STOCKHOLM UNIVERSITY
Doctoral thesis
Department of Special Education
Educational pathways and transitions in the early school years

Special educational needs, support provisions and inclusive education

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To Daniel
Abstract

The overall aim of this research is to describe and analyse the educational pathways from preschool to school of a group of children with and without special educational needs. The aim is also to describe and analyse children’s views and experiences of early years education, and how these can be obtained.

The research comprises six studies that are presented in four articles and two conference papers. Longitudinal and multiple-case study designs, and mixed method approaches are adopted in the empirical studies, and the data is collected via observations, a questionnaire, documents, conversations and interviews with staff, children’s drawings and interviews with children.

The results from the empirical studies show a variation of pathways to compulsory education; changes in activities and relationships in the transitions; a variation in preschool quality; a broad conceptualising of special educational needs; an application of comprehensive or specialised typologies in the educational settings; an undecided and cautious attitude toward inclusive education; an allocation of generous resources to specialised and segregated programmes; and a diversity of support provisions. The children report more positive than negative experiences of their early school years and pinpoint the importance of having a sense of belonging among peers; opportunities for creative play and thinking; experiences of speed, excitement and physical challenges; elements of cosiness, withdrawals and comfort for recreation; experiences of growth in knowledge and understanding of the world; feeling safe; feeling free and autonomous; and preventing homesickness in order to thrive.

The results of the literature review are that the researchers may obtain data from children with and without special educational needs by means of traditional and innovative data collection methods. For broadening participation and sharing of views, the researchers may offer relational and material support.

The thesis has relevance for researchers in the field of special education, inclusive education and early childhood education and care. It has also relevance for teacher training, policy makers and stakeholders, school heads, teachers and families.

Keywords: bioecological model; children’s views; disability; drawings; first grade; inclusive education; leisure-time centre; longitudinal; mixed method;
multiple-case study; preschool; preschool-class; special education; support; transitions.
List and abstracts of publications

The thesis is based on the six following texts:


The abstracts were:


   In Sweden, preschool inclusion is embraced and preschools are open for children both with and without special educational needs. The purpose of this study was to examine the characteristics of a number of preschool units in Sweden that provide education and care to children with special educational needs with regard to organisation, resources and quality. The purpose was also to provide reflections on the usefulness of different structured observation rating scales designed to assess preschool quality. Eight preschool units located in four Swedish districts were visited. A total of sixteen 5-year-old children with special educational needs/disability and forty typically developing children of the same age participated. The data sources were structured observation rating scales (Early Childhood Environment Rating Scale, Caregiver Interaction Scale and Inclusive Classroom Profile), ABILITIES Index questionnaire, unstructured observation, interviews, conversations and documents. Two overall typologies of preschool units were identified: the comprehensive units enrolled children with various special educational needs/disability, while the specialised units enrolled children with the same disability. The staff resources were greater in the specialised units. The overall quality in the observed units ranged from low to good. In units educating children with a disability diagnosis, the quality was never low. None of the preschool units was scored as having a good inclusive environment. The structured observation rating scales complemented each other and covered, in part, different quality aspects of the units. The study shows that there is a large variation in quality between the units and that there is a need to further develop the quality of the preschool units and of the services for children with special educational needs in Swedish preschools.


   The purpose of this multiple-case study was to investigate the abilities and needs of children in some comprehensive and specialised preschools adopting some form of inclusive education, and to describe
the provided support that was designed to enhance children’s participation and learning. Fifty-six children and eight preschools located in four municipalities were enrolled. The data was collected via observations, conversations, interviews and a questionnaire. The abilities of the children varied and the need of support among the children ranged from some needs to high and very high needs. Environmental and interpersonal support was integrated into ongoing activities, routines and plays, both in the comprehensive and specialised preschools. In the specialised preschools, one-on-one training and speech therapy, as well as an extended timeframe, were also provided. The descriptions of the preschool practices are related to national and international discussions concerning the topics of inclusive education and support provisions in preschools.


The purpose was to describe and analyse the level of inclusive education from preschool units (N=8) to preschool-classes for children with and without special educational needs. The preschools were visited autumn 2012 to spring 2013 and the preschool-classes were visited spring 2014. After preschool, the number of children having special educational needs increased. The children with special educational needs and a disability diagnosis (SEND) needed more support during educational activities, daily routines (such as getting dressed for outdoor play, personal hygiene and mealtimes) and play, than the children with special educational needs without a disability diagnosis (SEN). Fifty-two (n=3 SEND; n=9 SEN) of the 56 participating children attended fully inclusive preschool units. This means that they participated in the activities, routines and play occurring in their preschool unit. Two children (n=2 SEND) attended a partially inclusive unit. This means that they participated in most of the activities, routines and play occurring, as well as that they were ‘pulled out’ so as to gain speech and language therapy. Two children (n=2 SEND) attended a preschool unit that provided integrated activities. This means that they spent the majority of their time in a small special preschool unit. They were, however, integrated into activities (e.g., outdoor play, gross motor activities, song gatherings)
with children from a regular preschool located next to their unit. After preschool, almost all children started preschool-class. These classes were commonly inclusive, but some were in the form of a segregated programme. Examples of educational pathways from preschool to preschool-class are the following: from full inclusion to full inclusion, from full inclusion to segregated programmes and from integrated activities to a segregated programme. In the transition from preschool to preschool-class only one child experienced an increased level of inclusion.


The purpose of the study was to investigate the educational pathways of a group of children with and without special educational needs from the last year in preschool to 1st grade. Fifty-six children participated and 65 educational settings were visited. A longitudinal and mixed method approach was adopted. Data was collected via observations, conversations, interviews and a questionnaire. Over the early school years, the number of children with special educational needs increased. Their need of support ranged from some needs, to high and to very high needs. The support was integrated into ongoing activities and offered among peers, as well as provided in the form of one-on-one training and therapy, one-on-one conversation and after school training. The settings were comprehensive or specialised in a certain diagnosis, and the application of inclusion ranged from non-existent, to integrated activities and partial and full inclusion. The findings are related to national and international discussions on the topics of inclusive education, support provisions and early childhood educational pathways.


The aim of this review was to locate research in educational settings incorporating responses from children with or without disabilities or special educational needs, and to describe how the research was conducted. The review was guided by a literature review outline and inspired by a thematic analysis. It encompasses 24 empirical articles published between 1983 and 2012 inclusive. The researchers who involved children’s responses in their research obtained the data by
adopting traditional data collection methods such as interviews, observations and questionnaires, and by adopting innovative data collection methods such as visualisations, writing, child-directed tours and informal discussions. The researchers offered special support to children with disabilities or special educational needs which created opportunities for those children to opinion-share. The special support was relational and material such as assistance from an adult or peer, the use of picture symbols and child preferences, and the exclusion of difficult questions. Implications for theory and practice are offered.


A mixed method approach and thematic analysis were adopted in this longitudinal study on children’s views on education. Amongst the 56 participating children, 29 had SEN. Their views were collected using drawings and interviews. The children described likes, dislikes and worries. There were more positive views than negative, with positive views increasing from preschool to school. Eight themes (for example, sense of belonging, creativity and homesickness) that reflected matters of great importance for the children emerged.

The abstracts of studies, with exception from the abstract 3, have been obtained from the publications.

Reprints

Reprints of the publications are made with permission from the publishers.
Abstract

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Abbreviations

AIRCS  ABILITIES Index: Research Composite Score
CIS    Caregiver Interaction Scale
CRC    Convention on the Rights of the Child
CRPD   Convention on the Rights of Persons with Disabilities
CSPID  Compulsory School for Pupils with Intellectual Disabilities
DEC/NAEYC Division for Early Childhood and the National Association for the Education of Young Children
ECERS-R Early Childhood Environment Rating Scale – Revised
ICP    Inclusive Classroom Profile
IEP    Individualised Education Program
OECD   Organisation for Economic Co-operation and Development
PECS   Picture Exchange Communication System®
SEN    Special Educational Needs
SEND   Special Educational Needs and a disability Diagnosis
SNAE   Swedish National Agency for Education
SOU    Statens Offentliga Utredningar
TDC    Typically Developing Children
UN     United Nations
UNESCO United Nations Educational, Scientific and Cultural Organisation
Disposition

This thesis is divided into four chapters:

In chapter one (Introduction and aim) the aim, relevance, delimitations and key concepts of the research are presented. The theoretical frame of the research is also presented in the chapter. In chapter two (Research procedure and participants) the outline of the research and its participants are described. Ethical considerations are also described in the chapter. Chapter three (Results) reminds of the aims, presents the research questions of the studies and presents their results. In the chapter, some children’s educational pathways from the last year in preschool to first grade are also described. Moreover, the conclusions of the empirical studies are provided here. In chapter four (Discussion) the results are discussed. Some limitations of the studies and suggestions for future research are also offered. Further, it encompass a discussion of the relevance of the research and some implications regarding research, policy, practices and families on such matters as support provisions and inclusive education.

The thesis ends with a Swedish summary.
Chapter one: Introduction and aim

Early years education, which in Sweden comprises preschool, preschool-class, leisure-time centre and first grade, carries a great responsibility for children’s development. These should provide to the children opportunities for learning, play, recreation, and prepare them for their further education and active participation in society (Education Act, 2010:800; European Commission, 2014a, 2014b). Great efforts should therefore be made so that these early school years provide the best education possible and make positive contributions in the lives of all children.

In order to accomplish optimal conditions for development in early school years, it is considered important to listen to children and to hear what they have to say about their education. Children are considered experts on their own lives and capable of providing knowledge about matters that have more or less positive influences on them. Children also have the right to be heard in matters affecting their lives and to be taken seriously (United Nations Convention on the Rights of the Child [UN CRC], 1989, art. 12-13; United Nations Convention on the Rights of Persons with Disabilities [UN CRPD], 2006, art. 7).

This PhD research is about the great responsibility of early years education and what the early educational pathways from the last year in preschool to compulsory first grade may mean for a group of children with and without special educational needs in the context of Sweden. It is also about the benefits of incorporating children’s views in educational research, and about data collection methods for gathering children’s views and experiences of early years education.

Aim

The overall aim of this research is to describe and analyse the educational pathways from preschool to school of a group of children with and without special educational needs. Objects of attention are the transitions between early school years, the needs and abilities of children with special educational needs, the support provisions provided to them, the application of inclusive education, and the typology, resources and quality of the educational environments. The aim is also to describe and analyse children’s views and experiences of early years education, and how these can be
obtained. In particular, the focus is on data collections via drawings and interviews, and on the support provisions that are needed to enhance and facilitate the data collection from children with special educational needs. Concerning the children’s views and experiences, the focus is on what their likes and dislikes of early school years are.

Aims of the studies
To meet these overall objectives, six studies were conducted. These six studies had each and one separate aims and research questions that relate to the overall aim.

Aim of study 1
Study 1, regarding characteristics of preschools that provide education and care to children with special educational needs, aimed to describe and discuss the characteristics of a number of Swedish preschool units that are part of a decentralised educational system and that enrol children with special educational needs. In particular, the focus was on organisational typologies, availability of resources and quality aspects. Moreover, the aim was to provide reflections on the usefulness of structured observation rating scales designed to measure preschool quality.

Aim of study 2
As to study 2, concerning special educational needs and support provisions in Swedish preschools, the purpose was to investigate the abilities and needs of children in some comprehensive and specialised preschools in Sweden that adopt some form of inclusive education, describe the support designed to enhance children’s participation and learning that they provide, and examine differences between these types of preschools with regard to support provisions.

Aim of study 3
In study 3, about the transition patterns after inclusive preschool concerning children with and without special educational needs, the purpose was to describe and analyse the pathways in terms of the degree of inclusive education from preschool units to preschool-classes for children with special educational needs and their typically developing peers.

Aim of study 4
The aim of study 4, on the subject of educational pathways from preschool to school, was to investigate the educational pathways of a group of children with and without special educational needs from the last year of preschool inclusive education to school first grade in several Swedish municipalities.
Aim of study 5
In the literature review, study 5, the objective was to locate research on educational settings incorporating responses from children with or without disabilities or special educational needs, and to describe how the research was conducted.

Aim of study 6
Study 6, about children’s views and experiences of early years education, aimed to describe and analyse several children’s views on and experiences with their early school years with the intention to enrich the knowledge and understandings of early years education, ensuring the rights of children to be heard and enable the improvements of policy and practice consistent with children’s concerns.

An intertwining of studies
In order to enhance the knowledge and understanding of the early years education investigated, and of the children enrolled, the results from the empirical studies (1, 2, 3 and 4) in this thesis are intertwined.

The relevance and motives for these aims and attentions are presented in the following section.

Rationale
In Sweden there is limited knowledge about the educational pathways of children with and without special educational needs from the last year in preschool to compulsory first grade on such matters as transitions, special educational needs, support provisions, inclusive education and children’s views.

A similar outlook has been presented by others. Eilard (2010) reported that several features of early years education in Sweden has been paid attention to in research, but that studies on the topic are often small, fragmented and unable to provide a comprehensive picture. Wilder (Mälardalen University, “Barn med utvecklingsstörning: från förskola till särskola,” para. 2, author’s translation) wrote that there is “no documented research on children’s transition from preschool to the compulsory school for children with intellectual disabilities” in Sweden. Lutz (2009) informed that inclusive oriented research is seldom concerned with how present educational settings can be changed in order to meet a diversity of children. The lack of Swedish special education longitudinal research can be seen as problematic since such research may have relevance for policy-makers, head
teachers, teachers and parents. Swedish policy-makers can be provided descriptions of how national policy documents formulated are interpreted at a local level in some municipalities and schools, and what type of education settings these have generated. Those working within early years education in Sweden can be provided descriptions that inform their discussions and expand their knowledge and understanding on such matters as transitions, special educational needs, support provisions, inclusive education and children’s views. The knowledge on methods that may be used when children’s views and experiences are sought can be increased. Parents can be provided descriptions that may enable them to make informed choices for their children’s education. In an international perspective, research about early years education can form a basis for interesting comparisons with other countries that might enable mutual learning on the topic of support provisions, which is considered important and needed in Europe (European Commission, 2013).

In Sweden, there is limited knowledge on how the children with and without special educational needs view their early years education, if there are differences between the two groups and if their opinion changes over their early school years. There appears to be some longitudinal description of early years education as these are seen from the perspectives of children in Sweden (Ackesjö, 2014; Lago, 2014; Sandberg, 2012). One of these (Sandberg, 2012) states a connection to the field of special education. There are also few descriptions on how the views of all young children can be gathered in longitudinal studies. This does not seem to be an optimal situation when efforts to form the best education possible are to be made and positive contributions in the lives of all children are sought for. The children’s descriptions about their education can enhance and facilitate adults understanding of everyday lives in education (Qvarsell, 2001). Children can be considered as experts in their own lives and have many important things to tell about their everyday lives in education (Clark, McQuail, & Moss, 2003; Clark & Moss, 2011). This study will contribute to the field of early years education by being explicit about how early years education are viewed and experienced by children with and without special educational needs.

The limited amount of research on the topic of educational pathways and of children’s views and experiences on early years education are not the only motives for conducting this research, however. I will provide three additional reasons: First, it is worth studying inclusive education and to provide descriptions, insights and implications on this topic since inclusive education is recommended, sought for in many countries and considered beneficial for children (UN CRPD, 2006; United Nations Educational, Scientific and Cultural Organisation [UNESCO], 2009; Odom et al., 2004). It is also related to challenges for teachers such as to implement an effective inclusive education and choose teaching methods that fit all, and that
increase children’s participation and learning (Mitchell, 2010, 2014a; Nilholm & Göransson, 2013). Second, it is worth studying early school years and to provide descriptions, insights and implication on this topic, since the Swedish education system presently faces several challenges. There is a decline in the academic performance of 15-year-old pupils, as measured by the Programme for International Student Assessment\(^1\), that needs to be dealt with (Organisation for Economic Co-operation and Development [OECD], 2015). Although the link between the decline in skills of 15-year-old pupils and the characteristics of early years education cannot be demonstrated, the efforts to improve a school system of course need to take into account circumstances in the early years. It can be argued that a decline in skills in the latter school years need to be prevented by means of increased quality in early years education. Preschool quality and early interventions are of great importance for child development (Sylva, 2010; Taguma, Litjens, & Makowiecki, 2013). Third and finally, worth mentioning as a rationale of this research is also the increased foci on early interventions and teacher training in special education in Sweden (Government Offices of Sweden, 2015, “Rätt stöd till varje elev,” para. 1-12). It can be assumed that research on educational pathways of children with and without special educational needs can have relevance in teacher training, special teacher training [speciallärarutbildning, in Swedish] and special educator training [specialpedagogutbildning, in Swedish] since it may provide examples of organisations and support provisions that are presently implemented in practice.

Before continuing with a description of the key concepts of the research, I will shortly provide motives for the wide range of aspects that are targeted in this research. Children’s educational pathways are in fact encompassing several aspects that are interplaying with each other and that are not easily being studied in isolation. It is, for example, likely that the needs of a child, the organisational typology of a setting and the availability of resources would influence what kind of support provisions a child is provided. Hence, to not consider variables such as needs, organisational typologies and resources in a study on support provisions could risk making its descriptions and analyses on support fragmented and decontextualised.

**Delimitations**

Several aspects of early years education are not investigated nor analysed in this thesis. Some examples are the acts of transitions, the bureaucratic processes preceding a decision of alternative schooling, the pedagogical

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\(^1\) The Programme for International Student Assessment (PISA) is an international survey. It is designed to evaluate education systems worldwide in the subjects reading, mathematics and science.
documentations, the children’s views and experiences of pedagogical documentation, the general teaching strategies taken on and the children’s health related perceptions of quality of life. Data on some of these aspects has been collected, but it is not reported in this thesis, mainly due to the timeframe of this PhD programme. Another delimitation is that the research does not provide an evaluation of the effects and outcomes of the forms of transitions, organisation, support provisions, inclusive education and segregated programmes adopted.

Key concepts and contextualisation

In this section, the key concepts of educational pathways, transitions, special educational needs, support provisions and inclusive education are defined and contextualised. The section demonstrates what meaning the concepts are given and also demonstrates how these can be related to previous research, the Swedish Education Act, the national curriculums for preschool, preschool-class, leisure-time centre and first grade, and international policies such as the United Nation’s Conventions.

Early educational pathways in Sweden and transitions

The concept of educational pathways refers to children’s education and care over time (Hanson et al., 2001) such as their educational pathways from the last year in preschool to preschool-class, leisure-time centre and first grade.

On their way to first grade, children commonly experience two main transitions in Sweden (Education Act, 2010:800). In this research the concept of transitions, first and foremost, refers to a move from one education setting to another. In the first main transition, children transfer from preschool to preschool-class and leisure-time centre. The second main transition encompasses a transfer from preschool-class to mandatory first grade, but usually do not encompass a change in a leisure-time centre programme since children go to the same leisure-time centres after preschool-class and first grade. It is, however, possible to transit directly from preschool to school and to start school early at the age of six (Education Act, 2010:800). Lago (2014) reported that children commonly move from preschool-class to first grade in Sweden, but that other pathways and transitions exist. According to Lago, not all children attend preschool-class, for example.

Transitions imply changes in activities such as educational activities and routines, changes in relationships such as meeting new teachers, changes in roles such as becoming a student (Bronfenbrenner, 1979) and changes in physical location of education and care (Ackesjö, 2014). Such changes influence children’s development (Bronfenbrenner, 1979) and identity
(Ackesjö, 2014), and can be understood as critical events for children (Ekström, Garpelin, & Kallberg, 2008), as social processes and as crossing borders (Ackesjö, 2013). According to Ackesjö (2014), children can have both positive and negative experiences of early school years and transition: Positive experiences are changes in physical spaces and negative experiences are social discontinuities such as losing peers in transitions.

**Preschools in the context of Sweden**

In Sweden, preschool [förskola, in Swedish] is the first step of the education system and a legal entitlement for all children (Education Act, 2010:800; Swedish National Agency for Education [SNAE], 2011a). Approximately 83% of all one to five years old in Sweden (480.000 children) attend preschool when their parents are working or studying (SNAE, 2013a). The preschools are attended by typically developing children (also defined as children without special educational needs in this thesis) as well as by children with special educational needs. The children with special educational needs may or may not have a disability diagnosis such as intellectual disability, autism, language disorder, hearing impairment or Down syndrome. In preschool, all children should be prepared for school, be cared for, be provided with opportunities for learning social and academic skills and be offered ample opportunities for free play (SNAE, 2011a). In the Swedish preschools, much attention is given to free play, both indoors and outdoors.

In 1996 the responsible ministry for preschools was relocated from the Ministry of Health to Ministry of Education and Science (SNAE, 2008). In 1998, preschools received their first national legally binding Curriculum outlining the fundamental values and tasks of preschools (Department of education, 1998a), and in 2010, this national Curriculum for the preschool was revised in an effort to reinforce the educational mission (SNAE, 2011a). The staff in preschools should expand the children’s opportunities to learn about the subjects of science, technology, mathematics, language and communication in preschool. In Sweden, children attending preschool are not to be rated or graded, however. Instead it is the work of preschool staff and the conditions for learning and development that ought to be evaluated, although the learning and development of the children should be followed (SNAE, 2011a). Inspections of preschools during 2011 and 2012 established that preschools were not sufficiently focused on their educational mission and that improvements were needed (Swedish Schools Inspectorate, 2011, 2012).

At the same time that the educational missions of preschools are reinforced, the number of children in preschool units is reported to be increasing (Pramling Samuelsson, Williams, & Sheridan, 2015). According to Pramling Samuelsson, Williams, and Sheridan, this could be seen as problematic. Staff-child ratios (number of staff members to children in a
unit) and the number of children in a group namely influence the teachers’ possibilities to conduct activities and reach the curriculum goals.

*Preschool-classes in the context of Sweden*

Preschool-class [förskoleklass, in Swedish] is the second step in the Swedish education system and a separate school form (Education Act, 2010:800; SNAE, 2011b). Children start preschool-class in the autumn of the year they turn six. It is one year long, offered in the mornings for circa three hours per day and often located next to or within a school building. Approximately nine out of ten children (95%, 107,600) go to preschool-class (SNAE, 2013a) to learn certain values, and for education, care and play, and a preparation for school and active participation in society (SNAE, 2011b). The children themselves can view beginning preschool-class as their school start (Sandberg, 2012), and can also view it as an in-between class between preschool and first grade (Lago, 2014). In Sweden, children attending preschool-class are not to be rated or graded.

*Compulsory schools and the first grade in the context of Sweden*

First grade [årskurs ett, in Swedish] is the third step in the education system, but the first step that is compulsory (SNAE, 2011b). Children start first grade in the autumn of the year they turn seven. Circa 900,000 children go to school in Sweden (SNAE, 2013a). In school, children should be provided with values. Examples of such values are the “inviolability of human life, individual freedom and integrity, the equal value of all people, equality between women and men, and solidarity with the weak and vulnerable” (2011b, p. 9). These values are also central for preschools, preschool-classes and leisure-time centres. In school, the children should also be provided opportunities for learning and knowledge in several subjects such as art, English, home and consumer studies, physical education and health, mathematics, modern languages, music, biology, physics, chemistry, geography, history, religion, civics, crafts, Swedish, Swedish as a second language, and technology. However, not all of these subjects are in focus during first grade. Children in first grade are not to be rated or graded. In Sweden, the first grading is done in sixth grade (Education Act, 2010:800). Moreover, they shall also be prepared for a future education and active participation in society.

In Sweden, there are alternative education arrangements for children with intellectual disabilities. These are termed “Compulsory Schools for Pupils with Intellectual Disabilities” (CSPID, SNAE, 2011c) [grundsärskola, in Swedish] and should provide values, knowledge in subjects, social togetherness and preparation for a future education and participation in society. There also exists an orientation within the CSPID that is called “Compulsory school for pupils with intellectual disabilities with a training school orientation” [grundsärskola med inriktning träningsskola, in
Swedish]. This school form is in this thesis entitled *training school*. A training school is intended for “pupils who cannot benefit from all or part of the education in specific subjects. Instead of the separate subjects, the training school has five subject areas” (SNAE, 2014, “How is compulsory school for,” para. 2). These areas are aesthetic activities, communication, motor skills, everyday activities and perception of reality. Berthén (2007) has described similarities and differences between these two school forms. One similarity described was the organisation and structuring of the classroom work, and one difference was the foci of staff. In the training school class the staff was predominately focused on preparing children for their daily life, whereas in the other class the staff was predominately focused on preparing children for school and education. Training school classes have also been investigated by Östlund (2012). Östlund reported that the pedagogical practice in a training school encompasses circle time, one-to-one tuition, group joint education, snack time/lunch, breaks and playtime, and transitions. He also reported that children with intellectual disabilities in these kinds of classes often have few opportunities to create relationships with peers without disabilities. This could have a negative impact on their socialisation and identity formation (Östlund, 2012). It is possible for a child registered in an alternative education arrangement to attend a regular school class if the responsible authorities, head-teachers and parents agree on this (SNAE, 2013b). Approximately 1% (9.600 out of the 900.000) of the school children in Sweden are registered in an alternative education (SNAE, 2013a), and in first grade just as many children attend a CSPID as a training school (SNAE, 2015, “Statistik om grundsärskolan,” para. 2-3). Twenty percent of the children in the CSPID (excluding the pupils in training schools) are attending a regular class for at least half of their education time (SNAE, 2015, “Statistik om grundsärskolan,” para. 4).

In Sweden, there are also special schools [specialskolor, in Swedish] for a group of children who cannot attend regular schools or schools for the children with learning disabilities (Education Act, 2010:800; SNAE, 2011d). There are about 500 pupils enrolled in the special schools (SNAE, 2015, “Statistik om specialskolan,” para. 2) and they may be deaf or hearing impaired, deaf-blind, have profound language disorders, or a visual impairment and additional disabilities.

*Leisure-time centre in the context of Sweden*

Since preschool-class and first grade do not cater for children in the afternoons, when parents work or study, children go to leisure-time centres [fritidshem, in Swedish]. These centres are part of the Swedish education system, but are not compulsory (Department of Education, 1998b). One task of these settings is to complement the preschool-class and school, that is to say, stimulating children’s learning and development. One more task is to offer children a meaningful recreation and leisure time (Education Act,
Leisure-time centres have been described as fields for socialisation and informal learning, in which the children place high value in friendships and play (Johansson & Ljusberg, 2004). The alternative schools encompass leisure-time centres. Consequently, there are not only alternative schools in Sweden, but, in addition, alternative leisure-time centres.

An overview of the Swedish early school years is provided in Figure 1.

![Figure 1. An overview of early school years in the context of Sweden.](image)

**A decentralised education system**

The education system of Sweden has been decentralised since 1990 after many years of centralisation (Education Act, 2010:800; Lindensjö & Lundgren, 2014). This means that it has national values and goals for education, but that the municipalities, head teachers, teachers and other staff members of preschools, preschool-classes, leisure-time centres and first grades are expected to decide how the education and care of children is to be conducted (Education Act, 2010:800; SNAE, 2011a, 2011b, 2011c, 2011d). They are thus responsible for the realisation of values and goals formulated at a national level and ensuring that all children are provided good opportunities for learning. A motive that was presented when the decentralisation was introduced was that decisions on how to educate and care for children should be taken closer to the children by those who know them and who understand their individual needs (Granström, 2011). As a result of the decentralisation, a variation is likely to occur with regard to transitions, support provisions, inclusive education and organisation of early years education. Also, the allocation of resources such as the number of staff or teachers to children, as well as the number of children in classes, are decided at a local level in municipalities and among responsible authorities, and for that reason a variation may also occur in this regard. However, the Education Act (2010:800) states that all education ought to be equally good and evidence based.
Special educational needs

The concept of children with special educational needs is commonly adopted internationally in the field of early years education (see for example European Commission, 2013) and is also adopted here.

In this research, the concept of children with special educational needs refers to the children who are struggling in preschool, preschool-class, leisure-time centres and first grade, and who need additional help and attention to be able to participate and learn. Some of them may have received a disability diagnosis (e.g., autism, Down syndrome or language disorder), and others may have not. Such an understanding of the concept of special educational needs is not new, and a similar outlook is present among several other researchers. One example is Sandall and her colleagues (Sandall et al., 2008). They wrote:

The term children with disabilities and other special needs refers to children who are eligible for special education services and who have individualized education programs (IEPs). It also refers to children who, for a variety of reasons, are struggling in the classroom and need additional help or attention from their teachers. (p. 4)

In some cases in this research, the abbreviation SEN is used for children with Special Educational Needs and the abbreviation SEND is used for children with Special Educational Needs with a disability Diagnosis. The expression Typically Developing Children is, in some cases, used as a synonym for children without special educational needs and abbreviated TDC.

In Sweden, it is common to adopt the expression children in need of special support, children in need of adoptions and special support or the expression children in difficult situations when referring to children who struggle in education and who are in need of additional help and attention (Education Act, 2010:800; Sandberg, Norling, & Lillvist, 2009; Sandberg, Lillvist, Eriksson, Björk-Åkesson, & Granlund, 2010). It is also common to adopt expressions such as children with intellectual disabilities and children with learning disabilities when referring to children with special educational needs in alternative school forms, and expressions such as students in special teaching groups, pupils who do not reach the goals in school and students with an action plan when referring to children with special educational needs in regular school forms (Education Act, 2010:800; SNAE, 2011c).

Internationally, expressions such as learners with disabilities (European Agency for Development in Special Needs Education [European Agency], 2013), disadvantaged children, children with difficulties and children with disabilities (OECD, 2007) are also used. Some other expressions are students with extreme behaviour needs (Ministry of education, New Zealand, 2015, “Students with special education needs,” para. 4), students with high
and very high needs (Ministry of education, New Zealand, 2015, “Definitions of very high and high needs for ORS,” para. 3), children with high levels of SEND (Hornby, 2015) and children with low or high incidence disabilities in schools (Rix, Sheehy, Fletcher-Campbell, Crisp, & Harper, 2013). These last mentioned expressions make known that special educational needs can range from low to high, from mild to severe as well as be more or less common in the general population.

One reason for preferring expressions such as children in need of special support instead of learners with disabilities and children with special educational needs, is to underpin the role of relational and contextual aspects in the occurrence and handling of needs (Emanuelsson, Persson, & Rosenqvist, 2001; European Agency, 2013; Nilholm, Almqvist, Göransson, & Lindqvist, 2013). For many years in Sweden, the role of environment has been given a key role when it comes to the occurrence and handling of special educational needs. This has not been without debate, however (Malmqvist, 2015). For example, criticism towards this approach to special educational needs has been expressed in an Official Report of Swedish Government [Statens Offentliga Utredningar, SOU, in Swedish] (Malmqvist, 2015; SOU, 2008:109). It stated that characteristics of children and their need of attention and treatments have not been sufficiently recognised in the Swedish school system: “Pupils with difficulties have to have qualified help here and now, and cannot wait for reforms that can take a decennium to implement” (SOU, 2008:109, p. 208, author’s translation).

The motive for adopting the concept of children with special educational needs, in this research and its related studies and articles, is that it is commonly used internationally. This choice is not to be understood as criticism of the concepts of children in need of special support and children in difficult situations, or a repudiation of relational and contextual aspects in the occurrence and handling of struggles and needs. In this research, biological, relational as well as contextual aspects are in fact all considered to play a role, but the use of an internationally recognised formulation was considered advantageous when publishing in international scientific journals.

The European Commission (2012) has estimated that 15 million children have special educational needs in Europe. In a study, in which the data was collected via a preschool-teacher survey involving almost 500 Swedish preschool units located in two Swedish counties, it was estimated that around 17% of children aged one to five years old were in need of special support (Lillvist & Granlund, 2010). A longitudinal investigation of Swedish school children (N=17000) born in 1982 and 1987, respectively (Giota & Lundberg, 2007), estimated that at least 40% of the children were in need of support provisions at some point in school. These are relatively high figures and suggest that the provision of support is likely to be an undertaking for many teachers.
Support provisions

In Swedish early years education, children with special educational needs have a right to receive support provisions (Education Act, 2010:800), that is, additional help and attention designed to enhance participation and facilitate learning in educational activities, routines and play. Some examples of support provisions are additional instructions, one-on-one aids and training with a special educator in reading and mathematics.

Participation is about being present in an education setting as well as about interactions, joint activities and engagement. Such aspects, in particular that of engagement, are considered essential for a child’s learning and development (Bronfenbrenner, 1979), and has been an interest of several Swedish special education researchers (Castro, Granlund, & Almqvist, 2015; Sjöman, Granlund, & Almqvist, in press). Learning is about psychological processes that can be influenced by proximal activities, routines and play (group or solitary) at home, at school or during leisure time (Bronfenbrenner, 1979). These understandings of participation and learning are espoused in the research, and it is assumed that participation and learning makes possible the intellectual, social, emotional, moral and motor skill development of children. Participation, learning and development are therefore seen as linked. This means that support provisions can not only enhance participation and facilitate learning in educational activities, routines and play, but can in addition make possible children’s development.

Development is, in the research, defined as a lasting change and a phenomenon. This is in line with the ideas of Bronfenbrenner (1979, 2001). According to Bronfenbrenner, development can be described “as a lasting change in the way in which a person perceives and deals with his environment” (1979, p. 3) and as “the phenomenon of continuity and change in the biopsychological characteristics of human beings both as individuals and as groups. The phenomenon extends over the life course across successive generations and through historical time, both past and present” (Bronfenbrenner, 2001, p. 3).

Researchers (Sandall et al., 2008; Sandall, Schwartz, & Joseph, 2001; Soukakou, 2012) on the topic of support provisions and inclusive education have reported that support provisions for children who struggle in education are crucial. A lack of support may risk creating circumstances where children cannot participate and learn, and thereby not benefit optimally from their education. The importance of support provisions in inclusive practices is also stressed in international conventions. For example, the UN CRPD (2006) states that persons with disabilities should “receive the support required, within the general educational system, to facilitate their effective education” (art. 24 2d). The provision of support is likewise considered crucial in non-inclusive educational arrangements (Education Act, 2010:800).
The official national definition of *special support*, the term that often refers to support provisions in Sweden, has changed during the period in which this study was conducted.

In the year 2014, a revision of the Swedish Education Act concerning support provisions in schools was conducted (Education Act, 2010:800; Swedish National Agency for Education [SNAE], 2014a, 2014b). In short, the revision concluded that support provisions for pupils should be divided into extra adaptations [stöd i form av extra anpassningar, in Swedish], intense extra adaptations [stöd i form av intensifierade extra anpassningar, in Swedish] and special support [särskilt stöd, in Swedish]. Extra adaptations refer to support provisions that are provided within the classroom. For example, a child can be supported via extra instructions and technical tools. Intense extra adaptations refer to deeper and more intensely embedded support provisions that are provided within the classroom. For example, a child can be supported via several extra instructions and a number of tools. If the child is not being sufficiently supported in order to reach the academic goals by means of additional adaptations and intense extra adaptations, or show other needs, the school head should be informed (Education Act, 2010:800). The school head should than ensure that the child’s need of special support is considered, with support from the school Health Services. Special support refers to support provisions that may imply the involvement of other teachers and may take place outside of the regular classroom. One example of special support is training with a special teacher/educator in reading and mathematics. When special support is considered needed, an action plan [åtgärdsprogram, in Swedish] should be written with information concerning the support and the responsible persons. Special support can be provided in a smaller group of children [särskild undervisningsgrupp, in Swedish] and can also take the form of modified schooling [anpassad studiegång, in Swedish]. Before the July 1, 2014 the concept of special support was not grouped into extra adaptations, intense extra adaptations and special support, however (Education Act, 2010:800; SNAE, 2014a, 2014b), and instead the concept of special support was used for all types of support services. This revision of the concept of support is related to support in compulsory schools.

In research, efforts have also been made to describe the support provided to children in need of support in Swedish preschools. The support provisions offered in Swedish preschools have been described as direct and indirect (Sandberg, Norling, & Lillvist, 2009). Examples of direct support are support for motor development, man-to-man marking and praise from a staff member given directly to a child, whereas examples of indirect support are support from peers and physical environments.
**Multi-tiered system of support and the Building Blocks framework**

The revision made of support provisions at a macrosystem level in the context of Sweden can be seen as following an approach that is internationally called multi-tiered system of support and Building Blocks.

A multi-tiered system of support, and other similar notions such as a tiered approach, a tiered framework and Response To Intervention (Bender & Shores, 2007; Brown-Chidsey & Steege, 2010; RTI Action Network, 2015, “What is RTI,” para. 1), may be illustrated with a pyramid graphic divided into three sections. Tier 1, that is to say the foundation of the pyramid, represents the high-quality instruction of all children in classrooms that is provided by qualified staff. Tier 1 comprises an ongoing screening of children to identify struggling learners and the provision of support to those children within their classrooms among peers. When the children do not show adequate progress in tier 1, tier 2 is introduced. Tier 2 consists of targeted supplementary instructions that some of the children may need (approximately 15%) in addition to the instructions offered in their classrooms (Brown-Chidsey & Steege, 2010). Tier 2 instructions can be provided in small groups, and for a shorter or longer period of time, but this seldom exceeds a grading period. The children who do not show adequate progress in tier 1 and tier 2 are then provided tier 3. Tier 3 represents individualised and intensive instructions that approximately 5% of the children are estimated to need (Bender & Shores, 2007; Brown-Chidsey & Steege, 2010; RTI Action Network, 2015, “What is RTI,” para. 1-9). These intensive instructions may be of longer duration than the provisions of tier 2. In a multi-tiered system of support, the instructions and provisions can also be referred to as interventions.

There is a didactical multi-tiered system of support for preschool that is called Building Blocks. It is explicitly focused on early years education and inclusive education. Sandall, Schwartz, and Joseph (2001) have developed this didactic framework on preschool inclusion that is building on scientific evidence and educational practice. Building Blocks is “a set of educational practices designed to help teachers do a more effective job of including young children with disabilities and other special needs in preschool classrooms” (Sandall et al., 2008, p. 3). The didactical framework is illustrated with a block building tower in which each block represents a key component of preschool inclusion (Figure 2).
Explicit, child-focused instructional strategies

Embedded learning opportunities

Curriculum modifications and adaptations

High-quality early childhood program

Figure 2. The Building Blocks framework (Sandall et al., 2008, p. 12)

Its foundation, a high-quality preschool classroom, is considered important for all children in the classroom. Above this base, several levels of support can be required for the children with special educational needs. The curriculum modifications and adaptations are predominately focused on enhancing child participation in preschool activities, routines and play. Some examples of curriculum modifications and adaptations are change in the physical environment, special equipment, adult support, peer support and activity simplifications. The embedded learning opportunities are designed to give a child the opportunity to learn skills among peers within the preschool classroom such as training pronunciations in circle times together with peers. The child-focused instructional strategies are provided when more extensive instruction is needed. These are more intense and systematic than the curriculum modifications and adaptations, and the embedded learning opportunities. Some examples of child-focused instructional strategies are training of skills such as imitation and communication strategies. In the Building Blocks framework it is stressed that two additional key components are needed so as to create and maintain an effective preschool classroom. First, a careful ongoing monitoring of individual children’s progress is required to make plans for and evaluations of learning and education. Second, collaboration with different expertise is needed to make the preschool inclusion successful.

These multi-tiered support systems imply that both general efforts such as a high quality of education and qualified staff, as well as specific efforts such as explicit, child-focused instructional strategies and tier 3 instructions may be needed (Bender & Shores, 2007; Brown-Chidsey & Steege, 2010; RTI Action Network, 2015, “What is RTI,” para. 1-9; Sandall et al., 2008). Hence, it seems insufficient to ensure either good general quality or individual support. Instead, both are essential for providing an effective and meaningful education for children that need support in order to take advantage of their education.
Inclusive education

In this thesis, inclusive education encompasses both philosophical and practical aspects related to education and care. In a philosophical sense, inclusive education refers to a welcoming educational system, justice in school, every child’s right to education and an appreciation of diversity in classrooms during education and care (Booth & Ainscow, 2002; Division for Early Childhood and the National Association for the Education of Young Children [DEC/NAEYC], 2009; Salamanca Statement, UNESCO, 1994; UN CRPD, 2006). In a welcoming education system, all children have access to education and are also made to feel welcome, treated with respect and equally valued. Justice in school is about setting high expectations for all children, removing barriers that hinder participation and learning, a fair distribution of resources, provision of support, and planning the teaching so that it fits all children. Appreciation of diversity and mixed-ability groups during education and care means that the differences among children are seen as a resource for child development and something that enriches their education and care. Hence, differences are not understood as problems, and are instead seen as opportunities that should be utilised. Inclusive education also implies, in a more direct and practical manner, the participation and learning of children with and without special educational needs in the same educational activities, routines and play and ensuring that children with special educational needs are being adequately supported in these activities, routines and play in order to learn, reach their full potential, have a sense of belonging and gain friendships (DEC/NAEYC, 2009; Sandall et al., 2008; Soucacou/Soukakou, 2007, 2012). Inclusive education is therefore in this sense a multifaceted concept.

The application of inclusive education is presently on the agenda of several countries (European Commission, 2013; European Network on Inclusive education & Disability, 2014; European Parliament, 2015). Inclusive education is namely reported to be important since it can promote social justice and the formation of a welcoming society, as well as hold back discrimination (European Parliament, 2015; Salamanca Statement, UNESCO, 1994; UN CRPD, 2006; UNESCO, 2009). It is also considered important since it may impact positively on children’s social and academic development (Odom et al., 2004; Thomas & Vaughan, 2004). Odom et al. (2004) reported: “Positive developmental and behavioral outcomes occur for children with and without disabilities in inclusive settings, although as a group, children with disabilities are not as socially integrated as their typically developing peers” (p. 17).

In order to realise an inclusive education where both the children with and without special educational needs, develop, learn and thrive, it is considered important that these settings have adequate resources (Mitchell, 2005, 2014b). However, research (Allodi Westling, 2002a; Allodi Westling &...
Fischbein, 2000) on the Swedish education system has identified a tendency to ignore the group heterogeneity and the varied needs of children in regular settings and consequently to allocate only standard resources there. The ignoring of needs and the lack of resources can give rise to processes of marginalisation that eventually make placements into segregated programmes to appear necessary in order to protect the more vulnerable children (Allodi Westling, 2002a; Allodi Westling & Fischbein, 2000).

In order to realise an inclusive education where both the children with and without special educational needs, develop, learn and thrive, it is also considered important that staff are supported by special teachers and educators (European Agency, 2009). Moreover, the staff should have positive attitudes towards inclusive education, plan for diversity, meet other staff for an exchange of experiences and have opportunities for professional development by way of in-service training and consulting (European Agency, 2009; European Commission, 2013; OECD, 2003). Thus, the lack of such features could obstruct the implementation of an effective inclusive education. The European Agency (2009, p. 17) stated: “For teachers to work effectively in inclusive settings, they need to have the appropriate values and attitudes, skills and competences, knowledge and understanding”.

Additionally, the making and application of the Individualised Education Program (IEP) is reported to play a role for a successful inclusion in several international contexts (Sandall et al., 2008; Soukakou, 2012). In short, an IEP is a document that commonly encompass descriptions of a child’s educational performances, his/her present objectives and yearly goals, his/her need of support provisions and the expected duration of the same, as well as the agreements concerning how the child’s progress ought to be measured. In Sweden, the IEPs for children with special educational needs are not required in preschool, but action plans [åtgärdsprogram, in Swedish] are contemplated in school (Education Act, 2010:800).

Among the requirements of inclusion, it is considered essential that national legislations state inclusion as a goal (European Agency, 2009).

**Responsible inclusion**

Mitchell (2014b) has presented a formula for inclusive education in which inclusive education is considered in relation to placement, vision, adapted curriculum, adapted assessments, adapted teaching, acceptance, access, support, resources and leadership. He views inclusive education as a multifaceted concept and explains that a responsible inclusion can occur if legalisations, regulations and policy express a vision for inclusive education; educators at all levels of an education system are committed to inclusive education; and learners with special educational needs attend age-appropriate classes and go to their neighbourhood school. Responsible inclusion also requires, according to Mitchell (2014b) that teachers are supported by a team of professionals such as therapists, psychologists, social
workers, teacher aids and assistant teachers; that adequate resources such as equipment and staffing are provided; and that leadership are committed to inclusive education and that they accept and celebrate diversity. Moreover, Mitchell talks about the 5As as important features for a responsible inclusion: adapted curriculum, adapted assessments, adapted teaching, acceptance and access. (1) Curriculum needs be adapted so that it suits all learners, (2) assessments need to be adapted so that these can take account of all learners and their individual education plans, (3) teaching needs to be adapted to the needs of a class and individual learners, (4) the right to inclusive education needs to be accepted and (5) access to classrooms must be ensured by means of, for example, ramps, lifts, adapted toilets, wide doorways and adequate arrangement of furniture, temperature and acoustics. Mitchell refers to an education system that has a vision but lack placement, support, resources, committed leadership, adapted curriculum, adapted assessments, adapted teaching, acceptance and access, as a system with good intentions but no action. A system with vision and placement, but no other characteristics, is referred to as a system with irresponsible inclusion and a system with vision, placement and support, but no other characteristics, as a limited commitment. A rudderless inclusion occurs when vision, placement, support and resources are in place, but when leadership and the 5As are missing. If all the features of the formula are in place, with exception of the 5As, he talks about an inclusive education that is blocked at the classroom. An overview of this multifaceted view of inclusive education is presented in Table 1.
Table 1. The formula for inclusive education and the notion of responsible inclusion (Mitchell, 2014b, n.p.).

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<th>Features of the formula</th>
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<th>Index for inclusion</th>
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<td>Booth and Ainscow (2002) have developed the Index for inclusion that aims to support the developments of inclusive school cultures, policies and practices. In the Index for inclusion, inclusion is about the following: building inclusive communities in which everyone “is made to feel welcome” (p. 39); establishing inclusive values, which means to have high expectations of all pupils and to equally value all; producing schools for all in which staff are supported and the promotions are fair. In the Index, inclusion is also about organising support for diversity and making sure that special educational needs “policies are inclusion policies” (p. 40), that teaching is planned with all the learners in mind, that lessons “develop an understanding of difference” (p. 41), that differences are seen as resources, that expertise is used and that resources are allocated so that these support inclusion. Once again inclusive education comes forward as a multifaceted concept.</td>
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**Inclusive education in the context of Sweden**

Sweden has ratified both the UN CRPD (2006) and the Salamanca Statement (UNESCO, 1994; Svenska Unescorådet, 2006), which embraces inclusive education, and is also a member of the European Agency that promotes inclusive education. Nevertheless, as was pointed out in the paragraph concerning educational pathways, the Swedish education system and its school policies suggest special groups and alternative educational arrangements for a regular school for children with intellectual disabilities.
The preschool policy differs from that of the school policy since it does not encompass a special alternative to regular preschool services. The preschool policy does not make explicit use of the term inclusive education, however. Concepts such as a right to education, right to support and accessibility seem to be preferred instead of that of inclusion (Education Act, 2010:800; Göransson, Nilholm, & Karlsson, 2011).

Since the school policies suggest special groups for children in certain cases and alternative arrangements for children with intellectual disabilities, and the preschool policy does not, it can be expected that the application of inclusive education decreases over early years education in Sweden within these groups of children. It seems that school policy makers in Sweden are not convinced that inclusive education is to be sought after for all children after preschool.

There have been some evaluations and reports concerning the Swedish education system that can be related to the notion of ‘a school for all’ and thereby the notion of ‘inclusive education’ that reflect a certain scepticism and ambivalence towards inclusive education. One example is the Carlbeck-kommittén (SOU, 2004:98). Even if the Carlbeck-kommittén recommended an increase in cooperation between alternative and regular schools, the alternative education arrangements were suggested to remain and to be a service for children with intellectual disabilities. The conclusions of the inquiry seemed to support an increase in inclusive education as well as hold reservations against it. Another example is the SOU (2008:109) rapport concerning a sustainable teacher training in Sweden. It states that “the so called inclusive perspective on education is an ideological vision that, when meeting the reality, leads to the fact that children with special educational needs are at risk of being without this support” (p. 188, author’s translation).

This notwithstanding, Sweden is regarded as a context in which inclusive education is embraced and strived for. In fact, Sweden has been commended for its inclusive education system where only a few percent (just above 1%) of children are educated outside the regular schools in agreement with parents, by the OECD (2015) and the United Nations Committee on the Rights of Persons with Disabilities (2014). However, the Committee was not only positive. According to them, there is a lack of knowledge about different disabilities and accommodation needs related to disabilities in Sweden and its education system. They also urged Sweden to “guarantee the inclusion of all children with disabilities in the mainstream education system and ensure that they have the required support” (UN, Committee on the Rights of Persons with Disabilities, 2014, para. 48). The OECD (2015) was also not solely positive towards the system, even if they gave praise for its inclusiveness. They reported about concerns such as the low and decreasing academic performances of Swedish pupils and disciplinary problems in Swedish schools. The OECD suggested that Sweden should urgently reform its school system to improve quality and equity (OECD, 2015).
Research on educational pathways from preschool to school and inclusive education

Hanson et al. (2001) examined the participation in inclusive programmes over the early school years in the United States and reported that children attended fully inclusive settings, partially inclusive settings, integrated activities or segregated programmes. They informed that the first placements in segregated programmes occurred after preschool in Kindergarten, and that the most dramatic shift towards segregation occurred between Kindergarten and first grade. Hanson et al. (2001) defined these three forms of inclusive education as follows:

In full inclusion placements, children with disabilities participated as full members of the general education class. (p. 71)

Partial inclusion was characterized in one of two ways. First, service models in which the child with disabilities participated in a typical age appropriate program with children without disabilities for at least 50% of their educational day and part of the day in a separate experience with other children with disabilities, were categorized as partial inclusion. [...] Programs that were developed for children with disabilities and in which children without disabilities were brought in to participate as typical role models also were categorized as partial inclusion. (p. 71)

Integrated activities were those programs in which children with disabilities were predominantly in self-contained experiences but participated in joint classes or activities with age appropriate typically developing children. These integrated activities occurred on a regular basis and were planned to support interactions between the two groups of children. [...] Functionally, the children with disabilities were visitors to these classes. (p. 71)

According to Hanson et al. (2001), segregated programmes can be defined as self-contained special education classes. They wrote the following:

Segregated programs were those experiences in which children with disabilities received services in a self-contained special education class. The classroom might be in a typical age appropriate setting or school but the only contact between children with and without disabilities was incidental in public areas. That is, no regular, frequent, and planned opportunities for interactions between children with and without disabilities were available. (p. 71)

Such an understanding of inclusive education infers that settings can be regarded and termed as more or less inclusive and that children can attend and be engaged in more or less inclusive settings based on the amount of inclusive education being adopted. It also implies that segregation occurs when there are only incidental connections and meetings between the children in segregated programmes and other children.
Guralnick, Neville, Hammond and Connor (2008) investigated the continuity and change from full inclusion early childhood programmes through the early elementary period of children with mild development delays in the United States and reported that children remained involved in some level of inclusion over time. In their study, no child attended a segregated programme over the early school years, and it was suggested that a placement in a full inclusion early childhood programme created a momentum for the children being further included in school. Similar to Hanson et al. (2001), Guralnick et al. (2008) suggested that inclusive education is an education that can be implemented to various degrees.

The notions of full inclusion and partial inclusion have also been used outside the United States in special education research in Italy (Rix et al., 2013). Full inclusion occurred when a “pupil spends all the time within the class” and partial inclusion occurred when “the pupil spends part of their time within the class” (Rix et al., 2013, p. 86). Partial inclusion was more common than full inclusion and full inclusion was more common than exclusion. The choices between full inclusion, partial inclusion or exclusion were reported to depend on factors in the school such as choices of teachers and not on the severity or nature of a child’s impairment.

In Sweden, there have been no such descriptions and analyses of educational pathways and inclusive education. Since Hanson et al. (2001) offer empirically based definitions of inclusive education and its various forms (i.e., levels), this research will adopt these notions of full inclusion, partial inclusion, integrated activities and segregated programmes.

There is some research on educational transitions from preschool to compulsory school for children with intellectual disabilities in Sweden (Wilder & Lillvist, accepted; Lillvist & Wilder, in press). The foci are collaborations in transitions, key points of positive transitions, and challenges related to transitions. The data was collected via a survey to teachers (N=221) in compulsory schools for pupils with intellectual disabilities. According to Wilder and Lillvist, children need to experience a smooth transition in which the contents of preschools and schools are linked (e.g., the content of school is familiar to the children; they have visited the school during time of preschool) and relationships are maintained (e.g., children maintain friends from their preschool; teachers from preschool visit school). Furthermore, teachers need information on such matters as children’s communication, health care needs, children’s educational profile, every day functions, likes and routines, since these may smooth transitions for each child.

Uncertainty and debates about inclusive education

To embrace inclusive education and apply its principles has not been without debate, however (Hanson et al., 2001; Hornby, 2012). Hanson et al. (2001) wrote that “support for inclusive educational placements for children with
disabilities has not been without controversy regarding its benefits for all children” (p. 66). There are those who address the need for critical reflections on inclusive education, and those who address the need for special classes and schools, and that these are in fact the best and only option for some children (Terzi, 2010, in Hornby, 2012; Warnock, 2005, in Hornby, 2012). They have proposed the following arguments: Teachers in regular settings may not have adequate education and in-services training on inclusive education and therefore they may lack knowledge and skills for including children with varied special educational needs and/or disabilities. The material and financial resources may be insufficient. The curriculum for regular classes may not be appropriate for the children with special educational needs and/or disabilities. Children may come to lack peers having similar needs and disabilities.

There are also those who address that empirical evidence supporting inclusive education and its effectiveness is mixed (Mitchell, 2010) or lacking (Farell, 2010, in Hornby, 2012). Mitchell (2010) wrote: “The evidence for inclusive education is mixed but generally positive, the majority of studies reporting either positive effects or no differences for inclusion, compared with more segregated provisions” (p. 11). The European Commission (2013) came to a similar conclusion and stated: “A strong political consensus has emerged in Europe on the importance of inclusive education, and ensuring children with special educational needs (SEN) are included within mainstream education. This is broadly, although not comprehensively, supported by the evidence base” (p. 4). Even the Salamanca Statement (UNESCO, 1994), which is commonly seen as an influential and supportive document for inclusive education, seems to hold some reservations and talks about a majority of children in relation to the effects of inclusive education. It specified that regular schools with an inclusive orientation “provide an effective education to the majority of children” [my italic] (UNESCO, 1994, para. 2).

Scepticism with regard to inclusive education can also be found in SOU (2008:109) concerning a sustainable teacher training in Sweden. It states that a school for all does not necessarily mean that “all children should be educated together by the same teacher. An individualised education, worth its name, also recognises that some students have special needs that cannot be met in the large group” (p. 188, author’s translation). It also states that teachers need knowledge in special education so as to be able to identify rather than teach children in need of special support. Accordingly, teachers cannot have the competencies to meet the needs of all those children and instead the education of some children should be the main foci for special teachers (SOU, 2008:109).
**Inclusive special education**

Inclusive special education is a theory that synthesises the philosophy and practice of inclusive education and special education\(^2\) (Hornby, 2015). It is concentrated on the education and care of all children with special educational needs and disabilities in mainstream school classes, special classes within mainstream schools, as well as in special schools. Instead of declaring children’s right to an inclusive education or a special education, the theory declares children’s right to an appropriate education in which children’s needs are met and the children are prepared for inclusion and participation in the community after school. In inclusive special education it is considered important to include as many children as possible in mainstream school classes, but the availability of a continuum of placement options in special classes and schools, as well as collaborations between mainstream and special school classes and the opportunity for children to move between different types of classes, are also seen as important.

Inclusive special education recognises that “the majority of children with SEND can be effectively educated in mainstream classes”, but that “there are a minority of children with higher levels of SEND who benefit more from being educated in resource rooms, special classes or special schools for some or all of the time at school” (Hornby, 2015, p. 248).

The notion of inclusive special education has also been used in research descriptions of the Finnish education system, which is a system that emphasises both inclusive education and special education (Takala, Pirttimaa, & Törmänen, 2009). The policy in Finland is to immediately provide interventions and support when a need emerges. The support can be provided by children’s own teachers or by a special education teacher. The support from special education teachers is often pulled-out and not embedded in classrooms. It has been estimated that around 20% of the children in the Finnish schools receive part-time, pulled-out special education, and it has been estimated that around 8% of the children are educated in full-time special education (Takala, Pirttimaa, & Törmänen, 2009). The approach of inclusive special education in Finland may be a reason for the Finnish children’s success in international surveys (Kivirauma & Ruoho, 2007; Lahtinen & Ström, 2011).

**Summary**

In short, educational pathways refer to children’s early years education from the last year in preschool to compulsory first grade. Transitions refer to a move from preschool to preschool-class and leisure-time centre, and a move from preschool-class to first grade. The children with special educational

\(^2\) In inclusive special education, special education refers to individual planning, and specialised and intensive instructions that are pulled-out from mainstream classrooms.
needs are those who for a variety of reasons struggle in early years education and who need support provisions to be able to participate and learn. Inclusive education is about celebrating diversity and the education and care of children with and without special educational needs in the same activities, routines and play.

In the next section the theoretical frame of this research will be presented.

Theoretical frame

The field of special education

Special education, which in Sweden is referred to as specialpedagogik, is a field influenced by a number of academics disciplines such as pedagogy, medical science, sociology, disability studies and psychology (Atterström & Persson, 2000). Special education has connections to social work, public health, child and youth psychiatry, neuroscience, technology, educational psychology, developmental psychology, organisation psychology, curriculum studies and didactic methods. This means that special education is a multidisciplinary field that has links to several professions. Examples of such professions are head teacher, teacher, special teacher, social worker, psychologist, school nurses and speech therapist.

In Sweden, the contents of special education are multiple and not defined as a contrast to inclusive education. At the Department of Special Education at Stockholm University, special educational research is organised in four broad fields of research that reflect its multidisciplinary character. The research field of Democracy and fundamental values (Department of Special Education, 2015, “Demokrati och värdegrundsfrågor,” para. 1-3), is about democratic values, justice and ethics in society and the educational system. Learning environments and didactic development is a field of research that is focused on developing practices and hindering difficulties that occur for children, youth and adults so that they can participate and learn (Department of Special Education, 2015, “Lärandemiljöer och didaktisk utveckling,” para. 1). This may include the analysis of risk and protective factors. The research field of Impairments and disabilities is about what impairments and disabilities may mean for individuals as well as their ecological contexts (Department of Special Education, 2015, “Funktionsnedsättning och funktionshinder,” para. 1-2). Special education in preschool (Department of Special Education, 2015, “Specialpedagogik i förskolan,” para. 1-2), the fourth field of research, focuses on young children in the non-compulsory preschools, their preschool-teachers and the preschool settings. Topics are also inclusive education in preschool and children’s perspectives on their everyday lives.
Often the considerations within special education, in Sweden and elsewhere, are related to understanding what is causing special educational needs. This understanding can be used to prevent difficulties and meet these needs. These considerations are often rooted in various paradigms, e.g., the psycho-medical, sociological and organisational paradigm (Skidmore, 1996) and perspectives, e.g., categorical/individual and relational perspectives (Bladini, 2004). The integration of such paradigms and perspectives is recommended when causes and solutions are searched for, since both nature and nurture play a role in the occurrence of special educational needs and in child development (Bronfenbrenner, 1979; Bronfenbrenner & Morris, 1998; Fischbein, 1987; Helldin, 2003; Skidmore, 1996; World Health Organisation, 2013).

**Special education in this research**

The present research is dealing with many of the central aspects of special education as an academic discipline: justice in the educational system; individual learning and development in varying educational environments; inclusive education; support provisions in preschools, preschool-classes, leisure-time centres and schools for children with special educational needs; and environmental factors from the macro to the micro level. The assumption of this research is also that both nature (genetics, biology) and circumstances in contexts (ecology) influence child development. Consequently, special educational needs are not seen as entirely socially constructed in this research.

**Ontological and epistemological underpinnings**

It is in this research assumed that the world of human beings is composed of a number of realities: an *objective* reality, an *intersubjective* reality and a *subjective* reality. Such a philosophical standpoint can be referred to as an ontological pluralism or a form of realism, termed multiple realism (Johnson & Gray, 2010). Johnson and Gray (2010) define multiple realism and its three main components as follows:

- The objective reality is physical and can impact human beings. It consists of physical things/materials and physical/casual processes. The intersubjective reality is interpersonal. It consists of languages, cultures (nonphysical), institutions and social structures and is considered to be as real as the physical parts of the world. The subjective reality, which is also as real as the two other parts of our world, consists of a person’s feelings, beliefs, thoughts, experiences and emotions. These three realities together compose the world of human beings and are influencing each other.

This means that Johnson and Gray (2010), in resemblance with many qualitative researchers adopting interpretative and phenomenological standpoints, believe that thoughts, experiences and feelings are real and
important to study. This also means that they, in similarity with sociologists and anthropologists, believe that cultures and languages are real and important to investigate. Moreover, this means that they, in congruence with several quantitative researchers, believe that there are in fact objective realities that are influencing human beings and that are important to study.

Johnson and Gray (2010) have a particular interest in mixed method research, which is also adopted in this research. They believe that “one principle of MM [mixed method] is to take seriously multiple types of realities, concurrently, and to attempt to interconnect the subjective, intersubjective, and objective parts of our world” (p. 72). Thus, Johnson and Gray (2010) do not view these three realities as incompatible, and instead they underpin opportunities generated with a combination of the same. They wrote: “Multiple disciplinary perspectives have much to add to our understanding of our world and, often, they need to be interconnected. The same claim operates at the level of philosophy” (2010, p. 72). This means that they advocate for an interconnection of epistemological standpoints with regard to what can be known and how knowledge can be gained.

Multiple realism in this research
This research is in keeping with an ontological and epistemological standpoint of multiple realism, in the sense that the objective reality, the intersubjective reality and the subjective reality are all acknowledged, investigated and integrated in results, analyses and discussions. In this research, knowledge is also generated via a variety of strategies such as direct observations of the objective reality and the intersubjective reality, as well as via conversations, interviews and drawings about the objective, intersubjective and subjective reality. When, for example, an investigation of an educational setting is done, both the physical aspects (e.g., location, artefacts and quality aspects), the conversations and the teachers’ and children’s views, experiences and opinions will be considered and analysed. Attributable to the ontological and epistemological standpoint, the descriptions and analyses of this research could encompass several dimensions of the world of human beings.

A bioecological perspective on development
The bioecological model for human development (i.e., intellectual, social, emotional and moral development) (Bronfenbrenner, 1979; Bronfenbrenner & Morris, 1998) is adopted as a conceptual and analytical frame for this research.

The interpretation made of the bioecological model, in this research, is that it is compatible with the standpoint of multiple realism. Bronfenbrenner seemed to hold the opinion that the world is composed of physical, intersubjective and subjective elements and properties. He wrote as follows:
In the bioecological model, both objective and subjective elements are posited as driving the course of human development; neither alone is presumed sufficient” (Bronfenbrenner, 2001, p. 5). He also stated that environments “for human development include not only its objective properties but also the way in which these properties are subjectively experienced by the persons living in that environment” (Bronfenbrenner, 2001, p. 5). There are also aspects within the bioecological model such as proximal processes, mesosystem and macro system societal blueprints (e.g., cultures, social structures, belief systems and lifestyles specific to a group or a context) that seem compatible with the notion of the intersubjective reality.

During the conception of the bioecological model Bronfenbrenner gained inspiration from several scholars, for example Kurt Levin, George Herbert Mead, Sigmund Freud, Jean Piaget and Lev Vygotskij (Bronfenbrenner, 1979). He was also inspired and assisted by several colleagues.

The development of the bioecological model took him several years. Naturally, the model was targeted for reflections, revisions and extensions. Two overall periods of his work, separated by the year 1979, can be distinguished. The first ended with his landmark volume ‘Ecology of human development: Experiments by nature and design’, published in 1979 in which Bronfenbrenner presents the famous concepts of an interplaying microsystem, mesosystem, exosystem and macrosystem, and the influence of context on the child’s development.

According to Bronfenbrenner (1979), preschools, preschool-classes, leisure-time centres and school classes are examples of proximal microsystems that directly influence a child’s well-being and development. If the model is illustrated by the annual rings of a tree, the microsystem is the innermost ‘ring’. He states that microsystems influence a child (a) through the activities that the children are engaged in, (b) through the roles the children are being given or choose, and (c) through the relationships that are created within these. Bronfenbrenner (1992) defined the micro system in the following way:

A microsystem is a pattern of activities, roles, and interpersonal relations experienced by the developing person in a given face-to-face setting with particular physical and material features and containing other persons with distinctive characteristics of temperament, personality, and systems of belief. (p. 148)

To gain knowledge on children’s development it is also important to study interplays of microsystems, according to Bronfenbrenner (1979). The reason for this is that a child belongs to several systems and carries experiences from one micro-setting to another. What has taken place in a preschool-class may impact what is taking place in a leisure-time centre, for example. The
interplay between microsystems is located in the second ‘ring’ and is referred to as the mesosystem. Bronfenbrenner (1992) wrote:

The mesosystem comprises the linkage and processes taking place between two or more settings containing the developing person (e.g., the relations between home and school, school and workplace). In other words, a mesosystem is a system of microsystems. (p. 148)

The subsequent systems that are influencing children’s development are the exosystem (the third ‘ring’) and the macrosystem (the fourth ‘ring’). In these two systems the children are not active participants and instead the impacts are more indirect and distal from the child. Some examples of exosystem’s influences are the parents’ work and the economics of school districts. The work of parent(s) may impact how much time is spent with their children, and the finances in school districts may impact the available resources in the microsystems, which in its turn influences a child’s development. Some examples of macrosystem’s influences are shared traditions, attitudes, values and laws. Bronfenbrenner (1992) defined these two systems in the following way:

The exosystem, encompasses the linkage and processes taking place between two or more settings, at least one of which does not ordinary contain the developing person, but in which events occurs that influences processes within the immediate setting that does contain that person (e.g., for a child, the relation between the home and the parent’s workplace; for a parent, the relation between the school and the neighbourhood group). (p. 148)

The macrosystem consist of the overarching pattern of micro-, meso-, and exosystems characteristics of a given culture, subculture, or other broader social context, with particular reference to the developmentally instigative belief systems, resources, hazards, lifestyles, opportunity structures, life course options, and patterns of social interchange that are embedded in each of these systems. The macrosystem may be thought of as a societal blueprint for a particular culture, subculture, or other broader social context. (p. 149-150)

In the second period, the ecology of human development is called into question. Bronfenbrenner concludes, after conducting additional empirical studies, that attention also needs to be paid to the role of the child (person), such as their disabilities, abilities and engagement, along with “the role of the environment in shaping development” (Bronfenbrenner & Morris, 1998, p. 993). He also concludes that attention needs to be paid to the role of time for development, for example, days and weeks, changes in expectations and society, and “continuity versus discontinuity within ongoing episodes of proximal process” (Bronfenbrenner & Morris, 1998, p. 995). Bronfenbrenner presents another two systems referred to as the biosystem, which is located in
the centre of his model, and the \textit{chronosystem}, which is located as an outermost ring in his model surrounding all the other systems. Moreover, he decides to emphasise the role of activities and processes that children are enrolled in within microsystems. He termed these activities proximal processes and wrote: “Over the life course, human development takes place through processes of progressively more complex reciprocal interaction between an active, evolving biopsychological human organism and the persons, objects, and symbols in its immediate external environment” (Bronfenbrenner, 2001, p. 6).

In the bioecological model the proximal processes are understood as the primary engines for development (Bronfenbrenner & Morris, 1998) and defined as “enduring forms of interaction in the immediate environment” (p. 996). The following examples have been provided in purposes of illustration: “playing with a young child, child-child activities, group or solitary play, reading, learning new skills, athletic activities, problem solving, caring for others in distress, making plans, performing complex tasks, and acquiring new knowledge, and know-how” (p. 996). In order for development to occur and be effective the child needs to be engaged in such activities. The activity also must occur on a fairly regular basis, occur over time, increase progressively in complexity and encompass some reciprocal elements. These proximal processes include significant others, such as parents, teachers and peers, but objects and symbols can also play a central role, according to Bronfenbrenner and Morris. When objects are mentioned in relation to proximal processes these are not described and understood as active agents\textsuperscript{3}, capable to cooperate with human beings. Instead, Bronfenbrenner described the role of objects as useful and valuable tools to be used by human beings in activities. Bronfenbrenner stated that “there is a critical difference between physical objects and human beings: physical objects cannot, and human beings invariably do, have perceptions, feelings, expectations, and intentions with respect to the situations in which they are located” (1979, p. 127).

After his reconsidering of the model he changed its name: from the ecological model for human development to the bioecological model for human development. He also suggests that a labelling of Process-Person-Context-Time model (PPCT-model) can be suitable and adopted.

\textit{A bioecological model in this research}

The application of a bioecological model for human development is suitable for research in the multidisciplinary field of special education since it makes it possible to take influences of both nature and nurture into account.

\textsuperscript{3} The idea of considering materials in preschools as active agents is put forward in an official report from the Swedish National Agency of Education about follow-ups, evaluations and developments in preschools (Palmer, 2012).
In this study, the bioecological model predominately functions as a conceptual and analytical frame. This means that its key concepts (i.e., microsystem, mesosystem, exosystem, macrosystem, chronosystem, person, proximal processes, context and time) are embraced and considered useful in research descriptions and analyses of early years education. This also means that the model functions as a map in the sense that it suggests how the data collected on the topic of early school years can be described and analysed as proximal or distal to the children, as directly or indirectly influencing and as located at a macro-, exo-, meso-, micro- or biosystem level. Moreover, the model allows for assumptions concerning what is influencing child development, what is important for the same and how influences from different systems may interplay with each other. Hence, the application of the model allows for critical discussions and the presentation of concerns in the cases when important conditions for development seem to be lacking. This research does not have the aim to verify the bioecological model.

It can be said that a bioecological approach on early years education, transitions, special educational needs, support provisions and inclusive education is adopted in this research. A similar approach has also been considered appropriate by other researchers. For example, Rimm-Kaufman and Pianta (2000) recommended not only to look at a child’s characteristics in understanding transitions to Kindergarten, but also to look at indirect and direct ecological factors such as school environment, properties of neighbourhood, relations to peers, family situation, school-home collaborations and how such a child’s characteristics and ecological factors interplay and develop over time.

This research can be viewed predominantly as a study of micro learning environments (microsystems\(^4\)) and proximal processes\(^5\) occurring in these. It does not overlook child influences (biosystem/person) such as abilities and needs, however. Even the collaborations between microsystems (mesosystem), such as transitions and multidisciplinary collaborations and the distribution of resources to schools (exosystem) are considered. The contents of international (UN CRC, 1989; UN CRPD, 2006) and national policies such as the Education Act (2010:800) and Curriculums (SNAE, 2011a, 2011b, 2011c, 2011d) (macro system), and the changes over time in variables of children, practices and policies (chronosystem/time) are also taken into account.

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\(^4\) E.g., preschool units, preschool-classes, leisure-time centres and first grade classes.

\(^5\) E.g., educational activities, routines, solitary play, play with peers, child-child interactions, teacher-child interactions and reading, observed during fieldwork of research.
Proximal processes in research

Proximal processes have been of great interest for many researchers. However, not all of them make explicit use of the concept. I will provide some examples of research on the topic of proximal processes that have played a role for this thesis.

**Overall quality of education and appropriate staff-child interactions**

Harms, Clifford, and Cryer (2005, 2010) and Arnett (1989b) have reported that the quality of education and of teacher-child interactions plays a key role for children’s learning and development. Similar conclusions have been drawn by Taguma, Litjens, and Makowiecki (2013). They wrote:

> A growing body of research recognises that it [Early childhood education and care] makes a wide range of benefits, including social and economic benefits, better child well-being and learning outcomes as a foundation for lifelong learning, more equitable outcomes and reduction of poverty, and increased intergenerational social mobility. But these positive benefits are directly related to the “quality” of ECEC. (Taguma, Litjens, & Makowiecki, 2013, p. 9)

That quality and care matters in early childhood education has also been shown by Sylva (2010), Sammons (2010), Taggart (2010) and their colleagues Melhuish and Siraj-Blatchford in the Effective Provision of Pre-School Education (EPPE) Project. They have found that: “High quality preschooling is related to better intellectual and social/behavioural development for children” (Sammons, 2010, p. 94). They also found: “Settings that have staff with higher qualifications have higher quality scores and their children make more progress” (Sammons, 2010, p. 94). Moreover, they found that: “Pre-school experience, especially of high quality, helps reduce the risk of a child later being identified by teachers as showing a SEN during KS1” [key stage 1] (Sammons, 2010, p. 96). This suggests that a pre-schooling high in quality can function as an effective intervention, since special educational needs can be reduced and positive outcomes be produced.

According to Harms, Clifford, and Cryer (2005, 2010) a quality education is an education where space and furnishings, personal care routines, language-reasoning, activities, staff-child interactions, programme structure and parents-staff collaborations are good or excellent in quality. For example, a quality education according to them (Harms, Clifford, & Cryer, 2005), encompasses features such as the following: space in good repair, good ventilation, “some natural lighting through windows or skylight” (p. 10), that children with disabilities “have the adaptive furniture they need” (p. 12), pleasant departures such as “children not rushed, hugs and good-byes for everyone” (p. 22), pleasant staff-child interactions during toileting, “play
areas are arranged to avoid safety problems” (p. 32) and many “staff-child conversations during free play and routines” (p. 38).

A high quality of teacher-child interactions are, according to Arnett (1989b, n.p.), characterised by a caregiver (e.g., a teacher or a child-minder) who, for example:

Speaks warmly to the children. […] Listens attentively when children speak to him/her. […] Seems to enjoy the children. […] Encourages the children to try new experiences. […] Seems enthusiastic about the children’s activities and efforts. […] Pays positive attention to the children as individuals. […] When talking to children, kneels, bends or sits at their level to establish better eye contact.

These seven examples are obtained from the structured observation rating scale the Caregiver Interaction Scale (CIS) developed by Arnett (1989b).

In a synthesis of over 800 meta-analyses relating to achievement of children in education (Hattie, 2009), it was concluded that teachers play a great role for children’s learning and development, for example by means of motivation, support and constructive feedbacks. Three examples of studies also reporting about the important role of teachers are Hamre and Pianta (2001), Pianta and Hamre (2006), and Pianta and Stuhlman (2004). In these three studies, it is reported that positive teacher-child relationships in early school years, such as closeness between a child and a teacher, are fundamental to children’s success in school, both socially and academically.

The importance of quality education is also being emphasised by advocates for children’s rights. One example of such an advocate is Malala, the Pakistani girl who in 2014 was awarded the Nobel Peace Prize for her work on child rights, in particular on behalf of girls’ right to quality education. Two more advocates are the UN CRPD (2006) and the Salamanca Statement (UNESCO, 1994). In the UN CRPD (2006, art. 24 2b), the right to “an inclusive, quality and free primary education and secondary education on an equal basis with others in the communities in which they live” of child with disabilities is stated. In the Salamanca Statement (UNESCO, 1994) it can be read that:

Inclusive schools must recognize and respond to the diverse needs of their students, accommodating both different styles and rates of learning and ensuring quality education to all through appropriate curricula, organizational arrangements, teaching strategies, resource use and partnerships with their communities. (para. 7, p. 11-12)

_A quality inclusive education_

With regard to proximal processes of children with special educational needs, current researchers have not only reported about the importance of quality education and appropriate interactions, but also about the importance
of a quality inclusive education (Soukakou, 2012). A quality inclusive education is an education where, for example:

Adults deliberately organize the physical space (including materials/equipment) during the day to encourage peer interaction (e.g., teacher adds a chair to computer area for child who is standing and watching a peer playing; adult sets-up circle area to encourage children to read together; adult takes out more puppets to encourage other children to join the puppet area; adult repositions child on wheelchair so that she can face her peers). (Soucacou, 2007, p. 6)

Classroom has a great variety of professionally recommended toys, materials and equipment carefully selected to accommodate individual needs (e.g., sensory toys for child with sensory disorder, specialized equipment for visually impaired; adaptive toys for children w/ physical disabilities). (Soucacou, 2007, p. 6)

Adults actively encourage more socially competent children to model for or interact with children who find it difficult to form social relationships (e.g., adult invites child to play with isolated child; adult purposefully pairs two children for an activity; adult teaches child how to model appropriate requests for peer). (Soucacou, 2007, p. 7)

These examples are obtained from the doctoral thesis of Soucacou (2007), Assessment of classroom quality in inclusive preschool settings: Development and validation of a new observation measure, in which she presents a first draft of the structured observation rating scale termed the Inclusive Classroom Profile (ICP).

**Team teaching and support provisions**

In addition to the importance of good quality in settings, current researchers (Sandall et al., 2008; Mitchell, 2014a) have reported about the usefulness of team teaching, sometimes also referred to as collaborative teaching. In team teaching a teacher and a special teacher/educator make as well as implement the plans, for example.

Current researchers have also reported about the importance of Augmentative and Alternative Communication methods and tool for children who struggle with spoken language and verbal communication (Heister Trygg, 2003, 2004, 2005), such as Picture Exchange Communication System® (PECS), sign instructions, Pictograms® and Widgit Go®. Widgit Go® is an app designed to support communication and learning.

The provisions of environmental support (e.g., changing physical environment and plan for small group activities with engaging materials or toys in which child is close to peers), materials adaptations (e.g., placing materials close to child and making them larger and brighter) and activity simplifications (e.g., breaking down activities into manageable parts), are also considered important for children with special educational needs.
Moreover, current researchers (Sandall et al., 2008; Soukakou, 2012) have reported about the importance of child preferences (i.e., incorporating children’s likes into activities), allowing for peer support (e.g., letting a peer model an activity, helping and giving praise), providing adult support (e.g., staff being close to children and providing encouragement), and having special equipment. These important features are part of the Building Blocks framework and the ICP.

The important peer

Furthermore, the importance of peer relationships, that is to say the importance of social relations and having someone to be with and play with, is being stressed and related to child health and development (Ladd, 2005). According to Parry (2015), peer relationships between children with and without special educational needs can be facilitated by likeminded play interests and compatible personalities. Siljehag (2012) reported that aesthetic activities such as artwork, gross motor activities and drama can be useful and valuable when realising a quality inclusive education and when peer relationships shall be developed. The importance of peer relationships was also clearly stated by Bronfenbrenner and Morris (1998) who explicitly defined group play and child-child activities as proximal processes and engines for development.

Treatments, therapies, small steps and assistance

With regard to the proximal processes of children with autism and/or with more considerable special educational needs, the importance of providing effective educational and behavioural treatments and therapies, and distinctive teaching strategies in matters such a speech and language, has been reported (Ghezzi, 2007; Mitchell, 2014a; The National Autism Centre, 2009). There have also been reports concerning the importance of breaking down tasks and activities in proximal processes into very small steps and to provide assistance with such matters as orientation, movement and self-care (Mitchell, 2014a).

A theoretical conception and a metaphor of the role of support provisions in proximal processes

The interpretation made in this research is that provisions of support from adults and peers can be seen as enablers and facilitators of proximal processes. In interplay with several other contextual factors, such as quality of education and peer relations, these can influence positively the children’s participation, learning and development in early years education.

The interpretation made is also that the material aspects of support provisions can be seen as essential tools in proximal processes.
Bronfenbrenner (1979) suggests that physical objects differ from human beings. Unlike human beings, objects cannot have perceptions, feelings and intentions, according to him. Consequently, the material aspects of support provisions are not understood as active agents in this research.

Support provisions, both the tools and the support gained from others, can be illustrated as bridges, in the sense that these provide opportunities for children and staff members to overcome barriers in proximal processes and educational settings, and since these can be the way to participation, learning and development.

Standpoints of the researcher

The frame incorporates standpoints that can be supported by research and that are endorsed by agencies, international conventions and national policy. These standpoints influenced how the research was conducted and what was paid attention to in processes of description, analysis and discussion.

In resemblance with the Salamanca Statement (UNESCO, 1994), one standpoint is that inclusive education should be encouraged. Another standpoint is that settings can be regarded as inclusive, although they are not necessarily always fully inclusive. An inclusive setting can adopt various levels of inclusion such as full inclusion, partial inclusion or apply integrated activities (Hanson et al., 2001) and be regarded as more or less inclusive, that is to say, provide more or less elements of inclusive education.

Additional standpoints are that children are competent and rights holders with regard to education, care and support provisions (Clark & Moss, 2011; Education Act, 2010:800; UN CRC, 1989; UN CRPD, 2006), and that their opinions should be heeded (Education Act, 2010:800; UN CRC, 1989; UN CRPD, 2006).

One more standpoint is that it is possible to evaluate overall quality, interactional quality and the quality of inclusion in Swedish early childhood education settings (Arnett, 1989a, 1989b; Harms, Clifford, & Cryer, 2005, 2010; Soukakou, 2012) and that it is important to combine such assessments with what is locally valued and considered meaningful from the perspectives of staff and children. In this study, both observable quality aspects and issues related to subjective meaning are investigated.
Chapter two: Research procedure and participants

Outline of the empirical research

The empirical research (presented in study 1-4 and study 6) was conducted over a period of four years and followed the same set of children from their last year in preschool to compulsory school first grade. Data collections were made at three occasions during these four years. The first process of data collection was conducted in preschools from autumn 2012 to spring 2013, the second in preschool-classes and leisure-time centres spring 2014, and the third in schools’ first grade and leisure-time centres autumn 2014 to spring 2015. Thus, the research comprises three waves and has a longitudinal design (Taris, 2000). The same data collection methods and measurements, with exception from the three structured observation rating scales, were adopted since such a design makes it possible to identify changes over time and to reflect over motives and circumstances that may have generated these changes (Bronfenbrenner, 2001; Bryman, 2002).

The research procedure encompassed the following phases: (1) ethical approval and piloting of study; (2) identifying participating preschools with maximum variation, and processes of information and consent in preschools; (3) preschool fieldwork; (4) processes of information and consent in preschool-classes and leisure-time centres; (5) preschool-class and leisure-time fieldwork; (6) processes of information and consent in school first grade classes and leisure-time centres; (7) and school and leisure-time centres fieldwork.

An outline of the research on educational pathways from the last year in preschool to first grade, and the numbers of participating preschools, preschool-classes, leisure-time centres, schools and children, is presented in Table 2 on page 47.

An overview of the data collection methods adopted in the three waves of the empirical research is provided in Table 3 on page 48.

The letters of consent to school heads (head teachers), staff members and parents, and the child friendly letter used in processes of information, can be obtained on the Web6.

Ethical approval and piloting

This research was approved by the Central Ethical Review Board at the Karolinska Institute Stockholm, Sweden in the late spring 2012 (2012/421-31/5).

During the process of ethical approval a pilot study in a preschool was conducted in order to practice the data collection methods. Particular attention during the piloting was given to the application of the three structured observation rating scales that were planned to be used. I realised that the ‘presence’ of observation forms raised the interest of teachers and other staff and thereby risked to take their focus away from the children. Therefore, during the fieldwork, I filled these observation forms in during the afternoons/evenings and only had a pen and paper in my hand. I also realised, during the piloting, that teachers and other staff may come to ask for constructive feedback, advice and my opinion in several aspects during fieldwork. It did not seem appropriate to take on a role of evaluator, developer or agent of change during research, nor to deny staff some positive feedback, advice and opinions. Therefore, at the end of each fieldwork, I provided some positive feedback, advice and some opinions of mine, when such were asked for by the staff. For example, some positive feedback on such matters as engagement of staff, some advice on literature and my opinion that it is important to listen to the children and to hear what they have to say about their education in research and evaluations. Particular attention during the piloting was also given to the application of visualised interviews. I realised that these had the potential to work out well.

I did not pilot the study in preschool-classes, leisure-time centres and first grade classes, but instead just relied on the piloting in a preschool and experiences gained from preschool fieldwork.

Wave 1

Strategic maximum-variation and processes of information and consent in preschools

Preschools were searched for on the web and selected according to the principles of a strategic maximum-variation in order to ensure a variation of preschool settings enrolled in research (Mertens, 2010). A variation in geographical locations, responsible authorities, sizes and pedagogic profiles was searched for since heterogeneity in the sample could allow discovering a diversity of transitions, organisational typologies, resources, special educational needs, support provisions, inclusive education, views and experiences. A requirement was, however, that the participating preschools enrolled 5-year-old children with special educational needs.
Ten preschools that showed variation according to these criteria were identified and the head teachers were contacted in purpose of information. They were informed about the study via phone calls and/or physical meetings as well as via informative letters encompassing a consent form. Eight out of these ten preschools participated. In one case the lack of time caused the refusal, and in one case the preschool was already involved in another research.

The heads of preschools provided contact information to the staff working with the 5-year-old children. The staff of the preschool units [förskoleavdelningar, in Swedish] was informed about the study via phone calls and physical meetings, as well as informative letters encompassing a consent form. During information in staff meetings the research was described, and it was decided when I could meet the parents and children for the purpose of providing information. Consent was obtained from 100% of the staff. A total of 42 staff members (e.g., child-minders, teachers, special educators, speech and language therapist, behaviour scientist and substitute child minders/teachers) were part of this phase of research.

Parents to the children in the preschools were informed about the study via physical meetings in cloakrooms and/or at parental meetings. Letters to parents encompassing information and a consent form were distributed during these meetings. The parents were also given a child friendly letter that they should read for their children. During this process the parents were asked to consent to children’s participation in the study from the last year in preschool to first grade and to provide information to researcher concerning where the children intended to attend preschool-class, leisure-time centre and first grade. Since not all parents spoke Swedish the letter of consent was translated into two additional languages by professionals working at a translation company. Consent was obtained from 89% of the guardians (from both mothers and fathers) in the eight preschools. The parents not consenting had no objections to the preschool’s participation in this research.

Children were also informed about the research during physical meetings in cloakrooms and through information to their parents. When possible, I gave the child friendly letter directly to the children. The preschool children’s willingness to participate was understood on the basis of their verbal communications and their body language and mimic at the time of fieldwork. They were not asked to give written consent. A total of 56 children (28 boys and 28 girls) with and without special educational needs (16 with and 40 without special educational needs) were enrolled.

Although this research was predominately focused on matters that are related to children with special educational needs, such as their support provisions, it was considered important to enrol children without such needs in the research. The motive was to avoid the stigmatisation that could have occurred in the educational settings and could have been perceived by the parents, if only children with special educational needs had been asked to
participate and had been interviewed. Two more motives were to enable the observation of support from typically developing peers, and to make it possible to observe the shifts over time in the group identified as having special educational needs. Yet another motive was to permit comparisons between the group of children with and without special educational needs.

**Fieldwork in preschools**

Two months of preschool fieldwork was conducted from November 2012 to March 2013. Each preschool was visited for approximately one week.

The data was collected via structured observation rating scales: the Early Childhood Environment Rating Scale – Revised (ECERS-R, Harms, Clifford, & Cryer, 2005, 2010), the Inclusive Classroom Profile (ICP, Soukakou, 2012) and the Caregiver Interaction Scale (CIS, Arnett, 1989a, 1989b). The ECERS-R (Harms et al., 2010) generated a numerical description of the overall quality in an early childhood education setting. The ECERS-R is focused on space and furnishing, personal care routines, language-reasoning, activities, interaction, programme structure and parent-staff collaborations. The ICP (Soukakou, 2012) produced a numerical description of the quality of inclusion in an early childhood education setting. The ICP is focused on adaptations of space and materials/equipment, adult involvement in peer interactions, adults’ guidance of children’s play, conflict resolution, membership, relationships between adults and children, support for communication, adaption of group activities, transitions between activities, feedback, family-professional partnership and monitoring of children’s learning. It was obtained from Soukakou. The CIS (Arnett, 1989a, 1989b) enabled a numerical description of the interactional quality between staff and children. For example, the CIS is focused on whether the staff members speak warmly to the children, or seem distant and detached from them or threaten children in trying to control them. The structured observation rating scales were usually conducted in the beginning of field visits and can be described as investigations of microsystems and proximal processes occurring in these preschools. Data was also collected via the ABILITIES Index questionnaire (Simeonsson & Bailey, 1991), in Swedish referred to as ‘Skattning av funktionsområden’. It generated a comparable profile over the participating children with special educational needs and their functional and developmental status. More specifically, it is the nature and range of children’s abilities across major domains such as audition, behaviour and social skills, intellectual functioning, limbs, intentional communication, tonicity, health and vision that are scored in the index. Staff members who know the children well conducted the scoring.

The data on the preschool organisation, resources, special educational needs, support provisions and inclusive education was collected via documents (i.e., information folders, individual plans of children and webpages), direct observations, researcher-staff conversations and shorter
case study interviews with the staff. The data on the children’s views and experience of preschool was collected via drawings made by the children and visualised semi-structured interviews with the children.

Each one of the data collection methods is described more thoroughly in the publications.

Wave 2

Processes of information and consent in preschool-classes and leisure-time centres

The heads of preschool-classes, which were also the heads of leisure-time centres, were informed about the study via phone calls and/or physical meetings as well as in informative letters encompassing a consent form. The heads provided contact information to the staff working in the preschool-classes and leisure-time centres. It was commonly the same persons who worked both in the preschool-classes and in the leisure-time centres. In several cases I had obtained information concerning name of staff members in preschool-classes and leisure-time centres from those working in the preschools. The staff of preschool-classes and leisure-time centres was informed about the study via phone calls and physical meetings as well as informative letters encompassing a consent form.

During the processes of information and consent in the preschool-classes and leisure-time centres, the letters of consent from parents obtained in the preschools were shown in order to ensure heads and staff that parents had agreed regarding the children’s participation.

In order to remind the parents of the study, and to once again provide contact information to the researcher, I placed a short reminding letter about the study in the rucksack of child at the time of fieldwork. I also placed a note on the outer door of preschool-class/leisure-time centres so that parents to the children that did not participate or know about the study would be informed about the presence of a PhD student.

As in preschool, the children’s willingness to participate was understood on the basis of their verbal communications, and also of their body language and mimic. As in preschool, they were not asked to give written consent. All children in the preschool-classes were also informed during circle-times in the morning that a researcher was visiting them for a day or two. I shortly presented myself and said that some of them might recognise me. A majority of the participating children also recognised me and contacted me during the field days. They for example said: “You were at my preschool”. “Shall you write that book now”? “I remember you”. “Hi, do you remember me”? A boy who did not use verbal communication came and sat in my lap for a while and another boy who had difficulties in talking invited me to his play by taking my hand and dragging me to the play area. According to the staff,
this was those children’s way ‘to say’ that they accepted my presence. Some children I sat down with, played with for a while and talked to so as to help them recall why I had come to visit them again.

A total of 17 preschool-classes and 20 leisure-time centres were enrolled (a handful of leisure-time centres were visited during wave three). Consent was obtained from all the heads and staff in these settings. Three children had an extended timeframe in preschool and two children (without special educational needs in preschool) moved to preschool-classes and leisure-times that I had no information about. Consequently, 51 children (27 girls and 24 boys) were enrolled in this preschool-class/leisure-time phase of research. During this wave the children with an extended timeframe in preschool were also visited. Seventeen of those children had special educational needs (SEN, n=12; SEND, n=5). A total of 49 staff members (e.g., assistant nurses, child-minders, teachers, special educators, speech and language therapist, one-on-one aids, behaviour scientists and substitute child minds/teachers) were part of this phase of research.

Fieldwork in preschool-classes and leisure-time centres
One and a half months of fieldwork in preschool-classes and leisure-time centres, from March to April 2014, was conducted. Each preschool-class was visited for one or two mornings and each leisure-time centre was visited for at least one afternoon. A few leisure-time centres were visited when the children attended first grade. Since the number of settings had increased from preschool, I did not have the opportunity to stay as long as I did in the preschool units.

The data on the abilities of the children with special educational needs in preschool-class and leisure-time centres was collected via the ABILITIES Index. As in preschool, the scoring was made by staff members who know the children well. The data on the organisation, resources, special educational needs, support provisions, inclusive education and segregation was collected via documents, direct observations, researcher-staff conversations and shorter case study interviews with the staff. The data on the children’s views and experience of preschool-class and leisure-time centre was collected via drawings made by the children and visualised semi-structured interviews with the children.

Wave 3

Processes of information and consent in the first grades and leisure-time centres
The heads of schools were informed about the study via phone calls and/or physical meetings as well as informative letters encompassing a consent form. Several of them had already been informed and also consented since
these were also head of the preschool-classes and leisure-time centres visited the year before. The heads provided contact information to staff working in the first grade classes. During the period of preschool-class data collections I had met several of the staff that should be educating the children when they started first grade, so many of those were aware that a researcher should contact them. As in the processes of information and consent in the preschool-classes and leisure-time centres, the letters of consent from parents obtained in the preschools were shown to ensure heads and staff that parents had agreed on the children’s participation.

In order to remind the parents of the study and once again provide contact information to researcher, I placed a short reminding letter about the study in the rucksack of child at the time of fieldwork. In this letter I explained that the data collection of research had come to an end and I thanked parents and children for their participation in the study. In addition, the letter encompassed information on intended publications so that the parents and children were offered opportunities to read the results. I also placed a note on the outer door or in the cloakroom so that parents to children that did not participate would be informed that a PhD student was visiting the class. Some staff, in preschool-classes, leisure-time centres and first grade, also informed about the visit of a PhD student in their own information letters to parents.

Once again the children’s willingness to participate was understood on the basis of their verbal communications, and also of their body language and mimic. They were not asked to give written consent. All the children in the first grades visited were also informed, in the mornings, that a researcher was visiting them for a day or two.

A total of 20 school-classes were enrolled. Only a handful of leisure-time centres (5 out of the 20 leisure-time centres) were visited during wave three. Consent was obtained from all heads and staff in these settings. Since one more child moved to a school that I had no information about, 53 children (28 girls and 25 boys) were enrolled in this phase of research. Twenty-five of those children had special educational needs (SEN, n=18; SEND, n=7). In total, three children dropped out from the research. A total of 46 staff members (e.g., assistant nurses, child-minders, teachers, one-on-one aids, special educators, behaviour scientists and substitute child minders/teachers) were enrolled in this phase of research.

Fieldwork in first grade classes and leisure-time centres
Two months of first grade fieldwork was conducted from November 2014 to February 2015. Each class was visited for one or two days and each leisure-time centre was visited for at least one afternoon.

The data on the abilities of the children with special educational needs in first grade classes and leisure-time centres was collected via the ABILITIES Index. The scoring was made by staff members who know the children well.
The data on the school class and leisure-time centre organisation, resources, special educational needs, support provisions, inclusive education and segregation was collected via documents, direct observations, researcher-staff conversations and shorter case study interviews with the staff. The data on the children’s views and experience of first grade and leisure-time centre was collected via drawings made by the children and visualised semi-structured interviews with the children.
Table 2. Outline of the research on educational pathways from the last year in preschool to first grade, and the numbers of participating preschools, preschool-classes, leisure-time centres, schools and children by TDC, SEN and SEND.

<table>
<thead>
<tr>
<th>Wave 1</th>
<th>Fieldwork in preschools.</th>
<th>Wave 2</th>
<th>Fieldwork in preschool-classes and leisure-time centres.</th>
<th>Wave 3</th>
<th>Fieldwork in first grade classes and leisure-time centres.</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 2012 to March 2013</td>
<td>March to April 2014</td>
<td>November 2014 to February 2015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Units, N=8</td>
<td>Children, N=56</td>
<td>TDC, n=40</td>
<td>SEN, n=9</td>
<td>SEND, n=7</td>
<td></td>
</tr>
<tr>
<td>Wave 2</td>
<td>Fieldwork in preschool-classes and leisure-time centres.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classes, N=17</td>
<td>Centres, N=15</td>
<td>Children, N=51</td>
<td>TDC, n=34</td>
<td>SEN, n=12</td>
<td>SEND, n=5</td>
</tr>
<tr>
<td>Wave 3</td>
<td>Fieldwork in first grade classes and leisure-time centres.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classes, N=20</td>
<td>Centres, N=5</td>
<td>Children, N=53</td>
<td>TDC, n=28</td>
<td>SEN, n=18</td>
<td>SEND, n=7</td>
</tr>
</tbody>
</table>

Table 3. Data collection methods adopted in the three waves of the empirical research.

<table>
<thead>
<tr>
<th>Data collection methods adopted in the empirical studies of research</th>
<th>Wave 1</th>
<th>Wave 2</th>
<th>Wave 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structured observation rating scales</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECERS-R</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICP</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questionnaire</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>The ABILITIES Index questionnaire</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Staff oriented data collection methods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct observations</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Documents</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Shorter case study interviews with staff</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Researcher-staff conversations</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Child oriented data collection methods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drawing</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Visualised semi-structured interviews</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>


The identification of children with special educational needs

The staff members were, in the interviews and conversations (in preschools, preschool-classes, leisure-time centres as well as in first grades), asked about their work with children in need of support provisions, and to identify which of the participating children were in need of support provisions and also which of those had a disability diagnosis. This means that the identification of children with special educational needs (SEN and SEND) was done by staff members, and not by the researcher or via a screening instrument. The staff members were, in the interviews and conversations, also asked about skills and competences of children in need of support provisions.

In the interviews and conversations in wave 2 of research, the staff members were not informed about special educational needs of children identified in wave 1. Similarly, the staff members in wave 3 of research were not informed about special educational needs of children identified in wave 2.
and 1. I was also careful not to ask questions during wave 2 and 3 that revealed a previous identified need and status of a child.

Processes of analyses

The quantitative and qualitative data was stored and analysed independently of each other, but was integrated in result descriptions, analyses and discussions. The processes of analysis were inspired by thematic analysis (Braun & Clarke, 2006) and included also quantitative analyses.

Thematic analysis

A thematic analysis is a qualitative descriptive approach that is defined as “a method for identifying, analysing and reporting patterns (themes) within data” (Braun & Clarke, 2006, p. 79). The thematic analysis includes several stages such as the following: familiarisation with data; noting content of interest in analyses; interpretation and organising the content of data into units; searching within data and the units created for overall themes and subthemes; controlling the units and overall themes; defining and naming the themes; and creating result presentations.

Some of the thematic analyses conducted were deductive (for example, in the study 3 and 4) and used the categories of full inclusion, partial inclusion, integrated activities and segregated programmes obtained from Hanson et al. (2001). Others were inductive (for example, in the study 1-2, 4 and 6). The generated themes in the inductive thematic analyses were used in deductive analyses (for example, in the study 4). Multi-tiered frameworks and the didactic framework of Building Blocks (Sandall et al., 2008) inspired some of the thematic analyses conducted with regard to support provisions.

Quantitative analyses

The data collected was calculated and presented in the form of descriptive statistics such as frequencies, percentages, means and ranges, and followed the procedures that were recommended by the various instruments’ manuals. In the analysis of the data from the ABILITIES Index, the ABILITIES Index: Research Composite Score (AIRCS) was followed. The AIRCS manual was obtained from Simeonsson who is the author of this manual. The AIRCS manual suggests how a summary score for a child’s abilities can be calculated by means of weights and a summing. For example, the weight for intelligence in the manual is 2.0, and is higher than the weight for health (being 1.5) and for limbs (ranging from being 1.4 to 1.6). A result of 0 indicates the typical functional and developmental status of a child, and a result of 138.5 indicates a very low functional and developmental status. The data from the structured observation rating scales and the Abilities Index (AIRCS) were also analysed by means of a principal component factor.
analysis, linear regression and one-way between-groups ANOVA. Excel and SPSS were used for performing the quantitative descriptions and analyses.

Each one of the qualitative and quantitative data analysis are described more thoroughly in the articles.

Validity and reliability

Several efforts were made to increase the validity and reliability of this research.

The structured observation rating scales adopted (i.e., the ECERS-R, ICP and CIS), and the ABILITIES Index questionnaire distributed, are reported to be useful, reliable and valid (Arnett, 1989a; Bailey, Simeonsson, Buysse, & Smith, 1993; Harms, Clifford, & Cryer, 2005; Granlund & Roll-Pettersson, 2001; Roll-Pettersson, Granlund, & Steenson, 1999; Sheridan, 2001; Simeonsson, Chen, & Hu, 1995; Soukakou, 2012; Soukakou, Winton, West, Sideris, & Rucker, 2014). This means that the structured observation rating scales and the ABILITIES Index questionnaire have been used and considered valuable in previous research, and they have been tested for inter-rater agreement with promising results. Authors and experienced users to these structured observation rating scales (Mona Andersson and Elena Soukakou) and questionnaire (Lise Roll-Pettersson and Rune Simeonsson) provided trainings and/or support via personal meetings, e-mail and Skype before, during and after applications. Manuals were also carefully read. The training on ECERS-R with Mona Andersson resulted in an inter-rater agreement on 0.83.

In addition, I attempted to increase the validity and reliability of research through other strategies. Acknowledged analysis techniques were applied, limitations were stressed, triangulations were conducted and respondent validations were made. All the investigations were carried out in natural early years settings and involved objects and activities from the participating children’s everyday lives, which makes an investigation ecologically valid, according to Bronfenbrenner (1979). During the visits in the educational settings, particularly in the preschools, I was also present for a relatively long period of time so that the participants would get used to me. I was always careful not to interrupt ongoing educational activities, routines and play, since such actions may have an impact on the results of observations. These approaches may have increased the internal validity and the dependability of the research. Children were also asked to comment on the drawings so as to facilitate an accurate interpretation of these during processes of analyses. Furthermore, all the information about the special educational needs, with few exceptions, was obtained from staff members that know the children well. The direct observations and conversations written down in field notes were also in the evening of each field day read through so as to make clarifications and extensions for the purpose of
ensuring an understanding of these further ahead. The thematic analyses on the children’s views and experiences of early years education were validated by the supervisors (Mara Westling Allodi and Eva Siljehag), which may increase the trustworthiness of these analyses. An incorporation of quotations, comments and drawings in result descriptions were also done in order to increase the transparency and trustworthiness. Doing so not only offers descriptions that have ‘life’, but creates opportunities for readers to reflect over the data and perform an analysis by themselves. I am also careful not to generalize the results regarding other children and contexts. This may also have had a positive impact on the validity and dependability of the research (Bryman, 2002).

The results of the research should not be generalised directly to other contexts and children, and this means that the external validity can be considered low (Bryman, 2002). On the other hand, the result of the research could be used for analytical generalisations later on. An analytical generalisation means that a case study is generalised into theoretical propositions (Yin, 2014). The purpose with such a generalisation is to confirm or expand on theory.

Ethical considerations

Guidelines and recommendations from the Swedish Research Council (2011) have been followed. For example, verbal and written information has been shared with head teachers, teachers, other staff, children and parents. Written consent has also been obtained from the adults. The possibility to end research participation was stressed in the beginning of the research as well as during the process of data collections by letters of reminder and through ongoing attention to children’s verbal communications, body language and mimic. The persons and settings are unidentified and all names adopted are fictive. The data collected is stored in a safe way.

Research involving young children

Research involving young children, such as children in early school years, should be conducted with great sensibility. There are several reasons for this. Children are used to complying with adults and may perhaps not say no to research participation when being asked by the researcher. Children may be interrupted in their activities, routines and play even though the researcher is being careful not to. The children might feel that they are under surveillance during the data collection. The children may come to appreciate the presence of a researcher that is listening carefully to what they have to say and come to miss him/her when she/he leaves.

During the process of research with children the guidelines and recommendations from the Swedish Research Council (2011) and the UN CRC (1989) and UN CRPD (2006) have been followed, and advice from
research and other authors have been taken into consideration (Allodi Westling, 2002b; Doverberg & Pramling Samuelsson, 2000; Freeman & Mathison, 2009; Siljehag, 2015; Tangen, 2008).

These guidelines, recommendations and obtained advice led to the decision to write a child friendly letter to the children before the research started, taking the time to explain what the researcher will imply for the children, and to collect consent from children via a variety of strategies such as pay attention to verbal expressions as well as body language and mimic. I also tried to find ways to involve children with various abilities, to conduct short interviews, to listen carefully to what the children had to say and to ask the children to comment on the data collected. Several efforts were made to decrease the unequal power balance of the researcher and the child. The children were given opportunities to choose if they wanted to participate or not, to choose place and times for the interview and also how much to reveal. The study was also conducted in the children’s own ‘spaces’, that is, the preschool units, preschool-classes, leisure-time centres and first grade classes, and not in settings that were unfamiliar for them. Thus, the children were given opportunities to tell about their experiences of early years with and among peers. The researcher also took part in some play activities initiated by the children and did not take on the role of a teacher. Moreover, the study was planned in a way that could be perceived as fun by the children. The children picked illustrations of interview questions from the hand of the researcher (see photograph in Appendix 1), drew lines with their favourite colour in the interviews (see photograph in Appendix 1) and were asked to make drawings.

During the process of study I come across some ethical dilemmas. One example of a dilemma was that nonparticipating children wanted to be interviewed and make drawings of things they liked. It did not seem appropriate to deny them, what their peers were allowed, neither to invite them to report without their parents’ consent. I decided to let those children make drawings and answer some questions, but these materials were not kept or handled as research data. Another dilemma was that some children wanted much attention. It seemed inappropriate to obstruct their initiatives to conversations or to let them ‘hinder’ other children’s opinion-sharing. It therefore happened that I asked a child if we could continue a conversation the next day as the other children also wanted to talk to me. I thus tried to balance between listening to the children who had much to tell and, at the same time, to create opportunities for the other children to share views. One more dilemma was that not all children were able to share their views by the methods adopted despite several attempts to provide support, such as the use of visualisations in interviews and adopting sign language [Tecken som alternativ och kompletterande kommunikation, in Swedish]. I did not want to exclude them from participation, nor ask other persons to make statements on their behalf. I reflected over this situation and came to the conclusion that
the applications of proxies (i.e., asking questions to the teachers of children that were struggling with sharing their views and experiences) seemed better than knowing or telling nothing at all about those children’s experiences of education. An additional dilemma was that some children wanted to draw for a long time. It seemed inappropriate to rush their drawing activity or to let them miss opportunities for learning and playing with peers. I planned the drawing activity in cooperation with staff members and asked for the children’s consent to prevent the children from missing important activities. In some cases, I explained that there was just a few more minutes left for the drawing activity. Yet another dilemma was that children wanted to be interviewed at the same time, as they in certain cases seemed a little worried about missing transitions between educational activities and play with peers. To solve this situation, in cases when a transition between activities took place the children were interviewed at a time and place that they accepted and followed by the researcher to the new activity. They were also offered to continue their sharing on the next day. I also planned the time for interviews in cooperation with staff members, to avoid the children missing important activities or transitions.

Procedures of empirical studies

Procedure of study 1

In study 1, regarding characteristics of the eight preschools that provide education and care to children with special educational needs, a multiple-case study design and a mixed method approach were adopted. A multiple-case study design (Yin, 2014) is a study concentrated on more than one case. In this study, the eight preschool units were defined as the cases. There were several reasons for adopting a multiple-case study. First, such a design makes it possible to draw cross-case conclusions; second, it may be less vulnerable than a single-case study; and third, the result may be more powerful than if only one case is being investigated (Yin, 2014). A mixed methods approach means that quantitative and qualitative data were collected, analysed and integrated in results of study (Johnson, Onwuegbuzie, & Tumer, 2007; Teddlie & Tashakkori, 2010). There were several benefits of adopting a mixed methods approach. For example, such an approach provided opportunities to present rich descriptions in which words can add meanings to numbers, and vice versa (Johnson, Onwuegbuzie, & Tumer, 2007; Teddlie & Tashakkori, 2010).

The study was based on the data obtained from the ECERS-R (Harms, Clifford, & Cryer, 2010), the CIS (Arnett, 1989a, 1989b), the ICP (Soukakou, 2007, 2012) and the ABILITIES Index (Simeonsson & Bailey, 1991), as well as on direct preschool observations, interviews with preschool
staff, documents that encompass descriptions of the preschool units, and informal conversations with preschool staff (Yin, 2014).

Organisational typologies of the units were generated via a thematic analysis (Braun & Clarke, 2006) and the numerical data on qualities was analysed according to instructions in the manuals of structured observation rating scales. In the analyses of levels of abilities and needs, the ABILITIES Index: Research Composite Score (AIRCS) manual obtained from Simeonsson was used. Ability levels refers to children’s functional and developmental status across domains such as audition, behaviour and social skills, intellectual functioning, limbs, intentional communication, tonicity, health and vision that are scored in the index. A principal component factor analysis in order to obtain a composite measure of the quality of each preschool unit, called Educational Environment Quality, EEQ were conceptualised and conducted. The SEN-level (the highest AIRCS scores in the units) was tested as a predictor of EEQ by means of a linear regression. SPSS was used for performing the analyses.

Procedure of study 2
Study 2, concerning special educational needs and support provisions in the eight preschools, used a multiple-case study design (Yin, 2014) and a mixed methods approach (Johnson, Onwuegbuzie, & Tumer, 2007; Teddlie & Tashakkori, 2010). In this study, the preschool units were defined as the cases. These enrolled a total of 56 children and 16 of those had special educational needs. This study makes explicit use of some of the results of studies 1 and 3 in order to link the special educational needs and the support provisions identified with the characteristics of the eight preschool units (Lundqvist, 2015; Lundqvist, Allodi Westling, & Siljehag, 2016).

Data obtained from the ABILITIES Index (Simeonsson & Bailey, 1991), the eight group interviews with staff, the researcher-staff conversations and the direct observations, were used (Yin, 2014).

Thematic analyses were adopted (Braun & Clarke, 2006) and the analysis of the support provisions was inspired by the didactic framework on effective preschool inclusion (Sandall et al., 2008; Sandall, Schwartz, & Joseph, 2001) and multi-tiered systems of support. Frequencies, means and ranges were also used to describe the children’s abilities and levels of needs. The ABILITIES Index: Research Composite Score (AIRCS) manual was used in analyses.

Procedure of study 3
In study 3, concerning the transition patterns after inclusive preschool of children with and without special educational needs, a longitudinal and multiple-case study design was adopted (Taris, 2000; Yin, 2014). A mixed methods approach (Johnson, Onwuegbuzie, & Tumer, 2007; Teddlie & Tashakkori, 2010) was also adopted. A longitudinal design (Taris, 2000)
means that the same set of children are followed over time and that repeated measurements and data collections are conducted in order to gain an understanding of changes and continuities and factors that may have caused these. A longitudinal study can involve two or three or even more waves, according to Taris (2000). In this case it was a two-wave study; the last year in preschool and preschool-class. It enrolled 56 children and started in preschools (N=8) autumn 2012 to spring 2013, and continued in preschool-classes (N=17) spring 2014. Two children dropped out at the transition from preschool to preschool-class, and some did not start preschool-class and were instead continuing in their preschool units. One child had an extended timeframe in preschool when the study started.

The study was based on the data obtained from the ABILITIES Index (Simeonsson & Bailey, 1991), interviews with staff, conversations with staff and from direct observations (Yin, 2014).

The categories’ full inclusion, partial inclusion, integrated activities and segregated programmes, obtained from Hanson et al. (2001), were used in a deductive thematic analysis (Braun & Clarke, 2006). Frequencies of children in need of support provisions in preschool and preschool-class were calculated and reported.

Procedure of study 4

Study 4, on the subject of educational pathways from preschool to school, has a longitudinal design (Taris, 2000), a multiple-case study design (Yin, 2014) and a mixed method approach (Johnson, Onwuegbuzie, & Tumer, 2007; Teddlie & Tashakkori, 2010). The longitudinal design means, in this case, that the same set of children was followed from their last year in preschool to compulsory first grade. It involved three waves of data collections, and the same data collections methods and measurements were adopted. In this study, the educational settings were defined as the cases. The study builds upon the result, from studies 1, 2 and 3 (Lundqvist, 2015; Lundqvist, Allodi Westling, & Siljehag, 2015a, 2016). Three out of the 56 children dropped out over the time of study. Thus, a total of 53 children remained in wave three of the study. A total of 65 cases were incorporated in the study (preschools, n=8; preschool-classes, n=17, leisure-time centre, n=20 and first grades, n=20).

Data was collected via the ABILITIES Index questionnaire (Simeonsson & Bailey, 1991). Data was also collected via direct observations, researcher-staff conversations and shorter case study interviews (Yin, 2014).

Frequencies and percentages were used in descriptions of the children’s special educational needs, and means and ranges were used in descriptions of the children’s ability levels. A one-way between-groups ANOVA was adopted in an investigation of the relation between AIRCS scores and the children’s need’s groups, and thematic analyses were done on organisational typologies, support provisions and inclusive education (Braun & Clarke,
The categories of full inclusion, partial inclusion, integrated activities and segregated programmes obtained from Hanson et al. (2001) were employed in the thematic analysis. The terms some, a high and a very high need of support provisions, environmental and interpersonal integrated support provisions, one-on-one training and speech therapy, extended timeframes and comprehensive and specialised organisational typologies obtained from the studies 1 and 2 were also employed in thematic analyses.

Procedure of study 6
Study 6, about children’s views and experiences of early years education, has a longitudinal design (Taris, 2000) encompassing three waves. A mixed method approach was adopted (Johnson, Onwuegbuzie, & Tumer, 2007; Teddlie & Tashakkori, 2010). The first process of data collection was conducted in preschools (N=8), the second in preschool-classes (N=17) and leisure-time centres (n=15), and the third in schools (N=20) and leisure-time centres (n=5). In total, 20 leisure-time centres were visited. It enrolled 56 preschool children, and during the data collection in first grade classes, 53 of those were still part of the research.

The data was collected via drawings and visualised semi-structured interviews. Examples of children’s drawings (showing what they like in the educational environment) and photos illustrating the interview techniques are provided in Appendix 1 and 2 of this thesis. Each child was asked to draw three drawings (the first in preschool, the second in preschool-class/leisure-time centre and the third in first grade/leisure-time centre) and was interviewed around the same topics in preschool, preschool-class/leisure-time centre and first grade/leisure-time centre. I asked for the children’s consent to incorporate drawings in the publications. The topics targeted in the interviews were overall experiences, indoor and outdoor play, subject lessons, recesses, circle times, and meal and snack times.

To enhance and facilitate the reporting of the children with special educational needs during data collections several strategies were adopted. For example, peer support was adopted in the sense that more capable children functioned as role models for their peers with difficulties and disabilities. When, for example, visualised semi-structured interviews were proceeding in the children’s setting it was possible for the children with difficulties and disabilities, as well as those who were shy, to look at interview situations before participating in these themselves. Adult support was also adopted. One example was a teacher who made a drawing together with a child of a green bike that the child liked. In this case, the boy did not have the ability to make a drawing on his own. Picture symbols, in the form of Pictograms®, illustrating interview questions and feelings (positive, midway and negative) were also used to enhance understanding and decrease the need of verbal elements. Moreover, some sign language was incorporated in data collections so as to enhance and facilitate the
communication between researcher and children who had difficulties in communication through speech. Besides these adaptations, the exclusion of difficult questions in the interviews was also done if needed. For example, the children who struggled with their communication were not asked to motivate why he or she felt so. Adaptations such as easy to grab cards and child preferences such as drawings were also adopted for broadening participation.

Despite support provided it was not possible to gather the opinions of all children. Therefore, it was decided to further broaden participation via proxy arrangements. A proxy is an adult who knows a child well and who is asked to answer on child’s behalf, providing the closest approximation to how the child would have answered if he or she could. Examples of proxies are that a teacher tells the researcher what a child likes to do and what the children’s overall experiences are of preschool, preschool-class, leisure-time centre and first grade.

Thematic analyses were applied in the analyses of the contents of drawings and interviews (Braun & Clarke, 2006).

An overview of the procedures of the studies enrolled in this thesis is presented in Table 4.

**Procedure of intertwining**

The results from studies 1, 2, 3 and 4 were intertwined into five different educational pathways. These pathways represent the variation of educational pathways of all children, both with and without special educational needs, participating in this research. The pathways are described in text and are illustrated with figures in this thesis. Each pathway is also related to individual children with the intention of enhancing and facilitating the understanding of the pathways identified. The children are called Anna, Bo, Carl, David, Eleonore and Fredrika. These are all fictive names. Factors that seemed decisive for the children’s pathways were searched for in the process of analysis.

**Outline of the literature review**

*Procedure of study 5*

Study 5, the review of research on educational settings incorporating children’s responses, was guided by a literature review outline (Boaz & Sidford, 2006) and inspired by a thematic analysis (Braun & Clarke, 2006). Qualitative and quantitative data (mixed method) were used (Table 4).

Articles were sought by means of SCOPUS and ProQuest, available via the Stockholm University library. The quality of the articles to be reviewed
was considered using guidelines by Thomas and Harden (2008) and Boaz and Sidford (2006). Twenty-four empirical articles published between 1983 and 2012 were identified and targeted for thematic analysis on data collection methods and special support designed to enhance and facilitate the reporting of the children with special educational needs.

A first draft of the literature review was written during a PhD course, Review of International Policy and Research in Special Education, taken at the Department of Special Education, Stockholm University.

Table 4. An overview of the designs, data collection methods and analysis techniques adopted in the studies (1-6) presented in this thesis.

<table>
<thead>
<tr>
<th>Design, data collection methods and analysis techniques adopted</th>
<th>Studies 1</th>
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<th>6</th>
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<td>CIS</td>
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<td>ICP</td>
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<td>The ABILITIES Index questionnaire</td>
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<td>Direct observations</td>
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<td>Shorter case study interviews with the staff</td>
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<td>Researcher-staff conversations</td>
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<td>Drawing by children</td>
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<td>Visualised interviews with children</td>
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<td><strong>Analysis techniques</strong></td>
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<td>Thematic analyses</td>
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<td>Quantitative calculations and analyses</td>
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Chapter three: Results

Results of empirical studies (1-4, 6)

Study 1

Study 1, regarding characteristics of preschools that provide education and care to children with special educational needs, aimed to describe and discuss the characteristics of a number of Swedish preschool units that are part of a decentralised educational system and that enrol children with special educational needs. In particular, the focus was on organisational typologies, availability of resources and quality aspects. Moreover, the aim was to provide reflections on the usefulness of structured observation rating scales designed to measure preschool quality. The six specific questions of the study were:

- How are the preschool units organised and what advantages are presented of the organisation typologies adopted?
- Which resources are allocated to the preschool units?
- What are the characteristics of the preschools with regards to overall quality, interactional quality and quality of inclusive education?
- What is the relationship between organisation, resources, quality and the occurrence of a disability diagnosis in the units?
- What is the relationship between the quality of the units and the level of special educational needs of the 5-year-old children enrolled?
- What reflections can be had on the usefulness of different structured observation rating scales for preschool quality of preschool practices and research?

The preschool units took the form of a comprehensive unit that enrolled children with various special educational needs/disabilities or the form of a
specialised unit that enrolled children with the same disability. An overview of these two typologies is presented in Table 5.

The staff in the comprehensive and specialised units identified benefits with the typologies adopted. The children with and without special educational needs had fun while playing together, they supported each other during activities and they learned skills from each other. The staff in the specialised units also identified some other benefits. They could provide the children with one-on-one teaching (one adult educating one child) and the children did not have to go to a clinic for therapy in speech and language. One-on-one teaching can be seen as one-on-one training from a child’s perspective.

The resources (number of staff to children, number of teachers to children and number of children in the units) were better in the specialised preschool units.

The overall quality as measured by the ECERS-R, the interactional quality as measured by the CIS, and the quality of inclusion as measured by the ICP, varied between the preschool units. In the preschool units that educated and cared for children with a disability diagnosis, the overall quality, the interactional quality and the inclusive quality was never low, which could be the case in the other units. There were no preschool units that reached a score on the ICP that corresponded to a level of a good inclusive education and inclusive environment. There was a certain correspondence between the quality of setting and the level of special educational needs occurring in the preschool unit.

The structured observation rating scales ECERS-R, CIS and ICP were found to complement each other since these captured different sides of quality.

The study indicates that the quality of preschool units may need to be further developed in Sweden, in particular concerning inclusive education and services provided to children with special educational needs.
Table 5. An overview of the organisational typologies of preschool units.

<table>
<thead>
<tr>
<th>Typology of the preschool units</th>
<th>Enrolment of children with special educational needs</th>
<th>Enrolment of children without special educational needs</th>
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<tr>
<td><strong>Comprehensive</strong></td>
<td>Enrols children with various special educational needs/disabilities.</td>
<td>Enrols typically developing children.</td>
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<td><em>Not specialised in any disability.</em> (n=6)</td>
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<tr>
<td><strong>Specialised</strong></td>
<td>Enrols children with the same disability diagnosis.</td>
<td>Enrols typically developing children or ensures regular meetings and connections with typically developing children from another unit.</td>
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<tr>
<td><em>Specialised in a specific disability; for example, language disorder or autism.</em> (n=2)</td>
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Note. The specialised preschool-classes, leisure-time centres and first grade classes, described in studies 3 and 4 of this thesis, were segregated programmes and did not enrol typically developing children and did not ensure regular meetings and connections with typically developing children from regular leisure-time centres, preschool-classes and school classes. The concept of a specialised preschool unit is no synonym for a special preschool unit, [specialförskola, in Swedish]. A special preschool unit might have a comprehensive or a specialised typology.

Study 2
As to study 2, concerning special educational needs and support provisions in Swedish preschools, the purpose was to investigate the abilities and needs of children in some comprehensive and specialised preschools in Sweden that adopt some form of inclusive education, describe the support designed to enhance children’s participation and learning that they provide, and examine differences between these types of preschools with regard to support provisions. The three questions posed were as follows:

- Which are the levels of abilities and needs of the preschoolers that receive support provisions in the comprehensive and specialised preschool units investigated?
• Which types of support provisions, designed to enhance the children’s participation, learning and inclusion are provided in these units?

• What are the differences between comprehensive and specialised settings with regard to support provisions?

The abilities of the children ranged from typical functional and developmental status to very low functional and developmental status (a high AIRCS). The need of support provisions for the children with special educational needs ranged from some needs, to a high and to a very high need of support provisions.

A child in need of some support provisions took part in and learned from most of the educational activities, routines and play without a need for additional help and attention. Once in a while the child needed some extra help and attention in activities, routines and playing with peers to be able to participate and learn. A child with a high need of support provisions handled most of the routines by him/her-self, but needed much help and attention in educational activities and play with peers. A child with a very high need of support provisions was in need of considerable help and attention in educational activities, routines as well as play, to be able to participate and learn. Those, for example, needed assistance with such matters as orientation, movement, eating, self-care and purposeful use of toys.

In order to enhance and facilitate the children with special educational needs participation and learning, and thereby their development, the staff provided several types of support provisions. However, not all of the children with special educational needs were considered to need all types of support and they were provided only some types of support provisions.

The support provisions took the forms of environmental integrated support provisions, interpersonal integrated support provisions, one-on-one training and speech therapy, and an extended timeframe in preschool. The environmental and interpersonal support provisions were integrated into ongoing activities, routines and play activities, and provided in both the comprehensive and specialised preschool units. All the children with special educational needs were provided at least some integrated support provisions. One-on-one training and speech therapy were an exclusive provision of some of the children with a high or very high need of support provisions in the specialised preschool units. These were provided separate from peers and designed to facilitate learning. One-on-one refers to one adult educating one child. These proximal processes were, for the children with special educational needs, low abilities (high AIRCS) and intellectual disabilities, often broken down into small steps. In the specialised preschool units, an extended timeframe of one year in preschool to children with a high or a very high need of support was also provided. An extended timeframe was
provided to few and this means that the child did not follow peers to preschool-classes. Examples of support provisions are provided in Table 7 on page 69.

Study 3

In study 3, about the transition patterns after inclusive preschool for children with and without special educational needs, the purpose was to describe and analyse the pathways in terms of the degree of inclusive education from preschool units to preschool-classes for children with special educational needs and their typically developing peers. Two questions were posed:

- How many children were considered to be typically developing children, children with SEND and children with SEN in the preschools and preschool-classes?
- How can the children’s education and care in preschools and preschool-classes be described in terms of the degree of inclusion?

Since not all children started preschool-class (they remained in preschool for one more year), and one child had an extended timeframe in preschool when the study started, this study has also come to describe children’s needs and education and care in extended timeframes in preschools and in a training school class referred to as a special school in the study.

The total number of participating children having special educational needs increased from 16 children (in the preschool units) to 20 children (in the preschool-classes, extended timeframes and special school).

The children with SEND, on a group level, had lower abilities, as measured by the ABILITIES Index, and higher needs of support provisions than the children with SEN.

The preschool units adopted various levels of inclusive education: full inclusion, partial inclusion and integrated activities. In full inclusion, the children with special educational needs were full members of their units and classes, and participated in all its educational activities, routines and play. In partial inclusion, the children with special educational needs spent most of their time in their units and classes, but were on a regular basis in a separate experience with a staff member to obtain one-on-one training and therapy. In integrated activities, the children with special educational needs spent most of their time in a unit that commonly did not enrol children without special educational needs. In these units, the children had regular meetings and connections with typically developing children from other units and these activities were referred to as integrated activities.

The preschool-classes provided full inclusion, partial inclusion or segregation. The special school class took the form of a segregated
programme. In segregated programmes the elements of inclusive education were non-existing and the only meeting and connections with typically developing children were incidental in public spaces. An overview of the concepts of full inclusion, partial inclusion, integrated activities and segregated programmes are provided in Table 6.

Examples of educational pathways from preschool to preschool-class (and a special school class) were the following: from full inclusion to full inclusion, from full inclusion to segregated programmes, from partial inclusion to retention in the same preschool unit, from partial inclusion to full inclusion, from integrated activities to retention in the same preschool unit, and from integrated activities to a segregated programme. The conclusion was that educational pathways from preschool to preschool-class very seldom, in one case only, were directed towards an increased level of inclusion (i.e., from partial to full inclusion).
Table 6. The forms of inclusive education.

The forms of inclusive education and descriptions

**In full inclusion:**

The children with special educational needs were full members of their units, leisure-time centres and classes, and participated in all the education activities, routines and play that took place.

**In partial inclusion:**

In partial inclusion, the children with special educational needs spent most of their time in their units and classes, but were on a regular basis in a separate experience with a staff member to obtain one-on-one training and speech therapy.

**In integrated activities:**

In integrated activities, the children with special educational needs spent most of their time in a unit that commonly did not enrol children without special educational needs. In this unit, the children had regular meetings and connections with typically developing children from another unit. These regular meetings and connections, encompassing activities such as singing and gross motor play, were referred to as integrated activities.

**In segregated programmes:**

In segregated programmes, the children with special educational needs spent most of their time in alternative leisure-time centres and classes which did not enrol children without special educational needs. In these alternative centres and classes, the children had no regular meetings and connections with typically developing children. The only contact and meetings were incidental. These centres and classes could be located within a regular school, next to a regular school or be located distant from a regular school.

*Note.* The notion of full inclusion, partial inclusion, integrated activities and segregated programmes were obtained from Hanson et al. (2001).

**Study 4**

The aim of study 4, on the subject of educational pathways from preschool to school, was to investigate the educational pathways of a group of children with and without special educational needs from the last year of preschool
inclusive education to first grade in several Swedish municipalities. The following six questions were addressed:

- How do the special educational needs and abilities of the children change from the last year in preschool to compulsory 1st grade?
- Which types of support provisions are provided to the children and are there any changes from the preschool period in this regard?
- What types of educational settings are the children enrolled in after preschool?
- Which changes in activities and relationships occur in the early childhood education transitions?
- Will the placements in inclusive settings change (decrease or increase) over the early school years?
- Which variables seem to be associated with a decreased/increased propensity to inclusive education?

The total number of children with special educational needs increased from preschool to school. In preschool one third of the children (16 out of 56 children) were described as having special educational needs, and in first grade it was half of the children (25 out of 53). The total number of children with SEN changed and increased more (from 9 to 18 children), than the total number of children with SEND who remained constant (7 in preschool and in first grade). Some children ‘stepped out from’ being identified as having special educational needs (both with SEN and SEND) in the early school years. Nevertheless, the total number of children with special educational needs increased over the early school years.

Equal to the preschool phase, the levels of needs of support provisions of children with special educational needs ranged from some needs, to a high need and a very high need of support provisions in the preschool-classes, leisure-time centres and first grades. Descriptions of the levels of needs are provided in Table 8 on page 70. The children with high and very high needs of support provisions in preschool continued to have such levels of needs in preschool-class, leisure-time centre and first grade.

The children with SEND could have some needs, a high need or a very high need of support provisions, but the children with SEN only had some needs or a high need of support provisions. Thus, no child with SEN was described as having a very high need of support provisions.

The abilities of the children with special educational needs, as measured by the ABILITIES Index, ranged from an AIRCS of 0 to 75 in the early
school years. The AIRCS score of the children with SEN ranged from 0 to 40, and for the children with SEND these ranged from 3 to 75. Not all children with SEND had low abilities (high AIRCS). On a group level, the AIRCS scores of the children with SEN and SEND were relatively constant from preschool to school. For the group of children with SEN these ranged from 7 to 8, and for the group of children with SEND these ranged from 40 to 41. Higher levels of needs of support provisions were associated with a higher AIRCS.

Children with a very high need of support were found in both a fully comprehensive inclusive preschool unit, a specialised preschool unit adopting integrated activities, segregated preschool-classes, segregated leisure-time centres and segregated first grade classes.

In addition to the types of support provisions found in the preschool units some children with special educational needs were also provided one-on-one conversation in preschool-class and first grade, and after school training in first grade. Examples of one-on-one conversation and after school training are provided in Table 7 on page 69. No child had an extended timeframe in preschool-class. The one-on-one conversations and after school training were rare and aimed for children with some needs or a high need of support provisions. In the one-on-one conversations a staff member, for example, explained and deliberated a certain social skill of a child. These could be provided in the mornings as well as during the school day. The after school training was designed to enhance learning and were provided to children with special educational needs after school. The support provisions could be provided by a child minder, a teacher, a speech and language therapist, a special teacher, a special educator, an assistant nurse and/or a behaviour scientist. Those who provided the support were commonly employed in the settings. Support was also provided from peers.

Similarly to the preschool units, the preschool-classes, leisure-time centres and first grade classes were comprehensive or specialised in a certain diagnosis.

The preschool-classes and first grades were fully inclusive, partially inclusive or in the form of a segregated programme. The leisure-time centres were fully inclusive or in the form of a segregated programme. All the segregated programmes had a specialised typology. An overview of the concepts of full inclusion, partial inclusion and segregated programmes are provided in Table 6 on page 65.

The children with low abilities (high AIRCS), a very high need of support provision and intellectual disabilities started the segregated programmes after experiencing fully inclusive preschool education or integrated activities. This means that the application of inclusive education decreased.

The biosystem of children could be considered as a key factor for placements in inclusive or segregated preschool-classes, leisure-time centres and schools.
All children experienced changes in activities, relationships and roles in their transitions from preschool to school. The children with low abilities (high AIRCS), a very high need of support provisions and intellectual disabilities experienced greater changes in activities, relationships and roles than the other children since they started segregated programmes and training schools.

Over the early school years, the specialised settings had more resources than the comprehensive settings. The specialised settings had more staff to children, more teachers to children and smaller group sizes. Since the specialised settings, with the exception of two specialised preschool units adopting partial inclusion or integrated activities, were segregated programmes, the comprehensive and inclusive programmes did not have as good resources as the segregated programmes. One exception was a fully inclusive comprehensive preschool-class that was offered generous resources in order to support children with special educational needs among other children throughout the day. The policy in the municipalities was to allocate more generous resources (more staff to children, more teachers to children and smaller group sizes) to children and staff in segregated and specialised programmes.
Table 7. Types, examples and content of support provisions offered.

**Types, examples and content of support provisions**

**Integrated support provisions:**

*Environmental*: Time visualisations; Shared daily visual wall schedules; Individual daily visual wall schedules; Mobile visual schedules; Half-group circle-times; Special toys; Thematic organisations of toys in boxes; Child preferences; Special equipment; A step by step guide for getting dressed for outdoor play; Enclosed spaces; Locked outer doors; PECS®; Hearing protectors; Decreasing tasks; Half-class education; Ability grouped half-class education; Starting outdoor recesses ahead of others; Material rewards. *Interpersonal, staff initiated*: Sitting next to a child; Having a child in lap; Warm and gentle prompting; Supporting peer communications; Supporting conflict resolutions; Supporting purposeful use of toys and materials; One-on-one assistance in educational activities, routines and play; Adopting sign language; Boosting activities with peers and initiating play; Adopting peer modelling; A desk close to staff; Relational reward systems; Ample positive feedback; Individual step-by-step directions; Team teaching. *Interpersonal, peer initiated*: Mediate in conflict situations; Invite and support participation in indoor and outdoor play; Modell play activities; Support in transitions; Positive feedback; Individual step-by-step directions in schoolwork.

**One-on-one training and therapy:**

Speech therapy; Adopt Augmentative and Alternative Communication methods and tools; Communicate verbally; Gross and fine motor skills such as jumping and picking up a pen; Assembling jig-saw puzzles; Drawing; Social skills training such as responding on your name; Labelling and grouping of objects (e.g., fruits, animals, infrastructures and clothes); Recognise letters; Writing; Reading; Maths; Eating; Self-care; Open doors; Turn on lamps; Finding your way to the taxi; Climbing stairs; Getting dressed for outdoor play; Massages.

**Extended timeframe (one year) in preschool**

**One-on-one conversation:**

Teacher/special educator-child conversations on such matter as the forthcoming day, self-esteem and unappropriated behaviours. In some cases, Social Stories® were used.

**After school training:**

One-on-one training in school subjects after school. Training school subjects in a small group after school.
Table 8. Descriptions of the levels of needs, by educational activities, routines and play.

Levels of needs and descriptions of the levels of needs

**Children with some needs of support provisions:**

**Educational activities:** Occasionally, those needed *some* additional help and attention to be able to participate and learn in educational activities (e.g., to stay task oriented), particularly in whole group educational activities. **Routines:** They handled most of the routines (e.g., getting dressed for outdoor play, eating, personal hygiene and orientation) without one-on-one assistance over their early school years. **Play:** Occasionally in early years education those needed *some* additional help and attention in play with peers (e.g., to find a friend to play with, to remain in play, to follow ‘rules’ and to get along with peers).

**Children with a high need of support provisions:**

**Educational activities:** All through their early school years, those needed *much* additional help and attention to be able to participate and learn in educational activities (e.g., to stay task oriented, understand questions, getting the right amount of stimulation and to communicate), in particular in whole group educational activities. **Routines:** They handled most of the routines (e.g., getting dressed for outdoor play, eating, personal hygiene and orientation) without one-on-one assistance over their early school years. **Play:** All through their early school years, those also needed *much* additional help and attention in play with peers (e.g., to find a friend to play with, to stay in play, to follow ‘rules’, to get along with peers and to communicate with peers).

**Children with a very high need of support provisions:**

**Educational activities:** Throughout the days and over the early school years, these children needed *very much* additional help and attention (e.g., small step pedagogic and one-on-one assistance) to be able to participate and learn in educational activities, conducted in groups as well as individually. **Routines:** They also needed *very much* additional help and attention in routines (e.g., one-on-one assistance in getting dressed for outdoor play, eating, personal hygiene and/or orientation) all through their early school years. **Play:** Moreover, these children needed *very much* additional help and attention in solitary play (e.g., purposeful use of toys) as well as in play with peers (e.g., to find a friend to play with, to remain in play, to follow play ‘rules’, to get along with peers and to communicate with peers) during their early school years.

*Note.* These levels of needs occurred in thematic analyses.
Study 6

Study 6, about children’s views and experiences of early years education, aimed to describe and analyse several children’s views on and experiences with their early school years with the intention to enrich the knowledge and understandings of early years education, ensure the rights of children to be heard and enable the improvements of policy and practice consistent with children’s concerns. The questions of the study were the following:

- Which are the children’s views and experiences about their early years education?

- Which reflections are possible to make about the usefulness of drawing and visualised semi-structured interviews when collecting empirical data on educational environments with children?

The children had much to tell about their education and care such as their likes, dislikes and worries. The knowledge and understanding gained on the children’s subjective views and experiences could contribute to improvements of policies and practices consistent with the children’s concerns.

On the whole, the children mainly had a positive outlook of their early school years. The children had more positive than negative views and experiences of their early years education. In particular, they liked to play with peers and toys, to have free time, to do school work, to have athletics and be at leisure-time centre. On the negative side were unstimulating circle times and experiences of threats and physical violence.

The positive views were increasing from the last year in preschool to first grade. As a group, the children were fonder of preschool-class, leisure-time centre and first grade than of their last year in preschool. The group of children with SEN were not as fond of first grade as the others, however.

In order to thrive over their early school years, both the children with and without special educational needs, needed to have: a sense of belonging among peers; opportunities for creative play and thinking; experiences of speed, excitement and physical challenges; elements of cosiness, withdrawals and comfort for recreation; to feel safe; to experience growth in knowledge and understanding of the world; to feel free and autonomous; and to prevent and deal with homesickness.

Most children were able to draw and to take part in visualised interviews, but some children needed support from an adult or a proxy report. To draw seemed to be a familiar activity and made the children active during data collections. The illustration used in the interviews (see photographs in Appendix 1) seemed to facilitate the children’s understandings of the interview questions and their sharing of views without speech.
Results of intertwining

In order to enhance the knowledge and understanding of the early years education investigated, and the children enrolled, it was considered important to intertwine the results from the empirical studies (1, 2, 3 and 4) in this thesis. The questions guiding this intertwining were the following:

- How can the children’s education and care from the last year in preschool to first grade be described in terms of transition patterns, special educational needs, support provisions, inclusive education, and the typology, resources and quality of the educational environments?

- Which reflections are possible to make about changes (discontinuities) and continuities occurring in the educational settings on such matters as transition patterns, special educational needs, support provisions, inclusive education, and the typology and resources of the educational environments?

The educational pathways

There were a variety of educational pathways from the last year in preschool to first grade in the settings investigated for children with special educational needs and their typically developing peers. In purposes of illustration these are termed: (1) On the main road, (2) Exit the main road, (3) A stop sign, shortcut and an alternative road, (4) A stop sign, shortcut and an entrance to the main road, and (5) A bumpy road. All the names of the children used are fictive.

*On the main road: A common educational pathway from preschool to first grade*

The children who were identified as typically developing commonly transited from fully inclusive comprehensive preschool units to fully inclusive comprehensive preschool-classes and leisure-time centres to partially inclusive comprehensive first grade classes (Figure 3a). Some of them also attended partially inclusive comprehensive preschool-classes and fully inclusive comprehensive first grades. They commonly had peers with special educational needs in their early school years.

Anna is a child that was identified as typically developing over her early school years. She attended a comprehensive fully inclusive preschool unit and had peers who needed support provisions there. The abilities and skills of the children in her preschool unit varied to a large extent and the educational activities, routines and play in her unit were attended by children with mixed ability levels. In preschool, she was taught how to sign so as to
be able to communicate with all her peers. All the children in her unit had meal times together, played in the same school yard, shared toys, had circle times together, went on outings to the forest and celebrated festivities together.

After attending a comprehensive fully inclusive preschool unit, Anna started a comprehensive fully inclusive preschool-class, a comprehensive fully inclusive leisure-time centre and then went to a comprehensive partially inclusive first grade. Thus, she had peers who left the classroom for education in first grade. Her preschool peers with low abilities (high AIRCS), a very high need of support provisions and intellectual disability started segregated training preschool-classes, leisure-time centres and first grade classes after preschool and did not follow her to regular preschool-class, leisure-time centre and first grade. After preschool, she no longer practiced sign language.

Anna had a common educational pathway from preschool to first grade in the sense that she did not have an extended timeframe in preschool or take an alternative road (segregation) to first grade. On the other hand, the road of Anna can also be interpreted as somewhat different from the majority of the children since she learned sign language in preschool and had several peers with low abilities (high AIRCS), a very high need of support provisions and intellectual disabilities in preschool. In purposes of illustration, it can be stated that Anna remained ‘on the main road’ after preschool whilst her peers with low abilities, a very high need of support provisions and intellectual disabilities ‘exited the main road’ after the preschool phase and took an alternative road to first grade.
Preschool unit
Fully inclusive
Comprehensive
Environmental and interpersonal support provisions provided to peers

Preschool-class
Fully inclusive
Comprehensive
Environmental and interpersonal support provisions provided to peers

Leisure-time centre
Fully inclusive
Comprehensive
Environmental and interpersonal support provisions provided to peers

First grade
Partially inclusive
Comprehensive
Environmental and interpersonal support provisions provided to peers
One-on-one training and speech therapy provided to peers
One-on-one conversation provided to peers
After school training provided to peers

Note. The grey blocks and grey part of a block represent enrolment in inclusive education, and the white part in one of the blocks represents elements of withdrawals (non-inclusive education) implemented for peers with special educational needs.

Figure 3a. On the main road: A common educational pathway from the last year in preschool to compulsory first grade.

There were also children with some needs or a high need of support provisions that followed such a main road to school, for example Bo (Figure 3b).

Bo is a child who had a high need of support provisions over his early school years. He attended a fully inclusive preschool unit in which he was provided integrated support provisions, for example: a personal step-by-step guide for getting dressed for outdoor play and peer support. He had a close peer who was typically developing and who helped him to express feelings and handle conflicts. In comparison to the other preschools, his preschool had low overall quality, interactional quality and quality of inclusion.

After attending a comprehensive fully inclusive preschool unit, Bo started a comprehensive fully inclusive preschool-class, a comprehensive fully inclusive leisure-time centre and then went to a comprehensive partially inclusive first grade. Thus, he left the classroom and his peers for one-on-
one training in first grade. In these he trained speech and language, fine
motor skills and reading. Examples of environmental and interpersonal
support provisions provided to him in first grade were a desk close to the
teacher and starting outdoor recesses ahead of others, since it took time for
him to get dressed for outdoor play. During the winter season children may
need to put on their overalls, caps, mittens, woollen socks, boots and scarfs
before outdoor play.

**Preschool unit**
- Fully inclusive
- Comprehensive
- Environmental and interpersonal support provisions

**Preschool-class**
- Fully inclusive
- Comprehensive
- Environmental and interpersonal support provisions

**Leisure-time centre**
- Fully inclusive
- Comprehensive
- Environmental and interpersonal support provisions

**First grade**
- Partially inclusive
- Comprehensive
- Environmental and interpersonal support provisions
- One-on-one training
- One-on-one conversation
- After school training

*Note.* The grey blocks and grey part of a block represent enrolment in inclusive
education, and the white part in one of the blocks represents elements of
withdrawals implemented for children with some needs or a high need of support
provisions.

Figure 3b. On the main road: A common educational pathway from the last
year in preschool to compulsory first grade of children with SEN showing
some or high needs of support.

This choice of pathway (on the main road) was related to characteristics of
children such as having a capability to handle most routines without one-on-
one assistance, having the capability to communicate by means of speech
and having no intellectual disability. This choice of pathway was also related
to contextual factors such as attending a school in the neighbourhood and
keeping peer relations.
Exit the main road: Segregation after full preschool inclusion

Three children with low abilities (high AIRCS), a very high need of support provisions and intellectual disability attended a fully inclusive comprehensive preschool unit. During preschool they had no one-on-one training and speech therapy, but ample integrated environmental and interpersonal support provisions so as to be able to take part in and learn from the activities, routines and play taking place. After preschool they moved to specialised and segregated preschool-classes and leisure-time centres (Figure 3c). In these specialised and segregated settings, they were provided one-on-one training to develop functional, academic and social skills, as well as integrated environmental and interpersonal support provisions in order to be able to take part in and learn from the activities, routines and play taking place there. There was also some special equipment available in these settings for simplifying the staff’s care of those children. These segregated preschool-classes and leisure-time centres were termed ‘training preschool-classes and leisure-time centres’. Thereafter, they started specialised segregated first grade classes where they were also provided one-on-one training and integrated environmental and interpersonal support provisions in order to be able to take part in and learn from the activities, routines and play taking place in training school. Their first grade classes were named ‘training school classes’. During preschool-class, leisure-time centre and first grade, the only contact they had with typically developing children were incidental in public areas. This could happen when they walked to their own separate food hall and waited for their school taxis.

Carl is a boy with Down syndrome and intellectual disability who had a very high need of support provisions in educational activities, routines and play over his early school years. In his preschool unit, a majority of the children were typically developing, but children with a high and a very high need of support provisions were also enrolled. Carl trained sign language in preschool, since he struggled to communicate through speech. His peers also trained sign language so that they could communicate together. Carl and the other children in his unit attended the same preschool circle times and song times and they also ate at the same table, shared toys and books, played in the same school yard, rode kick cars together, built with blocks and went on joint outings to the forest. In some cases, he and some of his 5-year-old peers attended circle times with the 3-year-olds from their unit. In preschool he was provided ample integrated environmental and interpersonal support provisions such one-on-one assistance during dressing, a personal daily wall schedule and sign language. He was cherished for his social skills, for being cuddly and for contributing to a positive classroom climate.

After a fully inclusive preschool education Carl moved, with one of his preschool-peers having a very high need of support provisions, to a training preschool-class and leisure-time centre for children with intellectual
disabilities. After training preschool-class he started a training school class for pupils with Down syndrome, but was educated by the same staff as in preschool-class and also kept a majority of peers from preschool-class. Carl’s preschool-class, leisure-time centre and first grade offered integrated environmental and interpersonal support provisions, and he was therefore able to participate in activities such as circle times, routines and play that took place in these programmes. Carl was in preschool-class, leisure-time centre and first grade also offered one-on-one trainings. He trained academic, social and functional skills in the one-on-one trainings. In preschool-class, leisure-time centre and first grade, Carl attended song times, athletics and music times that were attended by children with intellectual disabilities from his class as well as other classes in the training school. He had only incidental contacts with typically developing children in public areas and thus did not play, eat or share toys and books with those children after preschool. During his years in the segregated programmes he started to communicate through speech, grew more autonomous and also started to train writing and counting, and to play football with his peers and staff in the training school. The schoolyard for children from the training school was somewhat isolated from the regular schoolyard, and only occasionally children from regular classes passed by.

Carl is a child who ‘exited the main road’ and entered an alternative road to first grade and who experienced great differences concerning organisational typologies, the provision of support and of inclusive education over his early years education. Carl’s transition from preschool can be described as radical.
Note. The grey block represents enrolment in inclusive education and the white blocks represent segregation implemented for children with a very high need of support provisions.

Figure 3c. Exit the main road: The educational pathway from the last year in preschool to training school first grade of three children with a very high need of support provisions.

This choice of pathway (exit the main road) was related to characteristics of children such as low abilities (high AIRCS), a very high need of support provisions in educational activities, routines and play, intellectual disabilities, difficulties in communication, health care needs, and the considered need of intensive and individual one-on-one training. This choice of pathway was also related to contextual factors such as the existence of training schools in the municipalities, provisions of one-on-one training and offering of one-on-one assistance in these programmes. The availability of special equipment and generous resources in segregated programmes, and content of national policies also played a role in the case of exiting from the main road. Moreover, the choice of parents and recommendations from professionals to choose a training school for a child were decisive. Other contextual factors such as keeping ample peer relations from preschool, having elements of inclusive education also after the preschool phase, and attending school in the neighbourhood were not prioritised for the children that exited the main road.
A stop sign, shortcut and an alternative road: From integrated activities to segregation

Two children with low abilities (high AIRCS), a very high need of support provisions, autism and intellectual disability transited from a specialised preschool unit. In the preschool unit they had integrated activities, and they were provided ample one-on-one training and integrated environmental and interpersonal support provisions. After preschool they moved to segregated specialised first grades where they were also provided one-on-one training and integrated environmental and interpersonal support provisions (Figure 3d). Those children had an extended timeframe in preschool and did not attend preschool-class. The staff reported that these children did their preschool-class year in a preschool. Their leisure-time centres and first grades were part of training schools. One of those children changed training school during these years. One reason was to gain even more one-on-one training.

David is a boy with autism and intellectual disability who had a very high need of support provisions in educational activities, routines and play over his early school years. His preschool was specialised and adopted integrated activities. In preschool he was provided ample one-on-one training and integrated support provisions such as PECS®, a personal daily wall schedule and ongoing one-on-one assistance. David and his peers had song times, gross motor activities and outdoor play with typically developing children in another adjacent preschool.

After preschool David moved to a training school, in which he attended several small group arrangements enrolling children with intellectual disabilities, such as circle times, baking and music times. In this programme he also trained academic, social and functional skills in one-on-one situations and was offered massage. Over his early school years, David changed training school and he was now provided with even more academic, social and functional oriented one-on-one trainings, and at the same time less small group arrangements enrolling children with intellectual disabilities. His teacher, like all the other teachers observed in the training schools investigated, used warm and gentle prompting during these trainings and broke these down into small steps. As in his previous school, he had no contact with typically developing children. His second training school was different from the other four training schools visited during this research. It had a high fence, small ‘classrooms’, several looked doors and few toys, materials, books and wall displays accessible for the children. In this school, the children did not eat at the same table as peers, and instead all sat one at a table with a staff member. During these meal times the child and adult could communicate. They also trained in some table manners.

David is a child who came across a ‘stop sign’, and who took a ‘shortcut and an alternative road’ to first grade. He did not experience many meetings and connections with typically developing children in his early years education. The illustration ‘a stop sign’ illustrates the extended timeframe in
a preschool unit and that no transition to preschool-class should be made. The illustration ‘a short cut’ illustrates skipping preschool-class in order to be able to start school in time. An extended timeframe does not mean that a child starts school later than other children.

Extended timeframe in a preschool unit
Integrated activities
Specialised
Environmental and interpersonal support provisions
One-on-one training

First grade
In a training school
Segregated programme
Specialised
Environmental and interpersonal support provisions
One-on-one training

Leisure-time centre
In a training school
Segregated programme
Specialised
Environmental and interpersonal support provisions
One-on-one training

Note. The grey part of a block represents enrolment in inclusive education in the form of integrated activities and the white part and white blocks represent segregation for children with very high special educational needs.

Figure 3d. A stop sign, shortcut and an alternative road: The educational pathway from an extended timeframe in preschool to training school first grade of two children showing a very high need of support provisions.

A stop sign, shortcut and an entrance to the main road: Partially inclusive education over the early school years

One girl, with the fictive name Eleonore, who had a language disorder and a high need of support provisions in educational activities and play over her early school years, had an extended timeframe in a partially inclusive specialised preschool unit. There, she was provided integrated environmental and interpersonal support provisions and one-on-one training and speech therapy.

She transited to a partially inclusive comprehensive first grade where she was also provided integrated environmental and interpersonal support provisions and one-on-one training (Figure 3e). In the afternoons, she attended a fully inclusive leisure-time centre in which she had a one-on-one assistance and the opportunity to do ample artwork in a well-equipped art room on her own as well as with peers.

Eleonore is a child who came across a ‘stop sign’, and who took ‘a shortcut’ to school and ‘entranced the main road’ in first grade.
**Extended timeframe in a preschool unit**  
Partially inclusive  
Specialised  
Environmental and interpersonal support provisions  
One-on-one training and speech therapy

<table>
<thead>
<tr>
<th>First grade</th>
<th>Leisure-time centre</th>
</tr>
</thead>
</table>
| Partially inclusive  
Comprehensive  
Environmental and interpersonal support provisions  
One-on-one training | Fully inclusive  
Comprehensive  
Environmental and interpersonal support provisions |

*Note.* The grey parts of the blocks and the grey block represent enrolment in inclusive education, and the white parts of the blocks represent elements of withdrawals implemented for her.

Figure 3e. A stop sign, shortcut and an entrance to the main road: The educational pathway of a child with a high need of support provisions from an extended timeframe in preschool to first grade.

The choice to have an extended timeframe in preschool (such as in the pathway of David and Eleonore) was related to characteristics of children such as a high or a very high need of support provisions, disability diagnosis, difficulties in communication and the need to carry on the training and therapy offered in preschools. This choice was also related to contextual factors such as the existence of preschool units offering an extended timeframe in preschool, the presence of a speech and language therapist in a unit, and generous resources in specialised preschool units. The extended timeframe in preschool was a local initiative, since such support provisions are not promoted in the Swedish education policies, even if it is not prohibited either. Other examples of affecting elements were choices of parents and recommendations from professionals. There were also time related factors that played a role such as the continuity and duration of support provisions. Contextual factors such as following the peers to preschool-class and leisure-time centre, or attending a neighbourhood preschool-class, were not prioritised for the children that had an extended timeframe in preschool; instead, other factors were central.

*A bumpy road: From partial to full inclusion and back to partial inclusion*

One child, with the fictive name *Fredrika*, had high needs of support provisions. She transited from a partially inclusive specialised preschool unit where she was provided one-on-one training and speech therapy, and integrated environmental and interpersonal support provisions, to a
preschool-class (not visited during the period of data collection), and then moved to a fully inclusive comprehensive preschool-class located in a preschool. In this preschool-class, Fredrika was not provided one-on-one training and speech therapy. Thereafter, she moved to a partially inclusive comprehensive first grade where she was provided one-on-one training, one-on-one conversations and integrated environmental and interpersonal support provisions (Figure 3f).

Fredrika had a quite ‘bumpy road’ to first grade, in particular after preschool and before compulsory first grade, and experienced several transitions and great differences concerning support provisions, inclusive education and organisational typologies. One reason (contextual) was that her family moved twice during her early school years.

Note. The grey parts of blocks and the grey blocks represent enrolment in inclusive education, and the white parts represent elements of withdrawals implemented for her. The black block represents a preschool-class that was not visited during data collection.

Figure 3f. A bumpy road: The educational pathway of a child with a high need of support provisions from the last year in preschool to first grade that encompassed several transitions.
Conclusions of the empirical studies

The characteristics of the early years education investigated can be summarised as follows: a variation of pathways to compulsory education; changes in activities, relationships and roles in the transitions; a variation in preschool quality; a broad conceptualising of special educational needs; an application of comprehensive or specialised typologies in the educational settings; an undecided and cautious attitude toward inclusive education; an allocation of generous resources to specialised and segregated programmes; a diversity of support provisions; and a mainly positive outlook of early school years by the children.

A variation of pathways to compulsory education

The early school years investigated comprised preschool, preschool-class, leisure-time centre and first grade.

The educational pathways from preschool to school varied. Commonly, the children moved from preschool to preschool-class and leisure-time centre to first grade. After first grade most of them attended the same leisure-time centre as during preschool-class. There were three children out of the 54 children who did not go to preschool-class (6%) and instead those had an extended timeframe in preschool (two children dropped out from the research before fieldwork in the preschool-classes and leisure-time centres). Those started first grade and leisure-time centre after their extended timeframe in preschool. Ninety-four per cent of the children (51 out of the 54) attended preschool-class. In purpose of illustration the children’s educational pathways were termed: on the main road; exit the main road; a stop sign, shortcut and an alternative road; a stop sign, shortcut and an entrance to the main road; and a bumpy road.

Decisive for what path a child followed were characteristics of the child as well as characteristics of the surrounding context. There were also time related factors that played a role, for example, the duration of support provisions and child’s age.

Transitions and changes in activities, relationships and roles

The number of transition made by the children over the early school years varied. The children, both with and without special educational needs, commonly made two transitions from the last year in preschool to first grade (from preschool to preschool-class and leisure-time centre, and from preschool-class to first grade). There were also children with special educational needs with a high and a very high need of support provisions who experienced one transition (from preschool to first grade and leisure-time centre), and one child with a high need of support provisions who
experienced more than two transitions. The preschool-classes and leisure-
time centres, with some exceptions, were closely related. These commonly
had the same staff employed and were also located in the same spaces.
Therefore, the children were described as making one transition from
preschool to preschool-class and leisure-time centre.

The children experienced changes in activities, relationships and roles in
their transitions. The activities changed from being focused on free play in
preschool units to academic work (initiated by teachers) in the first grades of
most children. The children gained new peers and teachers in their
transitions. However, several of them kept at least some peer relations from
their previous unit/class and some also kept their teacher relationships from
preschool-class in first grade. The roles of the children were also changed;
for example, from a child in preschool to a student in compulsory education,
and from being the oldest in preschool to the youngest in school.

The children with low abilities (high AIRCS), a very high need of support
provision and intellectual disability had the most drastic transitions, in
particular those who exit the main road. After preschool they did not
experience inclusive education and they did not follow typically developing
peers to preschool-class, leisure-time centre and first grade.

A variation in preschool quality
The preschools’ quality varied in overall quality, interactional quality and in
quality of inclusive education. In the preschool units that educated and cared
for children with a disability diagnosis, the overall quality, the interactional
quality and the inclusive quality was never low, which could be the case in
the other units. There were no preschool units that reached a score on the
ICP that corresponded to a level of a good inclusive education and inclusive
environment.

A broad conceptualising of special educational needs
The children with special educational needs were a heterogeneous group in
the early school years. The concept of special educational needs referred to
children who struggled in early years education, children who experienced
difficulties in learning and/or in everyday function and children who had a
disability diagnosis such as autism, intellectual disabilities, oppositional
defiant disorder, Down syndrome, hearing impairments, vision impairments.

The children with special educational needs had some needs, or a high or
a very high need of support provisions in their early school years, transient
or long term.

The children with special educational needs had strengths and
capabilities. A child with some needs and on the main road to school was
described as creative, as having ample social skills and as having many
friends. A child with a high need of support provisions, and who followed the main road to school, was described as gifted and talented, and as contributing to stimulating his peers’ learning on such matters as the solar system and mathematics. A child with a very high need of support provisions and who exited the main road was described as cherished for his social skills, for being cuddly and for contributing to a positive classroom climate.

An application of comprehensive or specialised typologies of the educational settings

The settings were comprehensive or specialised. A comprehensive setting enrolled children with various types of difficulties and diagnosis, and a specialised organisational typology enrolled children with the same type of difficulties and disability diagnoses.

The preschool units (N=8), preschool-classes (N=17), leisure-time centres (N=20) and first grade classes (N=20) were comprehensive or specialised in certain disability diagnoses. The comprehensive settings were more common than the specialised educational settings. Two of the preschool units, two of the preschool-classes, six of the leisure-time centres and five of the first grade classes were specialised.

An undecided and cautious attitude toward inclusive education

The staff in the preschool units adopted full inclusion, partial inclusion or integrated activities. The comprehensive preschool units were fully inclusive, whereas the staff in the specialised preschool units adopted partial inclusion or integrated activities. No preschool took the form of a segregated programme.

The staff in the preschool-classes adopted full inclusion, partial inclusion or segregation. No preschool-class had integrated activities. The comprehensive preschool-classes were commonly fully inclusive, but some were partially inclusive. The specialised preschool-classes took the form of a segregated programme and a training preschool-class.

The staff in the leisure-time centres adopted full inclusion or segregation. All the specialised leisure-time centres were in the form of a segregated programme and a training leisure-time centre.

Similar to the preschool-class staff, the staff in the first grades adopted full inclusion, partial inclusion or segregation. No first grade had integrated activities. The comprehensive first grades were commonly partially inclusive, but some were fully inclusive. The specialised first grades took the form of a segregated programme and a training school.

A combination of a specialised organisational typology and inclusive education were not operationalised after preschool.
The way of thinking about inclusive education and realising inclusive education were not constant and straightforward in the settings investigated. Trust was placed in some form of inclusion for all in preschool, but not thereafter. The approach towards inclusive education can be understood as undecided and cautious in several of the children’s pathways from preschool to school.

Preschool inclusion did not create a momentum for being further included in a preschool-class, leisure-time centre and first grade class. After preschool, all the children with a very high need of support provisions in fact started specialised and segregated programmes.

An allocation of generous resources to specialised and segregated programmes

As to the allocation of resources in the municipalities and settings investigated, the policy was to allocate (a) more generous resources to specialised preschool units than to comprehensive preschool units, (b) to allocate more generous resources to preschool units that enrolled children with disability diagnosis than to those who did not (c) and to allocate more generous resources to specialised and segregated preschool-classes, leisure-time centres and first grades than to comprehensive and inclusive preschool-classes, leisure-time centres and first grades.

A diversity of support provisions

All the children with special educational needs were provided support provisions. The types of support provisions considered needed were as follows: environmental and interpersonal integrated support provisions; one-on-one training and speech therapy; extended timeframe in preschool; one-on-one conversation; and after school training.

Environmental and interpersonal integrated support provisions were provided to all the children with special educational needs among peers in ongoing activities, routines and play. These were designed to enhance participation and facilitate learning.

In preschool, one-on-one training and speech therapy were an exclusive provision of some of the children with a high or a very high need of support provisions in specialised preschool units. Thereafter, such training and therapy were also provided in comprehensive settings and to children with some needs of support provisions. The training and the therapy were designed to enhance social, functional and academic skills and the proximal processes in these were, when needed, broken down into small steps. Three of the 53 children (6%) were provided individualised and intensive one-on-one training over their early school years (i.e., from the last year in preschool
to first grade). Three of the 53 children (6%) were provided individualised and intensive one-on-one speech therapy in preschool or in preschool-class and first grade.

One-on-one conversation was considered needed in some cases. These were provided for children with special educational needs separated from peers, for example in the mornings, and designed to enhance social competence and self-esteem of children, and used to inform a child about a forthcoming day. One-on-one conversation was provided in fully and partially inclusive comprehensive preschool-classes to children with some needs, and in a partially inclusive comprehensive first grade to a child with a high need of support provision.

After school training was also considered needed in some cases and was designed to enhance learning. These were provided to children with special educational needs after school in a partially inclusive comprehensive first grade. (These were also provided to children who had been sick and missed out on opportunities for learning).

An extended timeframe in preschool was linked to the specialised preschool units adopting partial inclusion or integrated activities, and to children with a high or a very high need of support provisions. Three out of the 54 children (6%) participating in this research (wave one and two) were provided an extended timeframe in preschool and did not attend a preschool-class. These preschool units provided ample individualised and intensive one-on-one training, and one of these units also provided ample one-on-one speech therapy.

A mainly positive outlook of early school years

The children reported more positive than negative experiences of their early years education and pinpointed the importance of having a sense of belonging among peers; opportunities for creative play and thinking; experiences of speed, excitement and physical challenges; elements of cosiness, withdrawals and comfort for recreation; experiences of growth in knowledge and understanding of the world; feeling safe; feeling free and autonomous; and preventing homesickness in order to thrive. However, the children with SEN were not as fond of first grade as the other children.

Results of the literature review

Study 5

In the literature review the objective was to locate research on educational settings incorporating responses from children with or without disabilities or
special educational needs, and to describe how the research was conducted. Two questions were posed:

- Which data collection methods were adopted to involve children with and without disabilities or special educational needs in research on educational settings?

- What kind of special support was offered to the participating children with disabilities or special educational needs?

It was found that the researchers who included children’s responses in their research obtained the data by adopting traditional data collection methods such as interviews, observations and questionnaires, and by adopting innovative data collection methods such as visualisations, writing, child-directed tours and informal discussions.

In the review, it was also found that the researchers offered support provisions, referred to as special support in study 5, to children with disabilities or special educational needs which created opportunities for those children to share their views. The special support was relational and material such as assistance from an adult or peer, the use of picture symbols and child preferences, and the exclusion of difficult questions. Moreover, it was shown in the review that the involvement of children’s responses has the potential to enrich the adults’ understanding of how children experience educational settings and their sense of well-being in these environments.
Chapter four: Discussion

The overall aim of this research was to describe and analyse the educational pathways from preschool to school of a group of children with and without special educational needs. The aim was also to describe and analyse children’s views and experiences of early years education, and how these can be obtained.

The chapter begins with a discussion of the results, followed by limitations and suggestions for future research. Thereafter, a discussion of the relevance of research is presented. At the end of the chapter some implications to research, policy, practice and families are offered.

Discussions of results

In this section the results are discussed. The results are related to previous research, didactical frameworks for support provisions and the bioecological model for human development. Some concerns that seem possible to relate to the early school years, support provisions and inclusive education are also discussed.

A variation of pathways

The results suggest that educational pathways to compulsory education can vary and also be very different from one child to another. This means that the topic of educational pathways is complex and multifaceted. This is particularly true for children with special educational needs. Their pathways seem possible to illustrate with expressions such as the following: on the main road; exit the main road; a stop sign, shortcut and an alternative road; a stop sign, shortcut and an entrance to the main road; and a bumpy road.

When these results on pathways and transitions are being compared with the research of Lago (2014) several similarities emerge. Both this research and her research suggest that children commonly move from preschool-class to first grade in Sweden. This research and her research also suggest that other pathways and transitions can occur. For example, not all children may attend a preschool-class. The comparison between the results of these studies can be seen as an attempt to conduct an analytical generalisation on educational pathways and transitions occurring in the context of Sweden.
The variation in pathways can be seen as local attempts, occurring in a decentralised education system, to meet varied needs of children and thus as an individualisation of early years education and of support provisions.

Such variations in pathways may imply some problems. Children, who take the same path in preschool but different paths thereafter, could risk to lose their contact with peers as well as friendships. Such a risk seems, first and foremost, related to children with a high or a very high need of support provisions and who have a disability diagnosis. Those children may have an extended timeframe in preschool for additional training and speech therapy or exit the main road and start a compulsory school for children with intellectual disabilities, and thus they are not following their same-age peers to preschool-class and first grade. Keeping peer relationships seems not to be decisive in transition planning for children with a high or very high need of support provisions and who have a disability diagnosis, while this seems important for the other children. Such an approach may imply that peer relations are not seen as important as getting one-on-one training and therapy in a specialised setting for children with certain disabilities. Since peer relationships and play are related to children’s health and development (Ladd, 2005), more capable peers can provide support in activities, routines and play (Sandall et al. 2008) (also shown in this research) and considering that play is an engine for development (Bronfenbrenner & Morris, 1998) this result can be interpreted as problematic. In particular, if we assume that friendships over time and play with friends of the same age play an essential role for children’s well-being and development. To keep peer relationships from preschool may also help smoothing transitions from preschool to school (Ackesjö, 2014; Wilder & Lillvist, accepted; Lillvist & Wilder, in press).

Anna and Carl (fictive names; Figure 3a and 3c) attended the same preschool unit, but moved thereafter to different educational settings. During preschool Anna and Carl learned sign language which assisted their communications, and they were also both attending the same educational activities and routines, such as circle times and mealtimes. At times, they also played together in the school yard and in the indoor play spaces. What seemed to be a good basis for a further education together was not taken advantage of and instead seemed wasted in the investigated context.

Changes in activities, relationships and roles

The results suggest that all children may come to experience changes in activities, relationships and roles in their transitions from preschool to school. The results suggest also that children with low abilities, a very high need of support provisions and intellectual disabilities may come to experience great changes in activities, relationships and roles in their transitions from preschool to school. This can be seen as a consequence of
undecided and cautious attitudes toward inclusive education for those children after preschool. Indeed, early childhood transitions may be critical for children (Ekström, Garpelin, & Kallberg, 2008), in particular for children that exit the main road, and may infer radical changes in their everyday activities, relationships and roles (Bronfenbrenner, 1979).

Uneven quality of preschool microsystems

Preschools’ quality seems to vary both in overall quality, in interactional quality and in quality of inclusive education. This means that children with and without special educational needs in Swedish preschools may have unequal opportunities for academic, social and functional development and that the support provisions provided to children with special educational needs may be offered in settings that have too low overall quality. Since preschool quality matters for child development (Sammons, 2010; Sylva, 2010; Taggart, 2010; Taguma, Litjens, & Makowiecki, 2013), and since it is considered important to have a solid foundation for support provisions (Sandall, Schwartz, & Joseph, 2001; Sandall et al., 2008) it seems crucial to pay attention to the preschools’ quality. Preschools that have low quality should be identified and improved.

The improvement of preschool can be seen as a multi-layered work. In some cases it can be central to focus on improving the quality of inclusion since other quality aspects (overall quality and quality of interactions) seem adequate, but in some cases it can be central to focus on all these three quality aspects to ensure good conditions for participation, learning and development for all children.

The preschool units observed did not reach a high quality of inclusive education, when assessed by the structured observation rating scale ICP. One explanation could be that some aspects that are internationally related to an effective preschool inclusion, appear not always to be given a central role in preschool practice and policy in Sweden. For example, there seems to be differences concerning the written planning for inclusive education and the use of IEPs which are used internationally but not always here (Education Act, 2010:800; SNAE, 2011a). This serves as a reminder of the importance to make cultural adaptions of structured observation ratings scales to contexts, in which these are to be used, and to provide qualitatively oriented reflections since these can explain the results. Nevertheless, evaluations of preschool quality, based on a structured observation rating scale, can be useful even if some problems may occur on such matters as differences with regard to written planning. The application of structured observation rating scales, both in research and in self-assessments, holds the potential to enhance the understanding of a preschool unit and its education system.

Both in a validation of the ECERS-R to the Swedish early years education context (Andersson, 1999; Harms, Clifford, & Cryer, 2010), and in a
comparison between the ICP and the Swedish preschool macro-policy, there
were also not many differences. The contents of these universal structured
observation rating scales did not seem controversial when applied in the
Swedish context and having in mind the objectives of the preschool
curriculum. These rating scales seem, like the UN CRC (1989) and the UN
CRPD (2006), to comprise aspects that are important for all children’s well-
being, no matter where they live nor what their difficulties and diagnoses are.

Staff members in preschool units that provide education and care to
children with special educational needs and disabilities (SEND) seem to do
well concerning the services’ quality and the offering of good conditions for
participation, learning and development. In this research, the quality was
never low in the units that provided education and care to children with
SEND. This may mean that the inclusion of children with disabilities produce opportunities for professional development and for developing
quality settings.

Special educational needs as a multifaceted concept

The concept of special educational needs was found to be a multifaceted
concept in this research. It relates to children with difficulties (in learning
and behaviour) and to children with disability diagnoses. However, it was
also found to be related to children with remarkable social skills and to a
child who was described as gifted and talented. This part of the results may
broaden and deepen what could be considered a conventional understanding
of the concept, in the sense that special educational needs include children
being skilled and capable.

An increasing group

The results propose that children with special educational needs are an
increasing group over the early school years. It seems more common that a
child steps into the group than out from the group. The total number of
children with SEN seems likely to increase the most, but the number of
children with SEND may also increase. This part of the result proposes that
special educational needs are not always a fixed label and can be described
as transient or long-term. For this reason, teachers and other staff may
continuously peruse the needs of the children so that children that step into
the group are provided with support needed as soon as possible.

Giota and Lundberg (2007) estimated in their longitudinal study on
Swedish school children (N=17,000), born 1982 and 1987, respectively, that
at least 40% of the children were in need of support provisions at some point
in school. In this research, approximately half of the children were identified
by the staff members as having special educational needs and to be in need
of support provisions, temporary or long term. In first grade, the percentage
was as high as 47%. Both research projects suggest that the provision of support is likely to be an undertaking for many teachers.

A heterogeneous group
The results also propose that children with special educational needs are a heterogeneous group, in terms of abilities and needs, in early school years. Concerning variances in abilities (AIRCS), the group of children with SEND may have lower ability levels than the group of children with SEN, and due to this they may need more types of support provisions in order to participate and learn in early years education. Concerning variations in need of support provisions, children with special educational needs may have some needs, a high need or a very high need of support provisions, temporarily or long term, in early school years.

According to what has been observed in this research, children with high or very high needs in preschool are likely to have a similar need level over their early school years. This means that a child with a high need of support provisions in preschool is likely to have a high need of support provisions in first grade, and that a child with a very high need of support provisions in preschool is likely to have a very high need of support provisions in first grade. So, although those children may learn new skills, as Carl (Figure 3c) did, they are likely to have a similar need level over their early school years. This implies that reviews of the need levels of children, first and foremost, should be linked to children with some needs.

Beneficial combinations of concepts
Since the concept of special educational needs was found to be multifaceted, it can be important to combine it with descriptions of children’s levels of needs, levels of abilities and disability diagnosis. I will provide two motives for making such a claim: First, if this research had not incorporated clarifications of children’s special educational needs in the form of some needs, a high need and a very high need of support provisions, the knowledge and understanding of their early years education, transitions, special educational needs and support provisions would have been more limited, or at least not the same. It had, for example, not been possible to capture the connections between organisational typologies, resources, support provisions, inclusive education, segregated programmes and the level of special educational needs. Second, if this research had not incorporated clarifications of children’s special educational needs such as with or without a disability diagnosis (SEN/SEND) in certain cases, the knowledge and understanding of early years education, transitions, special educational needs and support provisions would have been more limited, or at least not the same. It had, for example, not been possible to capture the connections between abilities, levels of needs, resources, quality of settings and the disability diagnosis.
The concepts of some needs, a high need and a very high need were considered useful and valuable in this research of early years education. These concepts may also have relevance in other situations. These may be useful and valuable in transition and support planning in early school years practices in Swedish municipalities. These may also be useful in education funding arrangements in municipalities and in making the funding fair, in the sense that the allocation of resources will be based on levels of needs rather than on disability diagnosis or organisational typologies.

Child influences on the context and the chronosystem
According to what has been observed, the biosystem of children may influence the context such as what opportunities and conditions will be offered for participation and learning in a setting for a child with special educational needs, and on the chronosystem, such as the duration of support. The results of this research, for example, suggest that a disability diagnosis may function as a ticket to certain support provisions (e.g., speech and language therapies in a preschool). This may create a situation where disability diagnoses are sought after.

Comprehensive and specialised typologies of microsystems
The results indicate that early years education can be specialised and enrol children with the same type of difficulties and disability diagnoses or can be comprehensive and enrol children with various types of difficulties and diagnoses.

In specialised settings, the children with special educational needs will have meetings and connections with children having similar needs and difficulties as themselves. At the opposite, the children with special educational needs in comprehensive settings can meet and have connections with children with quite different needs, abilities and skills. To lack peers having similar needs and disabilities can be a negative experience, according to Terzi (2010, in Hornby, 2012). It can be more comfortable to have peers with similar disabilities and needs, and it can also be easier to feel that you belong among peers that are alike you. On the other side, it can be a positive experience to get to know peers that are different from you. Booth and Ainscow (2002) argue that such a situation creates opportunities for children to develop an understanding of difference in schools and in communities.

Do specialised early years education settings hinder or enable inclusive education?
It can be important to discuss if specialised early years education settings are to be understood as hinderers or as enablers of inclusive education. Since all the specialised preschool units visited in this research adopted some form of inclusion, specialised preschool units may be seen as enablers of inclusive
education. This does not seem to be the case after preschool, however, since all the specialised settings visited were in the form of segregated programmes. On the other hand, specialised inclusive preschool units may be seen as hindering inclusive communities in the sense that these units may not be located in a child’s neighbourhood preschool. For example, if a child qualifies for attendance in a specialised partially inclusive preschool unit, he/she might have to leave the neighbourhood peers behind and gain new peers. In such a circumstance, a child is attending an inclusive education and is probably gaining ample one-on-one training and speech therapy that expands on his/her skills, but at the same time he/she is in fact separated from peers in his/her neighbourhood. Hence, it appears as if specialised inclusive preschool units can be seen as enablers of inclusive education in a sense, as well as be holding back the development of inclusive communities and school cultures.

**Teacher training**

It appears as if prospective teachers, special teachers and special educators should be provided with wide-ranging knowledge and skills in their teacher trainings even if they are to be working in specialised settings that enrol children with the same disability. This research namely suggests that children with the same disability diagnosis are most likely a heterogeneous group with different needs. The participating children with a language disorder, for example, had different one-on-one trainings and speech therapies, since their needs were not the same, according to the staff. Opting for wide-ranging skills of prospective teachers, special teachers and special educators seem also in line with the notion of inclusive education, because teachers will be prepared to meet varied needs and to adapt educational settings to children’s needs. Of course, it could also be beneficial for children that their teachers have specialised knowledge about disabilities, when it comes to ensuring good conditions for learning and development for children with special educational needs.

**Inclusive education and segregation in microsystems**

Early years education settings can be more or less inclusive, and staff members can adopt full inclusion, partial inclusion or integrated activities. After preschool, however, local authorities, head teachers, teachers, other staff and parents in preschool-classes, leisure-time centre and first grade, may make a different choice and seem to prefer segregation in certain cases. Children with low abilities, a very high need of support provisions and intellectual disabilities seem unlikely to be enrolled in any form of inclusive education after preschool, according to the practices adopted in the contexts observed in this research.
The results confirm the study of Östlund (2012) in the sense that relationships between typically developing children and children with intellectual disabilities attending training school classes seem scarce. This could have a negative impact on children’s socialisation and identity formation, as was suggested by Östlund. It is in the research showed that children with intellectual disabilities can be supported by typically developing children. Children imitate and learn from their peers. They may also be provided with opportunities to practice functional, social and academic skills taught in one-on-one training and therapy in such relationships.

The concept of full inclusion, partial inclusion and integrated activities
Since the concepts of full inclusion, partial inclusion and integrated activities, summarised in Table 6 on page 65 of thesis and obtained from Hanson et al. (2001), were considered useful and valuable in the descriptions and analyses of early years education in this research, these concepts may also have relevance in other situations. These may be useful and valuable when inclusive education is described and discussed in early school years practices in Swedish municipalities.

Reservations toward inclusive education
Because of the application of segregated programmes in the settings investigated, the absence of the concept of inclusive education in Swedish education policies (Education Act, 2010:800; SNAE, 2011a, 2011b, 2011c, 2011d) and a focus on risks rather than of benefits of inclusive education in certain cases (SOU, 2008:109), it does not seem appropriate to describe the way of thinking about and practicing inclusive education as a ‘hard-line inclusive approach’. Such an approach considers inclusive education applicable for all children with special education needs throughout their early school years. So comparable with, for example, Warnock (2005, in Hornby 2012) and Farell (2010, in Hornby, 2012), the staff in the investigated preschool-classes, leisure-time centres and first grade classes, and the Swedish education macro-policy, give the impression of being unconvinced that inclusive education is beneficial for all, throughout their early school years.

Even if inclusive education is considered beneficial for children in general, and the society as a whole (Odom et al., 2004; Salamanca Statement UNESCO, 1994; Thomas & Vaughan, 2004; UN CRPD, 2006; UNESCO, 2009), it can be wise to be undecided, cautious and to hold some reservations towards inclusive education and not make such an education compulsory for all. All teachers and staff may not be able to provide an education ‘for all’ that is good enough, for example. The reasons may be low engagement for children with special educational needs, lack of skills in support provisions and tight resources from municipalities. Moreover, not all children may want
or be able to be part of a unit, class or centre at a certain time in life, and of course children should not be forced to. It is important to stress that segregation cannot be seen as the solution only because of, for example, the lack of skills of staff. There may be other solutions, for example: changes in the attitudes of staff, further education in the didactics of inclusive education, allocation of resources, opportunities to have peer meetings and connections on a child’s own terms and combinations of inclusive education and separate services. It shall also not be forgotten that the segregated programmes (i.e., the training schools) helped the children to progress in skills and manage daily routines and play activities. In the training schools that were part of this research, the children had intense small step training in imitation, communication, counting, gross motor skills, fine motor skills, writing, drawing and singing. Small step training, sometimes referred to as small step pedagogy in this research, refers to an education in which complex skills such as imitation, writing, counting and talking are broken down into small easy steps so that children can ‘build up’ new skills step by step. They also trained purposefully the use of toys and went on outings, listened to stories, sewed, played football, baked, watched movies and trained their senses, which may have expanded their academic, functional, and social skills. The education in the training schools seemed, in many ways, beneficial for them.

Studying the alternative segregated training schools for children with intellectual disabilities can shed light on features that are considered important in the education and care of children with intellectual disabilities. If such features are not acknowledged when inclusive education is planned and implemented, then it could be less likely that inclusive education will be chosen as an alternative to segregation, that it would be effective and that it would persist over time. Small step pedagogy could be such a key feature that needs to be taken into account when inclusive education, such as partial inclusion or integrated activities, is being planned for.

Underestimation of skills after preschool
It seems as if some of the children enrolled in the training schools actually would have been capable of attending a compulsory school for pupils with mild learning disabilities instead. They, for example, trained to count and
write and benefit from training, according to staff. Therefore, it can be hypothesised, but not determined, that some of them were in fact incorrectly placed in a training school – which is supposed to serve pupils with moderate and severe learning disability. Thus the pupils’ abilities could have been underestimated in the transition planning from preschool to school.

Other observations also indicate an underestimation of skills of some children after preschool. I will provide three examples. First, the children with a very high need of support provisions were eating at the same table as their peers in preschool, but not in school where some of them ate with one adult separated from peers. Second, the children with a very high need of support provisions were sharing more than a few toys with their peers in preschool, but not at the leisure-time centre where some of them only had very few toys available to share with their peers. Third, the children with a very high need of support provisions were playing in the same school yard as the other children without such needs in preschool, but not thereafter. In school, their school yards were isolated from the ‘regular’ school yards.

These results are interesting and can be important to discuss. Why does such an underestimation take place? It can be assumed that the transition planning of those children was too much focused on difficulties, disabilities and needs. Therefore, their capabilities were somewhat forgotten about. This reminds of the importance to describe also children’s capabilities in transition planning.

_A responsible inclusion?_

When the way of thinking about and practicing inclusive education in the investigated school settings is being transferred into the formula for inclusive education developed by Mitchell (2014b) the following picture emerges: It does not seem to correspond to the notion of a responsible inclusion. There are no clear intentions (visions) in legalisations, regulations and policy (Education Act, 2010:800); not all the school forms and staff members were striving for inclusion; not all the learners with special educational needs appeared to attend neighbourhood schools; adequate resources such as equipment and staffing did not seem to be provided to all; and not all the leadership seemed committed to inclusive education.

The way of thinking about and practicing inclusive education in the school settings also seemed to not correspond to other notions of inclusive education (e.g., ‘good intentions no action’, ‘irresponsible inclusion’, ‘limited commitment’, ‘rudderless inclusion’ and inclusive education ‘blocked at the classroom’) since there is no clear vision in place. However, if we separate the preschool units investigated from the school settings, it appears possible to apply the notion of a ‘responsible inclusion’ for the preschools. In Sweden, preschool units seem more inclusively orientated than school settings.
Should Sweden be commended for its inclusive education?
With Carl, David and Eleonore (Figure 3c, 3d and 3e), and the results in mind, it can be discussed if Sweden should be commended for its inclusive education system as is claimed in the United Nations Committee on the Rights of Persons with Disabilities (2014) and by the OECD (2015). With the awareness of that the Salamanca Statement (UNESCO, 1994) is seen as a pro-inclusive document, despite the fact that it states that inclusive education provides an effective education for the majority of children (instead of all children), it seems indeed possible to commend Sweden. In Sweden only a few percent (1.1%) are educated in alternative settings. The percentage is a little higher in this study (5 of the 53 children; 9%) due to the sample design. Yet, the trust in inclusive education in the settings investigated in Sweden appears lower than in the American context investigated by Guralnick et al. (2008). In their study, no child was attending a segregated programme during their early school years after having experienced preschool inclusion. They suggested that a placement in a full inclusion early childhood programme created a momentum for being further included in school. This was, however, not the case in the Swedish early school years investigated.

Inclusive special education
Since both inclusive education and special education (referring to individual planning, specialised instruction and intensive instruction in the theory of inclusive special education) were come across in the settings investigated and also seemed valued, it can be argued that the notion of inclusive special education, as described by Hornby (2015) and Takala, Pirttimaa, and Törmänen (2009), was operating. In the settings investigated, a minority of the children with higher levels of needs were educated in alternative education arrangements, and there were children with special educational needs who were pulled-out of their units and classes for training and speech therapy.

Allocation of resources in exo- and microsystems
The results indicate that specialised preschool units, training preschool-classes, training leisure-time centres and training schools may have more generous resources than the comprehensive settings, for example, more staff in relation to children, more teachers in relation to children and smaller group sizes compared to comprehensive preschool units, preschool-classes, leisure-time centres and first grades.

On the one hand, such an allocation of generous resources to specialised settings enrolling children with a high or a very high need of support provisions can be seen as fair, and as a positive special action, since children with considerable needs were provided with generous resources. On the other hand, this research indicated that there were also children with
considerable needs in comprehensive early years education settings. It seems as if the specialised settings, in this research, were at an advantage, while the children and staff in comprehensive settings were disadvantaged. Models of allocation of resources that take account of the needs of the child should be developed, so that the needed resources could be available even in the comprehensive settings.

It is important that the resources, such as the number of staff to children and the total number of children in settings, are sufficient. A lack of resources could negatively influence the teachers’ possibilities to conduct activities and reach the preschool curriculum goals (Pramling Samuelsson, Williams, & Sheridan, 2015).

Segregated programmes at an advantage
Since the specialised settings investigated mostly adopted segregation, and not inclusion, it can also be claimed that the segregated programmes were at an advantage, while the children and staff in more or less inclusive units, classes and centres were disadvantaged. In order to realise an inclusive education, where both children with and without special educational needs develop, learn and thrive, it is considered important to have adequate resources for everyone (Booth & Ainscow, 2002; Mitchell, 2014b; OECD, 2003). The identified tendency to ignore group heterogeneity and the varied needs of children in comprehensive more or less inclusive regular settings and to allocate only standard resources there seems problematic. The children and staff in the more or less inclusive comprehensive settings may not be provided with sufficient resources. This tendency to ignore group heterogeneity and the varied needs of children in regular settings in Sweden, and to allocate only standard resources in regular settings, have also been reported in previous research (Allodi Westling, 2002a; Allodi Westling & Fischbein, 2000). Those researchers wrote that a lack of adequate resources in regular settings could give rise to processes of marginalisation that eventually make placements into segregated programmes to appear necessary.

Microsystem bridges
The research suggests that bridges, that is, support provisions, can take the form of environmental and interpersonal integrated support provisions; one-on-one training and speech therapy; one-on-one conversation; after school training; and an extended timeframe in preschool. Support provision is a broad concept. It also suggests that all children with special educational needs seem to need at least some environmental and interpersonal integrated support provisions in order to participate and learn. On the contrary, one-on-one training and speech therapy seem to be provisions needed for some children with some needs, and a high and a very high need of support
provisions. One-on-one conversation and after school training seem rare and aimed for children with some or high needs in comprehensive settings. An extended timeframe in preschool, which can also be related to the chronosystem in the bioecological model, seems to be needed for a few children with a high or a very high need of support provisions.

Balance between the dichotomy of nature and nurture
In my opinion, there seems to be a balance between the dichotomy of nature and nurture in the settings investigated, in the sense that provision of environmental and interpersonal support as well as one-on-one training and speech therapy was made. The struggles that occurred for the children seemed to be related to various paradigms and perspectives and had no single explanation and cause. This means that an integration of paradigms and perspectives was accomplished here, and this is also recommended when causes and solutions are searched for (Bronfenbrenner, 1979; Bronfenbrenner & Morris, 1998; Fischbein, 1987; Helldin, 2003; Skidmore, 1996; World Health Organisation, 2013). The staff attempted to give stimulating experiences to the children by means of training and therapy and to meet their needs in educational settings by modifications and adaptions of environments.

Comparing with extra adaptations, intense extra adaptations and special support
When the results and suggestions from this research is being compared with the new concepts of extra adaptations, intense extra adaptations and special support (Education Act, 2010:800; SNAE, 2014a, 2014b), similarities emerge. The environmental and interpersonal integrated support provisions can be seen as examples of extra and intense extra adaptations, and the one-on-one training and speech therapy, one-on-one conversation and after school training can be understood as special support.

Comparing with the Building Blocks framework and other multi-tiered systems of support
Comparing with the Building Blocks framework (Sandall et al., 2008; Sandall, Schwartz, & Joseph, 2001) there seems to be similarities. The environmental and interpersonal integrated support provisions can be seen as examples of curriculum modifications and adaptations, and the one-on-one training and speech therapy may be possible to compare with explicit, child-focused instructional strategies. Both the Swedish education system and the Building Blocks framework also address the need for quality education. There are also some differences. None of the support provisions observed in the settings investigated may be directly comparable to that of embedded learning opportunities since these seem, in the Building Blocks, related to individual goals of children formulated in written plans. In contrast to the
Building Block model, an extended timeframe is seen as a type of support provision here. The comparison between the results of this research and the content of the Building Blocks framework can be seen as an attempt to conduct an analytical generalisation on support provisions.

When the support services identified in this research are compared with those proposed by Bender and Shores (2007), Brown-Chidsey and Steege (2010) and the RTI Action Network (2015, “What is RTI,” para. 1-9), similarities appear. Both the support services identified in this research and the multi-tiered systems of support address the need of something extra and assume that not all children will progress by means of quality tier 1 provision. For example, some of the children with special educational needs need individualised and intensive instructions that are of longer duration in order to progress. Differences also occur in such a comparison. The support services identified in this research do not seem to focus on tier 2 provisions in small group arrangements, and instead children seem often to be moved directly from tier 1 to an individual oriented tier 3. This is not the case in multi-tiered systems of support that make use of tier 2 provisions before tier 3 provisions. Therefore, the support services identified in this research do not seem as systematic and ‘tiered’ as in multi-tiered systems of support. The application of a multi-tiered system in the settings investigated, as well as in the Swedish education system as a whole, may serve as a reminder of the importance of quality education and care, and to try out small groups before providing one-on-one provisions.

Children’s subjective views of their microsystems

This research shows, like other research (Ackesjö, 2014; Allodi Westling, 2002b; Clark, McQuail, & Moss, 2003; Clark & Moss, 2011; Lago, 2014), that children have many important things to tell about their everyday lives in education. To incorporate children’s views and experiences of early years education thus has the potential to enrich adults’ knowledge and understanding of early years education and improve policies and practices consistent with children’s concerns.

The data collection methods used in research with children may need to be modified and adapted to the children’s capabilities as well as be combined with support and proxies. According to what has been observed and experienced in this research, drawings and visualised semi-structured interviews seem useful in research with children.

According to this research it is essential for children, both with and without special educational needs, to have a sense of belonging among peers; opportunities for creative play and thinking; experiences of speed, excitement and physical challenges; elements of cosiness, withdrawals and comfort for recreation; to feel safe; to experience growth in knowledge and understanding of the world; to feel free and autonomous; and to prevent and
deal with homesickness. If these feelings, opportunities and experiences are missing, children will probably not thrive and have positive experiences of their early school years. Educational settings that do not ensure these feelings, opportunities and experiences of their pupils need to be identified and improved.

The children in the settings investigated had more positive views of their early school years than negative, with positive views increasing from preschool to school. However, relatively many children with SEN hold neutral and negative views of first grade. One explanation for this situation could be that the children with SEN were provided too few support provisions, and another explanation could be that the support provisions impeded their sense of belonging among peers, sense of freedom and autonomy. Support provisions may be bridges to participation and learning, but these do not seem to guarantee that a child will feel positive about his/her early school years.

**Quality and meaningfulness**

When the children’s opinions on important features in early school years (e.g., what is meaningful for them) are compared with the contents of structured observation rating scales (ECERS-R, CIS and CIP), designed to measure quality of education and care, several similarities emerge. Both the children and the structured observation rating scales address the need of pleasant relationships and interactions, free play, gross motor activities, space for privacy, cosy areas, safety and opportunities for learning. This means that an evaluation made by means of structured observation rating scales may also say something about how children view and experience the setting evaluated, and vice versa.

**Early school years within a bioecological model**

To sum up, the results of this research put forward that educational pathways from preschool to school can vary and that a number of factors and motives may influences these pathways and children’s development. For example, factors such as support provisions seem to play a role for the children with special educational needs, since these may be the way towards participation and learning in early school years.

In Figure 4, an overview of chronosystem, macrosystem, exosystem, mesosystem, microsystem and biosystem influences on the children’s intellectual, social, emotional and moral development that came to be part of this research is presented.
Figure 4. The early school years investigated with the support provisions within a bioecological model for human development.

Limitations

The research has some limitations that should be addressed: First, in this research, a limited number of preschools, preschool-classes, leisure-time centres and first grade classes were visited with the purpose of data collection, and a limited number of children with and without special educational needs were enrolled. Thus, the results should be interpreted with caution and be regarded as examples of circumstances and practices in Sweden. Second, the structured observations made in the preschools were
done by me and not tested for inter-rater agreement with other trained observers. Third, the ICP is a new instrument and has not yet been thoroughly validated for the Swedish context. Fourth, the data collection methods adopted to gather the views and experiences of the children with and without special educational needs (i.e., visualised semi-structured interviews; Appendix 1) were developed for this investigation and have not been tested before in this form. Fifth, even if a strategic maximum variation was completed I cannot claim that the pathways and descriptions of the early years education and support provisions is fully representative for the settings investigated. Even in the same settings there were in fact some children and parents who chose not to participate, and there are also certain matters and disabilities that are not represented in the research. Another factor to consider is that the staff members may not have identified all the children who were in need of support in the settings investigated.

Suggestions for future research

More research on the topic of early educational pathways and children’s views and experiences is needed. I have chosen to present three examples of research that seem important.

It seems important to conduct a research evaluation of the efficacy and the long term effects of the different forms of organisational typologies, support provisions, inclusive education, segregated programmes, as well as of the different transition patterns. The main motive is that such a research evaluation has the potential to increase the knowledge and understanding of what forms good conditions for participation and learning, and what makes positive contributions in the lives of children. It also seems needed to conduct more research on the quality of inclusive education in early years education. According to this research, there may be a scope for improvement in this regard. Moreover, it seems important to increase the knowledge and understanding on the topic of peer support which may also be termed ‘peer mediated instructions and interventions’, ‘peer tutoring’ or ‘peer mediated support strategies’. The peers can of course play an important role in inclusive settings and for proximal processes, and alternative settings.

Relevance and implications

This research provides a picture of educational pathways that has not been provided previously. It may therefore have relevance for several professions in Sweden. The studies may also have some relevance internationally since it allows for comparisons with other educational contexts and since it may
allow for some mutual learning on topics such as support provisions and inclusive education.

I have chosen to present four implications that seem significant for research, policy, practice and families:

When an investigation and evaluation of preschool quality is conducted a combination of structured observation rating scales, and not the use of only one, can be useful. The reason for this is that these may capture different facets of quality. The incorporation of matters that are locally valued or seen as problematic by staff and children can also be of importance in evaluations of preschools. Opting for an increase in quality and meaningfulness can have a positive influence on the children’s development and generate a more equitable education preschool system.

Inclusive education can promote social justice, the formation of a welcoming society, hold back discrimination (Salamanca Statement, UNESCO, 1994; UN CRPD, 2006; UNESCO, 2009) and can have a positive impact on children’s social and academic development (Odom et al., 2004; Thomas & Vaughan, 2004). The next implication, therefore, is to carefully consider (and investigate) the transformation of segregated programmes into settings adopting integrated activities or into partially inclusive settings. The motive is to ensure at least some meetings and connections between typically developing children and children in alternative education.

Parents can suggest integrated activities between children in regular and training school classes to teachers. Such meetings and connections can be organised in outdoor schoolyards, as well as indoors, when children do gross motor activities, have song times, build with blocks, watch movies, sew, bake, listen to music, rest, have snack time, create necklaces with beautiful pearls, dress up, train letters and numbers, etc. Children in training and regular schools share many likes and skills, and these similarities can most probably form a basis for enjoyable integrated activities that both children in training and regular schools classes can benefit from.

One more implication could be to develop systematic collaborations since the preschool staff in this research implemented an inclusive education for all children and for the reason that an exchange of experiences between staff is considered important for professional development and improvement efforts (European Agency, 2009; European Commission, 2013; OECD, 2003). The collaborations can include staff in regular and alternative preschools, preschool-classes, leisure-time centres and schools and be focused around the topic of inclusive education (e.g., integrated activities), support provisions and educational pathways.
Sammanfattning

Utbildningsvägar och övergångar under de tidiga skolåren: Behov, stödinsatser och inkluderande undervisning

Introduktion

En avhandling om tidiga skolår


I arbetet med att skapa optimala förutsättningar för utveckling är det av vikt att lyssna på barnen och höra vad de har att säga om sin utbildning. Barn har mycket viktigt att berätta (Clark, McQuail, & Moss, 2003; Clark & Moss, 2011; Qvarsell, 2001), har rätt att uttrycka sin mening och att få den respekterad (UN CRC, 1989; UN CRPD, 2006).

Att säkerställa hög kvalité under tidiga skolår och att erbjuda optimala förutsättningar för utveckling är inte helt enkelt. Flertalet aspekter behöver beaktas. Exempel på sådana aspekter är anpassningar och särskilt stöd till de barn som är i behov av stöd för att kunna delta och lära; resursfördelning såsom antal personal per barn; och krav ställda i styrdokument.

Den här avhandlingen består av sex studier: Fem empiriska studier som handlar om tidiga skolår, och en litteraturstudie som handlar om datainsamlingsmetoder som använts i forskning med barn. Fyra av studierna är artiklar och två av studierna är konferensbidrag.

I Sverige finns det relativt lite longitudinell specialpedagogisk forskning om tidiga skolår och barns perspektiv på dessa.

Syfte

Det övergripande syftet är att beskriva och analysera utbildningsvägar, för en grupp barn i och utan behov av stöd, från förskola till klass ett. Övergångar
mellan tidiga skolår, behov av stöd, typer av anpassningar och särskilt stöd, inkluderande undervisning och barns perspektiv på tidiga skolår ges ett särskilt fokus i dessa beskrivningar och analyser. Syftet är också att beskriva och analysera datainsamlingsmetoder avsedda för att användas i forskning med barn. Användandet av teckningar och visuella intervjuer ges ett särskilt fokus samt det stöd som behövs för att underlätta deltagande och berättande av barn som är i behov av stöd.

Centrala begrepp


Teoretiskt ramverk

Det teoretiska ramverket utgörs av en ontologisk och epistemologisk ståndpunkt som benämns multipel realism och en bioekologisk utvecklingsmodell (Bronfenbrenner, 1979; Bronfenbrenner & Morris, 1998).

Jag utgår i forskningen från att världen har en objektiv, en intersubjektiv och en subjektiv dimension. Den objektiva världen består av fysiska ting, material och fysikaliska processer, den intersubjektiva världen består av språk, kulturer och sociala strukturer som uppstår i mellanmänskliga möten, och den subjektiva dimensionen består av de känslor och tankar som finns inom en person (Johnson & Gray, 2010). Dessa tre dimensioner av världen påverkar varandra och de anses lika verkliga och viktiga att ta hänsyn till i forskning, enligt Johnson and Gray (2010).
Vidare utgår jag i forskningen från att barns intellektuella, sociala, emotionella, moraliska och motoriska utveckling influeras av barnet självt (exempelvis dess förmågor, funktionsnedsättningar, intressen och engagemang), av proximala processer (exempelvis aktiviter och lekar) och av mikrosystem (exempelvis tidiga skolår) (Bronfenbrenner, 1979; Bronfenbrenner & Morris, 1998). Därtill av mesosystem (exempelvis samverkan mellan skola och hem, och övergångar), exosystem (exempelvis resurser i kommuner), makrosystem (exempelvis lagar och kulturer), och kronosystem (det vill säga av historien och den tid som går) (Bronfenbrenner, 1979; Bronfenbrenner & Morris, 1998).

Genomförande


Femtiosex barn, lika många flickor som pojkar, deltog i forskningen. Enligt personalen var hälften av dessa barn i behov av stöd, tillfälligt eller över tid. Deras förskolor (N=8), förskoleklasser (N=17), fritidshem (N=20) och skolklasser (N=20) låg i mellersta Sverige och i fem olika kommuner. Förskolorna valdes ut strategiskt för att representera en variation av förskolor. Barnen från en och samma förskola följdes inte alltid åt till förskoleklass, fritids och klass ett. Det förde med sig att antalet utbildningsmiljöer kom att öka under forskningens gång.
**Etik**

Forskningen har godkänts av etiska nämnden vid Karolinska institutet i Stockholm (2012/421-31/5) och följer forskningsetiska lagar och rekommendationer.

**Resultat från empiriska studier**

De empiriska studierna visar en variation av utbildningsvägar från förskola till klass ett; förändringar i aktiviteter och relationer i övergångarna; en varierande kvalité på förskoleavdelningarna; en bred förståelse av begreppet specialpedagogiska behov; specialiserade och icke specialiserade organisationstypologier; en försiktig och inte övertygad attityd till inkluderande undervisning; väl tilltagna resurser i specialiserade och segregerade utbildningsmiljöer; och en variation av anpassningar och särskilt stöd. De visar också att barnen i och utan behov av stöd, för det allra mesta, hade en positiv inställning till sina tidiga skolår.

*En variation av utbildningsvägar från förskola till klass ett*


Den ordinarie vägen till skolan: En vanlig utbildningsväg från förskola till klass ett

En majoritet av barnen i behov av stöd, samt alla de barn som inte var i behov av stöd, flyttade från reguljär förskola till förskoleklass och fritidshem och till årkurs ett. Dessa barn beskrivs i forskningen följa den ordinarie vägen till skolan [the main road to school, på engelska].

Att vika av från den ordinarie vägen till skolan: Segregering efter full inkludering

Tre av barnen, vilka alla var i behov av mycket stöd, började i särskola med inriktning träningskola (som inrymde både förskoleklasser, fritidshem och skolklasser) efter förskolan. Personalen i deras förskolor erbjuder full inkludering, medan personalen i deras förskoleklasser, fritidshem och skolklasser tillämpade segregering. De erbjuds en till en-träning efter förskolan. Deras utbildningsväg illustreras med uttrycket att vika av från den ordinarie vägen till skolan [exit the main road, på engelska].
En stoppskylt, genväg och en alternativ väg till skolan: Segregering efter integrerade aktiviteter


En stoppskylt, genväg och en påfart till den ordinarie vägen: Deltidsinkludering i de tidiga skolåren

Ytterligare ett barn i behov av stöd hade en utökad tid, om ett år, i förskolan men hon började i en reguljär skolklass och ett reguljärt fritidshem efter förskolan. Hon erbjöds en till en-träning under alla sina tidiga skolår och behandling av en logoped i förskolan. Hennes utbildningsväg illustreras med uttrycket en stoppskylt, genväg och en påfart till den ordinarie vägen [a stop sign, shortcut and an entrance to the main road, på engelska].

En krokig väg till skolan: Från deltidsinkludering, till full inkludering och tillbaka till deltidsinkludering

Ett barn, som var i behov av särskilt stöd, upplevde fler övergångar än sina kamrater vilket beskrivs som en krokig väg till skolan [a bumpy road to school, på engelska]. Hon erbjöds en till en-träning under flertalet tidiga skolår och behandling av en logoped i förskolan.

Förändringar i aktiviteter och relationer i övergångarna

Alla barn upplevde förändringar i aktiviteter och relationer i sina övergångar. Störst förändringar upplevde de barn som hade mycket höga behov av stöd och en utvecklingstörning när de började i segregerade träningsskolor efter en lägre eller högre grad av inkludering i förskolan.

En varierande kvalité på förskoleavdelningarna

Kvalitén på barnens förskolor varierade. Den övergripande kvalitén, kvalitén på interaktionerna mellan personal och barn, och kvalitén på den inkluderande undervisningen på avdelningarna var inte i något fäll låg på de förskoleavdelningar där barn med diagnoser utbildades och vistades, vilket kunde vara fallet på de andra förskoleavdelningarna.
En bred förståelse av begreppet specialpedagogiska behov
Även om några barn upphörde med att vara i behov av stöd, ökade det totala antalet barn i behov av stöd från förskola till skolår ett.

Behoven av stöd varierade från att vara måttliga, till att vara höga till att vara mycket höga i utbildningsaktiviteter, rutiner och leksituationer.

Barn med måttliga behov behövde då och då stöd i utbildningsaktiviteter och leksituationer med kamrater, men klarade de allra flesta rutiner utan en till en-assistans från en vuxen. Barn med höga behov av stöd behövde dagligen mycket hjälp och stöd i utbildningsaktiviteter och leksituationer med kamrater, men klarade de allra flesta rutiner utan en till en-assistans från en vuxen. Barn med mycket höga behov av stöd behövde dagligen väldigt mycket hjälp och stöd i utbildningsaktiviteter, rutiner (exempelvis påklädningsstöd, övergångar och personlig hygien) och leksituationer, både i den egna leken och i lek med kamrater.

Några av barnen i behov av stöd hade en diagnostiserad funktionsnedsättning [Special Educational Needs with a disability Diagnosis, SEND, på engelska] såsom autism, språkstörning, trotssyndrom, Downs syndrom, hörselfnedsättning, synnedsättning och utvecklingsstörning. Som grupp sett hade dessa barn större svårigheter (högre AIRCS) än de barn som var i behov av stöd och som inte hade en diagnostiserad funktionsnedsättning [Special Educational Needs, SEN, på engelska].

Barnen i behov av stöd beskrevs också ha styrkor. Några exempel är det barn i behov av stöd som beskrevs ha hög social kompetens, det barn i behov av stöd som beskrevs vara omsorgsfull, och det barn i behov av stöd som beskrevs vara begåvad. Han hade lätt för att lära och bidrog till att kamraterna utvecklade kunskaper om, exempelvis, solsystemet.

Specialiserade och icke specialiserade organisationstypologier
Förskolorna, förskoleklasserna, fritidshemmen och skolklasserna hade en specialiserad organisation [a specialised typology, på engelska] där barn med liknande behov och diagnoser utbildades och vistades, eller en icke specialiserad organisation [a comprehensive typology, på engelska].

En försiktig och icke övertygad attityd till inkluderande undervisning
Personalen i de icke specialiserade utbildningsmiljöerna använde sig av full inkludering [full inclusion, på engelska] eller deltidsinkludering [partial inclusion, på engelska], medan personalen i de specialiserade utbildningsmiljöerna använde sig av deltidsinkludering, integrerade aktiviteter [integrated activities, på engelska] eller segregering [a segregated programme, på engelska] i utbildningen av barnen. Personalen i specialiserade utbildningsmiljöerna använde sig vanligtvis av segregering med undantag av två specialiserade förskoleavdelningar där personalen erbjöd deltidsinkludering eller integrerade aktiviteter.
Full inkludering betyder att barnen i behov av stöd deltog i samma utbildningsaktiviteter, rutiner och lekar som sina kamrater utan behov av särskilt stöd. Deltidsinkludering betyder att barnen i behov av stöd deltog i utbildningsaktiviteter, rutiner och lekar tillsammans med sina kamrater utan behov av särskilt stöd, samt regelbundet erbjuds stöd (exempelvis en till enträning och behandling av logoped) avskilda från kamraterna. I integrerade aktiviteter utbildas barnen i behov av stöd på särskilda avdelningar, men erbjuds regelbundet möten med barn utan behov av särskilt stöd i exempelvis sängsamlings- och grovmotoriska lekar. Det är dessa möten som kallades integrerade aktiviteter. I segregerade utbildningsmiljöer förekom mycket få möten mellan barn i och utan behov av stöd. Dessa möten var sporadiska och korta, och skedde i exempelvis skolkorridor.

Graden av inkludering minskade för den grupp av barn som hade omfattande funktionsnedsättningar, mycket höga behov av anpassningar och särskilt stöd, och en utvecklingsstörning. Trots att dessa barn hade vistats i inkluderande förskolor placerades de alla i segregerade speciella förskoleklasser, fritidshem och skolklasser. Flertalet reguljära skolklasser kombinerade också inkludering med särskilt stöd. Det tyder på en försiktig och inte övertygad inställning till inkluderande undervisning i de studerade miljöerna och då särskilt på relation till den grupp av barn som hade omfattande funktionsnedsättningar, mycket höga behov av anpassningar och särskilt stöd, och en utvecklingsstörning.

Väl tilltagna resurser i specialiserade och segregerade utbildningsmiljöer
De specialiserade utbildningsmiljöerna hade mer resurser än de icke specialiserade. De hade fler personal per barn, fler utbildade lärare per barn och färre barn på förskoleavdelningarna, fritidshemmen och i klasserna. Ett undantag var en icke specialiserad förskolklass som hade tilldelats rikliga resurser (få barn gick i klassen och två personal arbetade ofta där tillsammans).

En variation av anpassningar och särskilt stöd
Anpassningar och särskilt stöd erbjuds till barn i behov av stöd för att underlätta deras deltagande och lärande i utbildningsaktiviteter, rutiner och lek.

De anpassningar och stödinsatser som påträffades i de tidiga skolåren definierades i forskningen som materiellt och relationellt integrerat stöd, en till en-träning och behandling av en logoped, en till en-konversationer, träning efter skolan, och en utökad tid i förskolan [environmental and interpersonal integrated support provisions, one-on-one training and speech therapy, one-on-one conversation, after school training, and an extended timeframe in preschool, på engelska].

Alla barn i behov av stöd erbjuds materiellt och relationellt integrerat stöd. Några exempel på integrerat stöd är personliga dagsscheman,
aktiviteter i halvklass, timglas som synliggör tiden, Picture Exchange Communication System®, hörselskydd, belöningsystem, en elevassistent, vuxenstöd i lek, kamratstöd i lek och rikligt med positiv återkoppling.

Efter förskolan fick flertalet barn i behov av stöd, i icke specialiserade och specialiserade utbildningsmiljöer, en till en-träning. Efter förskolan fick också ett barn i en icke specialiserad förskoleklass och i en icke specialiserad skolklass behandling av en logoped. Under förskoleperioden erbjöds sådan en till en-träning och behandling enbart i specialiserade förskoleavdelningar. ‘En till en’ betyder utbildning och stöd från en vuxen till ett barn, och innehöll exempelvis träning i tal och språk, logopedbehandling, träning i alternativa kommunikationsmetoder och verktyg, träning i grov- och fimmotorik, träning i sociala färdigheter som att kunna gensvara när man hör sitt namn, träning i personlig hygien, påklädnings, matsituationer och träning i att läsa, räkna och skriva.

En till en-konversationer var ovanliga men förekom i några förskoleklasser och skolklasser. Det stödet implementerades avskilt från kamrater och syftade till att utveckla sociala färdigheter och självförtroende hos barn i behov av stöd. En till en-konversationer kunde också syfta till att ge barn i behov av stöd specifik information, exempelvis om skoldagens disposition.

Träning efter skolan var också ovanlig. Den gav barn i behov av stöd möjligheter att träna lite extra på att läsa, räkna och skriva med en vuxen, och ibland också med några kamrater som varit sjuka och gått miste om undervisning. Det stödet implementerades av lärare efter skolan och var inte en del av fritidshemmens verksamhet.

En utökad tid, om ett år, i förskolan arrangerades enbart i specialiserade förskoleavdelningar och för barn med höga eller mycket höga behov av stöd.

Stöd implementerades av barnskötare, lärare, logopeder, speciallärare och specialpedagoger, undersköterskor, beteendevetare och annan personal som arbetar i förskolorna, förskoleklasserna, på fritidshemmen och i skolorna. Kamrater erbjöd också stöd.

Barnens perspektiv på de tidiga skolåren

Barnen hade mycket att berätta om sina tidiga skolår i intervjuerna och genom sina teckningar. Några av dem behövde stödinsatser i sitt målande och berättande, till exempel stöd från en vuxen och visualisering av talat språk, eller ett ombud [a proxy, på engelska].

Barnen hade mer positiva än negativa erfarenheter av de tidiga skolåren. För att kunna trivas menade de att det var viktigt att känna tillhörighet bland kamrater; att ha möjlighet till kreativ lek och kreativt tänkande; att få uppleva fart, spänning och grovmotoriska utmaningar; att ha tillfällen att mysa, dra sig tillbaka och återhämta sig; att få nya kunskaper och öka sin förståelse för omvärlden; att känna trygghet; att känna sig fri och självständig; och att förebygga och kunna handskas med hemlängtan.
De positiva erfarenheterna ökade från förskola till klass ett, men gruppen barn i behov av stöd utan diagnostiserad funktionsnedsättningar (SEN) trivdes inte lika bra i första klass som de andra barnen.

Litteraturstudiens resultat

Litteraturstudien visar att barns perspektiv på tidiga utbildningsår kan samlas in genom traditionella metoder såsom intervjuer, observationer och enkäter. Innovativa metoder, till exempel visualiseringar i form av teckningar, brevskrivande, rundvandringar i utbildningsmiljöer ledda av barn och informella diskussioner, kan också vara värdefulla. Litteraturstudien visar också att det är viktigt att erbjuda stödinsatser för att bredda deltagande och möjliggöra alla barns berättande. Stödet kan vara relationellt eller materiellt. Några exempel är assistans från en vuxen eller en kamrat, visualiseringar av talat språk och att svåra frågor tas bort.

Diskussion

Det övergripande syftet var att beskriva och analysera utbildningsvägar, för en grupp barn i och utan behov av stöd, från förskola till klass ett. Syftet var också att beskriva och analysera datainsamlingsmetoder avsedda för att användas i forskning med barn.

Resultaten tyder på att tidiga skolår rymmer en variation av utbildningsvägar från förskola till klass ett, och att övergångar medför förändringar i aktiviteter och relationer. Variationen av utbildningsvägar kan ses som ett försök att individualisera utbildningen och möta varje barns behov, men kan också medföra att kamratrelationer och vänskap går förlorade.


Begreppet specialpedagogiska behov förefaller ha en vid innebörd i praktiken och kan behöva kompletteras med andra begrepp såsom måttliga behov, höga behov och mycket höga behov. Det kan medföra att beskrivningar av barn i behov av stöd och de svårigheter som de möter i skolan blir distinkta. Det skulle kunna underlätta planeringen av exempelvis övergångar och stöd under kommande skolår. Det kan också vara av vikt att vid sådan planering beskriva barns styrkor så att personal som arbetar under de kommande skolåren får kännedom om sådant som barn behärskar.

Utbildningsmiljöer under tidiga skolår har förmodligen en specialiserad eller en icke specialiserad organisationstypologi. Användningen av en icke
specialiserad organisationstypologi och inkludierande undervisning kan medföra att barn ökar sin förståelse för olikheter (Booth & Ainscow, 2002).

Det kan råda bristande övertygelse och försiktighet gällande användningen av inkluderande undervisning efter förskolan under tidiga skolår enligt den här avhandlingens studier. Det kan ses som bekymmersamt då inkluderande undervisning anses kunna vara gynnsam (Odom et al., 2004; Salamanca Statement, UNESCO, 1994; Thomas & Vaughan, 2004; UN CRPD, 2006; UNESCO, 2009).


Barn i behov av stöd under tidiga skolår kan behöva materiellt och relationellt integrerat stöd; en till en-träning och behandling av en logoped; en till en-konversationer; träning efter skolan; och en utökad tid i förskolan. I likhet med multi-tiered systems of support (Bender & Shores, 2007; Brown-Chidsey & Steege, 2010; RTI Action Network, 2015, “What is RTI,” para. 1-9), modellen Building Blocks (Sandall et al., 2008; Sandall, Schwartz, & Joseph, 2001) och den svenska skollagen (2010:800) föreslår alltså denna studie att barn i behov av stöd kan behöva olika typer av stöd för att kunna delta och lära.

Vidare pekar resultaten på att barn, i och utan behov av stöd, behöver kamrater; möjligheter till kreativ lek och kreativt tänkande; upplevelser av fart, spänning och grovmotoriska utmaningar; tillfällen att mysa, dra sig tillbaka och återhämta sig; nya kunskaper och ökad förståelse för sin omvärld; trygghet; frihet och självständighet; och förebygga och handskas med hemlängtan för att trivas under tidiga skolår. Om inte detta säkerställs finns risken att de inte kommer att känna sig glada och tillfreds under tidiga skolår.

Det är möjligt att det stöd som gavs till barn i behov av stöd utan diagnostiserad funktionsnedsättning (SEN) i första klass var otillräckligt, eller att det inverkade negativt på deras känsla av tillhörighet, frihet och självständighet eftersom de inte upplevde första klass lika positivt som de andra barnen. Stödinsatser kan vara en bro till delaktighet och lärande men verkar inte kunna garantera att barn trivs och känner sig glada i skolan.

Därutöver visar resultaten att barns perspektiv på tidiga skolår kan insamlas genom traditionella och innovativa metoder och att några barn
troligen behöver materiella eller relationella stödinsatser eller ett ombud för att kunna delta och berätta. Forskningen bekräftar flertalet tidigare utförda studier som visar att barn har mycket viktigt att berätta om sin utbildning (Ackesjö, 2014; Allodi Westling, 2002b; Clark, McQuail, & Moss, 2003; Clark & Moss, 2011; Lago, 2014; Siljehag, 2015) men påminner om att det är av stor vikt att anpassa metoder och att ge stöd för att möjliggöra alla barns deltagande och berättande.

Forskningen bekräftar flertalet tidigare utförda studier. Några exempel är att barn inte alltid går i förskoleklass (Lago, 2014), att övergångar kan förstås som kritiska händelser (Ekström, Garpelin, & Kallberg, 2008) och medför förändringar i aktiviteter, roller och relationer (Ackesjö, 2014; Bronfenbrenner, 1979). Ytterligare några exempel är att kamrater liksom vuxna kan stödja barn i behov av stöd vad avser deltagande och lärande (Sandall et al., 2008) och att relativt många barn (uppskattningsvis mer än 40 procent) behöver stöd, tillfälligt eller över tid, i skolan (Giota & Lundberg, 2007).

Jämförelser som genomförts mellan denna forskning och annan forskning kan förstås som försök till analytiska generaliseringar av utbildningsvägar, övergångar, behov, stödinsatser och inkluderande undervisning.

Några begränsningar och förslag på framtida forskning

Några begränsningar som är viktiga att ha i åtanke är följande: Antalet förskolor, förskoleklasser, fritidshem och skolklasser som undersöks i studien är få. Med anledning av det ska resultaten tolkas med försiktighet och ses som exempel på utbildningsvägar, övergångar, behov, stödinsatser och inkluderande undervisning i svenska utbildningsmiljöer. De strukturerade observationerna genomfördes av mig och har inte kontrollerats av andra forskare. Det strukturerade observationsmaterialet ICP har inte grundligt validerats till svensk kontext och har inte använts tidigare i svensk forskning. En annan begränsning är att personalen ombads identifiera de barn som var i behov av stöd. Risken finns att något barn i behov av stöd glömdes bort under identifieringen eller att något barn som faktiskt behövde stöd inte hade identifierades av personalen.

Det behövs mer forskning om tidiga skolår och barns perspektiv på dessa för att ytterligare öka och fördjupa kunskapen om tidiga utbildningsvägar, övergångar, behov, stödinsatser och inkluderande undervisning i det svenska utbildningssystemet. Det kan ske genom att undersöka, beskriva och analysera effektiviteten av olika organisationsformer, stödinsatser och former av inkluderande undervisning, samt av olika utbildningsvägar. Det kan också ske genom att undersöka betydelsen av kamratrelaterat stöd i inkluderande miljöer och hur sådant stöd kan intensifieras.
Implikationer och forskningens relevans

Tre implikationer från forskningen är följande: När kvalitén på en förskola ska undersökas är det av vikt att använda olika observationsinstrument med anledning av att de fångar olika aspekter av kvalité. Det är också viktigt att lyssna in vad barn och deras personal tycker om en förskoleavdelning. Det kan ge en bild av en förskoleavdelnings kvalité samt dess upplevda meningsfullhet.


Avhandlingen har relevans för forskare verksamma inom specialpedagogik, inkluderande undervisning och tidiga skolår. Den har också relevans för lärarutbildningar, beslutsfattare, rektorer, lärare och familjer.

Nyckelord: anpassningar; barn i behov av stöd; barns perspektiv; bioekologisk modell; de tidiga skolåren; fritidshem; funktionsområden; funktionsnedsättning; förmågor; förskola; förskoleklass; inkluderande undervisning; longitudinell design; mixade metoder; multipel realism; multipla fallstudier; organisationsformer; segregering; specialpedagogik; särskilt stöd; teckningar; tidiga insatser; träningsskola; utbildningsvägar; årskurs ett; övergångar.
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Appendix 1: Photographs from child interviews

The photograph (to the left) illustrates a preschool interview conducted outdoors in which Pictogram® illustrations were used. The photograph (to the right) illustrates a preschool-class interview. It was based on a form in which Pictogram® illustrations were used, and conducted indoors. The photograph shows the first page on the form in which a child practices drawing lines between two features (having a wound; an ice-cream) and personal feelings regarding these features. The other pages include Pictogram® illustrations of, for example, circle time and outdoor play.
Appendix 2: Examples of children’s drawings

An educational activity in a preschool-class (upper left): “I like to work”. Indoor play in a leisure-time centre (upper right): “The café and to play there”. Outdoor play in a preschool-class (lower left): “To swing. Me in the middle. My hair”. Outdoor recess in a first grade (lower right): “I like to play in the school forest”.

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