take a kindergarten in Singapore as an example. *Psycho Series: Jurnal Psikologi, 10*(2), 37–52. https://journal.um-surabaya.ac.id/PsychoSeries/article/download/25195/8768/65441

Chesworth, L., & Brock, A. (2015). A deeper understanding of play. In *The Early Years Reflective Practice Handbook* (1st ed., pp. 142–165). Routledge. https://doi.org/10.4324/9780203117248-13

Chesworth, L. (2016). A funds of knowledge approach to examining play interests: listening to children's and parents' perspectives. *International Journal of Early Years Education, 24*(3), 294–308. https://doi.org/10.1080/09669760.2016.1188370

Chesworth, L. (2019). Theorising young children's interests: Making connections and in-the-moment happenings. Learning, *Culture and Social Interaction, 23*, 100263. https://doi.org/10.1016/j.lcsi.2018.11.010

Christison, M. (2023). Pre-service teachers' beliefs, practices, emerging ideologies about multilingualism and self-efficacy relative to teaching multilingual learners. *Languages, 8*(1), 41. https://doi.org/10.3390/languages8010041

Clark, E. V. (2019). Research on first language acquisition. A brief history. In J. S. Horst & J. von Koss Torkildsen (Eds.) *International handbook of language acquisition. 1st Edition* (pp. 3-19). Routledge

Cochran-Smith, M. & Lytle, S.L. (1999). Relationships of knowledge and practice: Teacher learning in communities. *Review of Research in Education*. *24*, 249-305. https://doi.org/10.2307/1167272

Cohen, L., Manion, L., & Morrison, K. (Keith R. B.). (2018). *Research methods in education / Louis Cohen, Lawrence Manion and Keith Morrison*. (Eighth edition). Routledge.

Colliver, Y., & Veraksa, N. (2021). Vygotsky's contributions to understandings of emotional development through early childhood play. *Early Child Development and Care, 191*(7–8), 1026–1040. https://doi.org/10.1080/03004430.2021.1887166

Cong-Lem, N. (2023). Emotion and its relation to cognition from Vygotsky's perspective. *European Journal of Psychology of Education, 38*(2), 865–880. https://doi.org/10.1007/s10212-022-00624-x

Conway, P. F., Murphy, R., Rath, A., & Hall, K. (2009). *Learning to teach and its implications for the continuum of teacher education: A nine-country cross-national study*. Report Commissioned by the Teaching Council. University College Cork. https://www.teachingcouncil.ie/en/publications/research/documents/learning-to-teach-and-its-implications-for-the-continuum-of-teacher-education.pdf

Coşkun, H., & Durakoğlu, A. (2015). A project-based approach in child education: Reggio Emilia. *International Journal of Humanities and Education (IJHE), 1*(2), 141–153. https://dergipark.org.tr/en/pub/ijhe/issue/31785/348367

Council of Europe. (2025a). Common European Framework of Reference for Languages. https://www.coe.int/en/web/common-european-framework-reference-languages/level-descriptions

Council of Europe. (2025b). Global scale - Table 1 (CEFR 3.3): Common Reference levels. https://www.coe.int/en/web/common-european-framework-reference-languages/table-1-cefr-3.3-common-reference-levels-global-scale

Creamer, E. G. (2018). An introduction to fully integrated mixed methods research. Sage Publications, Inc.

Creed, L. (2013) Early years pedagogy into practice. In P. Beckley (Ed.) *The New Early Years Foundation Stage: Changes, Challenges, and Reflections* (pp. 7-19). McGraw-Hill Education

Creswell. J. W., & Plano Clark, V. L. (2011). *Designing and Conducting Mixed Methods Research*. 2nd Edition. SAGE Publications

Creswell. J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research*. 3rd Edition. SAGE

Cummins, L. (2004). Feature articles. *Childhood Education, 80*(5), 254-257. https://doi.org/10.1080/00094056.2004.10522809

Cummins, Prof. J. (2021). *Rethinking the Education of Multilingual Learners : A Critical Analysis of Theoretical Concepts*. (1st ed.). Channel View Publications. https://doi.org/10.21832/9781800413597

Dall'Alba, G., & Sandberg, J. (2006). Unveiling professional development: A critical review of stage models. *Review of Educational Research*, *76*(3), 383-412. https://doi-org.dcu.idm.oclc.org/10.3102/00346543076003383

Damjanovic, V., & Blank, J. (2021). Teacher communities as a context for professional learning: A preschool case study. *Professional Development in Education, 47*(4), 574–585. https://doi.org/10.1080/19415257.2021.1883718

Darling-Hammond, L., Hyler, M.E., Gardner, M. & Espinoza, D. (2017). *Effective teacher professional development*. Learning Policy Institute

Day, C., & Sachs, J. (2005). Professionalism, performativity and empowerment: Discourses in the politics, policies and purposes of continuing professional development. In C. Day & J. Sachs (Eds.), *International handbook on the continuing professional development of teachers* (pp. 3-32). McGraw-Hill Education.

Desimone, L.M. (2009). Improving impact studies of teachers' professional development: toward better conceptualizations and measures. *Educational researcher*, *38*(3), 181–199. https://doi-org.dcu.idm.oclc.org/10.3102/0013189X08331140

Dickinson, D. K., & Tabors, P. O. (Eds.). (2001). *Beginning literacy with language: Young children learning at home and school*. Paul H. Brookes Publishing.

DiPardo, A., & Potter, C. (2003). Beyond Cognition: A Vygotskian Perspective on Emotionality and Teachers' Professional Lives. In *Vygotsky's Educational Theory in Cultural Context* (pp. 317–346). Cambridge University Press. https://doi.org/10.1017/CBO9780511840975.017

Dockett, S. (2019). Images of early childhood educators: how are they characterised? *European Early Childhood Education Research Journal, 27*(6), 737-740. https://doi-org.dcu.idm.oclc.org/10.1080/1350293X.2019.1678712

Durrant, J. (2019). Teacher agency, professional development and school improvement. Routledge

Ebadi, S., & Gheisari, N. (2016). The role of consciousness-raising through critical reflection in teachers' professional development: A sociocultural perspective. *Cogent Education, 3*(1), 1147990. https://doi.org/10.1080/2331186X.2016.1147990

Eestikeelsele õppele üleminekut toetavaid koolitusi hakkab korraldama Eesti Keele Instituut ja ministerium [Professional Development Supporting Transition to Estonian-language education Will be Organised by the Institute of the Estonian Language and the Ministry]. (2024). https://www.hm.ee/uudised/eestikeelsele-oppele-uleminekut-toetavaid-koolitusi-hakkab-korraldama-eesti-keele-instituut

Education and Youth Board. (2022). Statistics on language immersion programme. Personal communication

Education Estonia. (n.d.). Kindergartens in Estonia: more than childcare. https://www.educationestonia.org/estonias-kindergarten/

Education Strategy 2021-2035. (2021). https://www.hm.ee/ministeerium-uudised-ja-kontakt/ministeerium/strateegilised-alusdokumendid-ja-programmid?view_instance=0&current_page=1#haridusvaldkonna-are

Edwards, S. (2017). Play-based learning and intentional teaching: Forever different? *Australasian Journal of Early Childhood, 42*(2), 4-11. https://doi.org/10.23965/AJEC.42.2.01

Ellis, R. (2005). Principles of instructed language learning. *System, 33*(2), 209-224. https://doi.org/10.1016/j.system.2004.12.006

Elmahdi, O. E. H., & Bajri, I. A. (2023). The crucial role of formulaic expressions in fluent communication and language acquisition. *Journal of Namibian Studies, 34*, 33–50.

Erdemir, E., & Brutt-Griffler, J. (2022). Vocabulary Development Through Peer Interactions in Early Childhood: A Case Study of an Emergent Bilingual Child in Preschool. *International Journal of Bilingual Education and Bilingualism, 25*(3), 834–865. https://doi.org/10.1080/13670050.2020.1722058

ERR [Estonian National Broadcast]. (2024a). Tallinnas edeneb eesti keele oskusega lasteaiaõpetajate leidmine aeglaselt [Tallinn is progressing slowly with finding early years teachers with the Estonian language proficiency]. https://www.err.ee/1609411327/tallinnas-edeneb-eesti-keele-oskusega-lasteaiaopetajate-leidmine-aeglaselt

ERR [Estonian National Broadcast]. (2024b). Tallinna lasteaiad otsivad õpetajaid tikutulega [Tallinn kindergartens are facing challenges finding teachers]. https://www.err.ee/1609496533/tallinna-lasteaiad-otsivad-opetajaid-tikutulega

Eslami, Z. R., & Fatahi, A. (2008). Teachers' sense of self-efficacy, English proficiency, and instructional strategies: A study of nonnative EFL teachers in Iran. TESL-EJ, 11(4), 1–19.

Estonian Language Immersion Centre. (2001). *Keelekümbluskeskus: Esimene aasta / Estonian Language Immersion Centre: Year One* (E. Rebane, I. Käosaar, P. Mehisto, & R. McConnell, Eds.). Estonian Ministry of Education.

Estonian National Curriculum for Preschool Child Care Institutions. (2008) https://www.riigiteataja.ee/akt/12970917?leiaKehtiv

Estonian National Curriculum for Preschool Child Care Institutions. (2024). https://www.riigiteataja.ee/akt/13351772?leiaKehtiv

Eun, B. (2008). MAKING CONNECTIONS: GROUNDING PROFESSIONAL DEVELOPMENT IN THE DEVELOPMENTAL THEORIES OF VYGOTSKY. *The Teacher Educator, 43*(2), 134–155. https://doi.org/10.1080/08878730701838934

Eurydice. (2023, November 27). Educational guidelines - Estonia. https://eurydice.eacea.ec.europa.eu/eurypedia/estonia/educational-guidelines

European Commission (2014). *Language Learning at Pre-Primary School Level: Making It Efficient and Sustainable*. A Policy Handbook, European Commission. https://ec.europa.eu/education/content/commission-staff-working-paper-language-learning-pre-primary-level-making-it-efficient-and_en

Evans, L. (2008). Professionalism, professionality and the development of education professionals. *British Journal of Educational Studies*, *56*(1), 20-38. https://doi-org.dcu.idm.oclc.org/10.1111/j.1467-8527.2007.00392.x

Faltis, C. J. & Valdes, G. (2016). Preparing teachers for teaching in and advocating for linguistically diverse classrooms: A vade mecum for teacher educators. In C. Bell

& D. Gitomer (Eds.) *Handbook of research on teaching* (pp. 549-592). American Educational Research Association

Fani, T., & Ghaemi, F. (2011). Implications of Vygotsky's Zone of Proximal Development (ZPD) in Teacher Education: ZPTD and Self-scaffolding. *Procedia, Social and Behavioral Sciences, 29*, 1549–1554. https://doi.org/10.1016/j.sbspro.2011.11.396

Farrell, A. (2016). Ethics in early childhood research. In A. Farrell, S. L. Kagan, & E. K. M. Tisdall (Eds.), *The SAGE handbook of early childhood research* (pp. 187–200). SAGE.

Ferrero, M., Vadillo, M. A., & León, S. P. (2021). Is project-based learning effective among kindergarten and elementary students? A systematic review. *PLoS ONE, 16*(4), Article e0249627. https://doi.org/10.1371/journal.pone.0249627

Fesseha, E. & Angela Pyle, A. (2016). Conceptualising play-based learning from kindergarten teachers' perspectives. *International Journal of Early Years Education, 24*(3), 361-377. https://doi.org/10.1080/09669760.2016.1174105

Finnish Education Evaluation Centre. (2019). Guidelines and Recommendations for Evaluating the Quality of Early Childhood Education and Care. https://karvi.fi/app/uploads/2019/03/FINEEC_Guidelines-and-recommendations_web.pdf

Fleta Guillén, M. T., & Schwartz, M. (2018). Scaffolding Discourse Skills in Pre-primary L2 Classrooms. *In Preschool Bilingual Education* (pp. 283–309). Springer International Publishing. https://doi.org/10.1007/978-3-319-77228-8_10

Fleta, T. (2019). From research on child L2 acquisition of English to classroom practice. In J. Rokita-Jaśkow & M. Ellis (Eds.), *Early Instructed Second Language Acquisition: Pathways to Competence* (pp. 57-79). Channel View Publications

Fortune, T. W., & Tedick, D. J. (2008). One-way, two-way and indigenous immersion: A call for cross-fertilization. In T.W. Fortune & D. J. Tedick (Eds.), *Pathways to multilingualism: Evolving perspectives on immersion education* (pp. 3–21). Multilingual Matters.

Fortune, T. W., & Tedick, D. J. (2015). Oral Proficiency Assessment of English-Proficient K-8 Spanish Immersion Students. *The Modern Language Journal (Boulder, Colo.), 99*(4), 637–655. https://doi.org/10.1111/modl.12275

French, G., McKenna, G., Giblin, F., Concannon-Gibney, T., Farrell, T., Gillic, C., Halligan, C., Lake, G., Ní Dhiorbháin, A., Ní Láimhín, M., O'Neill, S., & Maguire,

C. M. (2022). *Literature review to support the updating of Aistear, the early childhood curriculum framework*. National Council for Curriculum and Assessment. https://www.ncca.ie/

Friedman, A. & Phillips, M. (2004). Continuing professional development: Developing a vision. *Journal of Education and Work*, *17*(3), 361-376. https://doi-org.dcu.idm.oclc.org/10.1080/1363908042000267432

Galletta, A. (2012). *Mastering the semi-structured interview and beyond: from research design to analysis and publication / Anne Galletta; foreword by William E. Cross, Jr.* (1st ed.). New York University Press. https://doi.org/10.18574/9780814732953

Galguera, T. (2011). Participant structures as professional learning tasks and the development of pedagogical language knowledge among preservice teachers. *Teacher Education Quarterly, 38*(1), 85-106. https://www.proquest.com/scholarly-journals/participant-structures-as-professional-learning/docview/851623746/se-2

Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal, 38*(4), 915–945. https://doi.org/10.3102/00028312038004915

Gass, S. M. (2015). Comprehensible input and output in classroom interaction. In N. Markee (Ed.) *The handbook of classroom discourse and interaction* (pp. 182-197). Wiley

Gealy, A.-M., Tinney, G., McDonald, N. & Waters, J. (2020). A socio-constructivist approach to developing a professional learning intervention for early childhood education and care practitioners in Wales. *Professional Development in Education*, *48*(2), 298-314. https://doi-org.dcu.idm.oclc.org/10.1080/19415257.2020.1742187

Genesee, F. (2019). Language development in simultaneous bilinguals. In J. S. Horst & J. von Koss Torkildsen (Eds.) *International Handbook of Language Acquisition. 1st Edition* (pp. 300-320). Routledge

Gorozidis, G., & Papaioannou, A. G. (2014). Teachers' motivation to participate in training and to implement innovations. *Teaching and Teacher Education, 39*, 1e11. https://doi.org/10.1016/j.tate.2013.12.001

Guskey, T. (2000). Evaluating Professional Development. Corwin Press.

Guskey, T. (2002) Professional development and teacher change. *Teachers and Teaching*, *8*(3), 381-391. https://doi-org.dcu.idm.oclc.org/10.1080/135406002100000512

Guskey, T. R. (2025). Explaining the puzzling results in professional learning research. *Phi Delta Kappan, 106*(7–8), 55–60. https://doi.org/10.1177/00317217251342372

Güley, B. (2024). The effect of project approach-based science education program on problem-solving skills of preschool children. *Humanities and Social Sciences Communications, 11*, Article 9344. https://doi.org/10.1057/s41599-024-03444-0

Hadley, F., Waniganayake, M. & Shepherd, W. (2015). Contemporary practice in professional learning and development of early childhood educators in Australia: reflections on what works and why. *Professional Development in Education*, *41*(2), 187-202. https://doi-org.dcu.idm.oclc.org/10.1080/19415257.2014.986818

Hansen, J. E. (2020). Characteristics of educational language practices observed in four toddler groups in Norwegian ECEC. *International Journal of Early Years Education, 28*(4), 382-396, https://doi.org/10.1080/09669760.2018.1548347

Hansen, J. E., & Alvestad, M. (2018). Educational language practices described by preschool teachers in Norwegian kindergartens. *European Early Childhood Education Research Journal, 26*(1), 128–141. https://doi.org/10.1080/1350293X.2018.1412052

Hargreaves, A. (2000). Four ages of professionalism and professional learning. *Teachers and teaching: theory and practice, 6*(2), 151-182. https://doi-org.dcu.idm.oclc.org/10.1080/713698714

Haridus- ja Noorteamet. (n.d.). *Keelekümblus*. https://harno.ee/keelekumblus#sadakond-sammu

Harris, A., & Jones, M. (2023). Teachers' professional learning and teacher-led instructional approaches: Contexts and impacts. Educational Management Administration & Leadership, 51(2), 256-272. https://doi.org/10.1177/17411432221106829

Hart, B., & Risley, T. R. (2003). The early catastrophe: The 30 million word gap by age 3. *American Educator, 27*(1), 4–9. https://www.aft.org/sites/default/files/periodicals/TheEarlyCatastrophe.pdf

Hattie, J., & Timperley, H. (2017). The power of feedback and teacher-led instruction in learning. Review of Educational Research, 87(1), 153-183. https://doi.org/10.3102/0034654316675417

Hayes, N., & O'Neill, S. (2019). Little changes, big results: the impact of simple changes to early years learning environments. *Early Years, 39*(1), 64-79. https://doi-org.dcu.idm.oclc.org/10.1080/09575146.2017.1342223

He, P., & Lin, A. M. Y. (2018). Becoming a "language-aware" content teacher: Content and language integrated learning (CLIL) teacher professional development as a collaborative, dynamic, and dialogic process. *Journal of Immersion and Content-Based Language Education, 6*(2), 162–188. https://doi.org/10.1075/jicb.17009.he

Hedges, H. (2021). Contemporary principles to lead understandings of children's learning: synthesizing Vygotsky, Rogoff, Wells and Lindfors. *Early Child Development and Care, 191*(7–8), 1056–1065. https://doi.org/10.1080/03004430.2020.1849169

Hickey, T.M. & de Mejía, A.-M. (2014). Immersion education in the early years: a special issue. *International Journal of Bilingual Education and Bilingualism*, *17*(2), 131-143. https://doi.org/10.1080/13670050.2013.866624

Hill, N. R., Hanks, B. B., Wagner H. H., & Portrie-Bethke, T. (2016). Early Childhood: Physical and Cognitive Development. In D. Capuzzi & M. D. Stauffer (Eds.) *Human Growth and Development Across the Lifespan: Applications for Counselors* (pp. 205-246). John Wiley & Sons

Hirsh-Pasek, K., Zosh, J. M., Golinkoff, R. M., Gray, J. H., Robb, M. B., & Kaufman, J. (2015). Putting education in "educational" apps: Lessons from the science of learning. *Psychological Science in the Public Interest, 16*(1), 3–34. https://doi.org/10.1177/1529100615569721

Hood, S.J. (2020). Two-way immersion teacher preparation. *Foreign language annals*, *53*(1), 128-148. https://doi-org.dcu.idm.oclc.org/10.1111/flan.12441

Hoff, E. (2006). How social contexts support and shape language development. *Developmental Review, 26*(1), 55–88. https://doi.org/10.1016/j.dr.2005.11.002

Hoff, E. (2008). Language experience and language milestones during early childhood. In K. McCartney & D. Phillips (Eds.) *The Blackwell handbook of early childhood development* (pp. 524-565). Wiley.

Hoff, E., & Shatz, M. (2007). *Blackwell handbook of language development / edited by Erika Hoff and Marilyn Shatz.* (1st ed.). Blackwell.

Hoff, E. (2015). Language development in bilingual children. In E. L. Bavin, L. R. Naigles (Eds.) *The Cambridge handbook of child language. 2nd edition.* (pp. 483-503). Cambridge University Press

Hopkins, E. J., Spiewak Toub, T., Hassinger-Das, B., Golinkof, R. M., & Hirsh-Pasek, K. (2019). Playing for the future: Redefining early childhood education. In D. Whitebread, V. Grau, K. Kumpulainen, M. M. McClelland, N. Perry, & D. Pino-

Pasternak (Eds.), *The SAGE handbook of developmental psychology and early childhood education* (pp. 403-434). SAGE.

Howard, S. J. & Melhuish, E. (2017). An early years toolbox for assessing early executive function, language, self-regulation, and social development: Validity, reliability, and preliminary norms. *Journal of Psychoeducational Assessment*, *35*(3), 255-275. https://doi-org.dcu.idm.oclc.org/10.1177/0734282916633009

Huhn, C., Bell, T. R., & Chambless, K. (2021). Issues in world language teacher preparation: ACTFL/CAEP standards and oral proficiency. *Foreign Language Annals, 54*(1), 255–271. https://doi.org/10.1111/flan.12507

Hunzicker, J. (2011). Effective professional development for teachers: a checklist. *Professional Development in Education, 37*(2), 177-179. https://doi.org/10.1080/19415257.2010.523955

Imants, J. & Van der Wal, M. M. (2020). A model of teacher agency in professional development and school reform. *Journal of curriculum studies*, *52*(1), 1-14. https://doi-org.dcu.idm.oclc.org/10.1080/00220272.2019.1604809

Immersion Centre. (2003). Three Years of Accomplishment. https://www.innove.ee/wp-content/uploads/2020/04/KEELEKUMBLUS_aastaraamat_2003_EST_ENG.pdf

Jaramillo-López, C., Mendive, S., & Castro, D. C. (2025). Monolingual Early Childhood Educators Teaching Multilingual Children: A Scoping Review. *Education Sciences, 15*(7), 869. https://doi.org/10.3390/educsci15070869

Johnson, K. E. (2009). Trends in second language teacher education. In A. Burns & J. C. Richards (Eds.), *The Cambridge guide to second language teacher education* (pp. 20–29). Cambridge University Press.

Johnson, K. E., & Golombek, P. R. (2016). Mindful L2 teacher education: A sociocultural perspective on L2 teacher education. Routledge.

Kalinowski, E., Gronostaj, A. & Vock, P. (2019). Effective professional development for teachers to foster students' academic language proficiency across the Curriculum: a systematic review. *AERA Open, 5*(2), 1-23. https://doi-org.dcu.idm.oclc.org/10.1177/233285841982869

Kallio, H., Pietilä, A.-M., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: Developing a framework for a qualitative semi-structured interview guide. *Journal of Advanced Nursing, 72*(12), 2954–2965. https://doi.org/10.1111/jan.13031

Kangas, J., Lastikka, A.-L., & Arvola, O. (2023). Inclusive play: Defining elements of playful teaching and learning in culturally and linguistically diverse ECEC. *Education Sciences, 13*(9), 956. https://doi.org/10.3390/educsci13090956

Katz, L.G. (2014). Building a good foundation: the project approach. In M. Yasar, O. Ozgun, & J. Galbraith (Eds.) *Contemporary Perspectives and Research on Early Childhood Education* (pp. 10-23) Cambridge Scholars Publisher.

Kennedy, A. (2007) Continuing professional development (CPD) policy and the discourse of teacher professionalism in Scotland. *Research Papers in Education*, *22*(1), 95-111. https://doi.org/10.1080/02671520601152128

Kennedy, A. (2014). Understanding continuing professional development: The need for theory to impact on policy and practice. *The Journal of Professional Development in Education*, *40*(5), 688-697. https://doi-org.dcu.idm.oclc.org/10.1080/19415257.2014.955122

Kennedy, M. M. (2016). Teacher leadership: Defining the role in instructional settings. Teachers College Record, 118(3), 1-29. https://doi.org/10.1177/016146811611800301

Kiilo, T., & Kutsar, D. (2013). Dilemmas related to the professional self-identity of Russian-speaking teachers in Estonia: Adapting and accommodating to changes in the language-in-education domain. *Journal of Baltic Studies, 44*(4), 475–502. https://doi.org/10.1080/01629778.2013.805503

Kimer, M., Tuul, M. and Õun, T. (2016). Implementation of different teaching practices in early childhood education practices in Estonia. *Early Years, 36*(4), 368-382. https://doi-org.dcu.idm.oclc.org/10.1080/09575146.2015.1118443

King, F. (2016). Teacher professional development to support teacher professional learning: Systemic Factors from Irish case studies. *Teacher Development*, *20*(4), 574-594. https://doi-org.dcu.idm.oclc.org/10.1080/13664530.2016.1161661

Kinos, J., & Pukk, M. (2010). Lapsest lähtuv kasvatus. Lapse huvid esile. *Tea ja toimeta series*. Kirjastus ILO.

Kinos, J., Robertson, L., Barbour, N., & Pukk, M. (2016). Child-initiated pedagogies: Moving toward democratically appropriate practices in Finland, England, Estonia, and the United States. *Childhood Education, 92*(5), 345–357. https://doi.org/10.1080/00094056.2016.1226107

Kirsch, C. (2021). Practitioners' language-supporting strategies in multilingual ECE institutions in Luxembourg. *European Early Childhood Education Research*

Journal, 29(3), 336-350. https://doi-org.dcu.idm.oclc.org/10.1080/1350293X.2021.1928721

Kong, K. (2015). Teachers' identities and creative teaching in language immersion classrooms. *Learning Languages, 20*(1), 20–23.

Koolieelse lasteasutuse pedagoogide kvalifikatsiooninõuded [Qualification Requirements to Teachers of Preschool Child Care Institutions]. (2023). https://www.riigiteataja.ee/akt/128122022053

Koolieelse lasteasutuse seadus [Preschool Child Care Institutions Act]. (2002). https://www.riigiteataja.ee/akt/185456

Kuhl, P. K. (2010). Brain mechanisms in early language acquisition. *Neuron, 67*(5), 713–727. https://doi.org/10.1016/j.neuron.2010.08.038

Kukk, A. (2010). *Õppekava eesmärkide saavutamine üleminekul lasteasutusest kooli ning I kooliastmes õpetajate hinnanguil [Meeting the objectives of the curriculum in the transfer from a pre-school institution into school and at the first stage at school according to the assessments of teachers]* (Doctoral dissertation, Tallinn University, Institute of Educational Sciences).

Kukk, A., Sarv, E.-S., Muldma, M., & Talts, L. (2012). *Varane keelekümblus: Õppekava eesmärkide saavutamine lapsekeskse lähenemise aspektist: Uuringu aruanne: Lasteaia lõpp ja põhikooli I aste (2007–2011)*. Tallinna Ülikool, Haridus- ja Teadusministeerium. https://doi.org/10.978-9949-29-035-2

Kukk, A., & Õun, T. (2014). Meeting the objectives of the curriculum at the first stage of basic school by the child having left the language immersion kindergarten. *Education 3–13, 42*(4), 357–368. https://doi.org/10.1080/03004279.2012.704059

Kukk, A., Õun, T., & Ugaste, A. (2014). Readiness for school of children having attended language immersion kindergarten in their teachers' and parents' opinions. *International Journal of Early Years Education, 22*(2), 156–168. https://doi.org/10.1080/09669760.2014.900475

Kuusisaari, H. (2014). Teachers at the zone of proximal development: Collaboration promoting or hindering the development process. *Teaching and Teacher Education, 43*, 46–57. https://doi.org/10.1016/j.tate.2014.06.001

La Paro, K. M., Hamre, B. K., Locasale-Crouch, J., Pianta, R. C., Bryant, D., Early, D., Burchinal, M. (2009). Quality in kindergarten classrooms: Observational evidence for the need to increase children's learning opportunities in early education

classrooms. *Early Education and Development, 20*(4), 657–692. doi:10.1080/10409280802541965

Langeloo, A., Deunk, M. I., Lara, M. M., van Rooijen, M. & Strijbos, J.-W. (2020). Learning Opportunities of Monolingual and Multilingual kindergarteners and their Early Literacy and Executive Functioning Development. *Early Education and Development, 31*(8), 1224-1246. https://doi.org/10.1080/10409289.2019.1697607

Langeloo, A., Lara, M. M., Deunk, M. I., LoCasale-Crouch, J., & Strijbos, J.-W. (2021). Profiles of learning opportunities of multilingual and monolingual children in kindergarten. *European Journal of Psychology of Education, 36*(2), 379–404. https://doi.org/10.1007/s10212-020-00487-0

Langeloo, A., Deunk, M. I., Lara, M. M., & Strijbos, J.-W. (2023). Exploring the Use of Teacher Third-Position Support of Multilingual and Monolingual Children: A Multiple Case Study in Kindergarten Classrooms. *Journal of Research in Childhood Education, 37*(1), 136–158. https://doi.org/10.1080/02568543.2022.2097348

Language Act of Estonia. (2020). https://www.riigiteataja.ee/en/eli/521072020005/consolide

Language Act of Estonia. (2023). https://www.riigiteataja.ee/en/eli/528072023001/consolide

Language Act of Estonia. (2025). https://www.riigiteataja.ee/en/eli/518032025011/consolide

Language Immersion Centre. (2008). Seven years of accomplishment. https://www.innove.ee/wp-content/uploads/2020/04/KEELEKUMBLUS_aastaraamat_2008.pdf

Language Immersion Centre. (2020). *Digital archives 2000–2020* [Digital archive].

Lantolf, J. P. (2000). Second language learning as a mediated process. *Language Teaching, 33*(2), 79–96. https://doi.org/10.1017/S0261444800015329

Lantolf, J. P. (2006). Sociocultural Theory and L2: State of the Art. *Studies in Second Language Acquisition, 28*(1), 67–109. https://doi.org/info:doi/

Lantolf, J. P., & Thorne, S. L. (2007). Sociocultural theory and second language learning. In B. VanPatten & J. Williams (Eds.), *Theories in second language acquisition: An introduction* (pp. 201–220). Routledge.

Legget, E.S., Roaten, G.K. & Ybañez-Llorente, K. (2016). Early childhood: emotional and social development. In D. Capuzzi & M. D. Stauffer (Eds.) *Human Growth and*

Development Across the Lifespan: Applications for Counselors (pp. 247-279). John Wiley

Lichtman, K., & VanPatten, B. (2021). Was Krashen right? Forty years later. *Foreign Language Annals, 54*(2), 283–305. https://doi.org/10.1111/flan.12552

Lightbown, P. M. (2008). Easy as pie? Children learning languages. *Concordia Working Papers in Applied Linguistics, 1*, 1-25.

Lightbown, P. M. & Spada, N. (2020). Teaching and Learning L2 in the Classroom: It's About Time. *Language Teaching, 53*(4), 422-432. https://doi.org/10.1017/S0261444819000454

Lindahl, K., Baecher, L., & Tomaš, Z. (2013). Teacher language awareness in content-based activity design. *Journal of Immersion and Content-Based Language Education, 1*(2), 198–225. https://doi.org/10.1075/jicb.1.2.03lin

Lindholm-Leary, K. J. (2001). *Dual language education / Kathryn J. Lindholm-Leary*. (1st ed.). Multilingual Matters. https://doi.org/10.21832/9781853595332

Lindholm-Leary, K. (2022). Dual language education models and research in early childhood education in the USA. In M. Schwartz (Ed.), *Handbook of early language education* (pp. 403–426). Springer. https://doi.org/10.1007/978-3-030-91662-6_15

Lipscomb, S. T., Chandler, K. D., Abshire, C., Jaramillo, J., & Kothari, B. (2022). Early childhood teachers' self-efficacy and professional support predict work engagement. *Early Childhood Education Journal, 50*(5), 675–685. https://doi.org/10.1007/s10643-021-01182-5

Littlewood, W., & Yu, B. (2011). First language and target language in the foreign language classroom. *Language Teaching, 44*(1), 64–77. https://doi.org/10.1017/S0261444809990310

Lyster, R. (2019). Making research on instructed SLA relevant for teachers through professional development. *Language Teaching Research: LTR*, 23(4), 494–513. https://doi.org/10.1177/1362168818776667

Macaro, E. (2001). Analysing student teachers' codeswitching in foreign language classrooms: Theories and decision making. *The Modern Language Journal, 85*(4), 531–548. https://doi.org/10.1111/0026-7902.00124

Mac Naughton, G., & Rolfe, S. A. (2020). The research process. In *Doing early childhood research* (pp. 13-34). Routledge.

Map of Estonia. (2022). https://www.researchgate.net/figure/Map-of-Estonia-in-relation-to-surrounding-countries-with-the-primary-cities-and-lakes_fig1_304815314

Markova, I. (2017). Effects of academic and non-academic instructional approaches on preschool English language learners' classroom engagement and English language development. *Journal of Early Childhood Research: ECR, 15*(4), 339–358. https://doi.org/10.1177/1476718X15609390

Markussen-Brown, J., Juhl, C.B., Piasta, S.B., Bleses, D., Højen, A., & Justice, L.M. (2017). The effects of language- and literacy-focused professional development on early educators and children: A best-evidence meta-analysis. *Early Childhood Research Quarterly*, 38, 97-115. https://doi.org/10.1016/j.ecresq.2016.07.002

Martinez Enriquez, P. (2025). The project method in early childhood education and its scientific production: A systematic review. *Maskana, 16*(1), 73–89. https://doi.org/10.18537/mskn.16.01.05

McCartney, K., & Phillips, D. (Eds.). (2008). *Blackwell handbook of early childhood development / edited by Kathleen McCartney and Deborah Phillips. (1st ed.)*. Blackwell Publishing.

McChesney, K. (2022). The design and impact of professional development activities in a diverse international education reform context. *Teaching and Teacher Education, 119*, 103882. https://doi.org/10.1016/j.tate.2022.103882

McElearney, A., Murphy, C. & Radcliffe, D. (2019). Identifying teacher needs and preferences in accessing professional learning and support. *Professional Development in Education*, *45*(3), 433-455. https://doi-org.dcu.idm.oclc.org/10.1080/19415257.2018.1557241

McKim, Courtney. A. (2017). The value of mixed methods research: a mixed methods study. *Journal of Mixed Methods Research, 11(2)*, 202–222. https://doi.org/10.1177/1558689815607096

McWilliam, E. (2002). Against professional development. *Educational Philosophy and* Theory, 34(3), 289-299. https://doi-org.dcu.idm.oclc.org/10.1111/j.1469-5812.2002.tb00305.x

Mehisto, P. (2015). Estonia: Laying the groundwork for bilingual education. In P. Mehisto & F. Genesee (Eds.), *Building bilingual education systems: Forces, mechanisms and counterweights* (pp. 59–81). Cambridge University Press.

Melhuish, E., Ereky-Stevens, K., Petrogiannis, K., Ariescu, A., Efthymia Penderi, E., Rentzou, K., Tawell, A., Slot, P., Broekhuizen, M., & Leseman, P. (2014). CARE

Project: A review of research on the effects of Early Childhood Education and Care (ECEC) upon child development. University of Oxford

Mertens, D. M. (2007). Transformative Paradigm: Mixed Methods and Social Justice. *Journal of Mixed Methods Research, 1*(3), 212–225. https://doi.org/10.1177/1558689807302811

Mertler, C. A. (2017). *Action research: Improving schools and empowering educators* (5th ed.). Sage.

Met, M. (2008). Paying attention to language: literacy, language and academic achievement. In T. W. Fortune & D.J. Tedick (Eds.) *Pathways to multilingualism evolving perspectives on immersion education* (pp. 49-70). Multilingual Matters

Mhic Mhathúna, M. (2008). Supporting children's participation in second-language stories in an Irish-language preschool. Early Years, 28(3), 299-309. http://dx.doi.org/10.1080/09575140802212191

Ministry of Education and Research. (2025). Transition to Estonian-language education. https://www.hm.ee/en/node/234

Minnaar, L., & Heystek, J. (2013). Online surveys as data collection instruments in education research: A feasible option? *South African Journal of Higher Education, 27*(1), 162–183.

Mitchell, R., Myles, F. & Marsden, E. (2019). *Second language learning theories*. Taylor & Francis Group

Molla, T. & Andrea Nolan, A. (2019) Identifying professional functionings of early childhood educators. *Professional Development in Education*, *45*(4), 551-566. https://doi-org.dcu.idm.oclc.org/10.1080/19415257.2018.1449006

Moss, P. (2016). Where am I? Position and perspective in researching early childhood education. In A. Farrell, S. L. Kagan, & E. K. M. Tisdall (Eds.), *The SAGE handbook of early childhood research* (pp. 89–102). SAGE.

Mourão, S., Garton, S., & Copland, F. (2019). Research into the teaching of English as a Foreign language in early childhood education and care. *In The Routledge Handbook of Teaching English to Young Learners* (1st ed., pp. 425–440). Routledge. https://doi.org/10.4324/9781315623672-27

Múñez, D., Bautista, A., Khiu, E., Keh, J.-S., & Bull, R. (2017). Preschool teachers' engagement in professional development: Frequency, perceived usefulness, and relationship with self-efficacy beliefs. *Psychology, Society & Education, 9*(2), 181–199. https://doi.org/10.25115/psye.v9i2.655

Muñoz, C. (2006). The effects of age on foreign language learning: the BAF project. In C. Muñoz (Ed.) *Age and rate of foreign language learning* (pp. 1-40). Multilingual Matters

Muñoz, C. (2012). The significance of intensive exposure as a turning point in learners' histories. In C. Muñoz (Ed.) *Intensive exposure experiences in second language learning* (pp. 141-160). Multilingual Matters

Muñoz, C., & Spada, N. (2019). Foreign language learning from early childhood to young adulthood. In A. De Houwer & L. Ortega (Eds.), *The Cambridge Handbook of Bilingualism* (pp. 233–249). Cambridge University Press.

Mård-Miettinen, K., Arnott, S., & Vignola, M-J. (2022). Early immersion in minority language context: Canada and Finland. In M. Schwartz (Ed.), *Handbook of Early Language Education.* (pp. 347–-371). Springer International Handbooks of Education. Springer.

National Council for Curriculum and Assessment [NCCA]. (2024). *Aistear the Early Childhood Curriculum Framework*. https://www.curriculumonline.ie/getmedia/1e9e4eff-5d44-4950-bfa6-a28f43895d3f/Aistear-FW-ENG.pdf

National Association for the Education of Young Children [NAYEC]. (2019). *Class Observation Tool: All Ages*. https://www.naeyc.org/sites/default/files/wysiwyg/user-72/co_sv_itpks_-_2019.pdf

Nayernia, A., & Babayan, Z. (2019). EFL teacher burnout and self-assessed language proficiency: exploring possible relationships. *Language Testing in Asia, 9*(1), 1–16. https://doi.org/10.1186/s40468-019-0079-6

Neudorf, E., Ugaste, A., Tuul, M., & Mikser, R. (2017). Lasteaiaõpetajate uskumused seoses laste üldoskuste arendamisega riikliku õppekava alusel: lisaseletus lasteaia koolistumise põhjustele. *Eesti Haridusteaduste Ajakiri.*, 5(2), 54-. https://doi.org/10.12697/eha.2017.5.2.03

Nguyen, H. T., & Tran, V.-T. (2023). Educational administrators' perceptions of influential factors in cultivating and enhancing professional competencies among preschool teachers in the Southeastern region of Vietnam. *Revista Gestão e Secretariado (GeSec)*, *14*(11), 19392–19413. https://doi.org/10.7769/gesec.v14i11.2914

Nilsen, T.R. (2021). Pedagogical intentions or practical considerations when facilitating children's play? Teachers' beliefs about the availability of play materials in the indoor ECEC environment. *International Journal of Childcare and Education Policy, 15*(1), https://doi.org/10.1186/s40723-020-00078-y

Nissilä, S.-P., Karjalainen, A., & Koukkari, M. (2022). *It is the shared aims, trust and compassion that allow people to prosper: Teacher educators' lifelong learning in competence-based education. European Journal of Educational Research, 11*(2), 965–980. https://doi.org/10.12973/eu-jer.11.2.965

OECD (2019), Providing Quality Early Childhood Education and Care: Results from the Starting Strong Survey 2018, TALIS, OECD Publishing, https://doi.org/10.1787/301005d1-en.

OECD rahvusvahelise alushariduse ja laste heaolu uuringu IELS 2018 tulemused Eestis. [IELS 2018 report results for Estonia]. (2020). https://www.hm.ee/uldharidus-ja-noored/alus-pohi-ja-keskharidus/alusharidus?view_instance=1&current_page=1#rahvusvahelised-ja-s

OECD (2020). Education at a Glance 2020: OECD Indicators. https://read.oecd-ilibrary.org/education/education-at-a-glance-2020_69096873-en#page170

Ofner, D. (2018). Language support competence and language proficiency of early years professionals in monolingual and bilingual settings: Similarities and differences. *European Journal of Applied Linguistics, 6*(2), 255–278. https://doi.org/10.1515/eujal-2018-0002

Onchwari, G., & Keengwe, J. (2008). The impact of a mentor-coaching model on teacher professional development. *Early Childhood Education Journal 36*(1), 19–24 https://doi-org.dcu.idm.oclc.org/10.1007/s10643-007-0233-0

Õpetaja koolituse raamnõuded [Framework Requirements for Teacher Training]. (2013). https://www.riigiteataja.ee/akt/128082013002

Õpetaja koolituse raamnõuded [Framework Requirements for Teacher Training]. (2015). https://www.riigiteataja.ee/akt/118082015010

Õpetaja koolituse raamnõuded [Framework Requirements for Teacher Training]. (2019). https://www.riigiteataja.ee/akt/122082019010

Opfer, V.D. & Pedder, D. (2011). Conceptualizing teacher professional learning. *Review of Educational Research, 81*(3), 376-407. https://doi-org.dcu.idm.oclc.org/10.3102/0034654311413360

Õun, T. (2009). Quality of learning environments in Estonian preschools. *Problems of Education in the 21st Century, 15*, 118–124.

Paradis, J., Genesee, F., & Crago, M. B. (2021). *Dual language development & disorders: a handbook on bilingualism and second language learning / by Johanne Paradis, Fred Genesee and Martha B. Crago.* (Third edition.). Paul H. Brookes Publishing Co.

Paechter, C. (1996). What do we mean by professional development? *Research in Post-Compulsory Education*, *1*(3), 345-355. https://doi-org.dcu.idm.oclc.org/10.1080/1359674960010305

Peltoniemi, A. (2015). Kansainvälinen näkökulma kielikylpyopettajakoulutukseen. Seminaariraportti.Seminarierapport. Unversity of Vaasa. https://www.uwasa.fi/materiaali/pdf/isbn_978-952-476-601-2.pdf

Pickard, A. J. (2013). *Research methods in information* (2nd ed.). Facet Publishing.

Portolés, L., & Martí, O. (2020). Teachers' beliefs about multilingual pedagogies and the role of initial training. *International Journal of Multilingualism, 17*(2), 248–264. https://doi.org/10.1080/14790718.2018.1515206

Preschool Child Care Institutions Act. (2012). https://www.riigiteataja.ee/en/eli/512112013001/consolide

Preschool Child Care Institutions Act. (2018). https://www.riigiteataja.ee/en/eli/517062014005/consolide

Preschool Child Care Institutions Act. (2024). https://www.riigiteataja.ee/en/eli/ee/512112013001/consolide/current

Rand, M. K., & Morrow, L. M. (2021). The contribution of play experiences in early literacy: Expanding the science of reading. *Reading Research Quarterly, 56*(S1), S239–S248. https://doi.org/10.1002/rrq.383

Rannut, M. (2006). The role of education in reversing language shift: the Estonian experience. In O'Riagain, D. (ed.) *Voces diversae: lesser-used language education in Europe*. (pp. 78-88). Queens University Press

Raud, N., Džalalova, A., & Raik, K. (2011). Plurilingualism in teacher education for multicultural schools and kindergartens in Estonia. *Problems of Education in the 21st Century*, *32*, 113–120. https://doi.org/10.33225/pec/11.32.113

Reggio Emilia Ühing. (n.d.). *Tegevuskultuuri areng Eestis*. https://reggioemilia.ee/reggio-areng-eestis/

Reese, E., Sparks, A., & Leyva, D. (2010). A review of parent interventions for preschool children's language and emergent literacy. *Journal of Early Childhood Literacy*, *10*(1), 97–117. https://doi-org.dcu.idm.oclc.org/10.1177/1468798409356987

Richards, J. C. (2015). *Key issues in language teaching / Jack C. Richards.* (1st ed.). Cambridge University Press.

Richardson, K. (2020). *Models of Cognitive Development / Ken Richardson*. (Classic edition.). Routledge. https://doi.org/10.4324/9780429297571

Richter, D., Kleinknecht, M., & Gröschner, A. (2019). What motivates teachers to participate in professional development? An empirical investigation of motivational orientations and the uptake of formal learning opportunities. *Teaching and Teacher Education, 86*, 102929. https://doi.org/10.1016/j.tate.2019.102929

Rinaldi, C. (2021). *In dialogue with Reggio Emilia: listening, researching and learning* (Second edition.). Routledge.

Riveros, A., Newton, P., & Burgess, D. (2012). A situated account of teacher agency and learning: Critical reflections on professional learning communities. *Canadian Journal of Education, 35*(1), 202–216. http://www.jstor.org/stable/canajeducrevucan.35.1.202

Roberts-Holmes, G. (2021). School readiness, governance and early years ability grouping. *Contemporary Issues in Early Childhood, 22*(3), 244-253. https://doi-org.dcu.idm.oclc.org/10.1177/14639491198631

Robson, S. (2020). *Developing thinking and understanding in young children an introduction for students / Sue Robson.* (3rd ed.). Routledge.

Roskos, K., & Christie, J. (2001). On not pushing too hard: A few cautionary remarks about linking literacy and play. *Young Children, 56*(3), 64–66.

Rzejak, D., Künsting, J., Lipowsky, F., Fischer, E., Dezhgahi, U., & Reichardt, A. (2014).Facetten der Lehrerfortbildungsmotivation: Eine faktorenanalytische Betrachtung [Facets of professional development motivation: An investigation of the underlying factors]. *Journal for Educational Research Online; Journal Für Bildungsforschung, 6*(1), 139e159.

Sachs, J. (2001). Teacher professional identity: competing discourses, competing outcomes. *Journal of Education Policy*, *16*(2), 149-161. https://doi-org.dcu.idm.oclc.org/10.1080/02680930116819

Sachs, J. (2003). The Activist Teaching Profession. Open University Press

Sachs, J. (2016) Teacher professionalism: why are we still talking about it? *Teachers and Teaching, 22*(4), 413-425. https://doi-org.dcu.idm.oclc.org/10.1080/13540602.2015.1082732

Saracho, O. N. (2023). Theories of child development and their impact on early childhood education and care. *Early Childhood Education Journal, 51*(1), 15–30. https://doi.org/10.1007/s10643-021-01271-5

Saville-Troike, M. (1988). Private speech: evidence for second language learning strategies during the 'silent' period. *Journal of Child Language, 15*(3), 567–590. https://doi.org/10.1017/S0305000900012575

Saville-Troike, M. (2006). *Introducing second language acquisition*. Cambridge University Press

Scanlon, L. (2011). 'Becoming' a professional. in L. Scanlon (Ed.) *Becoming a Professional: An Interdisciplinary Analysis of Professional Learning* (pp. 13-32). Springer Netherlands.

Shaughnessy, M. F., & Kleyn, K. (2012). *Handbook of early childhood education*. Nova Science Publishers.

Schwartz, M., & Gorbatt, N. (2017). "There is no need for translation: She understands": Teachers' mediation strategies in a bilingual preschool classroom. *The Modern Language Journal, 101*(1), 143–162. https://doi.org/10.1111/modl.12384

Schwartz, M., Hijazy, S., & Deeb, I. (2021). The role of play in creating a language-conducive context in a bilingual preschool. *European Early Childhood Education Research Journal, 29*(3), 381–396. https://doi.org/10.1080/1350293X.2021.1928723

Senent, I. G., Kelley, K., & Abo-Zena, M. M. (2021). Sustaining curiosity: Reggio-Emilia inspired learning. *Early Child Development and Care, 191*(7–8), 1247–1258. https://doi.org/10.1080/03004430.2021.1900835

Serratrice, L. (2018). Becoming bilingual in early childhood. In A. De Houwer & L. Ortgega (Eds.) *The Cambridge handbook of bilingualism* (pp. 15-35). Cambridge University Press

Shabani, K. (2016). Applications of Vygotsky's sociocultural approach for teachers' professional development. *Cogent Education, 3*(1), 1252177. https://doi.org/10.1080/2331186X.2016.1252177

Shabani, K., Khatib, M., & Ebadi, S. (2010). Vygotsky's zone of proximal development: Instructional implications and teachers' professional development. *English Language Teaching, 3*(4), 237–248. https://doi.org/10.5539/elt.v3n4p237

Sharma, A. & Cockerill, H. (2014). Mary Sheridan's from birth to five years: children's developmental progress. Fourth edition. Routledge.

Shaughnessy, M. F., & Kleyn, K. (2012). The importance of early childhood education. In M. F. Shaughnessy & K. Kleyn (Eds.), *Handbook of early childhood education* (pp. 1–8). Nova Science Publishers.

Skaalvik, E. M., & Skaalvik, S. (2010). Teacher self-efficacy and teacher burnout: A study of relations. *Teaching and Teacher Education, 26*(6), 1059–1069. https://doi.org/10.1016/j.tate.2009.11.001

Sivevska, D., & Runceva, J. (2023). Organizational culture and climate in the pre-school institution. *KNOWLEDGE – International Journal, 57*(2), 293–300. https://www.researchgate.net/publication/323796487_Organizational_Culture_in_Nursery_Schools

S. M. Gass & C. G. Madden (Eds.) (1985) *Input in second language acquisition*. (Series on Issues in Second Language Research.) Newbury House

Smidt, S. (2013). Introduction: Context and culture. *In Introducing Malaguzzi* (1st ed., pp. 1–3). Routledge. https://doi.org/10.4324/9780203111857-1

Smidt, W. & Embacher, E-M. (2020) How do activity settings, preschool teachers' activities, and children's activities relate to the quality of children's interactions in preschool? Findings from Austria. *European Early Childhood Education Research Journal, 28*(6), 864-883. https://doi.org/10.1080/1350293X.2020.1836586

Smolucha, L., & Smolucha, F. (2021). Vygotsky's theory in-play: early childhood education. *Early Child Development and Care, 191*(7–8), 1041–1055. https://doi.org/10.1080/03004430.2020.1843451

Snow, M. A. (1987). *Immersion Teacher Handbook* (Educational Report No. ER10). Center for Language Education and Research. https://files.eric.ed.gov/fulltext/ED291243.pdf

Social Insurance Board (2025). Shared parental benefit and parental leave. https://sotsiaalkindlustusamet.ee/en/family-benefits-and-allowances/family-benefits-overview/shared-parental-benefit

Spada, N., & Fröhlich, M. (1995). *COLT: Communicative Orientation of Language Teaching Observation Scheme – Coding Conventions and Applications.* National Centre for English Language Teaching and Research, Macquarie University.

Speldewinde, C. (2022). Where to stand? Researcher involvement in early education outdoor settings. *Educational Research, 64*(2), 208–223. https://doi.org/10.1080/00131881.2022.2064323

Sproule, L., Walsh, G., & McGuinness, C. (2019). More than "just play": picking out three dimensions of a balanced early years pedagogy. *International Journal of Early Years Education, 27*(4), 409–422. https://doi.org/10.1080/09669760.2019.1628011

Statistics Estonia (2021). RL21429: *Rahvastik rahvuse, soo, vanuserühma ja elukoha (haldusüksus) järgi, 31. Detsember 2021 [RL21429: Population based on nationality, gender and place of residence (administrative unit)].* https://andmed.stat.ee/et/stat/rahvaloendus__rel2021__rahvastiku-demograafilised-ja-etno-kultuurilised-naitajad__rahvus-emakeel/RL21429

Statistics Estonia. (2022). *Suur ülevaade: õpetajad meie koolides ja lasteaedades [Big Overview: Teachers in Our Schools and Kindergartens]*. https://stat.ee/et/uudised/suur-ulevaade-opetajad-meie-koolides-ja-lasteaedades

Statistics Estonia. (2024). *Rahvaarv [Number of Population]*.https://stat.ee/et/avasta-statistikat/valdkonnad/rahvastik/rahvaarv

Stephen, C., McPake, J. & McLeod, W. (2012). Playing and learning in another language: ensuring good quality early years education in a language revitalisation programme. *European Early Childhood Education Research Journal, 20*(1), 21-33. https://doi.org/10.1080/1350293X.2012.650009

Strauss, A. M., & Bipath, K. (2020). Expanding vocabulary and sight word growth through guided play in a pre-primary classroom. *South African Journal of Childhood Education, 10*(1), 1–9. https://doi.org/10.4102/sajce.v10i1.738

Striepe, M. (2021). Combining concept mapping with semi-structured interviews: Adding another dimension to the research process. *International Journal of Research & Method in Education, 44*(5), 519–532. https://doi.org/10.1080/1743727X.2020.1841746

Svetlova, M. & Carpenter, M. (2017) Social development. In B. Hopkins, E. Geangu & S. Linkenauger (Eds.) *The Cambridge Encyclopedia of Child Development. Second edition* (pp. 415-423). Cambridge University Press

Swain, M. & Johnson, R. K. (1997) Immersion education: a category within bilingual education. In R.K. Johnson and M. Swain (Eds.) *Immersion education: international perspectives*. (pp. 1–16). Cambridge University Press.

Swain, M., Kinnear, P., & Steinman, L. (2015). *Sociocultural Theory in Second Language Education: An Introduction through Narratives*. Bristol, UK: Multilingual Matters.

Swain, M., & Lapkin, S. (1995). Problems in output and the cognitive processes they generate: A step towards second language learning. *Applied Linguistics, 16*(3), 371–391. https://doi.org/10.1093/applin/16.3.371

Swain, M. & Lapkin, S. (2005). The evolving sociopolitical context of immersion education in Canada: some implications for program development. *International Journal of Applied Linguistics, 15*(2), 169-186. https://doi-org.dcu.idm.oclc.org/10.1111/j.1473-4192.2005.00086.x

Sylva, K., Ereky-Stevens, K., & Aricescu, A. (2015). *Curriculum quality analysis and impact review of European early childhood education and care (ECEC).* University of Oxford.

Şahin-Sak, İ. T., Tantekin-Erden, F., & Pollard-Durodola, S. (2018). Turkish preschool teachers' beliefs and practices related to two dimensions of developmentally appropriate classroom management. *Education 3-13, 46*(1), 102–116. https://doi.org/10.1080/03004279.2016.1194447

Tallinna Linnupesa Lasteaed. (2014). *Mentori tugimaterjal*. https://www.linnupesa.edu.ee/dokumendid/Mentori_tugimaterjal.doc

Tam, A. C. F. (2022). *Transforming preschool language teachers' beliefs of implementing play-based learning in a professional learning community. International Journal of Early Years Education.* Advance online publication. https://doi.org/10.1080/09669760.2022.2065247

Taole, M. J. & Mawela, A. S. (2019). A reflective practice approach: reimagining teachers' continuing professional development in I. H. Amzat & N. Padilla-Valdez (Eds.) *Teacher Professional Knowledge and Development for Reflective and Inclusive Practices* (pp. 36-44). E-book. Routledge.

Tapa Vikerkaare Lasteaed [Tapa Vikerkaare Kindergarten]. (2023). Protocol of the parents' meeting of 11.09.2023.

Tashakkori, A., & Creswell, J. W. (2007). Editorial: exploring the nature of research questions in mixed methods research. *Journal of Mixed Methods Research*, *1*(3), 207-211. https://doi-org.dcu.idm.oclc.org/10.1177/1558689807302814

Tatto, M.T. (2021) Professionalism in teaching and the role of teacher education. *European Journal of Teacher Education*, *44*(1), 20-44. https://doi-org.dcu.idm.oclc.org/10.1080/02619768.2020.1849130

Teachers and School Principals as Life-Long Learners (2019). OECD International Research on Teaching and Learning TALIS 2018 Results Report in Estonia. Part I. https://www.hm.ee/sites/default/files/talis_eesti_raporti_i_osa_0.pdf

Tebben, E., Lang, S. N., Sproat, E., Tyree Owens, J., & Helms, S. (2021). Identifying primary and secondary stressors, buffers, and supports that impact ECE teacher wellbeing: Implications for teacher education. *Journal of Early Childhood Teacher Education, 42*(2), 143–161. https://doi.org/10.1080/10901027.2021.1918294

Tedick, D. J., Mathieu, C. S., & Dupuis, D. (2024). Learning content and language integration: Assessing the effectiveness of in-service professional development for immersion teachers. In S. Ballinger, R. Fielding, & D. J. Tedick (Eds.), *Teacher development for content-based language education: International perspectives* (pp. 42–63). Multilingual Matters.

Tedick, D.J. & Zilmer, C. (2018). Teacher perceptions of immersion professional development experiences emphasizing language-focused content instruction. *Journal of Immersion and Content-Based Language Education*, *6*(2), 269-294. https://doi.org/10.1075/jicb.17019.ted

Theobald, M., Danby, S., Einarsdóttir, J., Bourne, J., Jones, D., Ross, S., Knaggs, H. and Carter-Jones, C. (2015) Children's perspectives of play and learning for educational practice. *Education Sciences,* *5*(4), 345-362. https://doi.org/10.3390/educsci5040345

Tiit, E-M. (2020). Millised rahvused elavad Eestis? https://www.stat.ee/et/uudised/millised-rahvused-elavad-eestis

Tominey, S. L., Svea G. Olsen, S. G., & Bailey, C.S. (2019). Social and emotional skill development in early childhood. In D. Whitebread, V. Grau, K. Kumpulainen, M. M. McClelland, N. Perry, & D. Pino-Pasternak (Eds.), *The SAGE handbook of developmental psychology and early childhood education* (pp.115-132). SAGE.

Tracy, R. (2015). Bilingual Education: International Perspectives. *In International Encyclopedia of the Social & Behavioral Sciences* (Second Edition, Vol. 2, pp. 580–586). Elsevier Ltd. https://doi.org/10.1016/B978-0-08-097086-8.92044-0

Turnbull, M., & Arnett, K. (2002). 11. TEACHERS' USES OF THE TARGET AND FIRST LANGUAGES IN SECOND AND FOREIGN LANGUAGE

CLASSROOMS. *Annual Review of Applied Linguistics, 22*, 204–218. https://doi.org/10.1017/S0267190502000119

Tuul, M., Mikser, R., Neudorf, E., & Ugaste, A. (2015). Estonian preschool teachers' aspirations for curricular autonomy - the gap between an ideal and professional practice. *Early Child Development and Care*, *185*(11–12), 1845–1861. https://doi.org/10.1080/03004430.2015.1028387

United Nations. (1989). *Convention on the Rights of the Child*. https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-child

Vabariigi Valitsuse määruste muutmine seoses eestikeelsele õppele üleminekuga [Amendment to the Republic Government Decrees in Relation to the Transition to Estonian-language education]. (2024). https://www.riigiteataja.ee/akt/127072024002

Van de Pol, J., Volman, M., & Beishuizen, J. (2017). Scaffolding in teacher-led pedagogy: A systematic review of instructional support. Educational Research Review, 22, 134-152. https://doi.org/10.1016/j.edurev.2017.07.001

Vapper, T. (2023, September 12). *Mis on saanud alushariduse ja lapsehoiu seadusest? [What has happened to the early years education and care act?]. Õpetajate Leht [Teachers' Paper].* https://opleht.ee/2023/09/mis-on-saanud-alushariduse-ja-lapsehoiu-seadusest/

Veisson, M., & Kabaday, A. (2018). Exploring the Preschool Teachers' Views on Professionalism, Quality of Education and Sustainability: International Study in Estonia and Turkey. *Journal of Teacher Education for Sustainability, 20*(2), 5–18. https://doi.org/10.2478/jtes-2018-0011

Verschik, A. (2005). *The language situation in Estonia*. *Journal of Baltic Studies, 36*(3), 283–316. https://doi.org/10.1080/01629770500000111

Vovdenko, N. (2024, April 9). *Narva Pöördumine Haridus- ja Teadusministeeriumi poole [Narva's Appeal to the Ministry of Education and Research]. Õpetajate Leht [Teachers' Paper].* https://opleht.ee/2024/04/narva-poordumine-haridus-ja-teadusministeeriumi-poole/#comments

Waddington, J., & Esteban-Guitart, M. (2024). Funds of knowledge and identity in language learning and teaching. *Innovation in Language Learning and Teaching, 18*(3), 201–207. https://doi.org/10.1080/17501229.2024.2328306

Wall, S., Litjens, I., & Taguma, M. (2015). Pedagogy in Early Childhood Education and Care (ECEC): an international comparative study of approaches and policies. Research brief. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/445817/RB400_-_Early_years_pedagogy_and_policy_an_international_study.pdf

Walsh, G., Sproule, L., McGuinness, C., Trew, K., Rafferty, H. & Sheehy, N. (2006). An appropriate curriculum for 4–5-year-old children in Northern Ireland: comparing play-based and formal approaches. *Early Years, 26*(2), 201-221. https://doi.org/10.1080/09575140600760003

Walsh, G. M., McGuinness, C. & Sproule (2019). It's teaching … but not as we know it': using participatory learning theories to resolve the dilemma of teaching in play-based practice. *Early Child Development and Care, 189*(7), 1162-1173. https://doi.org/10.1080/03004430.2017.1369977

Warford, M. K. (2011). The zone of proximal teacher development. *Teaching and Teacher Education, 27*(2), 252–258. https://doi.org/10.1016/j.tate.2010.08.008

Wasik, B. A. & Hindman, A. H. (2020). Increasing preschoolers' vocabulary development through a streamlined teacher professional development intervention. *Early Childhood Research Quarterly*, *50*, 101-113. https://doi.org/10.1016/j.ecresq.2018.11.001

Waters, J. & McDonald, N. (2020) Exploring the use of a rating scale to support professional learning in early years pre-school staff: the experience of one local authority in Wales. *Early Years*, 1-15. https://doi-org.dcu.idm.oclc.org/10.1080/09575146.2020.1742666

Webster-Wright, A. (2009). Reframing Professional Development Through Understanding Authentic Professional Learning. *Review of Educational Research*, *79*(2), 702-739. https://doi-org.dcu.idm.oclc.org/10.3102/0034654308330970

Weisberg, D. S., Hirsh-Pasek, K., Golinkoff, R. M., Kittredge, A. K., & Klahr, D. (2016). Guided Play: Principles and Practices. Current Directions in Psychological Science: A Journal of the American Psychological Society, 25(3), 177–182. https://doi.org/10.1177/0963721416645512

Whitebread, D. and Adams, J. (2019). How children learn: implications for early childhood education. In D. Whitebread, V. Grau, K. Kumpulainen, M. M.

McClelland, N. Perry, & D. Pino-Pasternak (Eds.), *The SAGE handbook of developmental psychology and early childhood education* (pp. 309-328). SAGE.

Whiting, L. S. (2008). Semi-structured interviews: guidance for novice researchers. *Nursing Standard, 22*(23), 35–40. https://doi.org/10.7748/ns2008.02.22.23.35.c6420

Winter, R. E., Stoeger, H., & Suggate, S. P. (2024). Fine motor skills and their link to receptive vocabulary, expressive vocabulary, and narrative language skills. *First Language, 44*(3), 244–263. https://doi.org/10.1177/01427237241233084

Wood, D. R. (2007). Professional learning communities: teachers, knowledge, and knowing. *Theory into practice, 46*(4), 281-290. https://doi-org.dcu.idm.oclc.org/10.1080/00405840701593865

Wood, E. (2013). *Play, learning and the early childhood curriculum / Elizabeth Wood.* (Third edition.). SAGE.

Wray, A. (2002). *Formulaic language and the lexicon*. Cambridge University Press

Yanqiong, Z., & Caiga, B. T. (2024). Organizational culture, support and teaching leadership among preschool teachers in China: Basis for teachers' development plan. *Asia Pacific Journal of Management and Sustainable Development, 12*(2), 68–79. https://doi.org/10.70979/LEJP3000

Yoon, K. S., Duncan, T., Lee, S. W-Y., Scarloss, B. & Shapley, K. L. (2007). Reviewing the evidence on how teacher professional development affects student achievement. https://ies.ed.gov/ncee/edlabs/regions/southwest/pdf/rel_2007033.pdf

Zaslow, M., Tout, K., Halle, T., Whittaker, J. V., & Lavelle, B. (2010). Toward the identification of features of effective professional development for early childhood educators. Literature review. Washington, DC: Office of Planning, Evaluation and Policy Development, US Department of Education. https://files.eric.ed.gov/fulltext/ED527140.pdf

Zhang, S. (2021). A study on the relationship between organizational employees' work values, organizational loyalty and confidentiality commitment. *Modern Management, 11*(2), 124–134. https://doi.org/10.12677/MM.2021.112016

Zheng, Z., Degotardi, S., & Djonov, E. (2021). Supporting multilingual development in early childhood education: A scoping review. *International Journal of Educational Research, 110*, Article 101894. https://doi.org/10.1016/j.ijer.2021.101894

Appendix A: Teacher survey: Professional development for early language immersion teachers in Estonia

I would like to invite you to take part in the survey conducted as a part of my doctoral study at Dublin City University. The main aim of the study is to find out what the professional development (PD) needs of preschool immersion teachers in Estonia are and how they might be addressed.

You are invited to complete an anonymous online survey that takes about 15 minutes. The information gathered from this questionnaire will be used to help to inform initial teacher education and PD programmes for Estonian immersion teachers in the future. At the end of the questionnaire, you will be asked if you are interested in participating in a focus group to further discuss your PD experience and needs. You don't have to agree to this, it is completely voluntary. It is not expected that there will be any risk for those taking part in this study. However, the benefits of participating in this study are that you will help universities and other PD providers better meet your needs.

The data controller of this project is Dublin City University. You have the right to access your personal data at any stage of the research. You only need to contact the DCU Data Protection Officer, Mr Martin Ward by e-mail: data.protection@dcu.ie or telephone (01) 7005118/7008257. Participation in this study is voluntary and participants may withdraw without giving any reason. The categories of data that may be collected for this study may include; Name, preschool name and address, E-mail, and teaching experience. Your name and the name and address of the preschool will only be recorded if you agree to take part in the follow-on focus groups. No connection can be made between your questionnaire responses and your personal details. If you are unhappy with how your data is stored, you have the right to lodge a complaint with the Data Protection Commission in Ireland. Confidentiality and anonymity shall be kept to the extent possible within the legal limits of data protection.

Your responses will be kept in a secure location. Electronic data will be kept on an encrypted password protected computer. All records and data shall be appropriately disposed of within three years, in line with the DCU's Data Protection Policy. Please do not hesitate to contact me if you have any questions or want to discuss any aspect of the research. You can contact me at anna.golubeva2@mail.dcu.ie. This research study is approved by the Research Ethics Committee of Dublin City University. If participants are

concerned about this study and wish to contact an independent person, please contact: The Secretary, Dublin City University Research Ethics Committee, c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000, e-mail rec@dcu.ie

Best regards
Anna Golubeva
(Questions 1-9 are mandatory)

Section 1

Q.1 I have read (or I read) the statement of normal language.

- Yes
- No

Q.2 I understand the information supplied.

- Yes
- No

Q.3 I got an opportunity to contact the researcher and ask questions and discuss the study if I wished.

- Yes
- No

Q.4 I understand the information provided on data protection.

- Yes
- No

Q 5. I received satisfactory answers to any questions I asked.

- Yes
- No

Q.6 I understand that I could withdraw from this research study at any stage.

- Yes
- No

Q.7 I have read the arrangements made to protect data confidentiality, including that the confidentiality of information is provided subject to legal limitations.

- Yes
- No

Q.8 Declarations relating to any other relevant information have been read and understood by me as indicated in the usual language statement above.

- Yes
- No

Q.9 I consent to participate in this research.

- Yes
- No

Section 2. Background information

Q.10 What university education have you received? Please choose all that apply.

- Early Years Teacher (BA)
- Estonian as a Second Language (BA)
- Teacher of Estonian as a Second Language (MA)
- Primary School Teacher (MA)
- Other:

Q.11 What statement matches most closely your current Estonian language proficiency? Please choose all that apply.

- Estonian is my first language
- I hold C1 certificate in Estonian as a second language
- I speak Estonian fluently on everyday topics
- I have a good command of academic Estonian within the topics of the National Curriculum for Preschool Childcare Institutions
- I find it challenging to use Estonian in the classroom
- I find it challenging to use Estonian for spontaneous interaction
- Other:

Q.12 How long have you worked as an Estonian-medium teacher in language immersion ECEC settings?

- 0-5 years
- 6-10 years
- 11-15 years
- 16-20 years

Section 3. Aims and Features of Professional Development

Q.13 How important do you think the following aspects of ECEC teacher's professional development are?

	Not important	Somewhat important	Important	Very important
1. To provide all ECEC teachers with the same set of knowledge, skills and attitudes				
2. To keep ECEC teachers updated with Government's regulations in the area of their work				
3. To provide teachers with possibilities to re-evaluate and update their existing practices				
4. To provide teachers with possibilities to transform practices and invent new knowledge				
5. To provide teachers with possibilities to develop and/or pilot teaching and learning materials				

Q.14 How often do you attend PD events?

	Once a month	Once during 6 months	Once a year	Rarely/ never
1. On topics of early child's development				
2. On topics of play-based learning				
3. On topics of language immersion pedagogy				
4. On topics of teaching SEN children				
5. On topics of the development of teaching and learning materials				

Q.15 How likely are you to participate in the following types of PD?

	Highly unlikely	Unlikely	Likely	Highly likely
1. A lecture delivered by a specialist on Early Years or Language Immersion education				
2. A workshop on Early Years or Language Immersion education led by a practising teacher				
3. A regular meeting of members of the network of ECEC teachers to reflect on their individual experience				
4. A collaborative session with other teachers to develop a new task or material				
5. A joint planning session with colleagues				
6. Reading research article on the topic of early language immersion				
7. Reading research article on the topic of play-based learning				
8.Reading legislation/curriculum in the area of early years education				
9. Participating in a webinar on the topic of early language immersion				
10. Watching an educational video on the topic of child development				
11. A regular meeting of members of the network of preschool language immersion teachers to reflect on their individual experience				

Q.16 On a scale from 1 (not satisfied at all) to 5 (completely satisfied) how would you assess the extent of your overall satisfaction with the current PD provision for preschool immersion teachers?

Q.17 How well does the current PD provision meet your professional development needs?

	Does not meet at all	Meets somewhat	Meets fully
1. PD needs in the area of child development			
2. PD needs in the area of second language acquisition			
3. PD needs in the area of working with SEN children			
4. PD in the development of teaching and learning materials			
5. PD in the use of ICT to enhance teaching and learning in the classroom			
6. PD in classroom management in the preschool immersion settings			

Q.18 Which aspects of immersion pedagogy do you think you would like to receive PD on? Choose all that apply.

- Ways to scaffold child's second (immersion) language acquisition
- How to organise activities to get child's output in the second (immersion) language
- How to choose visuals and organise learning environment in the immersion language
- How to embed second (immersion) language learning in the National Curriculum for Preschool Childcare Institutions
- Course in Estonian (general proficiency and fluency)
- Course in professional Estonian (e.g. classroom management language)
- Catering for the children with SEN in my classroom
- The use of digital tools to enhance my teaching and learning
- How to develop and use different study materials
- How to enhance teachers' cooperation in an immersion classroom
- Ways to enhance the quality of the spontaneous teacher-child interaction in an immersion classroom
- Other:

Q.19 Would you like to add any further information about your PD experience of language immersion pedagogy to date and the needs you have in this area in the future?

Q.20 Would you like to take part in a focus group to further discuss your PD experience and needs?

- Yes. Please register by following the link https://forms.gle/kmvX8kPRh2cFiYF27
- No

Appendix B: Questions for Pre-PD Semi-Structured Interview

Professional development for early language immersion teachers in Estonia
(Stage 2)

1. How long have you worked in a language immersion preschool classroom?
2. If Estonian is not your first language, how do you evaluate your Estonian language proficiency? Do you find it sufficient for teaching in the immersion ECEC settings?
3. Do you have opportunities to take PD? How often do you go?
4. In which form has the professional development mostly been delivered? (for example)
5. Which forms of professional development do you find most beneficial for you as a language immersion teacher?
6. Have you experienced learning from your colleagues and if so, on which topics and in which form?
7. What do you perceive to be with challenges associated with PD? (oh, for instance, are there any issues with funding…)
8. What are the benefits of PD?
9. Which topics have you been most interested in? Has it changed over time?
10. Which topics/ elements of a PD course have impacted your classroom practice as an immersion teacher (for example)?
11. Are there any topics that you could provide you with knowledge and skills that you need to activate the immersion language skills of your students?
12. Is there anything else you would like to add?

Appendix C: The Representative Sample of Pre-PD Semi-Structured Interview

Stage 2: Semi-Structured Interview Transcript

Date: 22 November, 2023

Time: 12.00-12.40

Teacher #: 3

Researcher: How long have you worked in a language immersion preschool classroom or how long have you been working as a teacher implementing language immersion methodology?

Teacher: I work on the basis of the project, the one that is called "Professional Estonian-speaking teacher in a Russian-medium group". It means that I do not work as a language immersion teacher. Now it has been the fourth year, it has started, which means that I have worked three full years.

Researcher: As Estonian is not your first language or your mother tongue, I would like to ask you, how you evaluate your Estonian language proficiency? Do you always find it sufficient for working through the medium of Estonian language only?

Teacher: Estonian is not my first language. This is also my second language. I learned it being a grown-up when I arrived here in Estonia. I had some fear and doubts about my ability to work in the Estonian language. And what is important it is not whether I have enough vocabulary. The important is to be able to overcome myself which is to be able to work in the language. In my opinion, I have managed, although sometimes I make such a mistake that I use something like code-switching: when I need to make something clear fast or there are problems with discipline and a lot of noise, then I have to speak Russian. I understand that this is my mistake, but I will work on it step-by-step and decrease [speaking Russian]. On the whole, yes, I had vocabulary, but I had a different vocabulary. I worked more with documents, correspondence, some communication. And surely, in kindergarten there was a completely different set of words, and I would say that I spent the first year trying to figure out which vocabulary I would have in kindergarten.

Researcher: Do you have opportunities to take PD? For example, how often do you attend to in-service training?

Teacher: I think I have more than enough of such opportunities. In fact, I can satisfy absolutely all my wishes. First, because I am forwarded all the information about training, and secondly due to fact that I, myself, am not active, but inquisitive. It means that I have

a genuine interest towards all of it and that both teaching the language and teaching is to children is not only my job but my hobby as well. I am interested in it, and, in fact, I register myself for different in-service trainings and to a lot of them.

Researcher: In which form has the professional development mostly been offered to you? For example, one-day seminars, lectures, online seminars. What are you mostly offered now?

Teacher: Some Zoom seminars (trainings) are offered quite often. It means that mostly in Zoom. Besides, for the fourth year now I have been in face-to-face training, we go to Tallinn and other cities. Once in three months. We meet with fellow project teachers. This happens face-to-face. The rest of trainings are mostly in Zoom. However, there are seminars that are held in Narva. It is possible to find them.

Researcher: In your opinion, which forms of professional development provide the most support to you as a teacher who works in the Estonian language?

Teacher: Both forms suit me. The most important thing is that it should not be a purely web-based course which is a "do at your convenient time" type. I lack either the time or discipline to do this independently, to provide feedback responsibly, to do all tasks. The seminars that suit me are the ones that are held at a certain time, and we meet either face-to-face or in Zoom. The seminar takes place and I perceive the content it talks about.

Researcher: Have you learned anything from your colleagues? If so, can you bring any specific example of a topic or an activity?

Teacher: I have learned a lot, really a lot, and a lot of this learning has been about small things. It is necessary to learn small things. Then we learn about something on the whole. Before I had no idea about how to work at a kindergarten. I thought that children were so small, obedient and nice. They are indeed small, obedient and nice, but their currents need to be managed. Some discipline is necessary, some organisation is necessary. And to do it in a different language separately is difficult. For instance, the thing I have definitely learned and taken from PD is about the fruit break. For example, in our group I am the one conducting the fruit break. The teacher assistant cuts fruit and afterwards my part begins. Ok, what are we eating today? What kind of pear is it? What colour is it? What shape is it? Before I receive answers to all my questions, children do not start eating the pear. Before we have the discipline that should be there. Now it has been my second year of working with this group, they are four years old. We have already started to play during the vitamin break, which means that I have started making jokes, for example "Today we are eating pineapple". And the children reply whether yes or no. I used to use coloured rings, but I realized that it requires too many manipulations, there are too many actions as such. This way is much simpler and quieter. For example, "Today is Friday and we are eating pineapple". Then we find out that it is not Friday, and we are not eating pineapple but pear and so on. And again, this develops their listening skills, the skill of remembering words, reacting and so on. This is what I have learned from one of the teachers who shared. During the PD. And I borrowed this immediately; this is good. And so on. You

learn a lot during PD, and yesterday we watched a video with Hedi and I realized that I have to rewatch it around 8 times: first the way her wall is organized. Maybe, there is too much, for me, but if she talks about all of it and the children orientate among all of it, then this thing works.

Researcher: In your opinion, what are difficulties, challenges or problems with in-service training of teachers, with their professional growth? Maybe there are difficulties with financing, some PD has more participants, some fewer. Difficulties with information not reaching teachers everywhere.

Teacher: In fact, I think that there are no serious difficulties. The only difficulty is that some teachers cannot receive PD in such an authentic Estonian language just because they do not yet have the corresponding proficiency and cannot comprehend [the DD content]. Although the pain is also that they sometimes do not try, do not risk doing that. It means that if they sometimes still had to, this "computer" [referring to brain] would start searching for words and understand what is being spoken about and so on. Still, yes, maybe, on the one hand, the level of proficiency is not that good, but on the other hand, teachers and me, including, need to be made to use the language. And when I register myself for a lot of training courses, I organise myself such language immersion which I do not have in Narva. If I used to take [language] course for money, then now, I mean I had a language tutor, I paid money to learn the language, I always pay my own money for learning, then now I organise myself language immersion through PD in the Estonian language or through watching interesting Estonian-language content in YouTube. Special language immersion. Another problem that can also be there. As always, traditionally, whatever can be said about it, teachers have too much working load. There is always too much work, there can never be little of it. And being at home we keep contemplating these thoughts, "How am I going to conduct teaching activities tomorrow? How can I explain this topic in a better way?" Thus, it turns out that we take work home with us, and we have an unlimited amount of work, and we can cut out whatever as a whole family at home. So, it turns out that there is also the problem of time. But to be honest, I do not know when it is be solved and if it can ever be solved. I think that time is such a resource that can never be sufficient. Then it is just a question of priorities.

Researcher: You have already mentioned that for you personally, there is one linguistic aspect in this participation in PD, in such courses. In addition to that, what are other benefits of PD in general? Why is it necessary?

Teacher: For me to do my job better. Plus, in addition, I will start feeling better as a professional and as person because now at any moment when it turns out that I understand that today's teaching activity has not gone well or, for example, in one sub-group it has gone very well, at the moment I am teaching such a topic in the case of which I do not know how to divide the children into sub-groups. The reason being is that in the classroom I worked with last year there were two problematic children, so I put them into two different sub-groups, and that was it, it was more or less. Now, for example, there are seven of them [problematic children]. And whichever way of grouping the children I try,

anyway in one sub-group there end up children who, like [same polar] magnets, push each other away and, oppositely, who pull each other together. At this point I do not even know how creative I should be to make the [teaching activity] interesting while at the same time we also fulfil the curriculum. But, on the other hand, every time when something fails as planned, you start thinking about, on the one hand, how it can be done differently, how to find other options. But, on the other hand, like a normal human being, you start fretting yourself about whether the job is actually suitable for you, about how you keep failing at doing everything. And it takes time and effort to cope with such disappointment. To tell yourself that you are good enough as a teacher, at least C+, it is like "You are good enough mom, you are good enough wife". This is pure psychology already. You reanimate yourself and get yourself back to work.

Researcher: Which PD topics are you interested in? I understand that you have quite a wide scope of interests. What exactly are you interested in if we pinpoint any topics?

Teacher: For example, the latest PD I have registered for is an online seminar on Montessori pedagogy. I do not particularly know anything about it, I just want to learn about it. My daughter worked in Germany for a year, she used this methodology; and she says that they [children] all sit and play quietly. And they can do so for an hour, they sit and play with some wooden toys, not with plastic toys or cars, but with some other ones. And they are fine with exchanging toys. And she says that here [in Estonia] it is either children are different, or everything is different, and she asks why our children do not do that. Well, I do not know. Perhaps, I will find out. The second thing is…certainly… There is also such a problem, and this is what I would like and what I would like to work well: if it were a very practical PD training. This is something I have heard about for around thirty years in this job, but it always remains the same: the largest part of a PD course is theory, while it is necessary, desirable for the course to be practical. And this is why… But, on the other hand, I understand, that a course cannot be designed as purely practical, it is also necessary to share theory and to explain what is happening at this moment. But very practical PD courses occur, sometimes they occur.

Interviewer: Do your interests change with time anyhow? Now, this is Montessori pedagogy, what about other interests? Are there so-to-say permanent interests and interests that change with time?

Teacher: Yes, there are. A language as such. This is an old interest of mine, since my arrival here [in Narva]. Teaching young children is a completely new topic for me; when I recently studied at university, for the first time I started to learn how to teach a language to young children, how to do it in a better way, which methods exists and which ones I can borrow for my own teaching practice. It sometimes seems to me that this is another endless topic: there is "Step by Step", there are some learning centres and some others [other methodologies]. For now… The way that suits me is that I always search for such a mental mentor, I need a mentor, I see a person, I so-to-say join them and I try to borrow for myself everything that is valuable for them, if the person agrees with it. So far, in the ECEC sphere I have not [found such a mentor]. There is Heli Adamovich, but she is so

busy now that we cannot communicate well, but when we did talk, she shared a lot of things with me. In our PD programme, two sessions ago there was a phrase that helped me a lot. It was about what if I make the mistake of speaking in Russian sometimes. And you [speaking about the researcher] said that it is necessary to decide that starting from tomorrow you no longer speak in Russian. We need to learn how to fix mistakes, I am not the only one who has such mistakes. So far, I have not met such a language immersion specialist who would make it clear for me and who would tell me that it works 200%, you just need to do this, this, and this. I already have this experience, and a lot of it. So far, everyone I know in Narva, we all are such newbies on this minefield. For example, just recently, one session ago [talking about the intervention PD programme] we discussed that they [the children] would show good results, but we, in kindergarten, would probably not see that. On the whole, it will be, for instance, in Year 6 when they reach the same level of acquisition as in their first language. Somebody should have told me about that too, because so far, in kindergarten, I understand that my things are messed up. Because my own child has just finished kindergarten, and I understand that language immersion and the first language are very different. We need to be told that results will be there, but they will not be visible in kindergarten. So that the teacher who does it [Estonian-medium teaching], would believe it and continue doing it even though the result is not visible.

Researcher: Yes, certainly, because otherwise teachers burn out very quickly.

Teacher: It is very hard, every time you just [say] one and the same thing, they [the children] forget fast, and it seems that they get fed up with it too. I have started to understand clearly that they have become tired of this poem, they need another one. But this another poem needs to be interesting and fun for them. Spontaneous. And this belief, which is the basis, this needs to be taught somehow, like, guys, it will work, give the result, it is just that you won't see the result now.

Researcher: Yes, it would be good to see them [the children] afterwards when they are at school, for example.

Teacher: Yes, indeed. Thanks to the fact that in our city, for example, well, I feel good here, it seems to me like I am acquainted with 40% of the population owing to working at school, vocational school and here, it seems to me like I have covered half a city. And it is wonderful when you know children's parents, even their grandmothers. And I am sure that in the case of our children who just finished kindergarten I will know what will happen to them in Year 6-7. But those children who are well, they are already doing well now. They already cited poems at assemblies in Year 1, but some children may bloom later.

Researcher: You have already said that for you it is very important to find your mentor. Probably, this is the main PD element for you, isn't it?

Teacher: Yes, it is one of the constituents. It is the way I have been living all my life, always with some kind of a mental mentor.

Researcher: What do you think which other topics or PD courses would help you activate children so that they would use the language more? Which knowledge or skills do you need so that you could activate children to use more Estonian in the classroom, for example, with the teacher, with personnel? Which knowledge do you lack? For example, you talked about how to choose poems, how to make this study process interesting, what to do so that the teacher themself would not burn out. Maybe there is something else?

Teacher: For me one of the biggest questions is the one of discipline, because if there is any noise in the classroom, I do not have a chance to be heard. In this case what I say will not reach the ears. Or my words, considering that the noise is incomprehensible, will not be heard. So for me it is very important for some kind of basic silence to be there, so that I could have a chance to be heard. At least. Secondly, to be understood. Thirdly, we can also repeat [what I have said]. Fourthly, which is the most important, is that they are interested in what I am telling them, they are communicating with me, and they are replying to me. Thus, so far for me there is this basic question of discipline, the establishment of discipline by the teacher. Whatever anyone has told me that children should be kept interested, it is impossible to have 19 children equally interested. There 19 of them and in addition: three of them get distracted by one thing, two more are preoccupied by another, five are looking [at you] and are interested. So, for the fourth year I have been learning to deal with these currents, how to either divide them within the classroom or how to attract them to myself. How I can hold myself from irritating in this situation. Thus, for me the issue of discipline as the basis for beginning to teach is highly topical now, because I started working with the children in the previous classroom when they were five years old, and there were two problematic children. Now I have a feeling of not knowing what to do because there are seven or eight of them. And this critical mass of the noisy and misbehaving children is starting to win over me. I do not know how to solve this situation correctly. And again, we are speaking a different language. How to establish discipline while not causing hatred or some kind of rejection, and to spark interest as well? This is very interesting.

Researcher: Yes, it is.

Teacher: Because we are different. A stranger auntie has come and is saying something in a different language, and she is even angry sometimes.

Researcher: That is the way it is, indeed. Thank you very much. Is there anything else you would like to add on the topic of your PD or related questions?

Teacher: I can add that I have noticed that with me it really goes up and down like cardiogram: sometimes it seems to me that I have started to succeed, everything is well, and today the children behaved well. And then similarly I have such a fall that I think "Oh God, nothing is going well, it looks like I am working in a wrong place". Then, somehow, I climb back up. So far it is going like that up and down, I would like it to go up. And in this sense, the development is very periodic.

Researcher: I think this topic which is the psychological support of the teacher themself is very important. It should be available both if the teacher works in the first or the second language.

Teacher: In the second language is a separate topic. If in the previous classroom I felt like an aunt-cousin, I would always say that I had the "aunt-cousin feeling", then now I do not feel that way. However, I have noticed that there are children who have started to ignore me, like "I can't hear you at all". Maybe this is the way their team is. Because they are also a team, they learn from each other, do things as a team.

Researcher: It is so interesting that you have such an analysis. You analyse yourself; you analyse them. I think that it is a very good feature.

Teacher: What else do I have to do?

Researcher: Thank you for your time and your answers.

Appendix D: The Sample of Coded Pre-PD Semi-Structured Interview

STAGE 2

Semi-Structured Interview Transcript

Teacher #: 6

Codes:

Teaching experience in immersion

Use of L1 and L2 in the classroom

Estonian language proficiency

Learning Estonian

PD attendance

Benefits of PD

Forms of PD

Attitude to PD

Time and availability

Management and PD

SEN children

Communication with parents

Collaboration in learning

Learning from colleagues

Challenges with PD

Feelings towards transition

Teacher burnout

PD interests

PD to help children activate Estonian

Researcher: How long have you worked in a language immersion preschool classroom?

Teacher: Well, I have been on maternity leave a couple times, I do not know if that goes into account. In fact, Rita and I started with the two-way immersion at the same time, and we are continuing. It is just that Rita has worked this full time, and I have been on maternity leave two times.

Researcher: so in total this equals to how much?

Teacher: Rita calculated yesterday and got seven years. Seven or eight. How many does it make? I have not counted.

Researcher: I think, you started in 2017.

Teacher: we started a year later than all the others.

Researcher: Yes, you did. It means that you started in 2017.

Teacher: Right, if we started in 2017, it means I just started working after the maternity leave, then we worked, and then I had Milana and came back to work. It means that I was only on one maternity leave.

Researcher: Now you are working through the medium of the Estonian language, aren't you?

Teacher: Yes, I conduct all teaching activities in Estonian language only, I do some routinely moments in both Estonian and Russian, because the children are used to [me speaking Russian], so I am breaking myself and breaking the children. I am not enjoying it. Because it is one thing, when you dispose yourself from the beginning, and it is different when you have to readjust at one point. The latter is difficult.

Researcher: How do you feel, to what extent your Estonian language is sufficient? For conducting teaching activities, for communicating with the children in the classroom?

Teacher: Let's say, I do not have any problems communicating with the children in the classroom. In the case of teaching activity, it depends on the topic. For instance, last week we had the topic of "Me and my body". The children seemed to be interested and we decided to go deeper into the topic and study internal organs. And this is when I started having problems. How to say "the skeleton"? Which of the three words (Est: luustik, skelett, luukere) is the right one? What is the difference between them? Thankfully, there are native speakers [in the preschool] who explained everything to me in detail, which word was correct you use. I'll be honest and say that in case of some things I double-check myself. I double-check myself, if necessary, I go to filosoft [the Estonian spellcheck webpage] to check endings, because the Omastav and Osastav cases are a big problem for me, I still do not have a clear idea about how to use them properly. There are things like that. Let's say that if I need to make a sentence, I will structure it in such a way that I make as few mistakes as possible. If necessary, I will ask for help, I am not embarrassed to do that.

Researcher: Considering the fact that in the classroom there are children with Estonian as home language, is your Estonian sufficient for daily communication with them? Do

you hear the way they communicate? Such things as, for instance, “pull up your socks”, “don’t do that”, “don’t go there”? Do you have sufficient everyday vocabulary?

Teacher: Maybe, this vocabulary of mine could be bigger, if it were my everyday language as well. But, I have ears, I hear what parents tell the children, I hear what others say, and, as it is said, I can use it for my benefit. We have an Estonian-medium classroom next to ours, I borrow some things from there. So, in this respect, my word bank is growing. It is that for some years I deleted Estonian from my life, and now I am coming back to it, to this language. I just need time.

Researcher: So, can it be said that you are learning all the time?

Teacher: Recently I have been, yes. Recently yes. And there have actually been offered language courses for teachers. So that they would go and pass the language exam. At one time I took the C1 exam. For example, I asked for being registered for the language courses, I said, “May I go and sit there together with them, it will also be useful for me?” And I honestly attended the course for six months, studied grammar in detail as much as they did. I refreshed my memory. I cannot say that I am 100% confident in myself, that is definitely not the case. But I am not giving up, I am looking for information, I am asking for it, I am interested why something is this or another way. And, if I may wander off the topic, when we participated in Hakaton, it was one of my ideas that we, Russian-speakers, lack this base: we lack [the knowledge of] how to construct a sentence; how and where to put this ending; how, what and where; there is not a proper translation means, some are still using Google translator. And this all is so sparse in different places. First, I presented one idea, then we joined together and then we thought of a place where everyone could enrich themselves by acquiring some knowledge. I do not know if it hinders, but it is very necessary, required. Let’s say that it is difficult for Russian-speakers to find themselves information in Estonia. It is difficult to find it for work. Either you have to pay for it or there is nothing.

Researcher: Yes, that is the way it is, indeed. I agree.

Teacher: This is why we are expecting more of such support from the state. There could be such support, it could be there. Such available information, at any time and place, handy.

Researcher: We have just discussed that you are learning the language. But if we leave aside language learning, which is again topical, to what extent do you have an opportunity to deal with your professional development? For example, how often do you attend in-service training?

Teacher: Well, now just recently, on Tuesday and Wednesday, I attended in-service training. This is the project "Professional Estonian-medium teacher in a Russian-medium Classroom" which is free of charge. I would say that I was fascinated by one lecturer and had opposite feelings about the others. If the training is decent, I am always for it. I love practice, I do not need theory. I want practice; there is little practical real PD. I never refuse, when I am directed to PD, I go. The only thing is that my everyday background that I have in my life right now, I do not have enough of this free time for myself. Maybe I would want more in some aspects, but I cannot make it.

Researcher: And how often? I mean the preschool finds the possibility, the management directs you to PD. Or does it happen that the management limits the amount of PD possibilities/trainings that you get directed to?

Teacher: We have adequate management. Our management themselves have sent me to PD I needed and did not need; I would have never decided to participate in Hakaton by myself, this was done due to contribution by the director and Raivo Juurak [a journalist], they asked at least one of us to take part in the event. In this respect, our management sees who does not care much about new information and knowledge and which people will apply the obtained knowledge further. I am not talking about myself only, but also about Rita. We are the people who first receive [knowledge] and then give back to others, not like we would keep it to ourselves.

Researcher: You have said that you find practical forms of learning most suitable. What are you mostly offered? When you say that you are offered in-service training, which training is offered now the most? Are these practical seminars or one-day seminars, lectures, webinars? What are teachers mostly offered now?

Teacher: It is difficult to say. Let's say with this one [the project "Professional Estonian-medium teacher in a Russian-medium Classroom"] I did not have a choice; I was told to go, and I went. It is offered on-site (face-to-face instruction), I like to attend training on-site. I do not enjoy the Zoom option to the same extent. In terms of practical training, we were offered some on-site at kindergarten at some point; from time to time someone comes to the kindergarten and delivers lectures based on our needs. These can be parents-oriented lectures, as well as lectures about one's inner world, about safety – we have had different lectures. It is just that I am not at work that much, I returned back to work from my maternity leave last year, and I have managed to miss some things again. I do not know, do not remember. I have attended the training about SEN children, which was also

good. It is related to our situation: we speak about groups/classrooms in general, but each of them is special. These [SEN] children are in each group, those who are on the autistic spectrum, and then there are difficult children and difficult parents in each group. I'd like for someone to come and tell me, "Do this, this and this!" So that you do not have to invent the wheel every time. Like I have come up with a solution for a situation. There is some instruction, something like that. When there is complaint like a girl's trousers have disappeared and you are the one to find them, it spoils your mood for the whole day. What does it mean "find them"? And then it turns out that the mother had difficulty admitting that she had left the trousers at home. And you must greet her joyfully in the evening. I'd like to solve such everyday things in such a way that they [these situations] would not kill your desire to work.

Researcher: This is important, certainly.

Teacher: If I have managed to answer the question. Maybe I have wandered off the topic too much.

Researcher: No, not all. There are no right or wrong answers here. If we consider you as a language immersion teacher. In this case, which forms of professional development, of training support you most from this viewpoint?

Teacher: Well, categorically when you are on-site, when you are not alone; it would be good if there were also practitioners from other kindergartens who are interested, not that have been directed there. So that would be in such a way that you do not only receive knowledge, but can also talk about some your ideas, maybe you could even have your ideas developed or corrected. Let's say such a, similar to the one we had when we studied at the two-way immersion in-service training. It was super of course. Let's say, I have never again encountered any analogous, worthy of that training. So to say, I understand that I have been invested money in, and I know for sure what I am doing. This is the PD that suits me.

Researcher: Are you learning or have you learned anything from your colleagues?

Teacher: Yes.

Researcher: Can you remember a specific topic? Or a specific activity? What is a specific thing that you have learned?

Teacher: I never turn other people's suggestions down. If we talk about yesterday, I went to pick some study material that I needed, specified, for example, the Estonian word for a skeleton, specified the correct word for a skull because this is where the brain hides. I needed to specify some of those vocabulary things for myself, I have already learned to

do that. They immediately asked me what I was going to do. I started telling them what and how I was going to do. They asked me if I wanted to take a sheet of paper and make an outline of a child. I thanked them for the idea which I borrowed and carried into life although I had not planned this. I understood that it suited me, so I borrowed the idea and used it. This is a recent example from yesterday. A large sheet of Whatman drawing paper, we made an outline of the smallest child, we wrote word tags for everything. I do not know how the other person did that but they gave me an idea and I have used it. In case of some things, when Rita and I worked in the two-way immersion, we wanted to do some things in the same way, I mean routines, but also so that they would be different. Now these routines have to be different, but we need to be in tune because the children are receiving two languages. Rita's "tricks" have remained hers, but I still need to develop mine. It means that I observe some of them and then adapt them the way I need and want. For example, poems. Rita does them in her way, I will work with them in my own way. I will take a different poem. We have Estonian-speaking neighbouring classroom. I can ask from them, what interesting is happening in their classroom. They can also give me an idea. I am not afraid to use other people's ideas. But I add my own twist to them.

Researcher: What do you think which problems are associated with teachers' PD? Why teachers from one kindergarten attend more PD while teachers from another kindergarten do that less? What can it be connected with? With finances? Or in general, what problems can be associated with teachers' PD?

Teacher: Honestly, I can say, it is laziness. Laziness, in case of many. Looking at my kindergarten I can also say that it is the age. The age when, and now in addition, if we consider this year specifically it is the stress when a person knows that they can end up behind the door, the person does not care whatever they are suggested and however expensive the PD training can be, there is such a depressing feeling that a person cannot get rid of or hide anywhere. This is the last year we are working. This is the last time we are going somewhere. This is the last year we are celebrating Christmas. Let's make this Christmas celebration memorable. So it is difficult to say now. I know that in other kindergartens they can be more active, organize rest. What we lack is rest. Normal, physiological rest because 5-day work, working 5 days with half-day shifts, such a schedule on the whole is relatively difficult for personal life. That is why people burn out.

Researcher: They just do not care [about PD].

Teacher: If to say so, if to be honest, they just do not care. For example, I, I do not want to complain or for you not to feel uncomfortable, but I now, I will get up and go to work.

I get to work, at 12.30 the PD starts, we sit until 3 pm, then I receive the children, and then there are two options: the kids go home and I feel tired already, but I still have to prepare for tomorrow. Let's say, this pace of work is suitable if nothing happens in life. But if something happens all the time, then it feels that there is not enough time for work either. And that is the way for many others. I have asked a lot of people how they live. The most important thing is that there is calm atmosphere between people. This burning out, this laziness, this I-don't-want-anything, this apathy, they depend on the way you work together with the other person. I have listened to many; many people have a total mess in this aspect. They talk about teachers, but caretakers also have their bad moments.

Researcher: What does PD give? What can PD give to a teacher instead?

Teacher: If, we say, a teacher goes to study somewhere else, like to get a Master's degree, then PD can, in fact, give nothing. I'll be honest, nothing except for changing the place of work. I have an acquaintance who told me, "Are you still in kindergarten? This is slavery". This is what she told me, and she is partially right. At school you have more free time and possibilities, at school your Master's degree has more value and it will also have an impact on your salary, which does not happen here. Thus, what influences my PD here is probably the wish to work. Just to work properly which is what you receive money for. But jumping over head is probably not possible here. That is the way I think, but maybe I am mistaken. Maybe only if to come up with a project idea now, then to lead this project simultaneously with working at kindergarten, to do something else parallel to working at kindergarten, then ok, that is the way for professional growth. But here, to become a specialist in methodology is not what I want. Who else can you become in kindergarten except for a teacher? I do not know. I may be hindering myself.

Researcher: Which PD topics are you interested in?

Teacher: Psychology. To some extent. So, what drives whom. Pedagogy, we cannot escape it. Some approaches are interesting. I am always for that. I think this is everything I can think of.

Researcher: Have you always been interested in these topics or have your interests changed over time?

Teacher: No, interests do not change. They are the reason I came to kindergarten. I knew from the start that I want to be at kindergarten, although I entered the social work curriculum. I have never entered university to get education as early years teacher, I do not know why. I just entered the social work curriculum, I graduated and when we were doing internship, I understood that I felt best in kindergarten. And this is why I am here.

Researcher: You have just mentioned you studies at the social work curriculum when you realised that you felt good in kindergarten. Do you remember, you mentioned your PD on the topic of two-way immersion, can you say that this PD had the most impact on the way you work as a language immersion teacher? Or was it something else? Which retraining or which PD training had an impact on the way you work as a language immersion teacher?

Teacher: I will say for sure, and I have already said that to girls several times, that I do not remember the way I worked before the two-way immersion. Honestly, I do not remember. It seems to me that it is not that I contributed that much but that I did not have the structure. Let's say, I did not have this wholesome picture. The way it should be. It seems to me that now I know the way it should be. I have this clear vision: I come, I start, I do, I conduct [teaching activities], I am content with myself almost always in this respect. Of course, sometimes there happed different moments. It seems to me that thanks to the two-way immersion I have grown as the conductor of teaching activities, not just as a teacher, but exactly at this moment when I conduct teaching activities, thanks to this project. I have managed to combine my understanding of how I like to conduct teaching activities and what feedback I want to receive from children, and it works according to the way our kindergarten leavers are doing further [at school]. I do not want to change anything, even if they take away language immersion and it is not going to exist, as they say. I am not going to do anything to my skills, I will continue working the way I do.

Researcher: Do you think you would like to receive any knowledge or skills to help children speak Estonian better, to activate their use of the Estonian language?

Teacher: Why not.

Researcher: Which topics? What do you think, which could be the topics of PD? Let's say, which aspects of work need to be improved or which PD could it be? On which topics?

Teacher: If PD, then again the training should be narrowly focused. Let's say, if all the children in the classroom do not speak the classroom language at home, then this means one volume of knowledge. If all the children are Estonians by nationality, then they will speak Estonian anyway. Probably depending on the fact, you need to know which children you are going to be working with in the upcoming years, at least the majority of children. And based on that you receive the training. But anyway, what do children always want? They want game-like moments. This is always topical. Such PD which tells you how you can turn simple into difficult but still educating, such PD will always be topical. Simple

language games which include movements, they are topical in any language. I would not say “no” to such PD. Let’s say even all they who offer those which are somehow connected with music, with movement, specific people, practicians, I think such PD is priceless.

Researcher: I agree with you. Is there anything else you would like to add?

Teacher: I do not know. The only thing is how clear was I? Have I not wandered off the topic?

Researcher: I think everything has been wonderful. Thank you very much for your sincerity, for your answers.

Appendix E: Questions for Post-PD Semi-Structured Interview

1. How do you evaluate your participation in the professional development programme?

2. Which aspects of this experience did you benefit from most?

3. Which aspects of this experience did you not find useful? How might the programme be improved for the future?

4. Did you feel that a learning community of language immersion teachers met your PD needs in relation to early immersion pedagogy?

5.How has learning as a part of a learning community helped you meet your PD needs in relation to early immersion pedagogy?

6.Do you think your teaching strategy will change after completing this PD programme? How?

7.Do you think that a learning community would be useful to meet the PD needs of language immersion teachers? Would you like the opportunity to continue to participate in a learning community? Do you see a possibility for such a learning community to be established and functioning online?

8. Do you have any other suggestions for meeting your PD needs in the future?

Appendix F: The Representative Sample of Post-PD Semi-Structured Interview

Stage 4: Post-PD interview transcript

Participant # 2
Interview date: 26 February, 2024
Interview time: 14:30 – 14:39

Researcher: I am grateful that you agreed to take part in this concluding interview. And my first question is how do you evaluate your participation in the professional development programme?
Teacher: I gave it my best. I participated, I learned. That is all.
Researcher: And also which aspects of this experience were the most useful for you?
Teacher: Well, the aspect where I have probably received more of those ideas is the creation of this surrounding language environment. So that there would be more visualisation, and also to notice such things that if there is a picture then the talk and the picture would match, and also so that there would not be too many of unnecessary things, to notice these things more often.
Researcher: And then which aspects of this experience did you not find useful or important? How might this PD programme be improved for the future?
Teacher: I would not say that there was something unuseful, some things were as reminders. Like, there is a thing like this, it it necessary to pay attention to it. In general, there was nothing that did not suit.
Researcher: As we had here something like, I do not know, such a group of participants having emerged like such a community, did you have a feeling that such a learning community of language teachers helped you meet your PD needs in relation to early language learning or early immersion pedagogy?
Teacher: Surely, because it was interesting to hear different ideas and opinions. It suited me very well.
Researcher: Did such learning as a part of this learning community help you meet these goals as an early language immersion teacher?

Teacher: I would say that it rather provided me with such confidence that I am on the right track, that this is the way the things should be done. No big changes have come with time, it rather gave me that confidence.

Researcher: Do you think your teaching will change after completing the PD programme?

Teacher: I do not think that it will change very much, but some things will be better.

Researcher: For example, how?

Teacher: Better involvement of children in the learning process; taking special needs into consideration because there are more SEN children coming into groups. When creating this language environment, I will be paying more attention to it. Now we have been doing it the way it is, because these children are going to school. We have also discussed it with Lena [the teacher who the participant works in tandem with] that next year new children are coming, then are going to pay more attention here, to involve the teacher's assistant more into the Estonian-language part, into speaking Estonian, so that she would speak Estonian with Russian-language children and teach them.

Researcher: Yes, I think these all are very good solutions.

What do you think: now we have discussed language immersion teachers' development, and also in relation to this transition [to Estonian-medium education] and to the need to feel this support that I am not alone, or, as you said, that I am on the right track. Do you think this learning community can be such a solution where teachers could find this support for themselves?

Teacher: I think it would be very good.

Researcher: Would you like to have a possibility to continue in this learning community?

Teacher: Yes, why not.

Researcher: Can it also be in the internet environment so that people would not have to meet face to face?

Teacher: I personally like such get-togethers more than internet environment, but oh, if we say that if it is like one, two hours, then it is reasonable to do it online. But if it is something more practical and discussion, then it is better to be on site. Sometimes being physically there gives more. Chatting and reflection happens during breaks so that, let's say, you can speak more about your concerns or find a solution or find a friend with the same problem and get to know how they cope with it. And being physically on site you can do such things better and you have more possibilities.

Researcher: What do you think which could be your suggestions about how it could be possible to further support teachers' professional development?

Teacher: Such seminar-like trainings, but the ones similar to the ones we had like when we attended two-way immersion seminars. From time to time we met for two-three days, so there we received a lot, we had there this common feeling, common ideas, somehow..

Researcher: the network feeling?

Teacher: Yes, the network feeling, that we are one team, that we have one goal, that.. That these are places where we can meet, talk more and discuss and communicate more outside the learning environment, outside the classroom. I miss our meetings which, unfortunately, we no longer have. We had this common feeling.

Researcher: Well, it was such maintaining of the network, and these were also discussions of timely topics, weren't they?

Teacher: We received a lot of ideas, we visited each other's kindergartens, observed activities and it was... It helps, it helps a lot when you see it for yourself, with your own eyes, when you see this learning, not learning, but this environment, this process.

Researcher: Yes. And a big-big thank you to you and have a nice day!

Teacher: Thank you. This did not take much time at all. Have a nice day!

Appendix G: The Sample of Coded Post-PD Semi-Structured Interview

POST-PD INTERVIEW TRANSCRIPT

Codes:

Participation in the PD programme
Forms of PD online
New knowledge from the PD programme
Shortcomings of the PD programme
Benefits of the PD programme
Collaborative learning in the PD programme
Transition and SEN children
Impact of the PD programme on teaching
Future PD needs
PLC

Teacher # 5

Researcher: I am very thankful to you that you have agreed to speak to me also after completing the PD programme. And my first question is how you evaluate your participation in the professional development programme?

Teacher: What do you mean?

Researcher: I mean what is your opinion on receving the experience on participating in the PD programme that we had. How do you evaluate it?

Teacher: Actually, it is a new experience for me. In long-dictance learning. I have actually paricipated in trainings in Zoom, but I have not had such lengthy experience. I don't know if I have to talk about if I coped or what do you mean?

Researcher: No, you have said that it was the first experience of this kind and we had five weeks in Zoom. Yes, as you feel. This first feeling when you are answering a question is the asnwer. And if we continue on the topic of the training, what do you think, which aspects of this experience you found the most beneficial?

Teacher: The most beneficial? I could say about the theory that some things were very interesting for me, some things were new. And then it was very-very interesting when we talked about aims of language immersion in different countries, in Ireland, Finland, in the USA. What the aims of language immersion are there. It was new. Those videos which

you had offered before the meeting were very useful. But there was too little time to watch the video. Sometimes it was difficult to find time. But they were very useful, very detailed; those videos were super beneficial. This discussion was very useful. My thoughts have gone all over the place.

Researcher: At the same time, for me, what could you advise me if I were to repeat this PD programme in the future, what would you advise me to take out from it? About which aspects would you say that actually, this is probably not necessary?

Teacher: Everything was good. It was very good, very interesting. Very positive attitude. It was very pleasant that there was always readiness to listen, to support; everything was super. A very good learning experience, everything was well planned, everything was good.

Researcher: We had there a few participants, many of them were present regularly, and we have established such a learning community, right, as we exchnage information and experience. Did you feel that having this learning community, the community of language immersion teachers – did it support you? Did it meet your needs in relation to professional development needs and in this field?

Teacher: To a little extent, yes. Because I have different children, and I work in a different direction. It was interesting, but I cannot say much about how useful it was. But it was interesting to communicate with other people who work in language immersion, it is interesting anyway. It is experience.

Researcher: At the same time, you have such a, I would not like to use the word "specific", but, you see, your target group is so particular, that it can be a challenge to establish a corresponding learning community. I have just started thinking, where such teachers are, probably in Tartu Kelluke methodology centre. Actually, it would be necessary…

Teacher: For teachers of SEN classrooms…

Researcher: Yes, indeed. If to think about it, then maybe it should be a bigger kindergarten, where there are separate SEN classrooms and then separate teachers who teach Estonian as a second language to these children. But again, from the next year they are supposed to dissappear…

Teacher: because there will be the transition.

Researcher: which is a separate question about how these children's language learning is going to be organised during the transition, in these classrooms, because everything is unclear at the moment.

Teacher: We will see how it goes.

Researcher: Yes. But if we think about these learning communities which would comply with your needs entirely, then it would definitely have to be a purposefully established learning community. What do you think?

Teacher: Yes.

Researcher: What do you think, if there were a possibility to create such a particular learning community, would it be helpful for you if you could communicate? How much of help would it be for you? Would you use such a possibility?

Teacher: I think, I would. Why not.

Researcher: Do you think it could also function in an online environment? And how?

Teacher: An online environment is a very useful thing. If people live in different cities and places, it is possible to meet online. It is very good.

Researcher: Do you think your teaching strategy has changed or will change anyhow after completing this PD programme? How?

Teacher: Not really, because I have been doing it for a long time already. Theory is interesting. Well, speaking about practice. Or how?

Researcher: In general, about the way you feel. For example, is there anything you started thinking about more or paying attention to more? What you did not use to do or? Let's put it like that: how would you assess the impact this PD programme had on your teaching?

Teacher: Let's say that if I worked in a regular language immersion classroom, then yes. But as I work in such a specific direction, there should be a definite structure here. It cannot be changed. And this is such a structure that something new can be brought in, but this new is already there, and I do not feel that…

Researcher: I certainly understand.

Teacher: This structure could be broken or I do not know. It works, and it is great that it works.

Researcher: You have also mentioned that if you were in a regular language immersion classroom… Would you name one or two things that you would do differently in a regular language immersion classroom?

Teacher: This is very smart, very smart.

Researcher: it can be even one thing.

Teacher: I have not thought about it. It is difficult to say.

Researcher: But still somehow would you do anything differently?

Teacher: Maybe, yes.

Researcher: OK.

Teacher: But, the training had… well, let's leave it.

Researcher: OK, let's do that. Do you have any other suggestions for meeting your PD needs in the future?

Teacher: Maybe, more communication. Some things could be discussed.

Researcher: Does this communication have to be with colleagues in kindergarten or outside it?

Teacher: It does not matter. In different ways. There is little communication in my life.

Researcher: Do you mean networking?

Teacher: Yes.

Researcher: I see. And again we are coming back to establishment of those learning communities, which are very necessary.

Teacher: which are very useful.

Researcher: I see. Thank you very much.

Adapted from COLT Observation Scheme A & B (Spada & Frohlich, 1995) and the Class Observation Tool: All Ages (NAEYC Site Visit, 2019)

Appendix H: The Observation Tool Sheet

OBSERVATION OF PRESCHOOL CLASSROOM COMMUNICATION

Teacher #

Date: Start time: End time:

Observation location:

# of children in the classroom: Age of the children:

Standard 1. Quality of Teacher-Child Interaction in the Immersion Language

Presence of interaction Episodes Y/N	Participant organization			Teacher's use of the immersion language		Teacher's interaction with students						Student modality				Utterance form		Students' interaction with the teacher			
	Group	Pair	Individual	Group Manag	Content delivery	Correcting Sts	Initiating child talk	Addressing the whole group	Addressing individual Sts	Asking open Qs	Asking structured Qs	Listening	Speaking	Reading	Writing	Choral	Individual	Spontaneous utterance	yes-no answer	one-word asnwer	extended answer

Comments regarding Standard 1:																					

Standard 2. Use of child-centred and play-based teaching methodologies in the immersion language

2.1 The teacher uses visuals, toys and real-life objects when conducting classroom activities ☐Yes ☐No ☐Not Applicable

2.2 The teacher helps children identify their prior knowledge and immersion language vocabulary in the topic. ☐Yes ☐No ☐Not Applicable

2.3 The teacher uses rhymes, songs, and movements to help children learn the vocabulary. ☐Yes ☐No ☐Not Applicable

2.4 The teacher creates learning experience that expands children's understanding of the world. ☐Yes ☐No ☐Not Applicable

2.5 The teacher uses a variety of scaffolding techniques for both content and language. ☐Yes ☐No ☐Not Applicable

2.6 The teacher initiates and supports children's conversations about their experience. ☐Yes ☐No ☐Not Applicable

2.7 The teacher creates spontaneous situations of everyday communication with children. ☐Yes ☐No ☐Not Applicable

2.8 The teacher uses opportunities for interaction in the immersion language during unguided play time. ☐Yes ☐No ☐Not Applicable

2.9 The teacher uses pretend play to practice vocabulary and grammar structures on the topic. ☐Yes ☐No ☐Not Applicable

2.10 The teacher motivates children's involvement in the activity through praise and encouragement. ☐Yes ☐No ☐Not Applicable

Standard 2 summary:

Standard 3. Creation and use of supportive learning environment

3.1 Classroom displays support acquisition of everyday vocabulary in the immersion language. ☐Yes ☐No ☐Not Applicable

3.2 The teacher actively uses classroom display to support content delivery of the topic. ☐Yes ☐No

☐Not Applicable

3.3 Classroom displays support development of preliteracy skills. ☐Yes ☐No

☐Not Applicable

3.4 Classroom materials displays are child-friendly (height, size, colours). ☐Yes ☐No

☐Not Applicable

3.5 The classroom has special place for displaying children's works of art and other creations. ☐Yes ☐No

☐Not Applicable

Standard 3 summary:

Standard 4. Language learning and early years curriculum integration

4.1 The teacher creates an environment for child-led activities. ☐Yes

☐No

☐Not Applicable

4.2 The classroom activity integrates learning experiences from different curriculum areas. ☐Yes ☐No

☐Not Applicable

4.3 The classroom activity stimulates children's engagement through hands-on activities. ☐Yes ☐No

☐Not Applicable

4.4 Children are provided possibilities to learn about the actual community they live in. ☐Yes ☐No

☐Not Applicable

4.5 Children are provided with the language that is authentic and necessary in real-life situations. ☐Yes ☐No

☐Not Applicable

Standard 4 summary

Appendix I: The Representative Sample of the Observation Tool Sheet Filled in by Hand

Adapted from COLT Observation Scheme A & B (Spada & Frohlich, 1995) and the Class Observation Tool: All Ages (NAEYC Site Visit, 2019)

children out of silent period, but not producing much speech

OBSERVATION OF PRESCHOOL CLASSROOM COMMUNICATION

! Time prior to the teaching activity - children play around the classroom, not much interaction with the T

Participant# 7

Date: 30.01. 2024 Start time: 08:45 End time: 09:45

Observation location: Tallinn Vindi preschool

# of children in the classroom: 13

Age of the children: 4-6 y.o.; 1 SEN child – 7 y.o.

Standard 1. Quality of Teacher-Child Interaction in the Immersion Language

Presence of interaction Episodes Y/N	Participant organization			Teacher's use of the immersion language		Teacher's interaction with students						Student modality				Utterance form		Students' interaction with the teacher			
	Group	Pair	Individual	Group Manag	Content delivery	Correcting Sts	Initiating child talk	Addressing the whole group	Addressing individual Sts	Asking open Qs	Asking structured Qs	Listening	Speaking	Reading	Writing	Choral	Individual	Spontaneous utterance	yes-no answer	one-word asnwer	extended answer
Learning 1	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	N	Y	Y	Y
Learning 2	Y	N	N		Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N

Comments regarding Standard 1: during the 30 mins of observation.....

Morning circle routines on the carpet: answering Qs about the calendar: girls/boys counting. Ninisildid laste nimedega → T pulls one to decide on who does an activity.

Learning 3 Y N Y Y Y Y Y Y Y N Y Y Y N N Y Y Y N N Y (Bee-Bot)

Learning 4 N N Y Y N Y Y Y Y N Y Y Y N N N Y Y Y Y N (modelling)

Adapted from COLT Observation Scheme A & B (Spada & Frohlich, 1995) and the Class Observation Tool: All Ages (NAEYC Site Visit, 2019)

children addressing the T in Russian

Playtime Before ~~by~~ teaching activity → teacher is not involved with the children; children understand Estonian, but speak Russian to me.

Morning circle: children involved by name tags.

Learning II: topic intro → discussion of yesterday (ski bus). Vocab. with skiing equipment, T names item on the picture, children repeat after her (suusad, pulgad).

Learning III: Beebot, mat with winter activities (ehitavad lumememme, mahavad lumesõda). Children pull name tags, including the SEN girl. T. Vocab complicated (roogivad lund?!) T motivates children to use whole sentence (little not much repetition) (lusti)

Learning IV: individual work → modelling from clay. T shows the ready figure, describes appearance, clothes → children go to their tables, choose colours of play dough, toothpicks. T walking around classroom, asking Qs and supporting students/children.

Standard 2. Use of child-centred and play-based teaching methodologies in the immersion language

2.1 The teacher uses visuals, toys and real-life objects when conducting classroom activities ☑Yes ☐No ☐Not Applicable

Beebot, figure from clay, pictures

2.2 The teacher helps children identify their prior knowledge and immersion language vocabulary in the topic. ☑Yes ☐No ☐Not Applicable

ski bus experience, skiing skills

2.3 The teacher uses rhymes, songs, and movements to help children learn the vocabulary. ☑Yes ☐No ☐Not Applicable

Morning circle routines with greetings

(children talk in Rus; address the T in Rus)

2

Use of Beebot → good, but takes time 1 by 1

Adapted from COLT Observation Scheme A & B (Spada & Frohlich, 1995) and the Class Observation Tool: All Ages (NAEYC Site Visit, 2019)

2.4 The teacher creates learning experience that expands children's understanding of the world. ☐Yes ☐No
showing skiing equipment, new vocab. on the topic (pulgad) ☐Not Applicable

2.5 The teacher uses a variety of scaffolding techniques for both content and language. ☐Yes ☐No
Pictures, Bee bot / could be more repetition ☐Not Applicable

2.6 The teacher initiates and supports children's conversations about their experience. ☐Yes ☐No
winter fun + ski day and bus ☐Not Applicable

2.7 The teacher creates spontaneous situations of everyday communication with children. ☐Yes ☐No
+time Before teaching activity → + preparing for the lesson; ☐Not Applicable
children playing with me / by oneself; children use EST words with me

2.8 The teacher uses opportunities for interaction in the immersion language during unguided play time. ☐Yes ☐No
As in 2.7 → "lost opportunity" to work individually ☐Not Applicable
and practice understanding + output in EST

2.9 The teacher uses pretend play to practice vocabulary and grammar structures on the topic. ☐Yes ☐No
skiing; showing winter fun activities ☐Not Applicable

2.10 The teacher motivates children's involvement in the activity through praise and encouragement. ☐Yes ☐No
"ilus", "ilusti", and other words; involves the whole group ☐Not Applicable
if necessary

Standard 2 summary:

! activities are teacher-led mostly;
!! supporting the SEN girl in the activity + allowing her to have time she needed

3

Adapted from COLT Observation Scheme A & B (Spada & Frohlich, 1995) and the Class Observation Tool: All Ages (NAEYC Site Visit, 2019)

→ children's drawn pictures on display

Standard 3. Creation and use of supportive learning environment

3.1 Classroom displays support acquisition of everyday vocabulary in the immersion language. ☐Yes ☐No ☐Not Applicable

Carpet and environment for morning circle, pictures and word-tags in the environment

3.2 The teacher actively uses classroom display to support content delivery of the topic. ☐Yes ☐No ☐Not Applicable

3.3 Classroom displays support development of preliteracy skills. ☐Yes ☐No ☐Not Applicable

Working with calender, counting → use of numbers.
Use of name tags (pulling names for activities)

3.4 Classroom materials displays are child-friendly (height, size, colours). ☐Yes ☐No ☐Not Applicable

All materials for morning circle.

3.5 The classroom has special place for displaying children's works of art and other creations. ☐Yes ☐No ☐Not Applicable

Yes, children's drawings.

Standard 3 summary:

- morning circle environment
- children's name tags on furniture
- using name tags in exercises

Standard 4. Language learning and early years curriculum integration

Adapted from COLT Observation Scheme A & B (Spada & Frohlich, 1995) and the Class Observation Tool: All Ages (NAEYC Site Visit, 2019)

→ Beebots?

4.1 The teacher creates an environment for child-led activities. ☐Yes ☐No ☐Not Applicable

could be improved; more opportunities for children to lead

4.2 The classroom activity integrates learning experiences from different curriculum areas. ☐Yes ☐No ☐Not Applicable

Exercise with Beebots; play-dough making

4.3 The classroom activity stimulates children's engagement through hands-on activities. ☐Yes ☐No ☐Not Applicable

children motivated by use of technology; interested in play-dough modelling

4.4 Children are provided possibilities to learn about the actual community they live in. ☐Yes ☐No ☐Not Applicable

Ski bus → some children ski here only through it.
Talvelõbud → kas ainult lasteaias?!

4.5 Children are provided with the language that is authentic and necessary in real-life situations. ☐Yes ☐No ☐Not Applicable

Talvelõbud → verbs and activities; winter gear and clothes

Standard 4 summary:

- outdoor winter activities → significance in Estonia
- hands-on → modelling + Beebots → led by children → motivating + language use

5

Adapted from COLT Observation Scheme A & B (Spada & Frohlich, 1995) and the Class Observation Tool: All Ages (NAEYC Site Visit, 2019)

Appendix J: The Representative Sample of the Observation Tool Sheet

OBSERVATION OF PRESCHOOL CLASSROOM COMMUNICATION

Participant# 7

Date: 30.01. 2024 Start time: 08:45 End time: 09:45

Observation location: Tallinn Vindi preschool

# of children in the classroom: 13 Age of the children: 4-6 y.o. and one 7 y.o. SEN child

Standard 1. Quality of Teacher-Child Interaction in the Immersion Language

Presence of interaction Episodes Y/N	Participant organization			Teacher's use of the immersion language		Teacher's interaction with students						Student modality				Utterance form		Students' interaction with the teacher			
	Group	Pair	Individual	Group Management	Content delivery	Correcting Sts	Initiating child talk	Addressing the whole group	Addressing individual Sts	Asking open Qs	Asking structured Qs	Listening	Speaking	Reading	Writing	Choral	Individual	Spontaneous utterance	yes-no answer	one-word answer	extended answer
Play time.																					

After breakfast all the children have time for unguided play. They can play (board) games and/or do puzzles. The researcher played at the Lego table with some children. The children understand the researcher speaking Estonian, can say single words, such as "train", "plane", name colours, but mostly speak to the researcher in Russian. The teacher takes this time to prepare for the upcoming learning activity.																					
Learning activity I.	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	N	Y	Y	Y
Morning circle routines (the children and the teacher sitting on the carpet): answering Qs about the calendar, counting boys and girls. The teacher puts tags with children's names on the carpet and pulls the names one by one when asking Qs with the daily routines.																					
Learning activity II.	Y	N	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N
Introduction to the topic. The teacher asks the children what happened on the preschool territory the day before (it was the day when the skiing bus arrived. The skiing bus is a special bus belonging to a skiing club. They come to preschools on agreement, bring skiing equipment and teach children to ski on the preschool territory). The children respond in the Russian language that they skied. The teacher shows pictures of skiing equipment, names the items, the children repeat the words after her.																					
Learning activity III.	Y	N	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	N	Y	Y	Y	N	N	Y
Vocabulary practice and consolidation. The teacher shows the children a Bee-Bot, ask them questions "Who is it", etc. The teacher has prepared a mat for the Bee-Bot with the command cards that represent different winter outdoor activities. The teacher calls children to the front one by one, including the SEN child, (using the name cards). The child names an activity, for example, "the children are making a snowman", then the child programs the Bee-Bot so that it would reach the activity. The children count the number of the Bee-Bot's steps altogether out loud.																					
Learning activity IV.	N	N	Y	Y	N	Y	Y	Y	Y	N	Y	Y	Y	N	N	N	Y	Y	Y	Y	N
Handicraft (modelling from coloured modelling clay). The teacher shows the children a figure of a skier made from modelling clay. She says that this is her and describes the figure in a lot of detail: what the figure is wearing, what colour the clothes are, etc. Children move from the carpet area to the tables where they sit in groups and start modelling their skiers. They choose the colours for their skier's clothing, use toothpicks for ski-sticks. The teacher monitors the process by walking around the room, asking the children questions, and helping them if necessary.																					
Comments regarding Standard 1: during the 60 mins of observation the teacher demonstrated different levels of support in her interaction with the children in the immersion language. During the playtime the teacher prepared for the upcoming learning activities leaving this time up to the children to play on their own, which they did, naturally in their first language. The researcher communicated with the children, and her observations showed that they understood most of what she was telling them. However, they addressed her in the Russian language; the children's vocabulary in the Estonian language was limited, they could name few things, such as "a train", "a plane", and they knew the names of the colours. During the learning activities the teacher addressed both the whole group and individual students. She spoke clearly and used pictures to support the children's understanding of the input. However, she did not use repetition to a necessary extent: she would pronounce a word or phrase two times, while she could have asked the children to repeat in chorus and then have some children repeat in individually. She also used some complicated phrases, like "roogib lund". The teacher asked the children only "yes-no" or structured questions, which may hint at the fact that the children are at the early stage of second language acquisition. The children often addressed the teacher in Russian, which is their first language, and used this language for spontaneous utterances. The children used the Estonian language for answering questions regarding their routines, for example, calendar. When the teacher introduced the new topic, they repeated single words after her. During																					

the vocabulary consolidation activity, the teacher motivated the children to use model sentences, for example, “the children are making a snowman” for an extended answer, by saying “Please say it nicely”.
During the handicraft activity the teacher moved around the classroom and asked the children individual questions, about the colours of the figure’s clothes, what the figure was wearing, etc.

Standard 2. Use of child-centred and play-based teaching methodologies in the immersion language

2.1 The teacher uses visuals, toys and real-life objects when conducting classroom activities	X Yes	☐No
	☐Not Applicable	
2.2 The teacher helps children identify their prior knowledge and immersion language vocabulary in the topic.	X Yes	☐No
	☐Not Applicable	
2.3 The teacher uses rhymes, songs, and movements to help children learn the vocabulary.	☐Yes	X No
	☐Not Applicable	
2.4 The teacher creates learning experience that expands children’s understanding of the world.	X Yes	☐No
	☐Not Applicable	
2.5 The teacher uses a variety of scaffolding techniques for both content and language.	X Yes	☐No
	☐Not Applicable	

Adapted from COLT Observation Scheme A & B (Spada & Frohlich, 1995) and the Class Observation Tool: All Ages (NAEYC Site Visit, 2019)

2.6 The teacher initiates and supports children's conversations about their experience.	X Yes	☐No	☐Not Applicable
2.7 The teacher creates spontaneous situations of everyday communication with children.	☐Yes	X No	☐Not Applicable
2.8 The teacher uses opportunities for interaction in the immersion language during unguided play time.	☐Yes	X No	☐Not Applicable
2.9 The teacher uses pretend play to practice vocabulary and grammar structures on the topic.	X Yes	☐No	☐Not Applicable
2.10 The teacher motivates children's involvement in the activity through praise and encouragement.	X Yes	☐No	☐Not Applicable

Standard 2 summary:

During the observed time the teacher supported the children's involvement into the learning activities by using visuals and the Bee-Bot. She gave every child an opportunity to use the Bee-Bot, regardless of their language ability and behaviour, including the SEN child, although it made the activity last long that she had obviously planned. The teacher also supported the children through using words of praise and encouragement. However, she did not use the time of unguided play as an opportunity to communicate with the children 1:1, to work on their understanding of the language and improvement of their vocabulary.

Adapted from COLT Observation Scheme A & B (Spada & Frohlich, 1995) and the Class Observation Tool: All Ages (NAEYC Site Visit, 2019)

Standard 3. Creation and use of supportive learning environment

3.1 Classroom displays support acquisition of everyday vocabulary in the immersion language.	X Yes	☐No ☐Not Applicable
3.2 The teacher actively uses classroom display to support content delivery of the topic.	X Yes	☐No ☐Not Applicable
3.3 Classroom displays support development of preliteracy skills.	X Yes	☐No ☐Not Applicable
3.4 Classroom materials displays are child-friendly (height, size, colours).	X Yes	☐No ☐Not Applicable
3.5 The classroom has special place for displaying children's works of art and other creations.	X Yes	☐No ☐Not Applicable

Standard 3 summary:

The room has a special area for conducting the morning circle routines which has the calendar and the place for displaying pictures and word tags with the topic-related vocabulary. The teacher used this area for the morning circle.
In the room there are a lot of word tags on everyday items that help children to develop their preliteracy skills. On the tables and chairs there are children's name tags.

Standard 4. Language learning and early years curriculum integration

4.1 The teacher creates an environment for child-led activities.	X Yes	☐No
	☐Not Applicable	
4.2 The classroom activity integrates learning experiences from different curriculum areas.	X Yes	☐No
	☐Not Applicable	
4.3 The classroom activity stimulates children's engagement through hands-on activities.	X Yes	☐No
	☐Not Applicable	
4.4 Children are provided possibilities to learn about the actual community they live in.	X Yes	☐No
	☐Not Applicable	
4.5 Children are provided with the language that is authentic and necessary in real-life situations.	X Yes	☐No
	☐Not Applicable	

Standard 4 summary:

Outdoor winter activities is a very important curriculum topic which is related to several curriculum areas, including physical education, environment, community, etc. It is also an important part of Estonian culture. The teacher asked the children about their shared activity, which

was the skiing bus in the preschool. She also offered engaging hands-on activities, such as navigating the Bee-Bot and modelling from modelling clay.

Appendix K: Code Book

Phase 2 – Generating initial codes (79 initial codes developed)	Code definition	Files coded	Units of meaning coded
accessibility of PD and EL	Any reference to connection between teachers' proficiency in the Estonian language and their access to PD opportunities.	1	2
accessibility of PD	Any reference to teachers' opportunity to access PD and take part in PD events.	4	7
attitude to webinars	Any reference to teachers' attitudes to PD events conducted online in the form of webinars.	3	4
availability of PD information	Any reference to how available information regarding PD is for teachers.	2	4
benefits of PD	Any reference to benefits which PD brings.	6	8
challenges with PD	Any reference to concerns, problems, and challenges that teachers associate with PD.	5	6
child-led learning	Any reference to use of child-led activities in ECEC settings.	7	12
children engagement	Any reference to engagement of children in activities.	12	39
children in Estonia	Any references to characteristics peculiar of children living in Estonia.	1	1
children output	Any reference to children producing Estonian-language output.	6	21
children's progress in EL	Any reference to children's progress in acquisition of the Estonian language.	2	9
classroom or work organisation	Any reference to organization of teachers' work in the ECEC classroom.	5	14
curriculum integration	Any reference to integration of areas of early development in teaching activities.	6	12
discipline	Any reference to issues related to classroom management and discipline.	1	1
discipline and immersion language learning	Any reference to connection between children's proficiency in the immersion language and issues with classroom management and discipline.	1	2
expectation and reality of ECEC	Any reference to the teachers' expectations regarding ECEC settings and the reality of	3	3

Phase 2 – Generating initial codes (79 initial codes developed)	Code definition	Files coded	Units of meaning coded
	working there.		
experience of LC during PD programme	Any reference to teachers' experience of learning community during the PD initiative	7	10
experience of PD programme	Any reference to teachers' participation in the PD initiative	1	1
failure as motivation for action	Any reference to connection between teachers' feeling failure and being motivated by it.	2	2
financial issues	Any reference to financial issues related to PD	1	2
fixing teacher's mistakes	Any reference to teachers' mistakes and fixing them.	1	1
forms of PD	Any reference to forms of PD	10	18
future PD needs	Any reference to teachers' future PD needs.	2	2
gains from PD programme	Any reference to teachers' gains from the PD initiative.	7	15
importance of small things	Any reference to importance of small things in PD	1	1
insufficient interaction	Any reference to lack of interaction between the teacher and children	2	6
interaction in immersion L	Any reference to interaction between the teacher and children in the immersion language	7	21
L1 use	Any reference to children speaking their L1 in the classroom	3	6
L2 learning motivation	Any reference to the teacher motivating children to learn L2	4	10
L2 literacy development	Any reference to the teacher's activities aimed to develop children's literacy skills	3	8
LC gains for language immersion	Any reference to the teacher's gains from the learning community regarding language immersion	1	1
learning environment	Any reference to learning environment	6	8
learning from colleagues	Any reference to learning from colleagues	6	15
management support with PD	Any reference to the management supporting PD	3	5
need for mentor	Any reference to the teacher's need for mentor	2	4

Phase 2 – Generating initial codes (79 initial codes developed)	Code definition	Files coded	Units of meaning coded
needs for children	Any reference to consideration of children's needs	4	4
networking	Any reference to networking	1	2
new PD interests and topics	Any reference to teachers' new PD interests and PD topics	1	1
PD attendance	Any reference to teachers' attendance of PD	6	15
PD content	Any reference to PD content	4	12
PD experience failure	Any reference to failed PD experience	1	1
PD impact on teaching	Any reference to PD impact on teaching	1	1
PD interests	Any reference to teachers' PD interests	8	19
PD interests with immersion	Any reference to teachers' PD interests regarding language immersion	4	6
PD needs for EL	Any reference to teachers' PD in connection with the Estonian language	6	12
PD needs for immersion	Any reference to teachers' PD needs related to language immersion	5	10
permanent PD interests	Any reference to teachers' long-term PD interests	4	5
play-based learning	Any reference to play-based learning	5	7
psychological support for the teacher	Any reference to psychological support for the teacher	3	5
reaching curriculum aims	Any reference to achieving curriculum aims	1	1
relationship with parents	Any reference to relationship with parents	1	1
satisfaction with PD	Any reference to teachers' satisfaction with PD	1	4
satisfaction with PD forms	Any reference to teachers' satisfaction forms of PD	2	3
scaffolding content learning	Any reference to scaffolding content learning	1	4
scaffolding interaction	Any ways to scaffolding interaction	7	34
seeing perspective	Any reference to seeing future perspective in transition	2	3
SEN children	Any reference to SEN children	3	4
teacher as independent learner	Any reference to teacher's independent learning	1	1

Phase 2 – Generating initial codes (79 initial codes developed)	Code definition	Files coded	Units of meaning coded
teacher collaboration	Any reference to teacher collaboration	5	9
teacher competence	Any reference to teacher being competent	1	4
teacher EL confidence	Any reference to teacher feeling confident speaking the Estonian language	9	22
teacher learning from PD	Any reference to teacher's learning from the PD initiative	3	4
teacher learning the EL	Any reference to teacher's learning the Estonian language	3	4
teacher use of technology	Any reference to teacher's use of technology	1	2
teacher using Russian	Any reference to teacher speaking Russian (L1)	3	5
teacher's background	Any reference to teacher's background prior to preschool	1	1
teacher's free time	Any reference to teacher's free time	1	2
teacher's mental wellbeing	Any reference to teacher's mental wellbeing	4	14
teacher's motivation for PD	Any reference to teacher's motivation to participate in PD	6	20
teacher's motivation for work	Any reference to teacher's motivation for work	3	5
teacher's struggles	Any reference to teacher's facing challenges	2	4
teacher's working experience	Any reference to teacher's working experience	4	7
teacher's working load	Any reference to teacher's working load	1	1
teachers' collaboration in EL learning	Any reference to teacher's collaboration in Estonian language learning	2	4
teachers' feelings to EL learning	Any reference to teacher's feelings regarding Estonian language learning	1	2
teachers' feelings towards transition	Any reference to teacher's feelings regarding the transition reform	2	2
teaching Estonian as L2	Any reference to teaching Estonian as L2	2	2
theory vs practice in PD	Any reference to relationship between theory and practice in PD	3	4
time for PD	Any reference to having time for PD	3	4

Appendix L: Ethical Approval

Ollscoil Chathair Bhaile Átha Cliath
Dublin City University

DCU

Ms Anna Golubeva
School of Language, Literacy and Early Childhood Education

16th February 2023

REC Reference: **DCUREC/2023/013**

Proposal Title: **Professional development for early language immersion teachers in Estonia**

Applicant(s): **Ms Anna Golubeva, Prof Pádraig Ó Duibhir**

Dear Colleagues,

Thank you for your application to DCU Research Ethics Committee (REC). Further to expedited review, DCU REC is pleased to issue approval for this research proposal.

DCU REC's consideration of all ethics applications is dependent upon the information supplied by the researcher. This information is expected to be truthful and accurate. Researchers are responsible for ensuring that their research is carried out in accordance with the information provided in their ethics application.

Materials used to recruit participants should note that ethical approval for this project has been obtained from the Dublin City University Research Ethics Committee. Should substantial modifications to the research protocol be required at a later stage, a further amendment submission should be made to the REC.

DCU
Research & Innovation

Yours sincerely,

Dr. Melrona Kirrane

Dr. Melrona Kirrane
Chairperson

DCU Research Ethics Committee

Taighde & Nuálaíocht Tacaíocht
Ollscoil Chathair Bhaile Átha Cliath,
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E research@dcu.ie
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Note: Please retain this approval letter for future publication purposes (for research students, this includes incorporating the letter within their thesis appendices).

Appendix M: Letter to Preschool Director

Letter to the Preschool Director

Teacher survey: Professional development for early language immersion teachers in Estonia

Dear Sir/Madam,

My name is Anna Golubeva, I work at Narva College of the University of Tartu. For most of my professional career I have been involved in implementation and development of language immersion in Estonia. The role of the teacher and teacher professional development (PD) has become my research interest. I would like to invite the language immersion teachers of your preschool to take part in the survey conducted as a part of my doctoral studies at Dublin City University, Ireland. The main aim of the study is to find out what the professional development (PD) needs of preschool immersion teachers in Estonia are and how they might be addressed.

I would like to invite the Estonian-medium teachers of the language immersion classrooms of your preschool to complete an anonymous online survey that takes about 15 minutes. The information gathered from this questionnaire will be used to help to inform initial teacher education and PD programmes for Estonian immersion teachers in the future. **I would be grateful if you could forward this link to the questionnaire to the Estonian-medium language immersion teachers of your preschool.**

The confidentiality of information provided will be kept within the limitations of the law. The data controller of this project is Dublin City University. Participants have the right to access their personal data at any stage of the research. They only need to contact the DCU Data Protection Officer, Mr Martin Ward by e-mail: data.protection@dcu.ie or telephone (003531) 7005118/7008257.

Participation in this study is voluntary and the teachers may withdraw without giving any reason. The categories of data that are collected for this study may include: the teacher's name, preschool name and address, e-mail, and teaching experience. The teacher's name and the name and address of the preschool will only be recorded if the teacher agrees to take part in the follow-on focus groups. No connection can be made between the teacher's questionnaire responses and their personal details. The teacher's responses will be kept in a secure location. Electronic data will be kept on an encrypted password protected computer. All records and data shall be appropriately disposed of within three years, in line with the DCU's Data Protection Policy. Confidentiality and anonymity shall be kept to the extent possible within the legal limits of data protection.

Please do not hesitate to contact me if you have any questions or want to discuss any aspect of the research. You can contact me at anna.golubeva2@mail.dcu.ie. If you have concerns about this study and wish to contact an independent person, please contact:
The Secretary, Dublin City University Research Ethics Committee, c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000, e-mail rec@dcu.ie

Thank you for considering participating in this study.
Best regards,
Anna Golubeva

Appendix N: Plain Language Statement

Plain Statement Language Statement for Teachers

Professional Development Programme and Focus Group Interview

(Stages 3 and 4)

Dear Teacher,

My name is Anna Golubeva, I work at Narva College of the University of Tartu. For most of my professional career I have been involved in the implementation and development of language immersion in Estonia. The role of the teacher and teacher professional development (PD) has become my research interest. I would like to invite you to take part in the professional development programme which is developed and conducted as a part of my doctoral studies at Dublin City University, Ireland. The main aim of the study is to find out what the professional development (PD) needs of preschool immersion teachers in Estonia are and how they might be addressed.

You are invited to take part in a 15-week professional development programme which includes six weeks of PD sessions and sharing your experience with the other participants, observation of your teaching activity in your preschool classroom, and a semi-structured interview as the concluding activity of the PD programme. The semi-structured interview will be held in the Estonian language, and it will be audio recorded. No video or audio recording will be made during the observation of your teaching activity; no photographs of the children will be taken.

Upon completion of the professional development programme, you will be awarded with a certificate of attendance by Narva College of the University of Tartu. The PD sessions will be held in Narva, on the premises of Narva College of the University of Tartu or in Zoom. You may be offered some refreshments prior to the PD sessions and the interview on behalf of Narva College of the University of Tartu. Should you have any travel expenses related to your participation in the PD sessions and/or in the semi-structured interview, they will be compensated upon submission of the travel expenses reimbursement form which will be sent to the email address you provided when registering for the professional development programme. It is not expected that there will be any risk for those taking part in this study. However, the benefits of participating in this study are that you will gain new knowledge and skills as well as have an experience of sharing your own knowledge and experience.

The confidentiality of information provided will be kept within limitations of the law. The data controller of this project is Dublin City University. You have the right to access your personal data at any stage of the research. You only need to contact the DCU Data Protection Officer, Mr Martin Ward by e-mail: data.protection@dcu.ie or telephone (01) 7005118/7008257.

Participation in this study is voluntary and you may withdraw without giving any reason. The categories of data that are collected for this study include: your name, preschool name and address, e-mail, and teaching experience. Your responses will be kept in a secure location. Electronic data will be kept on an encrypted, password protected computer. All records and data shall be appropriately disposed of within three years, in line with the DCU's Data Protection Policy. If you are unhappy with how your data is stored, you have the right to lodge a complaint with the Data Protection Commission in Ireland. Confidentiality and anonymity shall be kept to the extent possible within the legal limits of data protection.

Please do not hesitate to contact me if you have any questions or want to discuss any aspect of the research. You can contact me at anna.golubeva2@mail.dcu.ie. If you have concerns about this study and wish to contact an independent person, please contact:
The Secretary, Dublin City University Research Ethics Committee, c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000, e-mail rec@dcu.ie

Thank you for considering participating in this study.
Best regards,
Anna Golubeva

Appendix O: Informed Consent Form

Informed Consent Form for Teachers
Focus Group Interview: Professional development for early language immersion teachers in Estonia
(Stage 2)

Purpose of the Study

The purpose of the current study is to find out what the professional development (PD) needs of preschool immersion teachers in Estonia are and how they might be addressed.

Requirements of Participating in This Study

You are asked to take part in a semi-structured interview about your professional development needs and experiences as a language immersion teacher. The interview will be held in the Estonian language, and it will be audio recorded. The interview will be held in Narva, on the premises of Narva College of the University of Tartu or in Zoom. You may be offered some refreshments prior to the interview on behalf of Narva College of the University of Tartu. Should you have any travel expenses related to your participation in the semi-structured interview, they will be compensated upon submission of the travel expenses reimbursement form which will be sent to the email address you provided when registering for the interview.

Confirmation That Involvement in the Study Is Voluntary

I am aware that if I agree to take part in this study, I can withdraw from participation at any stage. There will be no penalty for withdrawing before all stages of the study have been completed. I have read and understood the information in this form. The researcher has answered my questions and concerns, and I have a copy of this consent form. Therefore, I give my consent to take part in this research project.

Please complete the following (circle Yes or No for each question):

I have read the Plain Language Statement (or had it read to me).	Yes/No
I understand the information provided.	Yes/No
I understand the information provided in relation to data protection.	Yes/No
I have had an opportunity to ask questions and discuss this study.	Yes/No
I have received satisfactory answers to all my questions.	Yes/No
I am aware that my interview will be audiotaped.	Yes/No

Teacher's Signature: _____

Name in Block Capitals: _____

Date: _____

Appendix P: Letter to Parents

Letter to the Parents
Classroom Observation as a Part of a Professional Development Programme
(Stage 3)

Dear Sir/Madam,

My name is Anna Golubeva, I work at Narva College of the University of Tartu. For most of my professional career I have been involved in implementation and development of language immersion in Estonia. The role of the teacher and teacher professional development (PD) has become my research interest. At the moment, I am conducting doctoral research at Dublin City University, Ireland. The research is aimed to find out what the professional development (PD) needs of preschool immersion teachers in Estonia are and how they might be addressed.

The Estonian-medium teacher of your child is taking part in the research, and as a part of the research activity she is participating in a professional development programme. The programme includes classroom observations, which means that I will be present in the classroom during the teaching activity, observing the teacher interacting with children. I will not be interacting with the children or conducting any teaching activity myself. No video or audio recording will be made during the observation of the observed teaching activity; no photographs of the children will be taken.

The confidentiality of information provided will be kept within limitations of the law. The data controller of this project is Dublin City University. You have the right to access your personal data at any stage of the research. You only need to contact the DCU Data Protection Officer, Mr Martin Ward by e-mail: data.protection@dcu.ie or telephone (01) 7005118/7008257.

Please do not hesitate to contact me if you have any questions or want to discuss any aspect of the research. You can contact me at anna.golubeva2@mail.dcu.ie. If you have concerns about this study and wish to contact an independent person, please contact:
The Secretary, Dublin City University Research Ethics Committee, c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000, e-mail rec@dcu.ie

Best regards,
Anna Golubeva

Appendix Q: Design of the PD Programme

Workshop/Topic	Learning Objectives	Content	Links to LitAnalysis	Comments/Observations
Workshop 1/ **Introduction. Supporting SLA in early language learning programmes** (F2F session)	Upon participating in the workshop, the participants: ● explain the key aspects of SLA; ● recognize examples of early language teaching that is based SLA knowledge and recognition; ● provide examples of the way in which SLA principles are highlighted	*Activities:* 1. Participants' introduction. Possible options: children's cards/associations game to describe oneself as a teacher and to describe one's preschool; to make a particular sentence phrase describing oneself as a teacher and to describe one's preschool. 2. Activity "Controversial Statements". Each participant is given a handout with ten statements about SLA and early second/foreign language programmes. Participants need to mark if they agree or disagree with each statement. If they cannot decide, they need to comment why.	2.5.4.2 Development of Child's Second Language; 2.7.1 The Evolution of SLA as a Concept; 2.7.2 Stages of SLA; 2.7.3 Comprehensible Input, Output and Interaction	Videos https://www.youtube.com/watch?v=pDQMnUqGQTM https://www.youtube.com/watch?v=09PrmLppQ1A

	in their preschools.	First, participants do this independently, then as a pair activity followed by a whole group discussion facilitated by the researcher. 3. The researcher makes presentation about key aspects of SLA and the influence of SLA on early language learning practice. 4. The participants analyse videos illustrating key aspects of SLA (prompt guiding questions given in advance) 5. The participants share their experience about whether key aspects of SLA are highlighted in their preschools. *Reflection:* Participants start a reflection journal (5 min to add comments to a reflection journal) – prompt questions first to discuss in pairs and then to record	

		individually and privately "What activity was the most meaningful for you today and why". Examples of reflections, hypothetical examples A and B (differences between the levels of reflections – descriptive A and the "and so what" deep reflection B)	
Workshop 2/ **Aspects of Early Years Immersion Pedagogy (Introduction)** (Zoom session)	Upon participating in the workshop, the participants: ● explain the key aspects of language immersion pedagogy and their relation to SLA; ● distinguish between different models of language immersion and	*Activities:* 1. Playing a word game: explaining an abstract notion, e.g., "understanding" in Estonian in a simple child language, including by using gestures. 2. Participants analyse videos from international and Estonian language immersion classrooms (total, two-way, partial immersion) and complete a learning activity with the key aspects of immersion pedagogy.	1.6 Key Features of Early Language Immersion; 1.7 Estonian Experience in Early Language Immersion; 2.6.6 Teachers' Caretaker Speech; 2.5.5.2 Formulaic Speech; 2.7.3 Comprehensible Input, Output and Interaction

explain the benefits of a particular model based on the linguistic and/or social context of a country; ● provide examples of the way in which aspects of language immersion pedagogy are implemented in their preschools.	3. Whole group discussion of the videos using the participants' notes on the activity. 4. The researcher makes a presentation about key aspects of immersion pedagogy (Appendix R). 5. The participants share their experience about how the key aspects of immersion pedagogy are implemented and highlighted in their preschools. *Reflection:* The participants are asked to make notes in their reflection journal on the topic of the most significant knowledge they have acquired during the workshop. They are encouraged to write down the aspects of language immersion which require strengthening in their preschools.	

Workshop 3/ **Integrating Language Learning with the Preschool Curriculum Content** (Zoom session)	Upon participating in the workshop, the participants: ● describe different groups of EL2 in Estonian preschool education explaining their language peculiarities and needs; ● compose Estonian language outcomes for integrated activities from different areas of early development;	Activities: 1. Describing a picture. As the workshop starts, the researcher sends half of the participants a picture via email. The picture was taken from a colouring book for preschool teachers. Those participants who received a picture are tasked with describing it to the teachers who did not receive the email. The latter ones listen to the description and try to draw the picture. After the activity ends, the teachers share their feedback about the way they felt either describing or drawing the picture. 2. The researcher asks the participants about the linguistic background of the children in their classroom. Later she proposes the task for group/pair work to imagine the classrooms and children's backgrounds as the transition reform progresses. The	2.5.4.1 Development of the child's first language; 2.5.4.2 Development of the child's second language; 2.6.7 Development of Monolingual vs Multilingual Children in ECEC settings 2.6.8 Integration of All Areas of Early Development; 2.7.5.3 The ZPD and Scaffolding in language immersion education	1. Activity – mapping the learners by linguistic background and pointing out different group of learners, their needs and support they require (what are the challenges that this situation presents? What are the needs for scaffolding? Use of Russian/first language? To what extent?)

● provide examples of integrated activities that are implemented in their preschools.	participants receive the table with different types of learners and various aspects of teaching. Each group/pair chooses the type of the learner and then fill in the table (Appendix S and Appendix T). 3. The researcher makes a presentation about the role of Estonian language learning in the preschool education system and curriculum (incl. in relation to the transition to the Estonian-medium education) for the holistic development, pointing out different group of learners, their needs and support they require, also referring to the results of groupwork in the previous task. 4. Participants work in pairs: they receive cards with the age of children, the description of their needs as Estonian language learners, and areas	

		of early development Estonian plus two/three (e.g., mathematics, environment, arts). Their task is to plan is to compose learning outcome for content and language and to make an outline for an integrated activity. 5. The participants share their experience by bringing examples of any integrated activities from their preschools. *Reflection:* The participants are asked to reflect on those aspects of integration of language and curriculum in their preschools are strong and those which need strengthening based on the children's linguistic background and their needs.	
Workshop 4/ **Strategies for Effective**	Upon participating in the workshop, the participants:	Activities:	2.7.3 Comprehensible Input, Output and Interaction; 2.7.5.3 The ZPD and Scaffolding

Teacher-Child Interaction in the ECEC settings: Supporting Input Comprehension (Zoom session)	● have experienced playful approach in teacher-child interaction; ● explain strategies that support input comprehension; ● provide examples of strategies supporting input comprehension that are implemented in their preschools.	1. Participants need to explain different phrases (adjective plus noun) to each other using different kinds of support. Each participant is asked to pick a number from one to ten. Once the participant has selected the number, the researcher sends her a private Zoom message with the phrase. The teacher needs to explain the phrase to the other participants using any scaffolding she find appropriate (gestures, pictures, real life objects). 2. The participants work in pairs and write down some questions they have about supporting input comprehension. The participants analyse a video presentation (Prof. Virve Vihman) about the input quality and make comments in relation to their questions.	in language immersion education; 2.6.4 The Significance of Play in Early Language Learning

	3. The researcher makes a presentation highlighting the main aspects from the video by Vihman (leaving space for the participants' comments) and presenting effective input strategies. 4. The participants analyse videos with strategies for supporting input comprehension and comment on their effectiveness. 5. The participants share their experience on strategies for supporting input comprehension that they use/that are used in their preschools. *Reflection:* The teachers are asked to think about their classroom and the challenges their learners have with understanding input. They are encouraged to write down the activities that they learned about during the workshop and that they consider helpful for their learners.

Workshop 5/ **Strategies for Effective Teacher-Child Interaction in the ECEC settings: Output Enhancement** (Zoom session)	Upon participating in the workshop, the participants: ● are aware of the reasons that make it difficult for children to use Estonian in the ECEC classroom; ● explain strategies for output enhancement; ● provide examples of output enhancement strategies that are implemented in their preschools.	1. Language game: English tongue-twisters. The teachers are asked to pronounce English tongue-twisters: Mixed biscuits, mixed biscuits; She sells seashells by the seashore; I thought a thought of thinking of thanking you. 2. The participants work in pairs to brainstorm reasons why children find it difficult to use Estonian in the classroom. 3. The participants analyse a video presentation (Prof. Reili Argus) about the process Estonian is acquired as the first and second language (incl. typical difficulties and mistakes). The researcher facilitates a whole group discussion about conclusions from the video on the language-based difficulties with output.	2.7.3 Comprehensible Input, Output and Interaction; 2.6.8 Integration of All Areas of Early Development; 2.7.5.3 The ZPD and Scaffolding in language immersion education;	1. Remind the participants what it feels like not to be fluent in Estonia. Tongue twisters (mixed biscuits, mixed biscuits and others) https://www.youtube.com/watch?v=OP3CR_3erj8 https://www.youtube.com/watch?v=-OUOHSdEUFg Hedi ja raamat

4. The participants analyse videos with output enhancement strategies and match the strategy with its description on the worksheet.
5. The researcher makes a presentation highlighting the output enhancement strategies and their implementation.
6. The participants share their experience on output enhancement strategies that they use/that are used in their preschools.

Reflection:

The teachers are asked to think about the way they felt during the tongue-twister game and reflect on whether their learners may have the same feelings. The participants are encouraged to write down the ways in which the knowledge obtained during the

		workshop may help them support their learners' input.		
Workshop 6/ **Creating Learning Environment** (Zoom session)	Upon participating in the workshop, the participants: ● describe the main aspects of effective learning environment for ECEC; ● describe the necessary conditions for second language learning / immersion in the ECEC environment; ● reflect on their participation in	*Activities:* 1. Drawing activity in pairs: Drawing an ideal classroom from an early years perspective and commenting on it to the partner. 2. The researcher makes a presentation about the main aspects of organizing learning environment in an early immersion classroom 3. The participants analyse photos taken in different immersion preschool classrooms against the main criteria from the presentation (a whole group activity) 4. The participants work in pairs designing a learning space based on the topic and the children's age that are given to them. The aim is to design the learning space which supports	2.6.5 The Role of Learning Environment; 2.7.5.3 ZPD and Scaffolding in language immersion education	Remind the participants about classroom observations.

	the PD program.	children's language learning and holistic development. 5. As the *reflection* exercise for the whole PD programme, the researcher asks each teacher to finish the following sentences: 1) The PD programme made me think…; 2) As the result of the PD programme I am (which)…; 3) As the result of the PD programme I want to change…; 4) As the results of the PD programme I am ready to change The participants write the sentences in their reflection journals. If they wish to, they can share their reflections with the group.	

Appendix R: Sample of Presentation Used in the PD Programme

Varase keelekümbluse pedagoogika aspektid

24.10.23

1

KEELEKÜMBLUSE KOHUSTUSLIKUD ASPEKTID

Swain & Johnson, 1997; Swain& Lapkin, 2005

Sihtkeel on õppekeel (õpetamise vahend);
Keelekümbluse õppekava on samasugune nagu L1 õppekava (põhineb riiklikul õppekaval);
Haridusasutus toetab õppija arengut tema kõikides keeltes;
Põhineb rikastaval kakskeelsusel;
Peamine kontakt õppekeelega toimub rühmas (klassiruumis);

2

KEELEKÜMBLUSE KOHUSTUSLIKUD ASPEKTID

Õppijad alustavad kümbluses sarnase keeleoskuse tasemega (see on piiratud või seda ei ole);

Kõik õpetajad on kakskeelsed;

Rühma-või klassikultuur tunnustab mitmekeelsust (keelte paljusust) ja mitmekultuurilisust.

3

KEELEKÜMBLUSE LEVIK

MIS ON KEELEKÜMBLUS

kümblus vs. keelde uputamine

KEELEKÜMBLUSE EESMÄRGID

keele säilitamine ja ellu äratamine (Iirimaa)
keele staatuse tõstmine (USA)
teise riigikeele õppimine (Soome, Kanada)
riigikeele õppimine (Eesti, endised NSVL vabariigid)

4

KEELEKÜMBLUSE AJALUGU

1920 – Iirimaa keelekümblusprogramm käivitub
1960 - KKK esimesed klassid USAs
1965 – Esimesed KK klassid Kanadas
1987 – Soome alustab keelekümblusega
1998 - Eesti otsustab käivitada keelekümblusprogramm

5

KEELEKÜMBLUS PROGRAMM IIRIMAAL

Riigikeele säilitamise eesmärk
Ainult 1 mudel - täielik kk: kogu õppeprotsess on 100% iiri keeles v.a. inglise keel ainena
Keelekeskkonna loomine

2011. Rahvaloenduse andmetel
Iiri keelt kasutab igapäevaselt 1,77 m in (41,4%) Ja teeb seda väljaspoolt haridussüsteemi 77 185 in (1,8%)

6

KEELEKÜMBLUSP ROGRAMM

väljakutseks on
programmi pakkumine ja levik *post-primary* tasemel
2016.a. andmetel keelekümblust rakendati: 179 primary koolis ja 48 post- primary koolis
vanemate valikud ja hoiakud

7

KEELEKÜMBLUS USAS

Mudelite ja programmide paljusus: 1 kool - 1 programm
90/10 ja 50/50 mudelid
Vähemuste keelte olulisemaks muutmine
Keelte paljusus
Uuringud
Väljakutseks: ühtsete riiklike dokumentide puudumine

8

VIDEOTE ANALÜÜS

https://drive.google.com/file/d/1k7QDWM2DVNHu9R0O8htT3vDNFCeP5ZCh/view?usp=sharing

https://drive.google.com/file/d/1yGeSeWOTkoCtHhHx5H_TuMwYNbBIs7Nj/view?usp=sharing

9

KEELEKÜMBLUS SOOMES

Kümblemine rootsi keelde alates lasteaiast (5-aastased lapsed) kuni põhikooli lõpuni

Lasteaia ja kooli hea koostöö programmi jätkusuutlikkuse nimel

Lasteaia tasemel: keelest mõistmine, äratamine huvi ja positiivse hoiaku keele vastu

10

KEELEKÜMBLUS SOOMES

Kooli tasemel: mitmekeelne mudel

Emakeel + 1.võõrkeel – 1. või 2. klass

võõrkeel - 3. või 4. klass

võõrkeel - 7. või 9. klass

Töö erivajadustega lastega

Uuringud

11

EESTI KEELEKÜMBLUSPROGRAMM

12

HETKESEIS

Võrgustikus on
38 üldhariduskooli (ca 29 rakendavad KK aktiivselt)
ja 70 lasteaeda.

Keelekümblusprogrammi lastevanemate liit

https://keelekymblus.ee/ee/

13

KEELEKÜMBLUSPROGRAMMI EESMÄRGID

Eesti keele (sihtkeele) **funktsionaalne oskus** vastavalt haridusastmele;
emakeele (vene keele) valdamine **eakohasel tasemel**;
areng ja edasijõudmine **vastavalt riiklikule õppekavale**;
eesti ja vene kultuuride mõistmine ning väärtustamine;
mitmekeelsuse tunnustamine.

14

ÕPPETÖÖ

Õppetöö aluseks on

Koolieelse lasteasutuse seadus (EK2 alates 3.eluaastast)
Koolieelse lasteasutuse riiklik õppekava (KK mudelid)
Põhikooli ja gümnaasiumi seadus
Põhikooli riiklik õppekava

15

EESTI KEELEKÜMBLUSPEROGRAMMI AJALUGU

2000 – esimesed ühesuunalise täieliku varajase KK klassid
2003 – esimesed ühesuunalise täieliku varajase KK lasteaiarühmad
2003 – esimesed hilise KK klassid
2008 – esimesed osalise keelekümbluse lasteaiarühmad

16

EESTI KEELEKÜMBLUSPEROGRAMMI AJALUGU

2015 – esimesed kahesuunalise keelekümbluse lasteaiarühmad programmiväliselt (Avatud Kool)

2017 – esimesed kahesuunalise keelekümbluse klassid

2020 – esimene kahesuunalise keelekümbluse klass munitsipaalkoolis (Tapa Vene Põhikool/Tapa Keelekümbluskool)

17

Keel on vahend teadmiste ja oskuste omandamisel – õppetegevuse põhimõtted

Metoodika lähtub LAK-õppe põhimõtetest ja headest pedagoogilistest tavadest:

Ei tõlgita, üks õpetaja – üks keel

Keelt omandatakse loomulikes suhtlusolukordades, õpitav on tähenduslik

80/20 - lapsed on aktiivsed osalised tegevustes ja õppes, oma arengu ja õppimise juhtimisel

Koostöine lõiming ja eesmärgistatus – eesmärgid seatakse sisule/ainele, keelele ja õpioskustele; lõimitakse tegevused, võimed, huvid

Turvaline õpikeskkond: saadakse tuge kaaslastelt, õpetajalt, ümbritsevast keskkonnast

Tugistruktuur – keel on kasutusel: rühmapõhine õpe, suhtlusolukorrad, miimika, rutiintegevused ja nähtavad rääkivad seinad, keelestruktuurid, mudelid, sõnavara, õppevara

Vigu ei ole – edasiliikumine toimub eduelamuse toel

Elulähedus: kontekstikesksus, integreeritus, eakohasus, kasutatavus

...

18

Mis EI OLE keelekümblus?

Keelekümblus ei ole:

Muukeelne laps eestikeelses rühmas/klassis ilma toeta, ilma metoodikata

Eestikeelne aineõpe vene õppekeelega gümnaasiumis, kus ei järgita LAK-õppe põhimõtteid (Eestis ei rakendata keelekümblusprogrammi gümnaasiumiastmes)

Kakskeelne tund (ükskeelsele rühmale/klassile)

Eestikeelne õpetamine venekeelse tõlkega

Lapsevanema suhtlemine lapsega keeles, mis pole lapsevanema emakeel

Läbimõtlemata „keelekümblus“:

Kahjustab lapse keele ja eakohast arengul

Ei garanteeri õppele seatud aine/sisutulemusi

Toetab müütide ja eelarvamuste levimist

19

Keelekümbluse mudelid koolieelses hariduses

Täielik keelekümblus – rühm komplekteeritakse vene kodukeelega **viieaastastest** lastest. Õppe- ja kasvatustegevused viiakse läbi vaid eesti keeles.

Osaline keelekümblus – rühm komplekteeritakse vene kodukeelega **kolme-nelja- aastastest** lastest. Õppe- ja kasvatustegevused toimuvad rühmas nii vene kui ka eesti keeles; rühmas on õpetajatena kahe keele kandjad. Päeva ühes pooles eestikeelse õpetajaga omandatud teadmised-oskused rakendatakse päeva teisespooles venekeelse õpetaja juhitud tegevustes.

Kahesuunaline keelekümblus – rühm komplekteeritakse eesti ja vene kodukeelega **kolme-nelja-aastastest** lastest (mõlemat kodukeelt võrdselt). Õppe- ja kasvatustegevused toimuvad rühmas nii vene kui ka eesti keeles; rühmas on õpetajatena kahe keele kandjad. Päeva ühes pooles eestikeelse õpetajaga omandatud teadmised-oskused rakendatakse päeva teises pooles

20

Appendix S: Sample of Groupwork Task in Estonian

Eesti keele õppija tänases lasteaias

Grupi/paaristöö ülesanne: palun valige endale õppija tüüp ja mõelge läbi tabelis olevad aspektid lähtudes õppijast ja tema vajadustest

Õppija	Õppija kontakt eesti keelega enne rühma tulekut	Õppija peamised vajadused rühmas	Õppija peamised raskused eesti keele õppimisel	Kuidas saab seda õppijat toetada
Vene kodukeelega laps keelekümblusrühmas	Minimaalne, reklaam mobiilis mängu ajal, raadio autos, siseraadio poes, eestikeelsed laulud, multifilmid.	Esitada küsimusi ja saada arusaadavaid vastuseid, aru saada toimuvatest rutiinidest. Laps tunneb huvi eesti keele vastu mängude läbi. Laps mõistab lihtsamaid fraase eesti keeles. Kordab järele lihtsamaid sõnu (sõimerühm).	Ei oska esitada küsimusi, ei saa aru täielikult, Ei ole kõnet üldse. Lapsed suhtlevad ja mängivad omavahel vene keeles, ei ole vajadust rakendada eesti keelt.	Visualiseerimine, holofraasid (tegevuskaardid), Rääkivad seinad Muinasjutud mis on lastele tuttavad, kus on palju kordusi. Mänguline õppimine. Laulud liigutustega Väikesed rühmad, Kindlate rutiinide loomine.

Muukeelne laps keelekümblusrühmas	Mänguväljakud, kino, mängutoad, poed.	Kohanemine keskkonnaga, reageerimine pöördumistele.	Tunne, et ta on üksinda.	Logopeed, visualiseerimine, miimika ja žestide kasutamine, erinevad mängud, juhendatud mängurühma koostamine, leida aega kuulata last lõpuni, anda tagasisidet.
Venekeelne laps eestikeelses rühmas	Mänguväljakud, kino, mängutoad, poed.	Kohanemine keskkonnaga, reageerimine pöördumistele.	Laps peab rohkem pingutama, et teised temast aru saavad. Rohkem stressis – ühtekuuluvus.	Logopeed, visualiseerimine, miimika ja žestide kasutamine, erinevad mängud, juhendatud mängurühma koostamine, leida aega kuulata last lõpuni, anda tagasisidet
Muukeelne laps eestikeelses rühmas	Minimaalne, reklaam mobiilis mängu ajal, raadio autos, siseraadio poes, eestikeelsed laulud, multifilmid.	Ei suuda ennast keeleliselt väljendada, oma soovi. Vajab julgustamist. Puudub turvatunne.	Laps tunneb üksindust- Samad raskused nagu vene kodukeelega lapsel.	Laste hulgast abiline, Vaimne turvalisus_ s.t. laste tasandil rääkimine, kiitmine, naeratus. Õpetada lapsi üksteist kiitma. Suunama lapsi valima

	mängukaaslasi mitte keele järgi.

Appendix T: Sample of Groupwork Task Translated into English

Estonian language learner in today's preschool

Task for group/pair work: please choose the learner type and think of the aspects in the table based on the learner and their needs

Learner	Learner's exposure to Estonian prior to preschool	Learner's primary needs in the classroom	Learner's main challenges in learning Estonian	How the learner can be supported
Russian-speaking child in the language immersion classroom	Minimal; ads in phone while playing a game; radio in the car; shop announcements; Estonian-language songs, cartoons.	Ask questions and receive answers they understand; understand classroom routines. Child gets interested in Estonian through games. Child understands the simplest phrases in Estonian.	Child cannot ask questions or completely understands input. Cannot speak Estonian at all. Children communicate and play in Russian, there is no need to use Estonian.	Visualising; formulaic language (pictures with actions). "Talking walls" (lots of visuals and word tags in the classroom environment). Fairytales that children are familiar with and which contain lots of repetition. Play-based learning. Songs with movement.

		Child repeats the simplest words after the teacher (the nursery classroom).		Fewer children in the classroom. Establishment of routines.
Non-Estonian speaking child (who does not speak Russian) in the language immersion classroom	Playgrounds, cinema, playrooms, shops	Adaptation to the environment, reacting to others addressing them.	Feeling that they are alone.	Speech therapist; visualising; use of body language; different games. Establishment of teacher-guided playtime. Finding time to listen to the child and give them feedback.
Russian-speaking child in the Estonian-medium classroom	Playgrounds, cinema, playrooms, shops	Adaptation to the environment, reacting to others addressing them.	Child needs to make more effort so that others would understand them. Child is in more stress; needs the feeling of belonging.	Speech therapist; visualising; use of body language; different games. Establishment of teacher-guided playtime. Finding time to listen to the child and give them feedback.
Non-Estonian speaking child (who does not speak Russian) in the Estonian-medium classroom	Minimal; ads in phone while playing a game; radio in the car; shop	Child cannot express themselves in Estonian, cannot let others know what they need. Child	Child feels lonely. The same challenges as the Russian-speaking child has.	Assistant from among other children. Providing the child with mental safety, including speaking

announcements; Estonian-language songs, cartoons.	needs encouragement. Child lacks feeling safe.	at the child's level, praise, smile. Teaching children how to praise one another. Encourage children to choose playmates not based on the language they speak.