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DENMARK

Supporting danish early educators' professionalism and children's language development

Bookfun as apathway to improving inclusion

Clasen, Line Engel

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BOOKFUN AS A PATHWAY TO IMPROVED INCLUSION

BY
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DISSERTATION SUBMITTED 2014

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Dissertation submitted 31.08.2014

Center for Developmental and Applied Psychological Science

The illustrations in the beginning of each chapter are results of some the BookFun children's creative activities, including the "co-operation drawing" on the back cover.

CV

Line Engel Clasen: Cand.psych. PhD fellow. In 2011 I received my masters degree in psychology from the Institute of Communication & Psychology, Aalborg University. For the last six years I have been a member of CeDAPS (Center for Developmental and Applied Psychological Science). My main research focus is applied developmental psychology with particular interest in children's language development, socioemotional development, early educators' professional development and implementation of early literacy programmes. During my PhD I have conducted teaching mainly within developmental psychology and problem-based learning.

ACKNOWLEDGEMENTS

The present dissertation marks the end of my travels through PhD life. The journey has been inspiring, educational and sometimes difficult to travel. Finishing my PhD I am filled with pride in my accomplishments and gratitude to all the people who helped me along the way.

First and foremost I would like to express great appreciation to the day-care centres, children and pedagogues who participated in the BookFun project and who made time and efforts to give me valuable insights into their everyday life and practices. Furthermore, I would like to acknowledge students from the Clinic for Developmental Communication Disorders and from KANUK for assistance in data collection and in transcribing interviews. I would also like to thank Chris Cummins for assistance with proofreading part of the dissertation.

My PhD position was financed through funding obtained by Professor Kristine Jensen de López, principal investigator of the BookFun project, from Crown Princess Mary's Foundation and the Faculty of Humanities, Aalborg University, for this I owe many thanks. Center for Developmental and Applied Psychological Sciences (CeDAPS), Institute of Communication and Psychology, Aalborg University provided financial support for student assistance, which I also much appreciate.

I would also like to express my appreciation to my supervisor, Professor Kristine Jensen de López, for introducing me to and helping me to navigate the research world. Since I started working for you as a student helper six years ago you have helped me develop my identity as a researcher. You have been a constant source of input and ideas, never failing to provide me with sufficient challenges and always expecting me to perform my very best. In addition, I would like to extend my deepest gratitude to Professor Nicola Botting for hosting my visiting scholarship at City University, London. Thank you for all your advice and for helpful comments on drafts of papers, for your warm-heartedness and for placing me in the most cheerful and friendly environment an "exchange student" could ever wish for.

Many thanks to my colleagues at the Institute for Communication at AAU in Aalborg and in Copenhagen. I would especially like to thank my research group CeDAPS for fruitful discussions and social activities. I want to extend a special thanks to all my PhD colleagues and friends – especially Chalotte Glintborg, Radka Antalíková, Kristina Schoemmel, Hanne Knudsen, Yianna Georgiadou, Lena Lippke and Lone Sundahl Olsen. Your input and support, whether professional or social have been invaluable to say the least. When getting lost in the mist of thesis

writing you sometimes feel like a lone wolf, and knowing that I was in fact not alone in my struggles was a tremendous reassurance.

Also, I am grateful for my lovely family and wonderful friends. Thank you for showing your interest in my research. Thank you for your encouragement, for having faith that I could accomplish whatever I set my heart on and for listening to my complaints and frustrations when I was in doubt. And thanks to Anne, Mikkel and Jakob for technical and moral support in my final days of thesis writing.

Finally and most of all, many thanks to Jens for always providing equal amounts of support and perspective when thesis writing kicked my ass. Thank you for your faith in me and for being the perfect partner to share sorrows and joys in the course of a PhD and in life.

Line Engel Clasen, Copenhagen, August 2014

ENGLISH SUMMARY

Within a psychological developmental framework, this thesis focuses on the development of early literacy in Danish day-care centres in the evaluation of the first Danish structured early literacy programme, *BookFun* (in Danish: *LæseLeg*). The objective of the thesis is to explore how BookFun can support children's language development as well as early educators' professional development in order to create pathways to better inclusion in the day-care centre. BookFun is a pedagogical intervention programme that has been developed specifically for Danish day-care centres. BookFun is based on dialogical reading combined with creative, aesthetic activities (Broström, Jensen de López & Løntoft, 2012).

This PhD dissertation consists of four empirical articles that were all co-authored by PhD supervisor and principal investigator Kristine Jensen de López, but first a solo-authored accompanying text describes the background of the thesis. This text also serves as a platform for linking the empirical articles.

The background chapter of the thesis centres around three main areas: language development and early literacy, professional development, and inclusion. The thesis's account of language development is derived from Tomasello's (1999) usage-based approach, which highlights the adult's function as a role model in children's language acquisition. The objective of the thesis is to investigate how BookFun can support language development in order to improve children's abilities to enter into social communities. In this regard, giving children a larger vocabulary and a better ability to use their language – pragmatic language skills – is especially important. Empirical studies have demonstrated high degrees of stability in literacy skills over time and established the importance of language skills and early literacy skills (that is, what children know about reading and writing before they actually learn to read and write) for continued reading success (Whitehurst & Lonigan, 1998). This highlights the importance of supporting early literacy and language skills through early literacy programmes (ELPs).

However, improving children's outcomes through effective practices, including ELPs, requires skilled professionals in the day-care centres. Therefore, focus is also placed on the professional development of early educators in the day-care centres, and especially on how the implementation of BookFun can support the early educators' continued professional development. Professionalism is related to a sense of competence (Kusima & Sandberg, 2008), and professional development is characterised as supporting the acquisition of professional knowledge and skills and their application in practice (National Professional Development Center on Inclusion, 2008). Furthermore, professional development must simultaneously

support professional autonomy in order to foster actual change of practices (Jensen & Rasbech, 2008; Kennedy, 2005; Sommerfeld, 2005).

Inclusion is defined as efforts to guarantee that every child has a place in the community of children and that their full participation is assured. Improving inclusion is therefore understood as ensuring that communities in the day-care centres achieve active and equal participation for all (Fisker, 2010; The Alliance for Inclusive Education, 2009). The thesis focuses on BookFun's potential to contribute to inclusion in the day-care centres by (1) enabling a child's access to other children's social communities, play and social relations by means of supporting their language development, and (2) offering early educators tools for creating a more inclusive environment in the day-care centre.

The empirical investigation of how BookFun can support development in the day-care centres among both early educators and children, for the purpose of improving social inclusion, is based on a mixed methods design consisting of a matched controlled trial and an interview study.

Article I (Jensen de López & Clasen) reports the results of an effect study of children's benefits from BookFun. Analyses of covariance (ANCOVA) in SPSS tested the effect of the intervention on 77 Danish speaking typically developing 3-4 year-old children that had participated in either 12 weeks of BookFun, reading-as-usual, or a passive control group. Pre- and post-test measures consisted of Expressive One-Word Picture Vocabulary Test, selected target words from the storybooks, print knowledge, semantic fluency and a narrative production and comprehension task called the "Fox story". At post-test the BookFun group showed statistically significant increases in expressive vocabulary, receptive vocabulary, semantic fluency and narrative production compared to one or both control groups. BookFun promotes narrative production, but results showing that both reading groups (dialogical reading and reading-as-usual) improved significantly more than the passive control group also point to the effect of reading itself on narrative abilities. BookFun did not demonstrate an effect on narrative comprehension or print knowledge.

Articles II, III and IV are based on a qualitative interview study consisting of 36 pre- and post-programme interviews with early educators regarding their pedagogical practices and experiences applying BookFun. Based on Thematic Content Analysis an array of themes were uncovered.

Article II (Clasen & Jensen de López) focuses on the pre-programme interviews conducted before the early educators had been introduced to BookFun. In regard to early learning the Danish day-care services stand out by not being very school-like – as opposed to pre*schools* in many other Western countries. Also, early educators in Denmark are called pedagogues instead of teachers. The article compares the

practices of Danish pedagogues in day-care centres with Danish political statements about the "New Nordic School" in regard to early learning. Results suggested a potential gap between practice and politics concerning the promotion of early learning in Denmark. The New Nordic School approach aims for a national academic boost achieved through systematic approaches using well-founded methodologies. Pedagogues, however, did not have a structured approach to book reading, and generally did not consider it to be a learning activity. While both politicians and pedagogues have focussed on inclusion, there was also no concerted approach or structure in the way pedagogues addressed inclusion in the day-care centre prior to the implementation of BookFun.

Focussing on the post-programme interviews, **article III** (Clasen & Jensen de López) aims to identify best practice for implementing ELPs in Danish day-care centres in order to facilitate pedagogues' continued professional development as well as inclusion in the day-care centres. From the perspectives of the pedagogues BookFun can enhance inclusion in the day-care centres through (1) improving children's language abilities, (2) supporting the formation of social communities within the reading groups, and (3) increasing children's confidence. Furthermore, pedagogues' application of BookFun seems to increase their own focus on inclusion as they regard BookFun as a tool for social inclusion. BookFun showed potential to support professional development by providing early educators with new knowledge on how to support children's language development. Applying this knowledge through BookFun, pedagogues' professionalism was also fostered by their reflections about their own practices and the importance of their pedagogical competencies. Reflections on current practices, the development of a new professionalism, and taking ownership of a programme are suggested as crucial processes in changing practices and in the implementation of a new ELP.

Article IV (Clasen & Jensen de López) is a spin-off article in Danish that combines themes and results from articles II and III. This article focusses on the social learning processes that the pedagogues undergo in the implementation of BookFun. Taking ownership of BookFun and reflecting on current practices are described as two central social learning processes through which the pedagogues changed their shared reading practices from pre-programme to post-programme. The article also suggests how social learning processes can develop on two dialectical levels through the implementation of BookFun.

Taken together, the four articles' results are discussed in relation to the central research questions and the contributions, implications and limitations of the study are discussed.

In summary, the thesis finds support for BookFun's potential to support development in the day-care centres among both pedagogues and children for the purpose of creating pathways to improved inclusion.

DANSK RESUMÉ

Inden for en udviklingspsykologisk ramme fokuserer denne afhandling på udviklingen af "early literacy"[1] i danske børnehaver i evalueringen af det første danske strukturerede early literacy program, *LæseLeg*. Afhandlingens formål er at udforske hvorledes LæseLeg kan støtte børns sprogudvikling såvel som pædagogers professionelle udvikling med henblik på at skabe veje til øget inklusion i børnehaven. LæseLeg er et pædagogisk interventionsprogram udviklet specifikt til danske børnehaver. LæseLeg bygger på dialogisk læsning kombineret med kreative, æstetiske aktiviteter (Broström, Jensen de López & Løntoft, 2012).

Phd afhandlingen består af fire empiriske artikler, men forinden beskriver et sammenkædende tekstbidrag afhandlingens baggrund. Denne tekst har også til formål at danne grundlag for en kobling af de empiriske artikler. Artiklerne blev skrevet i samarbejde med phd-vejleder Kristine Jensen de López.

Afhandlingens baggrundsafsnit centrerer sig om tre hovedområder: sprogudvikling og early literacy, professionel udvikling og inklusion. Afhandlingens redegørelse for sprogudvikling bygger på Tomasello's brugsbaserede tilgang, som fremhæver den voksnes funktion som rollemodel i børns sprogtilegnelse. Afhandlingens formål er at undersøge, hvordan LæseLeg kan støtte sprogudvikling for dermed at forbedre børns færdigheder til at indgå i sociale fællesskaber. I dette henseende er det særligt vigtigt at give børn et større ordforråd og en bedre evne til at bruge deres sprog – de pragmatiske sprogkompetencer. Empiriske studier har påvist stor stabilitet i literacy over tid og de har fastslået vigtigheden af sprog evner og early literacy (dvs. hvad børn ved om læsning og skrivning før de faktisk lærer at læse og skrive) i forhold til fortsat læsesucces (Whitehurst & Lonigan, 1998). Dette fremhæver vigtigheden af at understøtte early literacy og sprogkompetencer gennem early literacy programmer (ELPs).

At forbedre børns udbytte gennem effektive praksisser, herunder ELPs, kræver imidlertid dygtige professionelle i børnehaven. Derfor fokuserer afhandlingen også på pædagogers professionelle udvikling i børnehaven og på hvordan implementeringen af LæseLeg kan understøtte pædagogernes fortsatte professionelle udvikling. Professionalisme er relateret til en følelse af kompetence (Kusima & Sandberg, 2008), og professionalisme karakteriseres som det at støtte tilegnelsen af professionel viden og færdigheder samt anvendelsen af disse i praksis (National Professional Development Center on Inclusion, 2008). Professionel

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[1] Literacy er svært at oversætte til dansk, hvorfor den engelske terminologi er bibeholdt. Begrebet er tidligere forsøgt oversat til hhv. tekstorienterede aktiviteter (Fast, 2007) og tekstsprogskultur (Kjertmanns, 2009).

udvikling må ydermere også støtte den professionelles autonomi, hvis den skal bidrage til at forandre praksis (Jensen & Rasbech, 2008; Kennedy, 2005; Sommerfeld, 2005).

Inklusion defineres som de indsatser, der udføres for at sørge for, at ethvert barn har en plads i børnefællesskabet og at de sikres fuld deltagelse heri. At forbedre inklusionen forstås derfor som det at sikre, at fællesskaberne i børnehaven opnår en aktiv og lige deltagelse for alle (Fisker, 2010; The Alliance for Inclusive Education, 2009). Afhandlingen fokuserer på LæseLegs potentiale til at bidrage til inklusion i børnehaven ved at (1) muliggøre et barns adgang til børnefællesskaber, leg og sociale relationer ved at støtte barnets sprogudvikling, og (2) tilbyde pædagogerne redskaber, der kan hjælpe dem med at skabe et mere inkluderende miljø i børnehaven.

Den empiriske undersøgelse af, hvorledes LæseLeg kan understøtte udvikling i børnehaven blandt såvel pædagoger som børn med henblik på at øge inklusion, er baseret på et mixed methods design, som består af et matched kontrolleret forsøg samt et interviewstudie.

Artikel I (Jensen de López & Clasen) rapporterer resultaterne af et effektstudie om børns udbytte af LæseLeg. Analyser af kovarians (ANCOVA) i SPSS blev anvendt til at undersøge effekten af at deltage i et LæseLeg forløb på 77 dansktalende, typisk udviklede 3-4årige børn, som havde deltaget i enten 12 ugers LæseLeg, almindelig højtlæsning eller en passiv kontrolgruppe. Præ- og posttest målene bestod af: Expressive One-Word Picture Vocabulary Test, udvalgte ord fra bøgerne, viden om prints, semantisk udtryksevne samt en narrativ produktions- og forståelsesopgave kaldet "Ræve historien". Ved posttesten viste LæseLeg gruppen statistisk signifikante forbedringer i ekspressivt ordforråd, impressivt ordforråd, semantisk udtryksevne og narrativ produktion sammenlignet med en eller begge kontrolgrupper. LæseLeg fremmer narrativ produktion, men resultater som viste, at begge læsegrupper (dialogisk læsning og almindelig læsning) forbedrede sig signifikant mere end den passive kontrolgruppe, peger på en mulig effekt af læsning i sig selv ift. områder af narrative kompetencer. LæseLeg viste ingen effekt på narrativ forståelse og viden om prints.

Artikel II, III og IV er alle baserede på et kvalitativt interviewstudie med 36 præ- og post-program interviews med pædagoger omhandlende deres pædagogiske praksis og deres erfaringer med at anvende LæseLeg. En række temaer blev fundet baseret på en tematisk indholdsanalyse.

Artikel II (Clasen & Jensen de López) fokuserer på præ-program interviewene, som blev udført før pædagogerne blev introduceret for LæseLeg. I relation til tidlig læring skiller danske børnehaver sig ud, idet de ikke minder så meget om skolen – modsat "pre*schools*" i mange andre vestlige lande. Ydermere kaldes personalet i

børnehaver for pædagoger i stedet for lærere. Artiklen sammenligner danske pædagogers praksisser i børnehaven med det danske politiske initiativ "Ny Nordisk Skole" i relation til den tidlige læring. Resultaterne pegede på en potentiel kløft mellem praksis og politik i Danmark. Ny Nordisk Skole stiler efter et nationalt akademisk løft, som skal opnås gennem systematiske og metodisk informerede praksisser. Pædagogerne havde imidlertid ikke en systematisk tilgang til højtlæsning og betragtede det generelt ikke som en læringsaktivitet. Politikere og pædagoger havde imidlertid et fælles fokus på inklusion, men der var ikke en fælles tilgang eller struktur i måden pædagogerne adresserede inklusion i børnehaven forud for implementeringen af LæseLeg.

Med fokus på post-program interviewene har **artikel III** (Clasen & Jensen de López) til hensigt at identificere "best practice" for implementering af ELPs i danske børnehaver med henblik på at facilitere såvel pædagogers professionelle udvikling som inklusion i børnehaverne. Set fra pædagogernes perspektiv kan LæseLeg fremme inklusion i børnehaven ved at (1) forbedre børns sprogkompetencer, (2) støtte udviklingen af sociale fællesskaber inden for læsegrupperne, og (3) øge børnenes selvtillid. Pædagogernes anvendelse af LæseLeg synes ydermere at øge deres eget fokus på inklusion, idet de betragter programmet som et inklusionsredskab. LæseLeg har vist potentiale til at støtte professionel udvikling ved at tilbyde pædagoger ny viden om, hvordan de kan støtte børns sprogudvikling. Ved at tage denne viden i anvendelse i LæseLeg understøttes pædagogernes professionalisme gennem deres refleksioner over deres egne praksisser samt vigtigheden af pædagogfaglighed. Refleksioner over nuværende praksisser, udviklingen af en ny professionalisme samt det at tage ejerskab af et program foreslås som afgørende processer ift. at ændre praksis og i implementeringen af et nyt ELP.

Artikel IV (Clasen & Jensen de López) er en spin-off artikel på dansk, som kombinerer temaer og resultater fra artikel II og III. Denne artikel fokuserer på de sociale læreprocesser, som pædagogerne undergår i implementeringen af LæseLeg. At tage ejerskab af LæseLeg og reflektere over nuværende praksisser beskrives som to centrale sociale læreprocesser gennem hvilke pædagogerne ændrede deres højtlæsnings praksisser fra præ-program til post-program. Artiklen foreslår også, hvorledes sociale læreprocesser kan udvikles på to dialektiske niveauer i implementering af LæseLeg.

De fire artiklers resultater diskuteres samlet set i relation til de centrale forskningsspørgsmål, ydermere diskuteres studiets bidrag, implikationer og begrænsninger.

Opsummerende finder afhandlingen støtte for LæseLegs potentiale til at støtte udvikling i børnehaven blandt både pædagoger og børn med det formål at skabe veje til forbedret inklusion.

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LIST OF PUBLICATIONS

Article I: Jensen de López, K. & Clasen, L. E. BookFun is more supportive of early literacy than reading-as-usual: A randomized controlled trial study in a Danish day-care centre setting (The article has been written with expectation of submission to *Developmental Psychology*)

Article II: Clasen, L. E. & Jensen de López, K. Practice versus politics in Danish day-care centres: How to bridge the gap in early learning? Accepted for publication in *European Early Childhood Education Research Journal*. Scheduled for publication in vol. 25, issue 1, 2017.

Article III: Clasen, L. E. & Jensen de López, K. BookFun – "There's more to it than reading a book": Early educators' views on the benefits of an early literacy programme for children's development and their own professionalism (Submitted to *Early Education and Development*)

Article IV: Clasen, L. E. & Jensen de López, K. (2013). Pedagogical practices as social learning – BookFun: a concrete suggestion for the New Nordic School? *Psyke & Logos*, vol. 1, no. 34, pp. 106-126.

CHAPTER 1. INTRODUCTION
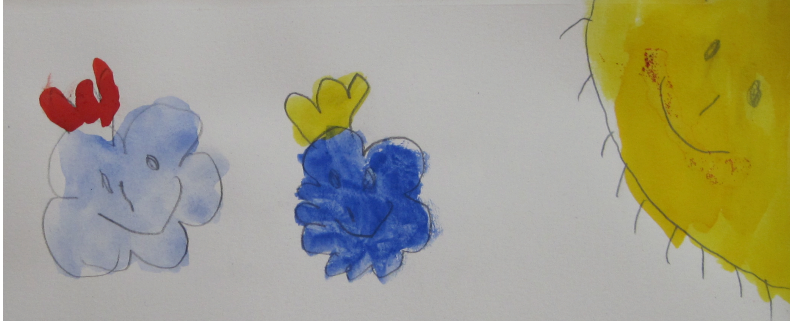
The current thesis stems from a general interest in children's development: and more specifically, an interest in children's language development and the crucial importance of language abilities for preschool children's early literacy and for their potential to engage in social relations. The thesis very much rests on the assumption that the support of children's development of communicative skills is essential for their general well-being. Hence, it is crucial that early educators in day-care services – where children spend a great deal of time – possess adequate pedagogical tools for supporting children's communicative development at this early age.

The focus of the thesis is a specific early literacy programme developed as a tool for early educators to support children's language abilities. My main motivation for conducting an investigation of the effect of this programme was to be able to contribute to its development and establish evidence for its effectiveness as an instrument that has potential to aid language development in a wide range of children – including typically developing children, bilingual children, and children with language impairments[2] – and thus also provide pathways to inclusion in the day-care centres. Within this lie two further assumptions of the thesis: the interrelatedness of language abilities and social competencies, and the important role that language abilities play in a child's capability to gain access to the social communities of children in the day-care centre.

Its field of research being early literacy and professional development, the thesis's framework is set within an educational psychological approach. Educational psychology has been described as the study of human learning processes, specialising in understanding teaching and learning in educational settings. The area includes topics such as improving schooling, teaching methods and teachers'

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[2] The thesis, however, focuses solely on the effect of the early literacy programme on children from regular day-care centres.

training, curriculum development, and socialization processes and their interaction with cognitive functioning (O'Donnell & Levin, 2001; Santrock, 2009). The thesis adheres to an educational approach with its focus on early literacy, professionalism and inclusion; within this approach, however, the thesis builds on a developmental framework for understanding human development throughout the lifespan. More specifically, the thesis focuses both on the preschool child's language development and on the early educators' professional development. The thesis investigates how supporting these developmental paths can create pathways to improved inclusion in the day-care centre. In this thesis the inclusion concept is unfolded in a setting, which centres around interaction between children and early educators. However, the thesis does not focus mainly on the interaction in itself, but on the development of children and professionals when they engage in an interactive programme such as BookFun.

The developmental framework on which the thesis is based will be elaborated on in the background chapter prior to a more detailed description of the specific areas that the thesis explores.

The empirical research reported in this thesis was conducted in Danish day-care centres. One motivation for choosing the day-care centre as the setting of interest is that a large degree of children's early development is manifested within this particular setting. Danish day-care centres stand out from most other contexts in which early literacy programmes (ELPs) have previously been investigated, as Danish day-care centres are not very school-like. The Danish day-care tradition emphasises children's spontaneous development and free play, and empirical studies have shown Danish early educators to be sceptical towards the concept of "learning", which they consider to be a term belonging to the school environment. However, in recent years, political focus at a national level has been placed on the question of how to improve Danish students' academic performance. Consequently, increased attention has been paid to early learning in day-care services (Law of nursery curriculum, 2004; Public School Act, 2009). So even though early literacy programmes internationally are not a novel concept, the new programme discussed in this thesis, BookFun, was the first structured ELP employed within Danish day-care centres.

Forming part of an ongoing research project at the Clinic for Developmental Communication Disorders[3], the thesis centres around the evaluation of the BookFun early literacy programme (http://www.maryfonden.dk/en/bookfun). BookFun was developed by the Crown Princess Mary's Foundation

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[3] The BookFun project (2010-2015) is led by professor of developmental psychology Kristine Jensen de López and based within the Center for Developmental & Applied Psychological Science, Institute of Communication and Psychology, Aalborg University.

(http://www.maryfonden.dk/en) and together with the programme "Free of Bullying" it addresses one of the Foundation's main focus areas, namely fighting social isolation. Both programmes strive to strengthen the social communities among children based on the underlying philosophy that every child should feel that they belong.

In Denmark as well as internationally, there is a growing focus on evidence-based practices within the field of early childhood education. However, one of the main purposes of this thesis is to call attention to the fact that improving child outcomes through effective practices requires skilled professionals in the day-care centres. There is a great need for continuous support and training of early educators if they are successfully to implement evidence-based practices including structured ELPs. Children's language and early literacy development cannot be seen as independent from early educators' professional development. Therefore, this thesis seeks to combine an exploration of the two in the evaluation of the first Danish ELP, BookFun.

A further aim of this thesis is to contribute to the existing international knowledge base on early educators' professional development and the effects of ELPs on children's language abilities, by providing a Danish perspective on these issues.

1.1. THE COMPOSITION OF THE THESIS

The current thesis is empirically founded and four empirical articles (articles I-IV) constitute the core of the thesis. These articles are briefly summarised in section 2.8 of the background chapter and more thoroughly in the results chapter. In addition to the articles, the thesis comprises the current text presenting the theoretical framework and the methodology as well as a summary and discussion of the results. This text, henceforth referred to as the overview text, has the function of an interlinking contribution, bringing together the different aspects and findings presented in the empirical articles and forming the platform for the thesis.

Working to interlink the differnet aspects of the overall study and articles, I developed a mindmap as a working paper to illustrate connestions between central aspects of the individual articles. For an illustrative overview of the articles' connections, this working paper is enclosed in appendix A.

The investigation of BookFun is based on a mixed methods approach applying a quantitative design to measure BookFun's effect on children's language abilities as well as qualitative interviews with early educators (see methods section 3.2). I have chosen to present one empirical article on the quantitative study (article I), and three empirical articles on the qualitative interviews. The articles represent different approaches to the research area of early literacy and ELPs, and have been published in or submitted to different journals with distinct audiences. Since the articles are

free-standing publications, some sections, especially the methodology, will be somewhat repetitious. The current overview text aims to create a common thread throughout the thesis and to link the different articles, thus describing how the overall study is conducted within a mixed methods research paradigm.

The overview text consists of six chapters. The current introduction comprises the first chapter and presents the motivations for the thesis. The second chapter presents the theoretical background and introduces the main foci of the research: language development, early literacy, dialogical reading, inclusion and professional development. Chapter three, the methodology, presents the aims and research questions of the thesis, identifies the components of the study's mixed methods design, describes the context of the study, the recruitment of participants and the materials and analyses employed in the study, and discusses ethical considerations. Chapter four summarises the empirical articles' aims, results and conclusions. Chapter five is a discussion of the results in relation to the research questions posed in chapter three, and also explores the implications, contributions and limitations of the study, and suggests directions for future research. The sixth and final chapter of the overview text presents the study's conclusions. Other relevant documentation to the study is provided as appendices. Finally, the four empirical papers complete the dissertation. At the time of writing, two of the papers are published or accepted for publication, and the other two are still manuscripts awaiting submission or peer-review. However, for simplicity all papers are referred to as articles in this thesis. Throughout the thesis I will cite the empirical articles, but the extracts will not be explicitly marked as quotes in the text.

CHAPTER 2. BACKGROUND

Taking the early literacy programme (ELP) as its field of research, the current thesis zooms in on the child's development of language and the early educators' professional development in the day-care services, and explores how ELPs can possibly aid both developmental paths.

The current chapter provides a background for understanding the empirical articles. First the thesis's psychological framework – inspired by Vygotsky and Bronfenbrenner – is presented. After this there follows an introduction to the areas of language development, early literacy, dialogical reading, inclusion and professional development. The BookFun programme is also described in detail. The chapter is rounded off with a short overview of the four empirical articles that constitute the Ph.D.

The background chapter aims to give insights into the different areas that constitute the research field of this thesis, but does not attempt to provide an exhaustive description of these areas.

2.1. CONTEXTUAL INFLUENCES ON CHILD DEVELOPMENT – A PSYCHOLOGICAL FRAMEWORK

The theoretical framework of this dissertation rests upon an understanding of the human as constantly interacting with peers, significant others and with the surrounding community. To motivate this understanding, the following subsection gives a brief (but in no way exhaustive) introduction to two cornerstones in development psychology that inform the theoretical stance of this thesis: sociocultural theory and ecological systems theory. These theories give differentiated accounts of contextual influences on child development.

2.1.1. SOCIOCULTURAL THEORY

Vygotsky was one of the pioneers of psychological Activity Theory, which highlights the social, cultural and historical nature of the mind. This approach views the relationship between the environment and the individual as a dialectic: the individual simultaneously changes and is changed by the surrounding environment (Roth & Lee, 2007). Vygotsky's sociocultural theory emphasises social experience and views cognitive development as a socially mediated process. According to Vygotsky (1978), cognitive skills develop at two levels: their development starts out socially between the child and an adult on the interpersonal level and afterwards the skills are internalized to an intrapersonal level within the child. According to Vygotsky (1978), all higher functions have their origin in relations between human beings.

In its appreciation of cognitive development as being socially founded, a key concept in Vygotsky's theory is the *zone of proximal development (ZPD)*. In *Mind in Society* (1978, p. 86) Vygotsky defines the ZPD as: *"The distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers"*. Hence, the ZPD characterizes the spectrum of tasks that are too difficult for the child to solve by herself, but possible to solve with the assistance of an adult or more capable peer. The ZPD is the difference between the child's actual and potential level of development with and without assistance.

As discussed in article IV, the ZPD concept can be used not only to describe children's development but also to describe lifelong development and social learning, e.g. the early educators' professional development.

According to the sociocultural theory, human cognition is not only inherently social but also language-based. Vygotsky (1934/1986) believed language to be the foundation for all higher cognitive processes, since language and private speech

help children abstract to a metacognitive level, thinking about mental activities and behaviour. Vygotsky furthermore pinpoints that language has the same social function for grown-ups as it does for children in promoting social contact (Vygotsky, 1934, as cited in Wertsch, 1985).

2.1.2. MAKE-BELIEVE PLAY

Another central concept in Vygotsky's (1978) theory is make-believe play. This concept is of importance to this thesis as the BookFun programme builds on a combination of dialogical reading and creative play activities[4]. In Vygotsky's terminology, play is described as a mechanism propelling child development forward. Make-believe play serves as a ZPD and is a central source of development in preschool years. The rule-based nature of make-believe play strengthens metacognitive skills: by engaging in make-believe play, children gain capacity to think before they act and become better at understanding social norms and expectations. Another important aspect of make-believe play is its possibilities for combining playing with learning. In her account of make-believe play, Bodrova (2008) describes the challenge that confronts early childhood educators to start teaching academic skills at a progressively younger age while also maintaining traditional early childhood activities related to care as well as social and emotional areas. As discussed in article II, this dilemma is also seen in Danish day-care centres through the conflicting interests of Danish day-care tradition, focussing on care and free play, and political initiatives stressing the importance of early learning. In accordance with Vygotsky's theory, applying make-believe play could help resolve this dichotomy, promoting academic skills through play (Vygotsky, 1978). This is a particular ambition of the BookFun programme. Bodrova (2008) describes how make-believe play serves as a prerequisite through which the child develops abstract and symbolic thinking. Make-believe play additionally promotes the child's intentional behaviour contributing to the child's readiness for formal schooling. Following the Vygotskian tradition, the Danish professor within education and pedagogics Broström (2010) underlines how fiction that contains an aesthetic dimension has a pivotal role in supporting young children's literacy competencies, since most children reflect on stories through aesthetic activities, e.g. drawing, play, dramatizing and their own storytelling. Broström proposes that "*reading of fiction combined with aesthetic reflections and expression [in] children's storytelling, drawing and play might be useful tools in developing children's literacy competence in early years*" (Broström, 2010, p. 7). BookFun builds on exactly this combination of shared reading followed by creative, aesthetic activities. The BookFun programme is also highly inspired by the Vygotskian approach and its concepts of the ZPD in how to support and scaffold children in their development, since this approach is very widespread in the tradition of Danish day-care centres.

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[4] Directly translated *LæseLeg* in Danish means "reading play".

2.1.3. ECOLOGICAL SYSTEMS FRAMEWORK

Bronfenbrenner's theoretical perspectives are especially important to this thesis, as his scientific work inspired the development in 1965 of the very first ELP in the US, Head Start, of which he is considered a co-founder.

Bronfenbrenner (1979) was inspired by Vygotsky, seeing the processes of human development as a product of the interactions between the individual and its environment. Bronfenbrenner was also an advocate for an ecological approach in which development is understood and studied in its natural environment. He criticised the experimental approach in developmental psychology for being *"the science of the strange behavior of children in strange situations with strange adults for the briefest possible periods of time."* (Bronfenbrenner, 1979, p. 19). As a response he put forward a basis for including *context* in research models for theoretical as well as empirical work. Bronfenbrenner named his scientific perspective the *ecology of human development,* which he defined as:

"the scientific study of the progressive, mutual accommodation between an active, growing human being and the changing properties of the immediate settings in which the developing person lives, as this process is affected by relations between these settings, and by the larger contexts in which the settings are embedded" (Bronfenbrenner, 1979, p. 21).

Focussing on the different contexts surrounding human development, Bronfenbrenner (1979) put forward his ecological systems framework. This identifies five environmental systems in which individuals interact: the microsystem, the mesosystem, the exosystem and the macrosystem that are all embedded in the temporal chronosystem. Whereas Vygotsky placed his main focus on the immediate surroundings and transmission of culture through social interaction, Bronfenbrenner's account gives a broader and perhaps more complete perspective on human development.

Bronfenbrenner's theory can be used to illustrate central areas to take into account when implementing an early literacy programme within the specific ecological setting of the child. Within the scope of this thesis, the micro- and macrosystems are especially relevant[5]. According to the ecological model, one needs to support the microsystems, e.g. childcare systems, in order to create environments that can nurture the child's communicative and social development and thus prepare them for starting school.

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[5] Obviously parents also play a vital role in early literacy development: however, their role extends beyond the scope of this thesis.

In this thesis the specific microsystem under investigation is the pedagogical practice of Danish day-care centres. Investigating this system, it is important to take political and societal aspects into consideration, as day-care centres are tightly embedded within these structures. According to the ecological model, the conditions and practices that occur within day-care centres in a specific culture do not exist independently of the macrosystem in which the day-care centre as well as the child is embedded. For example, certain governmental laws concerning number of educated staff per child will have a major influence on the implementation of an ELP in this setting. Article II therefore gives a political overview of the current situation for Danish day-care practices and relates this to the pedagogues' practices prior to the implementation of the BookFun programme.

2.2. LANGUAGE DEVELOPMENT

The following section states the thesis's theoretical framework for understanding language development. This paragraph is not remotely exhaustive as an introduction to the area of language acquisition, but does serve to introduce the relevant key concepts. The main focus is on language development from 3-6 years and subsequently which areas of language one might be able to affect and advance through the use of an ELP.

2.2.1. FOUNDATIONS OF LANGUAGE DEVELOPMENT

In continuation of the Vygotskian view of cognitive and language development as socially founded, this thesis subscribes to the view of the American developmental psychologist Michael Tomasello and his social-pragmatic approach to language known as the usage-based approach[6]. He highlights the adult's function as a role model in children's language acquisition, which is especially important from a pedagogical perspective. With an array of empirical experiments involving nursery school and preschool children Tomasello (1999) has shown how the development of communicative competencies is embedded within cultural learning[7] and developed through the child's attempt to decode the intentions that others are conveying through speech. Through a set of general socio-cognitive abilities the child is enabled to acquire the surrounding world's cultural symbols and tools, language being the most important cultural tool (Tomasello, 1999).

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[6] As opposed to the nativist perspective represented by Chomsky's (1957) Universal Grammar approach.

[7] Defined as social learning processes in which intersubjectivity or perspective taking plays a crucial role (Tomasello, Kruer & Ratner, 1993).

Language development can be divided into the acquisition of four domains: sound, structure, meaning and usage. The first, phonology, covers rules that govern the structure and sequence of speech sounds. The structure of language, grammar, consists of two parts: syntax, governing how words are arranged into sentences, and morphology, which covers the usage of grammatical markers indicating e.g. tense and number (Karmiloff & Karmiloff-Smith, 2001; Snow, Burns & Griffin, 1998). The first two domains of language concern the form of language. The third domain, meaning, also called semantics, concerns the content of language: vocabulary, the way underlying concepts are expressed in words and word combination. The final domain involves the usage of language and is termed pragmatics. The domain of pragmatics covers how to use language in social contexts including the rules for engaging in suitable and effective communication. This involves turn taking, staying on topic and narrating a story with a beginning, a middle, and a conclusion. Pragmatics also involves sociolinguistic knowledge (Bamberg, 1987; Karmiloff & Karmiloff-Smith, 2001; Snow et al., 1998). Knowing how to use language effectively in social contexts is vital for being included in social relations and becoming part of a social community.

The objective of this thesis is to investigate how BookFun can support language development in order to improve children's ability to enter into social communities, strengthening inclusion in the day-care centres. In this regard, giving children a larger vocabulary and a better use of their language is especially important; therefore, the thesis's further description of language development will focus mainly on the pragmatic and semantic areas of language acquisition in preschool years. Even though there is a high degree of individual differences in language acquisition, some overall milestones can be highlighted.

2.2.2. MILESTONES IN LANGUAGE DEVELOPMENT FROM 3-6 YEARS

Joint attention has been hypothesised to underlie the earliest forms of human cultural learning, and to be a central factor in language development (Carpenter, Nagell & Tomasello, 1998). Empirical studies based on experiments conducted by Tomasello and colleagues have demonstrated how children who spend more time engaged in joint attention activities with their mother when they are between 12 and 18 months old have larger vocabularies at 18 months (Tomasello & Todd, 1983).

Vocabulary in early childhood is an important and robust predictor of good literacy outcomes (Snow, 2005). Around 18 months the so-called vocabulary spurt sets in and from 24-36 months the toddler's grammatical skills increase dramatically and they start producing actual, complex sentences. At age 2 the child knows 250 words on average, however, during the child's first three years dialogical abilities are still restricted. From 3-6 years the child's grammatical and pragmatic abilities become more sophisticated, the child learns conversational turnabouts (conversational turn taking) and starts adjusting speech to the listener's perspective and to social

expectations. Providing the linguistic content with which the child attains a multifunctional level of dialogue, adult-led conversations play a crucial role for the child's development of narrative abilities (Karmiloff & Karmiloff-Smith, 2001).

The child's understanding of narrative events and their expressive narrative ability – the ability to structure and tell a story – also develops dramatically in these years. Four-year-olds will have a language that is largely similar to that of an adult and will produce short "leapfrog" narratives, jumping from one event to another. At the age of 4½-5 years, children will begin to produce chronological narratives in which events are placed in a temporal sequence. At age 6 the child will have an active vocabulary of an average of 2,600 words and have advanced to classical narratives in which, for instance, they end their narrative with the solution to a problem (Bamberg, 1987). There is empirical evidence for the developmental trend in children's acquisition of narratives: younger children tell shorter stories, have a lower frequency of different words (Miller, 1991), and have a less complex syntax and a less complex or incomplete story structure (Peterson & McCabe, 1983; Shapiro & Hudson, 1991). Narrative abilities form an important part of the child's early literacy, because telling a story links oral skills and literacy skills. Therefore, narrative skills are considered pivotal tools for the child's later reading and writing abilities when they reach school age (Gagarina et al., 2012), and shared book reading is one way of introducing and refining new pragmatic functions (Snow et al., 1998).

2.2.3. THE RESEARCH PARADIGM FOR NARRATIVE DEVELOPMENT

It is important and fruitful to investigate children's narrative abilities because narratives constitute a great source of information regarding the child's language as well as forming the basis of many linguistic practices. Furthermore, measuring children's narratives is an ecologically valid way of measuring communicative skills in a natural context (Botting, 2002).

Researchers use an array of methods to investigate children's narratives. Different types of narratives are typically distinguished (e.g. personal versus fictional narratives), and different methods are employed to elicit narratives, e.g. asking the child to tell a novel story based on a set of pictures (story generation) or asking the child to retell a story they have already heard (retelling) (Bamberg, 1987; Gagarina et al., 2012.). Analysis of children's narratives allows the assessment of multiple linguistic features including macrostructure and microstructure. Macrostructure covers the organizational structure of the event sequence in the narrative – that is, whether the child is able to structure and tell a meaningful and cohesive story. This is often organised into story grammar units, which are the story's basic components that arrange events in a meaningful and sequential manner (Gagarina et al., 2012; Lever & Sénechal, 2011). Microstructure, on the other hand, covers the more specific linguistic structures that are used in the narrative: for instance, language

complexity, as measured by the total number of words, the average length of sentences and the proportion of different words used (Gagarina et al., 2012). The narrative method can also furnish insights into the child's use of internal state terms providing information on the character's mental state, intention and motivation. Newly developed pictorial stimuli permit the elicitation of macrostructure, microstructure and internal state terms within a unified framework called MAIN (Multilingual Assessment Instrument for Narratives, Gagarina et al., 2012). Elements of the MAIN were applied in this design (please see article I for further information).

In general, two activities have been shown to be particularly supportive to early narrative development. Firstly, autobiographical narrative dialogues shared between children and their mothers have been demonstrated to improve the narrative abilities of 3-5 year-old children (Peterson, Jesso & McCabe, 1999). Secondly, shared book reading has also frequently been identified as an important joint activity that directly supports children's narrative development. In particular, dialogical reading, an interactive shared reading approach, has been proposed as an intervention to support children's literacy development (Lever & Sénéchal, 2011). Dialogical reading will be discussed in more detail in section 2.4. Firstly, an area closely connected to language development will be introduced: early literacy.

2.3. EARLY LITERACY

Language and literacy are considered two closely related aspects of child development, as evident in the relation between vocabulary and literacy and in the importance of narrative abilities for literacy (see section 2.2.2.). Especially metalinguistic knowledge (language or though about language) adds to the child's development of literacy (Snow et al., 1998).

The language acquisition research conducted at Harvard's Center for Cognitive Studies in the 1960s and early 1970s gave birth to a new perspective of reading acquisition labelled "emergent literacy". Emergent or early literacy (the terms are here used interchangeably) refers to the idea that literacy acquisition is best conceptualised as a developmental continuum (Whitehurst & Lonigan, 1998). Among others, early literacy-relevant skills include distinguishing pictures from prints, naming and printing letters, being able to receite the alphabet, and spelling simple words (Snow, 2005). The early literacy perspective views children's early literacy experiences as pivotal for later reading success and focusses upon what children know about reading and writing before they actually learn to read and write. It does not encompass the teaching of reading but instead involves the building of a foundation of skills, knowledge and attitudes, the developmental precursors to reading and writing, so that when children are taught to read and write they will be ready (Teale & Sulzby, 1986; Whitehurst & Lonigan, 1998). Early literacy involves children developing an understanding that sounds can create

words, which can be read from left to right to tell a story. However, according to Henry (2004), early literacy also encompasses children playing, engaging in creative storytelling and acting out their own stories, which is a central aspect in BookFun. The early literacy concepts and skills form the foundation for the child's subsequent reading and writing achievement.

Empirical findings have demonstrated high degrees of stability in literacy skills over time and the importance that early literacy and language skills have on continued reading success (Whitehurst & Lonigan, 1998). This highlights the importance for interventions in early literacy and language skills. However, Broström (2010) points out that introducing early literacy in preschool is challenging especially from a Danish perspective, as Danish day-care centres have a tradition of not being very school-like (see section 3.3 and article II for details of the specific practices of Danish day-care centres).

In order to systematically support children's early literacy, several early literacy programmes (ELPs) have emerged during the past decades, primarily in English-speaking countries such as Australia, the USA and Canada (see Balla-Boudreau & O'Reilly, 2010 for a recent survey. Also see Valdez-Menchaca & Whitehurst, 1992 for a study in a Mexican day-care centre, Fielding-Barsley & Prudie, 2003 for a study in Australia and Chow, McBride-Chang, Cheung & Chow, 2008 for studies of Chinese children). Research that investigates the impact of specific programmes on children's language and literacy development has provided valid documentation of the effectiveness of some ELPs (see Lever & Sénéchal, 2011 for a recent effect study).

During the past decades many studies have provided empirical evidence for the link between shared book reading and children's language development. In a Danish literature search on best practices for tools to support language development, Kristine Jensen de López concludes that the method of *dialogical reading* shows the most well-documented and most robust beneficial effects on different types of language abilities for preschool children (Jensen de López, 2011, working paper).

2.4. DIALOGICAL READING

Dialogical reading is not a new method: research on the approach dates back to the 1980s. American developmental psychologist Whitehurst and colleagues (1988) developed and tested the theory and methods behind dialogical reading in its original form as interactive picture book reading. Dialogical reading is based on the theory that children's language development is facilitated by their practice in using language, the adult's feedback concerning language, and appropriately scaffolded adult-child interactions, all in the context of shared picture book reading (Zevenbergen & Whitehurst, 2003). In dialogical reading the adult involves the child actively during shared book reading, creating a dialogue, and the main aim is

for the child to become the narrator of the story. The fundamental reading technique in dialogical reading follows the "PEER" sequence in which the adult:

Prompts the child to say something about the book,
Evaluates the child's response,
Expands the child's response by paraphrasing and adding new information,
Repeats the prompt in order to make sure that the child has learned from the expansion (Zevenbergen & Whitehurst, 2003, p. 172).

During reading the adult can use an array of different prompts, such as asking the child to recall what happened in a book, or asking open-ended and wh-questions about pictures, characters and the plot of the story that allows the child to describe and narrate the book.

Since the development of dialogical reading an array of empirical evidence has documented the effectiveness of the intervention. Dialogical reading has been shown to have a positive effect on language skills for children in the age-range 2-6 years, for children from different socio-economic status groups and in both home and preschool environments (Zevenbergen & Whitehurst, 2003). Within the last decades several studies have proved that interactive reading, as compared to reading as an unstructured activity, has a significant effect on the vocabulary development of preschool children from low-income families (Whitehurst at al., 1994; Lonigan & Whitehurst, 1998; Zevenbergen, Whitehurst & Zevenbergen, 2003). Studies have mainly focused on dialogical reading practices carried out by parents and most often the target group has been children from low-income families. In a recent meta-analysis Mol, Bus, de Jong and Smeets (2008) compared parent-child dialogical reading to typical shared reading. Based on 16 studies the authors found a moderate effect size of dialogical reading on expressive vocabulary. However the effect was particular to younger children aged 2-3 years, and dialogical reading did not seem to change home literacy activities for children of greatest risk of school failure (risk status here being based on demographic income variables or maternal education).

Overall, the main finding in studies investigating the effect of dialogical reading is that the intervention improves children's expressive vocabulary significantly compared to reading a book as usual (e.g. Whitehurst & Lonigan, 1998; Valdez-Menchaca & Whitehurst, 1992; Whitehurst et al., 1988). However, in order to become a competent conversational partner, vocabulary in itself is not sufficient. Recent research has therefore also looked into the effect of dialogical reading on more complex linguistic competencies. A central area within this research involves dialogical reading's effect on children's narrative abilities, but data on this is still sparse.

Zevenbergen, Whitehurst and Zevenbergen (2003) examined the effect of a shared reading intervention on a specific facet of narrative skills within the retelling paradigm, namely the inclusion of evaluative information in children's narratives. Evaluative information includes explicit reference to one's own or characters' internal states, use of qualifying comments and characters' speech. The 30-week shared reading intervention was conducted in Head Start classrooms and homes. Participants in the study were 123 American 4-year-olds from low-income families assigned to either the regular Head Start group or the intervention group. Zevenbergen et al. found that the dialogical reading intervention significantly improved children's inclusion of evaluative devices in their narratives, and specifically their reference to characters' internal states and dialogue. A limitation to this study is, however, that it only investigates narrowly delimited aspects of children's narrative knowledge.

A more elaborate study by Lever and Sénéchal (2011) tested the effect of dialogical reading on a wider range of narrative components. They investigated the effect of an 8-week shared reading intervention on the narrative competencies of 40 Canadian 5-6-year-olds. Children were assigned to either a dialogical reading group or a control group with an alternative treatment consisting of training in phonological awareness. Researchers carried out the dialogical reading. The children were tested on a range of narrative measures as well as language complexity and receptive and expressive vocabulary at pre- and post-test. Based on a story generation task, results showed that, besides improving their expressive vocabulary, children participating in the dialogical reading intervention produced narratives with significantly better story grammar macrostructure and also exhibited greater spontaneous use of mental words than the children in the alternative treatment group.

Based on the evidence presented in this section there is reason to believe that dialogical reading could also improve Danish preschool children's language abilities. Therefore, a newly developed Danish programme has adapted dialogical reading to the traditional Danish day-care practice and further expanded it to include creative activities.

2.5. BOOKFUN – A DANISH ELP

BookFun is a pedagogical intervention programme developed in 2010-2011 by the Danish Crown Princess Mary's Foundation with the assistance of Danish childcare researchers. The programme was piloted in the autumn of 2011 and launched nationally in Denmark in the summer of 2012. BookFun was developed for Danish day-care centres and is based on dialogical reading combined with creative, aesthetic activities (Broström, Jensen de López & Løntoft, 2012).

BookFun is to be used with a fixed group of 4-5 children who have been grouped together by the pedagogue conducting the programme. Each BookFun period lasts 12 weeks, during which time the group reads six preselected Danish children's books. In the introduction to BookFun, pedagogues are taught a set of principles about how to engage children actively during shared book reading by asking the children questions about the characters, pictures and plot of the story. A book is read aloud three times per week and each reading session has qualitatively different content. In the first reading the book is read without interruption so that the child experiences the story in full. During the second reading the children are allowed to interrupt, asking questions about, for instance, the plot and the characters. In this reading the early educators will also invite children to participate, using the dialogical techniques to engage children with the book. In the third and final reading the aim is for the children to become narrators of the book. In each session the early educators can supplement the reading with an array of activities suggested in the BookFun material. For each book, the BookFun material includes a list of "good words" to discuss, a book quiz, ideas for talking about the book and suggestions for creative and drama activities that follow the plot of each book. Subsequently, in the week following the three readings, the early educator and children re-enact the story and the plot of the book through an array of different creative activities, e.g. retelling, drawing and drama.

The BookFun material exists in two different versions with age-appropriate Danish children's books: a version for the 3-4-year-olds and a version for the 5-6-year-olds.

The main purpose of BookFun is to promote children's communicative abilities and aid their social competencies through shared book reading, thereby strengthening the social relations and social communities between the children and helping to ensure that everyone has a place to belong. By including creative activities, the programme aims to take into account the special Danish tradition of free play (see article II for further elaboration on this concept). The BookFun programme's aims can be seen as combining the increased political focus on academic skills with traditional Danish early childhood activities (see article II). This matter is also addressed by Bodrova (2008) and emphasized in Vygotsky's understanding of make-believe play as the leading source of development in preschool years, during which time academic skills should be fostered through play and creative imitation (Vygotsky, 1978; see also Broström, 2010).

The BookFun programme is highly inspired by the Vygotskian approach and its concepts of the zone of proximal development (Vygotsky, 1978) in how to support and scaffold children in their development. The Vygotskian approach is very widespread within Danish day-care centres, and by building on traditions that are already influential upon the working methods of Danish pedagogues, it is hoped that BookFun will be readily integrated with to the pedagogues' own style and approach.

2.6. INCLUSION AND THE INTERRELATEDNESS OF LANGUAGE ABILITIES AND SOCIAL COMPETENCIES

The BookFun programme does not explicitly state that it aims to enhance inclusion in the day-care centres, but analysing the programme's objectives and focus areas, it is clear that these closely relate to enhancing social inclusion through shared book reading. And there is good reason for trying to enhance inclusion by means of supporting language development.

As language acquisition is a social process (Tomasello, 1999; Vygotsky, 1978) based on social competencies such as intentionality and joint attention, cognitive and social competencies are viewed as interrelated. Language skills are critical for the day-care child's social life: good language skills will help them engage in social relations, gain access to peer play activity and resolving conflicts verbally.

Evidence for this claim can be found in research on children with language impairment for whom language difficulties limit the child's social well-being (Leonard, 2000). A study on peer preferences in preschool by Gertner, Rice and Hadley (1994, as cited in Leonard 2000) concludes that typically developing children prefer peers who are also typically developing instead of children with language difficulties. Children with poor language skills may therefore be at risk of acquiring lower social status among their peers, which could evidently lead to their marginalisation. This peer preference might reflect a general tendency in society to place great value on language abilities: for instance, poor language abilities are deprecated more than poor physical ability (Tomblin, 1983). A British empirical study by Harper and McCluskey (2002) supports this. Authors investigated the amount of time that children with different special needs – severe communicative handicaps or severe motor problems – spend in various activities in an inclusive preschool programme. Harper and McCluskey (2002) found that children with communicative problems spent more time in solitary pursuits and were the most isolated, indicating that children with a communicative handicap are more likely to be excluded than children with a physical handicap. The support of children's language development therefore seems to be a significant factor in ensuring social inclusion in the day-care centre. In the current thesis the children's abilities to enter into social relations and social communities were not directly measured. However, some abilities known to affect social competencies, namely language abilities, were tested.

Inclusion is a notion currently commanding great attention in Denmark as well as internationally (Ainscow, Dyson & Weiner, 2013; Farrell, 2006; Fisker, 2010; NPDCI, 2008). The primary reason for this increased focus on inclusion is the political objective of offering children with special needs a space within the general community (also see article II's description of the New Nordic School). The Salamanca declaration (UNESCO, 1994) states a commitment to providing

"Education for all". According to this declaration, inclusion is characterised by the efforts to create a school and a day-care centre for all children, and the movement away from the tendency to segregate children into special needs education classes (Zobbe, Madsen, Feilberg, Sørensen & Ertmann, 2010).

The inclusion concept has, however, received an array of connotations, which are not all positive. The inclusive way of thinking has been criticised for mainly having economical foundations, i.e. being motivated by saving money by cutting down on special needs education. Despite this motivation, as pointed out by Fisker (2010), strategies for inclusion cannot be seen as a means for cost reductions in the short run, since inclusion builds on a strong professionalism that needs to be developed continuously. In a lifelong perspective, however, inclusion strategies can be considered as preventative efforts agaînt maginalization, which can in time create cost reductions.

Inclusion requires that there is room for differences. According to the UK Alliance for Inclusive Education (2009), inclusion happens when solutions that fit most children are provided in the mainstream classroom or day-care centre and when the educational environment is committed to ensuring the full participation of every child, disabled or not. Furthermore, Fisker (2010) defines inclusion as a system being able to accommodate different individuals in the sense not only that there is a physical place for these individuals but also that everyone is included in activities, communities and social relations. The current thesis focuses mainly on the latter aspect of inclusion – ensuring that every child has a place in the community of children and participates fully. Improving inclusion is therefore understood as ensuring that communities in the day-care centres achieve active and equal participation for all.

From this point of view the thesis investigates and emphasises how BookFun has the potential to contribute to inclusion in the day-care centre by (1) enabling a child's access to other children's communities, play and social relations by means of supporting their language development, and (2) offering pedagogues tools for creating a more inclusive environment in the day-care centre. Language abilities are crucial for interactional competencies, which in turn are prerequisites for inclusion (Fisker, 2010). Therefore, it seems relevant to support children's language abilities in order to contribute to inclusion. Farrell (2006) warns against psychology adopting a "within person" model in which problems are attributed solely to the individual instead of viewing problems as multifaceted and embedded within social contexts. Accordingly, the stance adopted in this thesis is also that it is primarily the responsibility of the surrounding environment to hold and include all children – that is, it is not the individual child's own responsibility to become part of the community. Consequently, a main focus of this thesis is how to support the day-care centres and the early educators' continued professional development in order to improve inclusion.

The main reason why this thesis focuses on social inclusion is that children develop through the social communities of other and more competent peers, so their access to and participation in these relations are of the utmost importance (Højholt, Larsen & Stanek, 2007; Vygotsky, 1978). Based on how this thesis defines inclusion, and in the light of the inclusion concept's negative connotation, a more pertinent phrase with which to replace inclusion could be "learning and development in the community". I have, however, chosen to retain the term inclusion to describe these processes as this term corresponds to the existing literature in the area. It is relevant, however, to take account of precisely how this term is used in research on early literacy.

2.7. PROFESSIONAL DEVELOPMENT WITHIN THE DAY-CARE CENTRE

As described in section 2.5, the purpose of BookFun is to promote children's communicative competencies, thereby strengthening social communities and inclusion in the day-care centre. As Fisker (2010) pinpoints, inclusion builds on a strong professionalism, which is why it is also important to investigate how the implementation of a new ELP such as BookFun can support professional development.

In recent years, focus on effective practices has increased as part of the process of improving child outcomes throughout the day-care system. Policy makers are turning to professional development in order to ensure that practitioners have adequate skills to implement effective practices (e.g. the Danish "New Nordic School", see articles II and IV). Professional development is often equated to in-service training and staff development. However, as the National Professional Development Center on Inclusion (NPDCI) points out, the field is lacking a conceptual framework and definition for professional development. Based on a literature review, the NPDCI found an array of key assumptions regarding professional development. Acknowledging the full scope of professional development for early childhood educators, they suggest the following definition: "*Professional development is facilitated teaching and learning experiences that are transactional and designed to support the acquisition of professional knowledge, skills, and disposition as well as the application of this knowledge in practice*" (NPDCI, 2008, p. 3). According to NPDCI's definition it is key to ensure that the professionals' transactional learning experiences have applicability in practice, and that professional development results in practices actually being changed to be more effective and knowledge-based. Furthermore, from sociological (Sommerfeld, 2005) and psychological (Kennedy, 2005) as well as pedagogical (Jensen & Rasbech, 2008) perspectives it is argued that professional development must simultaneously support professional autonomy in order to foster the actual change of practices.

When implementing new, evidence-based practices it is important to get the professionals on board and ensure that they do not consider the new programme to impose too rigid a structure, as this risks creating a feeling of alienation or lack of agency on the part of the users. From a sociological angle Sommerfeld (2005) addresses this issue by observing that the impact of the increasing demand for evidence-based practices can be viewed from two angles. From a positive perspective, these demands can promote the role of the professionals and inspire a new professionalism, thus contributing to professional development. On a more negative view, the preoccupation with evidence and demonstrated effects can be considered as an attack on the autonomy of the professionals, or new practices can be seen as undermining their decision-making (Sommerfeld, 2005).

In order to ensure that the implementation of the new Danish ELP will contribute to professionalism and not attack the users' autonomy, it is important to involve the practitioners actively in the implementation process. This can be done for instance by encouraging professionals to engage reflectively on whether and how the ELP fits with their current practices, and by employing a participator led perspective (Jensen & Rasbech, 2008; Kennedy, 2005). This is reflected in the use of qualititative interviews in the research design of this thesis. Article III of the thesis pursues the question of how the implementation of an ELP such as BookFun can support Danish pedagogues' continued professional development. Article IV elaborates further on how professionalism can be viewed as a social learning process.

Returning to the definition of professionalism, Berntsson, a Swedish professor in pedagogical processes, argues that a profession is characterised by the members of a specific group possessing specific basic knowledge that they "have the rights to" – specific knowledge which is meaningful to strive for within the profession (Berntsson, 1999). The nature of the knowledge that binds early educators together in their profession was investigated empirically by Kusima and Sandberg (2008). Based on surveys with 27 Swedish preschool teachers they investigated how early educators interpret the concept of professionalism. In the Scandinavian context of Swedish preschool teachers, the pedagogical view on professionalism is described as equivalent to competence. Furthermore, the role of the professional field for preschool teachers "*can be understood by the connection between the society and its development*" (Carlgren & Marton, 2000 as cited in Kusima & Sandberg, 2008). One could argue that since preschool teachers need to realise the expectations formulated by society, it is important to compare the expectations of society, or of political statements regarding early learning, with the actual pedagogical practices. This inspired the comparison of practice and politics in early learning, which is undertaken in article II of this thesis.

Using a multiple case study design, Friesen and Butera (2012) investigated American teachers' beliefs about what constituted appropriate reading instruction as

part of an ELP. Classroom observations, questionnaires, and interview data suggested that teachers held strong beliefs about what constituted appropriate reading instruction. However, the results also showed that the teachers' practices were primarily informed by their practical and personal knowledge, while professional knowledge seemed to play a limited role. Friesen and Butera (2012) conclude that understanding teachers' beliefs about early literacy is an important first step in bringing about change in instructional practices. This conclusion was a further motivation for the research reported in this thesis that investigated Danish pedagogues' beliefs and practices regarding shared book reading based on the pre-programme interviews (see article II).

Findings from the American National Reading Panel (2000) indicate that, when educators' outcomes showed significant improvement, so did children's outcomes. Another crucial point is that, for professional development within early learning to be effective, it must produce desirable changes in both early educators and children. In this thesis the pedagogues' experiences of the children's gains from BookFun are reported in articles III and IV, while quantitative measurements of the changes in children's language abilities caused by BookFun are reported in article I.

In summary, the current background chapter has brought together insights into children's language development, early literacy, and dialogical reading as a method for improving language. The paragraph on BookFun elaborated on the question of how dialogical reading can be combined with creative activities to fit the special context of the Danish day-care tradition. The background chapter has also described the concept of inclusion and explored the interrelatedness between language and social competencies. Finally, the argument has been made for the importance of taking professional development into account when trying to improve child outcomes through effective practices. The major contributions that this thesis offers to the research field are, firstly, combining these aspects within one overall study, and secondly, providing a Danish perspective to supplement the existing international knowledge base on early literacy and professional development. Before turning to the methodology of this study, the following section gives an overview of the empirical articles contained in this thesis.

2.8. OVERVIEW OF THE THESIS'S FOUR EMPIRICAL ARTICLES

Within the dissertation's overall framework of language development, inclusion, early literacy programmes and professional development, the four empirical articles that constitute the PhD explore different areas related to the BookFun ELP.

The first article, which is entitled *BookFun is more supportive of early literacy than reading-as-usual: A randomized controlled trial study in a Danish day-care centre setting* is centred around the quantitative part of the mixed methods design and reports BookFun's effect on children's language development. This article is the

only one to directly analyse the children's gains from BookFun, whereas the other three articles report on the pedagogues' experience of BookFun's effect on children's language abilities and social skills.

The second article is entitled *Practice versus politics in Danish day-care centres: How to bridge the gap in early learning?* This article focuses on the specific Danish context, and compares day-care centre practices to Danish political "New Nordic School" (Goals, manifesto and dogmas for the New Nordic School, 2012, http://nynordiskskole.dk/) statements about early learning in attempt to forestall possible challenges to the implementation of the first Danish ELP.

The third article, *BookFun – "There's more to it than reading a book": Early educators' views on the benefits of an early literacy programme for children's development and their own professionalism*, focuses on implementation and the important but often overseen aspect of the applicability of an ELP. This article's main purpose was to identify best practice for implementing ELPs in the special context of Danish day-care centres with a specific view to supporting the practitioners' professional development and increasing inclusion in the day-care centres.

In a general sense the term implementation can be applied to actions carried out in order to change existing practices. In the current thesis I view implementation as the set of processes involved in introducing new practices or a new programme, including how the programme is applied and integrated into the workday and current practices of the programme users in order to make their practices more knowledge-based. The thesis draws on literature on implementation as well as sustainability, which are considered as two partly overlapping concepts. However, whereas implementation refers to the initial introduction and application of a new set of practices or a new programme, sustainability refers to the continued use and maintenance of those changed practices.

Finally, the fourth article in the thesis is entitled *Pedagogical practices as social learning – BookFun: a concrete suggestion for the New Nordic School?* This article is written in Danish and is a spin-off of the two qualitative articles written in English. This fourth article presents empirical data from the pre- and post-programme interviews in a unified manner. Even though this article overlaps in content with article II and III it has a somewhat different focus, centred on the social learning processes involved in BookFun. In this thesis, social learning processes are viewed as learning processes, learning opportunities and reflections that arise from social interaction, stimulated by or taking place in the interaction between two or more children or adults, as opposed to individual, cognitive learning processes. This type of relational learning can nevertheless be viewed as a contributor to cognitive learning processes (Nielsen & Berliner, 2013).

A more thorough description of each article's aim, results and conclusions is provided in the results chapter. However, before presenting the empirical articles, a description of the thesis's research questions and methodological approach is presented in the following chapter.

CHAPTER 3. METHODOLOGY

3.1. OBJECTIVE AND RESEARCH QUESTIONS

The present thesis has above all been inspired by my interest in how to support preschool children's language development and improve inclusion, and by my interest in evidence-based practices – that is, measuring the practical effectiveness of interventions (Sommerfeld, 2005). Having been given the chance to participate in the evaluation of the first structured Danish early literacy programme, my focus expanded to include the question of how new early literacy practices can be successfully integrated into current practices in such a way as to ensure benefits not only for children's language abilities and inclusion, but also for the early educators' professional development.

Investigating an ELP and having the day-care centre as my field of research has enabled me to focus my thesis on a holistic understanding of how to improve child outcomes through effective practices that can be attained through professional development. The main aim of this study has been to investigate how children as well as early educators benefit from the ELP BookFun. The above interests led me to formulate the following overall research question:

How can an ELP based on dialogical reading support development in the day-care centres among both pedagogues and children for the purpose of improving social inclusion?

This question can be divided into several research sub-questions, which are addressed by the research articles in this thesis, namely:

To what extent can BookFun promote preschool children's language development and hence their social competencies? (Articles I and III)

How can the implementation of BookFun support the early educators' continued professional development? (Articles II, III and IV)

How can BookFun contribute to social inclusion in the day-care centres? (Articles III and IV)

The thesis sheds light on these research questions by employing different methods for data collection, which are presented and discussed in the following design section. Each of the four articles comprising the present dissertation provides its own more specific methodology section that includes relevant information pertaining to the articles' specific aims and foci.

3.2. DESIGN OF THE STUDY

The present PhD project was part of the ongoing research project evaluating the BookFun programme developed by the Crown Princess Mary's Foundation. The entire project consisted of a matched, controlled trial testing 130 children, case-study observations of 18 children, 32 individual interviews with 18 pedagogues and six focus group interviews with the same 18 pedagogues. Being embedded in this larger project, this PhD thesis does not draw upon the entire dataset, but centres around the matched, controlled trial and the individual interviews with early educators. During my PhD I was responsible for developing interview guides and conducting individual interviews as well as focus group interviews. Additionally, I contributed to the adjustment of some of the tasks in the effect study and I participated in a minor capacity in the collection of data from eight children[8].

3.2.1. A MIXED METHODS DESIGN

The choice of research method should always depend on the specified research question. In the current project the aim was to investigate whether and how BookFun functioned in the everyday life of Danish day-care centres. In order to give a satisfactory answer to this question, two main areas needed to be covered: how do children benefit from BookFun, and how do the professionals benefit form BookFun? Conducting an ecological investigation of an intervention in a real world

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[8] The design of the overall study had already been completed when I started my PhD thesis.

setting, as opposed to a laboratory based experiment, adds substantially to the complexity of the research, and as argued by Greene (2007, quoted in De Lisle, 2011, p. 89)*"the messiness of complexity demands multiple investigative tools."* Using multiple research methods enables a more holistic approach to and understanding of the field of research. A mixed methods design was therefore employed, in order to simultaneously elicit numeric trends from quantitative data and specific details from qualitative data (Hansson, Creswell, Plano Clark, Petska & Creswell, 2005). In order to evaluate the effect of the BookFun programme on children's language skills, the quantitative part of the study was designed as quasi-experimental consisting of a controlled trial with matched groups. Pre- and post-tests were carried out on three groups: an intervention group (the dialogical reading group), an active control group (the reading-as-usual group) and a passive control group. Figure 1 shows an outline of the quantitative design:

Figure 1: Design of the effect study
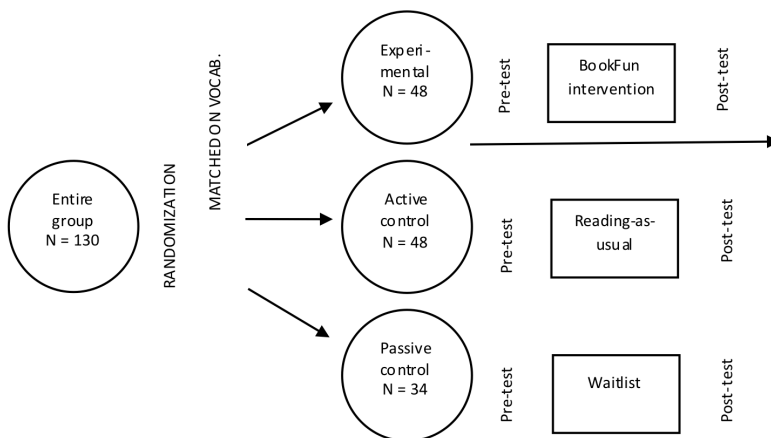
As depicted in figure 1, the design consists in three arms: experimental, active control and passive control. Initially, children for whom we had a positive consent forms were randomly assigned to groups, however, in order to maintain balance between the reading groups, the BookFun group and the reading-as-usual group were matched on age, gender and their pre-test expressive vocabulary scores prior to intervention. The figure was inspired by Zachariae (1998).

The qualitative part of the mixed methods design consisted of interviews with 18 pedagogues using BookFun. Qualitative interviews were conducted before and after the pedagogues piloted the BookFun programme. Pre-programme interviews

allowed us to gain insights into the pedagogues' daily practices for shared book reading prior to working with BookFun. These interviews hence functioned as a baseline to which post-programme interviews could be compared in order to shed light on possible changes in shared book reading practices and to evaluate the impact of the programme as well as the implementation itself. This qualitative method enabled access to the personal perspectives and experiences of the pedagogues (Kvale & Brinkmann, 2009) by allowing them to describe a typical reading situation from their point of view. The interviews were semi-structured following an interview guide but additional elaborating questions were also posed (cf. Howitt, 2013). As illustrated in figure 2 the pedagogues participated in two individual interviews: one pre-programme interview and one post-programme interview. After the pre-programme interview all pedagogues participated in a one-day introduction course to BookFun managed by language adviser Jette Løntoft. All pedagogues applied the BookFun programme to a small group of children during a three-month pilot phase. Pedagogues who had participated in the BookFun course were asked not to pass along information from the course concerning BookFun or dialogical reading to their colleagues during the pilot phase (since the other pedagogues were to provide "reading-as-usual" to the active control group).

Figure 2: Timeline and design of the interview study
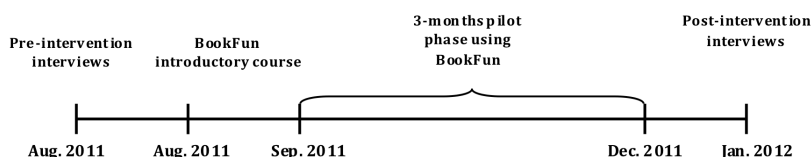
Combining qualitative and quantitative methods enables the researcher to achieve a richness of understanding in ways that one form of data on its own does not allow (Hansson et al., 2005). Using a mixed methods design it was possible to shed light on the effectiveness of BookFun from both a quantitative perspective, by testing the children's language skills, and from a qualitative perspective, by interviewing the pedagogues on their use of BookFun.

Integrating quantitative and qualitative research methods is becoming increasingly popular within humanities and social sciences. According to Creswell and colleagues the mixed methods approach can be defined as:

"the collection or analysis of both quantitative and qualitative data in a single study in which the data are collected concurrently or sequentially, are given a priority, and involve the integration of the data at one or more stages in the process

of research".
(Creswell, Plano Clark, Gutmann & Hanson, 2003, p. 212).

Quantitative and qualitative methods can be combined in a number of ways in a mixed methods research design. As mentioned in the quote above, there are at least three important aspects to take into consideration when designing a mixed methods study: timing, weighting, and levels of mixing. Data can be collected concurrently or sequentially, and emphasis can be placed on either qualitative or quantitative methods. Furthermore, methods can be mixed on different levels: in the design, data collection, data analysis and/or interpretation of the data (Creswell et al., 2003).

The mixed methods design employed for the current PhD thesis can be described as concurrent triangulation, in which qualitative and quantitative methods are given equal priority and the two types of data are analysed separately (Hansson et al., 2005). Consistent with the equal priority of the two methods, the timing of the data collection was concurrent, i.e. quantitative and qualitative data were gathered at the same time.

A distinctive feature of concurrent triangulation is that the qualitative and quantitative methods are mixed on the design level, but not in the data analysis (Hansson et al., 2005), given that the data sets are initially separated and only later combined (Moran-Ellis et al., 2006 according to De Lisle, 2011). In the articles in this thesis, the findings from the overall study are divided into quantitative results (article I) and qualitative results (articles II, III and IV). Hence, the two data sets are not integrated at the interpretation level in the articles. Interpretation of the qualitative and quantitative results will however be integrated in the discussion chapter of the overview text (see section 5.1).

Mixed methods research has been criticized for being untenable in its combination of methods from different paradigms, a "bastardization of positivism" (Giddens & Grant 2007 according to De Lisle, 2011; Hansson et al., 2005). Without going further into this paradigm debate, I should state that I consider myself a pragmatist with regard to epistemology, focussing on "what works" (Hansson et al., 2005). Pragmatism is considered the paradigm that fits best with mixed methods approaches (De Lisle, 2011; Tashakkori & Teddlie, 2003). I am, however, a purist within the individual methods, paying attention to quality criteria and respecting the claims for validity and reliability within each method (De Lisle, 2011). Shortcomings of both the qualitative and quantitative methods are briefly discussed in the thesis' articles and a more exhaustive discussion of methodology will be unfolded in the overview text's discussion chapter (see section 5.3).

3.3. CONTEXT OF THE STUDY: THE DANISH CASE

An important aspect to take into consideration in the current thesis was the context in which the investigation of BookFun took place. Danish day-care centres are not structured like typical preschools in many other, especially English-speaking, countries. The Danish day-care centres for infants and preschool children are most often viewed as a continuum and termed *day-care services*. This underlines the fact that the day-care centres are perceived as an integrated part of the social care system. The early educators in Danish day-care centres also stand out by being called *pedagogues*; they in fact reject the word "teacher" to describe their practices and they do not use the term "education" to describe their interaction with children (Jensen, Broström & Hansen, 2010). Indeed, the majority of Danish pedagogues have been sceptical towards the concept of "learning" (see Broström, 2004). Consequently, early literacy development through structured, shared book reading has not been a focus in Danish day-care centres prior to this study.

It is crucial to take into consideration the existing context in which a new programme or new practice is to be implemented (Stirman et al., 2012). Therefore, the special context of the Danish day-care centres merited detailed consideration as part of the comprehensive investigation of the implementation of BookFun. This gave rise to article II of this thesis, which is based on the pre-programme interviews. Results from these interviews showed that pedagogues describe a typical day as one with only few planned activities. They described their practices for shared book reading as quite unstructured. See article II for a more elaborate description of the Danish day-care centre context.

3.4. PARTICIPANTS AND RECRUITMENT

As described earlier, this PhD project forms part of the on-going BookFun project and consequently the process of recruitment was carried out prior to my involvement in the project. In conjunction with the principal investigator, the Crown Princess Mary's Foundation was responsible for contacting three participating municipalities which then recruited the nine day-care centres that participated in the research project. To strive for a representative and nationwide sample of Danish pedagogues the day-care centres were recruited in three large municipalities distributed across Denmark, one in Jutland, one on Funen and one on Zealand. The municipalities were contacted and subsequently they themselves each allocated three day-care centres to the project. After that, the nine day-care centres each appointed two pedagogues to work with BookFun during the three-month pilot phase. These pedagogues were mostly already involved in working with language development in the day-care centres. They were all trained professionals with a minimum of three and a half years of training at a Danish University College. The pedagogues were all females with Danish as a first language. All 18 pedagogues

participated in both pre- and post-programme interviews; none dropped out during the project.

Due to limitations in resources it was not possible to carry out the quantitative effect study in all nine day-care centres. Therefore, only six day-care centres, two in each municipality, participated in this part of the effect study. The absence of these three day-care centres from the quantitative effect study also resulted in minor differences in the instructions to the pedagogues. All 18 pedagogues participated in the one-day BookFun introduction course and were given the same information regarding the programme. However, pedagogues in the non-effect study day-care centres could carry out the programme slightly more freely as they were allowed to compose their own reading groups consisting of 4-5 children, as prescribed in the BookFun programme. In the day-care centres participating in the effect study, the children were randomly assigned to one of three groups by the principal investigator; however, to ensure that the reading groups were balanced they were matched on specific variables (see article I). This slight difference in the day-care centres' degree of freedom in regard to using BookFun in the pilot phase was, however, not evident in the interviews when pedagogues described their thoughts about BookFun. Therefore, this aspect is not addressed in the qualitative articles.

In order to ensure an unbiased sampling strategy, all 3-6-year-old children in the six day-care centres were invited to participate in the study. Information describing the study and its purposes and a statement of consent for their children to participate was sent to all the children's parents prior to the initiation of the study (see appendix B). After having obtained written consent from the parents, a total of 130 children were randomly selected for participation in the study, controlling for age and gender. Children were selected from two age groups corresponding to the age groups that BookFun's material address, namely younger children of 3-4 years and older children of 5-6 years. Each group of children were thereafter assigned to one of three groups: dialogical reading (intervention group) reading-as-usual (active control group) or passive control group. This division enabled two separate effect studies to be conducted, one of the younger group of children and one of the older group of children. Psychology Masters students from Aalborg University and the author of this thesis carried out data collection. Article I reports the findings from the effect study of the younger children. Findings from the effect study of the older children are not reported in this thesis.

3.5. MATERIALS AND ANALYSES

The test battery for evaluating the effect of BookFun on children's language abilities was developed by the principal investigator of the BookFun project prior to this thesis and consisted of: Expressive One-Word Picture Vocabulary Test, print knowledge, selected target words from the storybooks, narrative production and comprehension, semantic fluency tasks and Rapid automatized naming (RAN).

RAN was, however, only administered to the 5-6 year-olds, as the task has only been developed for older children. For a thorough description of each test please see article I.

Children were tested twice on the same test battery, at pre-test prior to the launch of BookFun and at post-test after the pilot phase when the 12 weeks of reading had ended. To avoid any effect of the tester on the children's pre- and post-test results, the same person administered the individual child's pre- and post-test in 90% of the cases. Testers were blind to children's group allocation.

The author of this thesis was responsible for coding and analysis of the Fox Story narratives with the assistance of student helpers (for further description of coding procedures please see article I).

3.5.1. INTERVIEW GUIDES

The semi-structured interviews enabled the interviewer to address specific issues of interest to the research programme while at the same time keeping an open mind about the experiences of the interviewee and being able to pursue these in detail. In the current study this interview form asking open-ended questions enabled the interviewer to gain insights into themes and aspects concerning the pedagogues' practices and experiences using BookFun that were not anticipated and hence were not covered by the planned questions. In the development of the interview guides a distinction was drawn between research questions and interview questions (Tanggaard & Brinkmann, 2010). Research questions are those posed by the overall study, as presented in section 3.1. These questions are often thematic. The actual interview questions, formulated based on the research questions, are often more open-ended and are translated into a more natural and less stiff spoken language. The interview guides combined broad, opening interview questions with subsequently more specific questions in order to attain nuanced descriptions from the pedagogues as well as answers to specific questions regarding their practices.

In the pre-programme interviews all pedagogues were asked to begin by describing an ordinary day in the day-care centre, and were also asked about the significance of reading in the pedagogues' workday. Thereafter the interview guide emphasised three main themes in relation to shared book reading practices: 1) the reading situation (structure and content), 2) finishing the book (processing of the book's content), and 3) social inclusion and stimulation of language development. In addition, questions were posed regarding the children who also participated in the observations.

At post-programme interviews, pedagogues were first asked to describe their experiences using BookFun in the pilot phase. The interview guide's three themes were: 1) changes in pedagogical practices, 2) legitimacy and prioritisation of book

reading, and 3) BookFun's possible contributions to children's language development and to social inclusion. For further details regarding the interview guides please see appendix C.

3.5.2. DATA ANALYSIS

The quantitative data analysis examining differences between groups at post-test was carried out using the statistical software package SPSS (Statistical Product and Service Solutions) version 21. Analyses of covariance (ANCOVA) were applied in order to compare the means of the experimental group to the means of the control groups at post-test (dependent variable) taking the pre-test scores into account as covariates. The analysis of the interviews was based on Thematic Content Analysis (Braun & Clarke, 2006) and consisted of a condensation for meaning, which located thematic patterns across the interviews and thus resulted in the identification of overarching themes. The analyses of the post-programme interviews were carried out using the qualitative software programme NVivo (version 10, for Mac).

Unlike some qualitative research, the analysis of the interviews in this thesis has not been preoccupied with an exploration of the individual pedagogues' phenomenological life world. Instead, the analytic strategy has focussed on bringing forward and investigating the pedagogues' perspectives on the study's specific areas of interest – namely the pedagogues' practices and their experiences with applying BookFun. The results from the interview analyses can be seen as a synthesis of all the pedagogues' descriptions, but at the same time identify contradictions between different individuals' experiences of using BookFun.

For a more elaborate description of the methods and procedures used, please see the methodology sections of the individual articles I, II, III and IV.

3.6. ETHICAL CONSIDERATIONS

When conducting empirical research, one should always consider possible ethical implications, especially when this research involves human research participants. Ethical considerations and actions should be evident in all phases of an empirical study – from the selection of research topic through to the research design, data gathering and the presentation of the results (Coolican, 2009). The current study adheres to the *Ethical principles of Nordic psychologists* (2010-2012). Furthermore the study is evaluated as being low risk as it does not involve biomedical research, substance abuse or disorders of any kind; nor does it involve vulnerable persons, e.g. those suffering from medical or psychological conditions (see: http://www.etikudvalg.hum.aau.dk). However, as the study involves under-age children, special measures had to be taken. The children's parents were informed about the study in writing as they were asked to give informed consent for their

children to take part in the effect study. Furthermore, testers were instructed to be aware of the child's well-being throughout the testing session, taking breaks when necessary or discontinuing the testing if the child expressed that they did not want to participate or showed signs of discomfort. In order to ensure that the testing would be a positive experience for the child, all tasks were designed to be developmentally appropriate and fun to engage in. All participants were encouraged and given positive responses to their answers regardless of whether the answers were correct or incorrect. Also, at the end of the last testing session each child was given a sticker as appreciation of its efforts.

There are also ethical considerations in relation to the interview study of the current thesis. In order to make the interview a pleasant experience for the interviewees, the interviewer made sure to establish a good atmosphere and to thank the participants for their contributions. Another important ethical aspect was ensuring confidentiality and anonymity. The early educators gave informed consent to their participation orally prior to each interview (this consent being documented in the recording of the interview). They were also informed that they could withdraw their consent without consequences at any time, and that their names would be anonymised.

As an additional ethical issue, researchers are responsible for publishing only well-founded and genuine results that are open to analysis by colleagues. In the current study this has been achieved though careful decription of procedures for data collection and data analysis. More broadly, we can assess the motivation for the investigation on ethical grounds. The purpose of the current investigation can be regarded as an attempt to improve humans' condition (Kvale & Brinkmann, 2009), aiming to identify best practices for early learning in order to improve inclusion in day-care centres. It should therefore be categorised as having not only scientific but also human value.

The following results chapter summarises the empirical articles – their aims, results and conclusions – that are based on the data from the mixed methods design presented in this chapter.

CHAPTER 4. RESULTS: SUMMARY OF EMPIRICAL ARTICLES

This thesis consists of four empirical articles. The following pages briefly summarise the aims, results and conclusions of each article. How these conclusions contribute to answering the thesis's overarching research questions will be addressed in the subsequent discussion chapter.

4.1. BOOKFUN IS MORE SUPPORTIVE OF EARLY LITERACY THAN READING-AS-USUAL: A RANDOMIZED CONTROLLED TRIAL STUDY IN A DANISH DAY-CARE CENTRE SETTING

The first article is based on the quantitative part of the mixed methods design and illustrates how the children benefited from BookFun, by appeal to results from the effect study.

Keywords: Language acquisition, dialogical reading, BookFun, vocabulary, verbal working memory, narrative, Danish day-care centres

Aims: The aim of the first article was to investigate the extent to which the 12-week dialogical based reading intervention BookFun, implemented by early

educators in an ecological setting, could improve the language skills of Danish preschool children as compared with an active control group (reading-as-usual) as well as a passive control group. We hypothesized that engagement in the BookFun programme should enhance the following areas of language and early literacy abilities: expressive vocabulary, receptive vocabulary, print knowledge, semantic fluency, narrative production and narrative comprehension. This article builds on data from the effect study of the younger group of children.

Results: Analyses of covariance (ANCOVA) were conducted in SPSS to investigate the effect of the intervention on 77 Danish-speaking typically developing children aged 3-4 years. Treatment group was used as a between participants factor and pre-test scores were taken into account as covariates. Pre- and post-test measures consisted of Expressive One-Word Picture Vocabulary Test (EOWPVT), selected target words from the storybooks, a print knowledge task, a semantic fluency task, and a narrative production and comprehension task called the "Fox story".

Results showed that children in the dialogical reading group improved more than children in both the reading-as-usual control group and the passive control group on most measures. The intervention group scored significantly higher on expressive vocabulary, receptive vocabulary, semantic fluency and narrative production than at least one control group in post-tests. Improvements in the remaining tasks did not differ significantly between groups.

Intervention effects on word production, comprehension, semantic fluency and print knowledge: BookFun improved children's expressive vocabulary significantly more than both the reading-as-usual group and the passive control group. Also, the BookFun group could comprehend significantly more target words than both the reading-as-usual group and the passive control group. In the semantic fluency task, children in the BookFun group were able to generate more words than children in the other two groups, this difference reaching statistical significance in the comparison with the reading-as-usual group. Group allocation did not have a significant effect on the children's print knowledge scores.

Intervention effects on narrative abilities: The BookFun group produced a higher total story grammar score (story grammar units combined) than the two other groups. However, children in BookFun as well as the reading-as-usual group significantly improved their total story grammar score compared to the passive control group. There was no significant difference between the BookFun group and the reading-as-usual group. There was no significant effect of group on post-test narrative comprehension scores after controlling for pre-test comprehension scores.

Conclusion and implications: The first study replicated earlier studies' findings that shared book reading can significantly improve children's expressive

vocabulary. The study further showed that BookFun can yield improvements in children's expressive and receptive vocabulary compared with reading-as-usual as well as the passive control group, suggesting that BookFun is a strong tool for boosting children's overall vocabulary. Furthermore, since the semantic fluency task involves retrieving and categorizing information, it might also tap into other components of the child's executive functioning such as task switching and flexibility. Our results could therefore suggest that there might be cognitive benefits of BookFun that directly transfer to the child's development within the cognitive domain. Surprisingly, we found no significant difference between the BookFun group and the reading-as-usual group on narrative production abilities at post-test. Both reading groups scored higher than the passive control group, indicating that there might be an effect of reading itself on narrative abilities.

4.2. PRACTICE VERSUS POLITICS IN DANISH DAY-CARE CENTRES: HOW TO BRIDGE THE GAP IN EARLY LEARNING?

The second article centres upon the pre-programme interviews. The article compares the practices of Danish pedagogues in day-care centres with Danish political statements about the "New Nordic School" in regard to early learning.

Keywords: Early literacy programmes; implementation processes; professional development; Danish day-care centres, BookFun, shared book reading, New Nordic School

Aims: When implementing a new ELP it is important to consider the existing everyday practices in which the programme will be applied. In regard to early learning the Danish system stands out by not being very school-like – as opposed to pre*schools* in many other Western countries. This observation underpins the need to describe this specific context for early learning and possible challenges to the introduction of the first Danish ELP. Therefore, the purpose of the second study was to take a close look at the special Danish context in which BookFun was to be implemented in order to 1) predict the outcome of the implementation of the first Danish ELP, 2) compare day-care centres' practices to Danish New Nordic School political statements on early learning.

Results: The thematic content analysis of the 18 pre-programme interviews identified four overarching themes:

1) Danish day-care centres as a setting for shared book reading:
The pedagogues' descriptions of their everyday routines in the day-care centres and their shared book reading habits showed that most pedagogues were not used to working in a structured manner when reading books aloud and it varied how often

they read and in what setting they read. Pedagogues stated that you need time, space, and silence to be able to read aloud, but various challenges in regard to shortage of staff and unsuitable physical surroundings failed to support book reading.

2) The status and use of shared book reading:
Most of the pedagogues expressed the view that they would like to read aloud more often to the children than they currently had been doing. However, through the interviews it became clear that the majority of the pedagogues viewed book reading as yet another play activity in the day-care centres, rather than as an educational activity. This indicates a mismatch between day-care practices and the aims of the New Nordic School that advocates for an academic boost in day-care services through systematic approaches using well-founded methodologies.

3) Motivation for working systematically with shared book reading:
Although the majority of the pedagogues did not work systematically with shared book reading they did however express the motivation to do so. During the interviews some of the pedagogues themselves requested new inputs and tools for book reading and several of them stated a desire to become acquainted with good techniques for shared book reading and to reflect more upon the objective of book reading within the day-care services. This clearly indicated a motivation to learn in a more systematic and reflective fashion.

4) Promoting social inclusion through language:
During the interviews pedagogues spontaneously connected the themes of language and social inclusion and gave several examples of how language helped children gain access to peer relations. In accordance with the goals of the New Nordic School approach, the pedagogues stated a clear focus on inclusion.

Conclusion and implications: The second study suggested that there is a potential gap between practice and politics concerning the promotion of early learning in Danish day-care centres: the centres do not work in a structured manner and in regard to shared book reading they do not focus on learning as requested by political decisions. Furthermore, certain aspects of existing pedagogical practices may be foreseen as potential challenges for the implementation of structured ELPs in Denmark as well as internationally. Meanwhile, the fact that BookFun has emerged in a partly bottom-up fashion and was tailored to the Danish practice might make it a useful resource in attempting to overcome the observed gap between practice and politics.

4.3. BOOKFUN – "THERE'S MORE TO IT THAN READING A BOOK": EARLY EDUCATORS' VIEWS ON THE BENEFITS OF AN EARLY LITERACY PROGRAMME FOR CHILDREN'S DEVELOPMENT AND THEIR OWN PROFESSIONALISM

The third article expands on the results and conclusions presented in the second article and focuses on the post-programme interviews in order to give a full description of the BookFun implementation processes from pre-programme to post-programme.

Keywords: Implementation processes, professional development, social inclusion, best practice, BookFun, ownership, reflection

Aims: The main purpose of this article was to identify best practice for implementing ELPs in the special context of Danish day-care centres with a particular focus on supporting the practitioners' professional development and increasing inclusion in the day-care centres. Towards this overall purpose the article had three more specific aims:

1) To explore factors affecting the implementation and applicability of BookFun from the pedagogues' perspectives, by employing qualitative interviews.
2) To assess how the implementation of BookFun can facilitate pedagogues' continued professional development and contribute to social inclusion in the day-care services.
3) To evaluate whether the pedagogues experience that their shared book reading practices are transformed due to the implementation of BookFun – from pre-programme to post-programme practices.

Results: A thematic content analysis of the 18 post-programme interviews resulted in four main themes being identified:

1) Factors affecting successful implementation – facilitators and barriers:
This theme described the different factors that, based on the pedagogues' statements, seemed to either facilitate the implementation and continued use of BookFun or could pose potential barriers to the pedagogues' use of the programme. The main facilitators were the fact that BookFun fitted the approach of the day-care centres and the pedagogues' personal style, that the pedagogues thought BookFun to have benefits for both children and the pedagogues themselves, and that BookFun was viewed as a tool for supporting inclusion in the day-care centre. All the barriers were associated with the pedagogues' concerns about having sufficient time to run BookFun.

2) Reflection fosters professional development:
Based on the pedagogues' descriptions of their use of BookFun, the importance of the pedagogues' specific competencies and their pride in and protection of their professionalism, it was evident that the pedagogues' professional competence came into play during shared book reading. The analysis of the interviews demonstrated how the implementation of BookFun was able to support the pedagogues' continued professional development by expanding their reflections about their own practices and professional competencies.

3) Ownership – a key to successful implementation:
An important factor for the successful implementation and continued use of BookFun was the pedagogues' development of a strong ownership of BookFun. They clearly expressed that they viewed BookFun as a *pedagogical* tool with a large array of applications in their pedagogical practice. The pedagogues' ownership was also clearly marked by their strong reservations about the suggestion of handing BookFun over to volunteers.

4) BookFun as a tool for social inclusion:
All 18 pedagogues thought that BookFun had the potential to improve social inclusion in the day-care centre, and several pedagogues explicitly referred to BookFun as a tool for social inclusion. Based on the pedagogues' descriptions, three main ways in which BookFun can contribute to inclusion in the day-care centres were inferred: (1) through improved language abilities that can, for instance, facilitate peer relations during play activities, (2) through social communities within the reading groups, which can facilitate new friendships and provide an entrance into extended peer activities outside the reading groups, and (3) through an increase in children's confidence, which was seen as a crucial step for them to become included as legitimate participants in peer groups.

Conclusion and implications: The results from the third article suggest that reflections on current practices, the development of a new professionalism, and taking ownership are all crucial processes in changing practices and in the implementation of a new programme. The possible relations between these processes are illustrated in figure 2 in article III. This figure illustrates how the critical reflections spurred by the introduction of BookFun combined with the skills and knowledge acquired during the application of BookFun to give rise to a new quality of professionalism. This professionalism is evident in the pedagogues' application of BookFun as a tool for inclusion. Furthermore, a new outlook on practices seems to make the pedagogues feel more motivated and responsible for changing and improving practices, and through this process they develop a sense of ownership of the programme. All these processes combine to foster the pedagogues' successful implementation of BookFun.

Future studies of implementation and professionalism could benefit from knowledge of these central processes in order to ensure successful implementation. The suggested implementation model describes general processes and could therefore be applied in an array of contexts and countries that go beyond Denmark and the Danish day-care system.

4.4. PEDAGOGICAL PRACTICES AS SOCIAL LEARNING – BOOKFUN: A CONCRETE SUGGESTION FOR THE NEW NORDIC SCHOOL?

(in Danish: Sociale læreprocesser i den pædagogiske praksis – LæseLeg: Et konkret svar på Ny Nordisk Skole?)

The fourth and final article is written in Danish as the authors were invited to contribute to a special issue of the Danish national, peer-reviewed journal of psychology: Psyke & Logos (Psyche & Logos), on the topic of social learning processes. This article presents empirical data from the pre-programme interviews as well as the post-programme interviews and thus combines the two datasets in a unified presentation. This article also overlaps to a certain extent in content with article II as well as article III.

Keywords: Social learning processes, pedagogical practices, professional development, BookFun, shared book reading, New Nordic School, social inclusion

Aims: The main aim of the final article is to analyse the social learning processes that the pedagogues undergo in the implementation of BookFun. These processes are investigated by looking into the changes in the pedagogues' shared book reading practices after they participated in the implementation of BookFun.

Results: The themes uncovered in the 36 pre- and post-programme interviews were, naturally, a combination of themes from articles II and III (see sections 4.2 and 4.3 for a summary). However, this study's report of the findings focuses on social learning processes and in that respect differs from the other qualitative articles. The four themes were:

1) The status and function of shared book reading
2) A new approach to shared book reading
3) Ownership of BookFun as the pedagogue's professional tool
4) Reflection on the pedagogues' own professionalism

Taking ownership of BookFun and reflecting on current practices were described in this article as two central, social learning processes by which the pedagogues changed their shared reading practices. These element connects to the third article's

discussion of reflection as a prerequisite of learning, which in turn can be defined as sustainable change achieved through new knowledge (see section 4.1 in article III: Central processes in ensuring implementation as well as inclusion).

Another important finding in the fourth article was how social learning processes can develop on two dialectical levels in BookFun. On one level, social learning between the children in the reading groups is brought out, e.g. in their play and discussion of the story's plot. On a second level, the pedagogues can apply the experiences from the interplay with the children to reflect on and change their own practices. Through the interviews and through the changes they had made to their practices the pedagogues expressed a clear motivation, willingness and ability to develop and advance their pedagogical practice regarding shared book reading. It was evident that these changes took place within a social learning context between the pedagogue, the child and the implementation of the early literacy programme.

This article also follows up on article II's comparisons between day-care centre practices and the New Nordic School political statements by elaborating upon whether and how working with BookFun can help fulfil the stated political goals and thus potentially help to bridge the gap between practice and politics in early learning.

Conclusion and implications: Pedagogical initiatives in the day-care centre such as BookFun can facilitate social learning processes, which could in turn create a platform for improved academic performance. A tool such as BookFun is in many ways a concrete suggestion for how to work with the political doctrine of the New Nordic School in pedagogical practice.

Having summarised the content of the four articles contained in this thesis, the following discussion chapter will compare the main findings across the articles in order to address the thesis's main research questions.

CHAPTER 5. DISCUSSION

The discussion chapter will begin by drawing together the articles' main results and relating them to the overall aims and research questions of the thesis. The discussion will then turn to the study's contributions and implications for research and practice within language development, early learning and inclusion. Finally, the methodological underpinnings of the thesis are explored, and limitations to the current study are identified, leading to suggestions for future research within the area.

5.1. COMPARISON OF MAIN FINDINGS ACROSS THE FOUR ARTICLES

The overall aim of this PhD thesis was to investigate the following research question: *How can an ELP based on dialogical reading support development in the day-care centres among both early educators and children for the purpose of improving social inclusion?* The thesis has sought to address this issue through qualitative and quantitative research methods. In the following, results from these two datasets will be compared and contrasted in order to answer the research question.

5.1.1. TO WHAT EXTENT CAN BOOKFUN PROMOTE CHILDREN'S LANGUAGE DEVELOPMENT AND SOCIAL COMPETENCIES?

The first research sub-question was to what extent BookFun could promote preschool children's language development and hence their social competencies. The first part of this research question was investigated with qualitative as well as quantitative measures. In the qualitative dimension, the pedagogues were asked to evaluate BookFun's effect on children's language development and social

competencies. The quantitative effect study investigated BookFun's effect on children's vocabularies, print knowledge, semantic fluency and narrative abilities. The effect study replicated previous studies' findings that shared book reading significantly improves children's expressive vocabulary (Whitehurst & Lonigan, 1998; Valdez-Menchaca & Whitehurst, 1992; Whitehurst et al., 1988; Zevenbergen et al. 2003). The effect study further demonstrated that BookFun could be considered a powerful tool for promoting children's overall vocabulary: BookFun significantly improved children's expressive and receptive vocabulary compared with the reading-as-usual and passive control groups. The fact that children in the BookFun group also generated more words than children in the other two groups in the sematic fluency task also suggested that BookFun might yield broader cognitive benefits. However, based on the results from article I, it is not clear whether the dialogical component in BookFun has a significant effect on children's narrative abilities. No significant effect of group was demonstrated on post-test narrative comprehension scores. Lever and Sénéchal (2011) found that dialogical reading significantly improves children's narrative production compared to a control group, but we only replicated this finding when comparing BookFun to a passive control group. Our study found no statistically significant difference between BookFun and reading-as-usual on the post-test narrative production score.

The interview results revealed that pedagogues in general thought that BookFun was able to promote children's development of communicative competencies. The majority of the pedagogues emphasised that children had improved their vocabulary and a third of the pedagogues believed that children were now using their language in a different way, for instance in resolving conflicts. Results from the effect study, showing a significant effect of BookFun on expressive and receptive vocabulary and semantic fluency, reinforce the pedagogues' experience that children are getting better at expressing themselves and increasing their vocabulary due to BookFun.

Alongside this, eight of the pedagogues specifically expressed the view that BookFun had improved the children's pragmatic language abilities from pre- to post-test, for instance with respect to narrative abilities and turn-taking. This corresponds to the fact that children participating in BookFun did actually produce significantly better narratives than the passive control group at post-test. However, this is also true for children in the reading-as-usual group. The overall tendency in the narrative production measures was that both reading groups, dialogical reading and reading-as-usual, improved their scores compared to the passive control group.

Based on the pedagogues' descriptions of the children's engagement in book reading and the discussion of plots and characters during BookFun, one would speculate that the children became better at comprehending stories and inferring plots. Therefore, it is somewhat surprising that the children's narrative comprehension did not improve significantly compared to control groups. One

explanation of the difference between the pedagogues' views of the children's progress and the actual measurable effect of BookFun could be that pedagogues are biased in their experiences due to their strong ownership of BookFun, as documented in articles III and IV. The pedagogues have put a lot of work into running BookFun and feel that the tool is very applicable, which could dispose them to see an effect of BookFun even when it might not be present. Another explanation could be that pedagogues have seen that some of the children in the BookFun group are improving their narrative comprehension, but that might not be enough for a significant difference to be manifest at the group level. Finding a statistically significant effect of an intervention in a controlled trial is difficult, as differences between groups have to be quite large in order to prove that the difference with a high degree of certainty ($p \leq .05$) was not obtained by chance.

Even prior to the introduction of BookFun and the explanation of its purpose, the pedagogues expressed how they saw a strong connection between the children's language abilities and their social competencies. Therefore, by supporting language abilities, social skills are also supported indirectly. As already discussed, pedagogues gave examples of how children that had participated in BookFun were becoming better at resolving conflicts and taking turns when talking. In regard to the children's social competencies, pedagogues additionally stated that they thought running BookFun was creating social communities within the reading groups. How this impacts on inclusion in the day-care centres is described in section 5.1.3.

Based on the quantitative results, and further reinforced by the pedagogues' experiences of children's benefits from BookFun, the programme definitely seems able to improve some aspects of children's language acquisition and (according to the pedagogues' experiences) can also promote social skills. However, the validity of this result would have been strengthened if the test battery in the effect study had included a direct measure of social skills. The fact that an interactive reading programme can enhance children's language abilities is in accordance with the theoretical assumptions of the thesis concerning language development as a socially founded process (Tomasello, 1999; Vygotsky, 1978). BookFun creates a setting for what might be categorised as cultural learning insofar as it creates opportunities for social learning processes that foster perspective taking, e.g. by talking about the plot of the book and characters' intentions (Tomasello, Kruer & Ratner, 1993).

5.1.2. HOW CAN BOOKFUN SUPPORT PROFESSIONAL DEVELOPMENT?

The second research sub-question was how the implementation and use of BookFun could support the pedagogues' continued professional development. Articles II, III and IV shed light on this matter through analysis of the qualitative interviews with pedagogues. According to the National Professional Development Center on Inclusion (2008), professionalism can be characterised as learning experiences that

support the acquisition and application of professional knowledge and skills. Based on the pedagogues' own statements, the BookFun introductory course provided them with new knowledge on language development and on how to support children's language acquisition. Applying this knowledge within the BookFun programme seemed to foster professionalism. Article IV especially unfolds the changes in the pedagogues' own use of language in the day-care centre from pre-programme to post-programme. Pedagogues experienced that after the introduction of BookFun they were using a "bigger language" with a more varied vocabulary when talking to the children. This could indicate that pedagogues have become more aware of their status as role models for the children's language acquisition, as highlighted in Tomasello's (1999) usage-based approach. Pedagogues were describing an overall change in their approach to supporting children's language that reaches beyond the BookFun setting. Article III explores how the pedagogues' reflection about their own practices and competencies enhances their sense of professional competence. In particular, when asked whether volunteers could run BookFun in order to spare the pedagogues' time, the pedagogues stressed the importance of their professional competencies, and how they applied these in BookFun (see article III and IV). According to the pedagogical view of professionalism as equivalent to competence (Kusima & Sandberg, 2008), these reflections can be seen as evidence of the pedagogues' professional development. Furthermore, the interview study showed that applying BookFun spurs the pedagogues into reflections on the individual child and the relations between children in the day-care centre, for instance when composing the reading group for BookFun.

The fact that the pedagogues consider BookFun to be a pedagogical tool and the dialogical way of reading to be an eye-opener indicates that the use of the programme has in fact spurred these reflections and thereby supported their professional development. The pedagogues' reflections are exemplified in article III, which describes how pedagogues have found BookFun to have additional benefits that were not described to them in the introductory course – for instance, they use BookFun as a tool for systematic observations of the individual child that can be used in assessment of the child's school-readiness and in parental reports.

Based on these qualitative results it seems clear that the implementation of BookFun has great potential to support the pedagogues' professional development in regard to their skills as well as their reflection on practices. A point for discussion, however, is whether this positive development in professionalism will continue without further in-service training. The BookFun introductory course comprises a single day. In order to ensure continued development it might be beneficial to have follow-up BookFun courses. A lower-cost alternative could be to establish groups for exchange of experience between pedagogues from different day-care centres.

5.1.3. HOW CAN BOOKFUN CONTRIBUTE TO SOCIAL INCLUSION IN THE DAY-CARE CENTRES?

The final sub-question was: How can BookFun contribute to social inclusion in the day-care centres? Articles III and IV looked into this issue based on data from the post-programme interviews. Article IV concluded that improving inclusion is a common focus for politicians and pedagogues in Denmark. However, as described in article II, there was no concerted approach or structure in the way that pedagogues addressed aspects of inclusion in the day-care centres prior to the implementation of BookFun. After having been introduced to BookFun they saw a clear potential in this programme as an inclusion tool. Article III presents three different ways in which BookFun can enhance inclusion in the day-care centre, namely through (1) children's improved language abilities, (2) the formation of social communities within the reading groups, and (3) increasing children's confidence. Two of these aspects focus on individual qualities within the child (its language abilities and confidence), while the other relates to the social community in the day-care centre. Pedagogues were very excited about the solidarity that seemed to be created by running BookFun in small groups, and how BookFun could act as a common point of departure for peer-play activities after the reading session finished. A further way in which BookFun can contribute to inclusion in the day-care centres is by increasing pedagogues' focus on inclusion through their use of BookFun. As described in figure 2 of article III, "Central processes in implementation", the introduction of BookFun has spurred the pedagogues' reflection on practices, which has contributed to the development of a new professionalism. In turn, the pedagogues' development of a new professionalism has also made them see an array of applications for BookFun as a tool for social inclusion. These connections between inclusion and professionalism are consistent with Fisker's (2010) argument that inclusion builds upon a strong professionalism.

In regard to enhancing inclusion through improved language abilities, the pedagogues reported that they believed children's vocabulary had been improved through BookFun, and that this could aid them in peer relations, gaining access to play activities, and in the resolution of conflicts. As already described, the results from the effect study in article I confirm that children's expressive and receptive vocabulary had improved significantly through BookFun, which matches the pedagogues' reports. The improvements in the children's pragmatic skills highlighted by the pedagogues – that is, the fact BookFun might improve the children's *use* of their language and their ability to narrate a story – could also prove relevant to the children's ability to engage in peer relations and play activities, and in this sense strengthen inclusion in the day-care centre.

These results show both individual and collective ways in which BookFun can contribute to enhancing inclusion in the day-care centre, and are consistent with the arguments presented in the overview text's background chapter (section 2.6) that

inclusion should not be considered solely as a "within person" matter (Farrell, 2006).

As also described in that section, BookFun was expected to have the potential to contribute to inclusion in the day-care centre by (1) supporting children's language and thereby providing them with better access to other children's communities, play and social relations, and (2) offering pedagogues the tools with which to build a more inclusive environment in the day-care centre. Based on the interview results, the pedagogues seem to think that BookFun has succeeded in both these aspects and can indeed contribute to social inclusion. However, it is still premature to say whether BookFun will actually be able to create inclusion in the sense of ensuring the establishment of communities in the day-care centre that reflect active and equal participation for all, as articulated by the Alliance for Inclusive Education (2009).

Article II poses the question of whether BookFun can contribute to bridging the gap between practice and politics in early learning. One of the goals the New Nordic School is that every child should be challenged and supported in a way that ensures equal opportunities for all – a goal resembling the efforts to strengthen inclusion. Based on the results presented in article III and IV, BookFun seems to be a programme with the potential for bringing practice and politics closer together, in the sense that it has made pedagogues aware of a more structured and systematic way of working with early literacy. Still, based on a 3 month pilot, it is still too early to assess whether BookFun can actually contribute to bridging across this evident gap. An important contribution, however, is that BookFun, as an inclusion tool, offers a structured way for pedagogues to work with the New Nordic School goal of inclusion.

5.1.4. AN EMPIRICAL MODEL OF THE ECOLOGICAL SYSTEMS THEORY

The current section aims to compare aspects of the theoretical framework presented in chapter 2 with the results from this thesis. The comparison will be framed by the development of an empirical model inspired by Bronfenbrenner's ecological systems theory. Based on the theoretical account of Vygotsky (1978) and Tomasello (1999) in relation to children's language development, social interaction was portrayed as the main mechanism propelling language development forward. This was clearly the case for the interaction that took place between early educators and children through BookFun. As described in the results chapter, BookFun can be considered a powerful tool for supporting vocabulary, and reading itself seems to support narrative production. In the interviews, the pedagogues describe how the interactions in BookFun enable systematic observations that give them a clearer perception of the individual child's competencies, and consequently how to support the child. Pedagogues also describe how the peers in the group help each other, for instance when asked questions about the book in BookFun's "Book-quiz". These

descriptions could indicate that BookFun is serving as a zone of proximal development (ZPD). In the following Bronfenbrenner-inspired model, some of the empirical results of this thesis are portrayed.

Figure 3: An empirical Bronfenbrenner inspired model
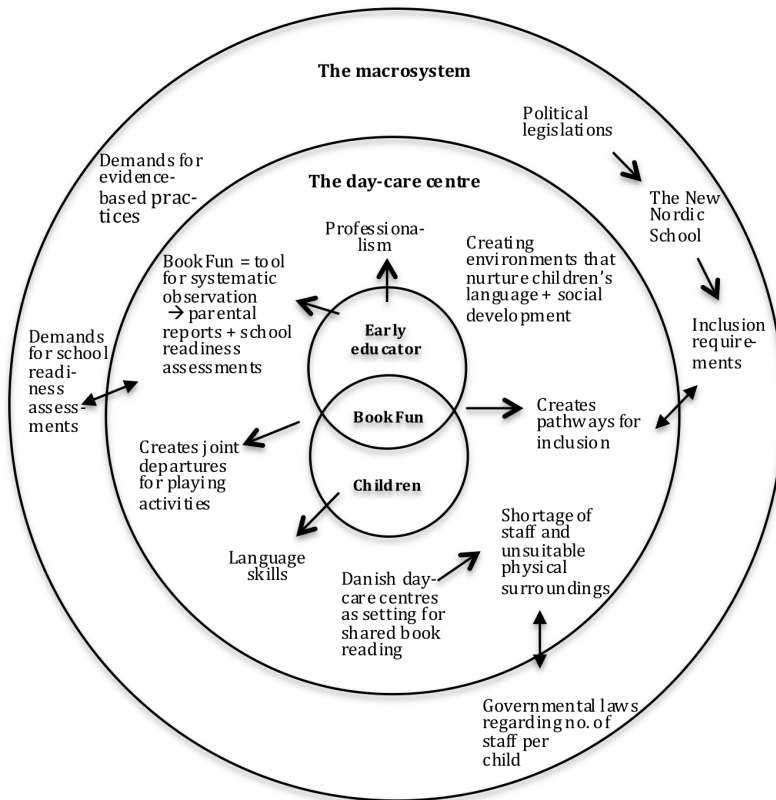
The figure's inner circles illustrate the interaction between early educator and child through BookFun, which can create a zone of proximal development. For early educators the ELP has potential to support their professionalism and for children it improves their language. The middle circle represents the day-care centre, while the outer circle consists of the macro system – legislations and demands imposed by society. The figure gives an array of empirical examples of how interactions from BookFun creates changes in the micro system of the day-care centres, and how BookFun can possibly help the day-care centres fulfil demands from the

macrosystem. However, as the example regarding no. of staff per child illustrates, legislations from the macrosystem can also create possible limitations to shared book reading. The interplay between macro- and microsystems, or lack of such, is furthermore discussed in the following section on implcations.

5.2. CONTRIBUTIONS AND IMPLICATIONS

In this section the contributions and practical implications of the thesis's findings will be discussed.

5.2.1. CONTRIBUTIONS TO THE RESEARCH AREA

One of the main contributions of the current study is the combined focus on and investigation of child development and professional development in the implementation of the first Danish ELP. It is of pivotal importance to recognise these different levels when assessing the effect and quality of an ELP in order to give a holistic account of the benefits of a given programme. Viewing cognitive development as a socially mediated process (Vygotsky, 1978), children's interaction with early educators is essential to their language development. An ELP has to be able to create change for children as well as professionals in order to be considered effective and to have the potential to be sustained in practice. These levels were summed up in figure 3 in section 5.1.4. Future research in early literacy would benefit from taking all of these levels into account when designing evaluation studies.

The current study also contributes to the growing literature base on central processes in implementation. When investigating an ELP, it is crucial to consider the implementation process. The implementation of evidence-based practices and the professionals' actual application of the new knowledge presented to them are crucial in order to ensure that the children benefit from the programme. An effective programme will only produce results of limited value to the child if it is not successfully implemented alongside the current practices of the professionals. Article III identified three main processes that were in effect during the pedagogues' implementation of BookFun in the day-care centres: reflecting on practice and professionalism, taking ownership, and employing BookFun as a pedagogical inclusion tool. Based on these results and on previous research on implementation, article III contributed a model for implementation processes. The model highlights how the introduction of new practices can induce professionals to reflect on their current practices. These critical reflections can combine with the skills and knowledge acquired in applying an early literacy programme to give rise to a new quality of professionalism. Through this process professionals can also become motivated to improve practices and hence they can come to develop a sense of ownership of the programme.

Awareness of implementation processes is important on a theoretical level and in implementation as a research discipline, e.g. when designing evaluations. The processes emphasised in the implementation model presented in this thesis also have practical implications when programmes are actually introduced and implemented in a given practice. Hence, the findings of this research contribute to implementation as a scientific as well as a practical discipline.

Another contribution of the current study lies in its design. The mixed methods design enabled a more holistic and suitable investigation of the "messy reality" of practice (see section 3.2.1) and offered different perspectives on the impact of BookFun. A further strength of the design is its use of two control groups in the effect study. To the best of my knowledge, the current study is the first to compare the results from an active reading-as-usual as well as a passive control group in investigating the effect of shared book reading in a day-care centre setting. The active control group consisting of reading-as-usual in a small, fixed group of children, with the same number of readings per week as in the dialogical reading group, ensures that it is in fact the effect of BookFun (*dialogical* reading and creative activities) that we are testing and not the effect of book reading itself or of the interaction in a small group with a high ratio of staff to children. This strengthens the study's internal validity (see section 5.3.3.). Also, the two reading groups were matched on age, gender and expressive vocabulary prior to intervention, which is also a strength as this enables a more precise comparison of the groups. As argued in article I, it is particularly relevant to include a waitlist (passive) control group in developmental studies in order to control for the effect of maturation over time. As an additional strength the testers were blind to group allocation.

As regards the qualitative part of the study, the use of a pre-post programme design in the interview phase can be considered a strength. This design made it possible to closely follow the implementation process and to carry out comparisons of pedagogical practices before and after the introduction of BookFun. Moreover, the fact that a research team independent from the Crown Princess Mary's Foundation (the developers of BookFun) carried out the programme evaluation hopefully reduces the so-called "pleaser effect". Pedagogues were urged to speak freely and to give positive as well as negative responses to the programme. However, it is noteworthy that the pedagogues' experiences with applying BookFun are almost exclusively positive. When directly asked what could be improved in BookFun or what had not worked in the application of BookFun only a few pedagogues uttered any critique of the programme in its pilot phase. This picture might, of course, appear different once more time has elapsed.

The design strengths described in this section all contribute to underpinning the validity of the results, an aspect that will be further discussed in section 5.3.3.

With its investigation of the first structured Danish ELP the current study also specifically contributes to Danish research and practice in regard to early learning. Therefore, the following section elaborates on the implications of the study's findings for Danish practices.

5.2.2. IMPLICATIONS FOR DANISH PRACTICES AND FOR PEDAGOGICAL READING ACTIVITIES

The findings from this dissertation on the implementation of the first Danish ELP could have implications for Danish pedagogues' approach to shared book reading and possibly also for their views on early literacy and what learning in the day-care centre can encompass. As described in section 3.3, and elaborated upon more thoroughly in article II, Danish pedagogues have been sceptical towards the concept of learning, a concept they thought belonged to the school environment (see Broström, 2004). The evidence of the BookFun programme's effects could possibly broaden some of the critical pedagogues' horizon as regards how early learning can have a central place in the day-care centres. Although the current study aimed at investigating the effects of BookFun, the results also shed light on the importance of book reading in general. In the effect study it was noteworthy that the active control group doing reading-as-usual improved their narrative production (based on total story grammar) significantly more than the passive control group, suggesting that shared reading in itself also has an effect on children's narrative abilities. The interviewed pedagogues additionally stressed useful aspects of BookFun that are not directly related to dialogical reading or to the creative activities, such as having focussed time together with a small group of children who then develop new peer relations as the plot of the book initiates shared play activities. The question is, how much of this would have been possible with reading-as-usual (and not dialogical reading) in a small group? The children might not have processed and understood the story as well, or taken it as much to heart, without the dialogical reading and the creative activities in BookFun. However, to make a comparison it would have been informative also to have interviewed pedagogues doing reading-as-usual in order to shed light on their reading techniques as well as their experiences of the children's gains from regular book reading in a small group. However, since interviews are quite a time-consuming and costly data gathering method, it was not possible to conduct these additional interviews within this study.

On a related note, one of the main conclusions and contributions from this thesis is that, in order to support children in their development, it is crucial to support the early educators in their professional development. Viewing the processes of human development as a dialectic and as a product of the interactions between the individual and its environment (Vygotsky, 1978; Bronfenbrenner, 1979), children's and early educators' developmental paths are inextricably connected in the day-care centre. Therefore, in order for political initiatives to successfully impact upon children's language and social development, it is of the utmost importance that

professional development is also taken into consideration in a holistic view of the day-care services. One could call into question whether previous initiatives have succeeded in this objective. The following section problematises the lack of focus on professional development in Danish political initiatives and media debates.

As part of the legislation for day-care services, the Danish government launched language screenings of 3-year-olds nationwide in all day-care centres from 2007-2009[9] (Day-Care Services Act, 2007). The language screenings were initiated as part of a set of preventative measures in order to identify children with potential language delay or language impairments and to initiate early interventions. According to the language screening legislation, there are two steps in the screening process: identification of children needing special efforts from the day-care centre, and subsequent intervention. The intervention consisted of language stimulation conducted by *"persons with special qualifications for executing the task"* (Day-Care Services Act, 2007, my translation to English).

The demand that all municipalities had to offer language screenings to 3-year-olds met with mixed responses in Denmark. Some found it essential that more focus was put into identifying children with the need for language support through screening, while the chairmen of large trade unions stated that a time-consuming language screening was not necessary and that resources should instead be applied directly to the pedagogical practices (Jyllands-Posten, 4th of June 2007 as cited in Bleses, 2009). A common focus in the debate seemed to be helping children with special needs through improved pedagogical practices. Regardless of which side of the debate one would side with, it can be called into question whether the Danish pedagogues were actually equipped for the task of executing the subsequent intervention for the identified children based on their training. Bleses (2009) argues that there was a need for additional training in order for the majority of pedagogues to be able to do so. Therefore, continued professional development would have been necessary in order for initiatives such as the language screening to be fruitful. Sadly, the professional development aspect seems to have been overlooked in this regard. Efforts were put into developing appropriate screening tools, but not into developing tools for the pedagogues to carry out subsequent language supporting efforts, and screening with no follow-up does not result in adequate changes. Viewed in Bronfenbrenner's (1979) frame of reference one could argue that the implementation of the national language screening initiated from the macro system was not successful taking into account all the necessary factors at micro level, e.g. professional development in the day-care centres.

Another example of a debate in Danish media that could benefit from considering professional development is the idea of "elite pedagogues". The administration for children and adolescents in Copenhagen's council has submitted the proposal that

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[9] For how long the screening was mandatory did however vary between municipalities.

marginalised day-care services in Copenhagen should be reinforced with talented pedagogues who in return will be offered a considerable salary increase and other desirable terms if they accept a job in day-care services in ghetto areas (Astrup, 2014a). These marginalised day-care services with a large percentage of immigrant children have difficulties attracting and retaining the most skilled employees. The suggestion of bringing in elite pedagogues aims to ensure that marginalised children are better prepared for school entry (Astrup, 2014a). The suggestion has however been met with intense criticism from, among others, the chairwomen of the Danish pedagogues' organisation. She thinks the suggestion is a disparagement of the work currently being conducted in these day-care centres, and believes that a better solution would be to introduce a "social staffing ratio". This concept encompasses the idea that day-care services in marginalised areas should be offered more employees per child, making more time for the pedagogues' extra work connected to the families' social problems (Astrup, 2014b). Some might argue that a higher ratio of staff to children is not a sufficient change to elevate marginalised children in their school readiness and early literacy.

However, an alternative to bringing in elite pedagogues – which could possibly devalue the work of the current pedagogues – could be to invest in professional development of the pedagogues already working in these day-care services. An example from the empirical results of this thesis supports this idea. As described in section 3.1. of article III, one pedagogue stated that her experiences during the pilot phase have proven to her the necessity of prioritising BookFun and running the programme on fixed days during the week. Beforehand the staff of this day-care centre had been worried that they would not be able to find time for running BookFun in its structured format. Even though this specific day-care centre had one of the poorest ratios of staff per child among the participating day-care centres, and was placed in a somewhat marginalised area, they have decided post-pilot phase to continue using BookFun in the same structured and time-consuming manner that is suggested by the programme. Investing in professional development such as the BookFun programme could prove to be a more sustainable solution since this could also allow pedagogues to develop a unified ownership of new practices (see article III, section 3.3.), whereas bringing in elite pedagogues could possibly create a division within the staffing group.

Following this section's discussion of the thesis' contribution and implications for practice, the next section will consider a number of limitations to the study and its design.

5.3. LIMITATIONS AND FUTURE RESEARCH

As described in the methodology chapter, the overall design of the study had already been developed when I started my PhD, including the skills and areas that were to be targeted in the effect study's test battery. I therefore only participated to

a minor degree in the adjustment of the specific measures for testing children's language abilities, while I developed the interview guides for the qualitative study myself. This gives rise to some considerations as to how I could improve the research design to better suit the aims of my specific PhD project.

5.3.1. LIMITATIONS TO THE STUDY'S DESIGN

One of the aims of the current thesis was to investigate how BookFun could contribute to inclusion in the day-care centres. The investigation of this was clearly limited by the fact that inclusion was only examined directly through the qualitative interviews. In the effect study, only abilities known to affect social competencies, namely language abilities, were tested. A more direct measure of the children's abilities to enter into social relations and the quality of the social communities in the day-care centres would have improved the study's ability to assess the potential of BookFun to strengthen social inclusion[10]. Such a measure could consist of a mapping of the peer relations in the day-care centre before and after the implementation of BookFun to see if they had developed. Furthermore, a measure of children's well-being in the day-care centres could also shed light on whether BookFun had actually contributed to the formation of a community in the day-care centres that incorporates active and equal participation for all children. However, ethical considerations should be taken into account when addressing children's well-being and peer relations – for instance, how to handle the situation if a marginalised child is not included in her peers' mapping of their relations. Moreover, changes of this sort are difficult to capture within a short time period like the three-month pilot phase. This brings me to another limitation of the study.

A limitation of the effect study is the lack of further, longer-term follow-up assessment that could have shed light on whether the effect of BookFun on expressive and receptive vocabulary and semantic fluency persisted over time or even accelerated. Follow-up studies are especially pertinent in developmental research in order to give insights into how the effect of an intervention evolves in time and in relation to the development of the child.

A further limitation of the study that affects the validity of the quantitative findings as well as the qualitative findings is the lack of an objective, independent fidelity check of the pedagogues' execution of BookFun. Fidelity check has proved to be an important aspect of research on early literacy. Based on findings showing significant differences in frequency of intervention sessions among schools participating in their study, Lonigan and Whitehurst (1998) investigated the effect of compliance to programme. They found that children in dialogical reading groups in the more compliant schools improved whereas they did not in the less compliant

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[10] The observations could however partly shed light on this aspect as described in a report for the Mary Foundation (Jensen de López & Clasen, 2012).

schools. A fidelity check of whether programme users are complying with the programme is therefore important when testing an intervention's effect.

In the present study, the post-programme interviews functioned as a fidelity check in that pedagogues were asked an array of questions regarding their compliance to the intervention programme. Even though there is no standard method for measuring implementation fidelity within the field, independent observers are considered the best means for accurately measuring fidelity (Sanford DeRousie & Bierman, 2012). Despite this, programme users themselves (e.g. early educators) are the usual source of information on programme implementation. Stirman and colleagues (2012) report that 40% of 125 reviewed studies used interviews as a measure of how a programme was sustained in practice. However, findings on the validity of teachers' reports when compared with observers' reports are mixed, some studies showing a high level of agreement (e.g. Melde, Esbensen & Tusinski, 2006) and other studies reporting that teachers tended to over-report the degree to which they had implemented new practices (e.g. Lillehoj, Griffin & Spoth, 2004). Nevertheless, programme users' reports are the most feasible solution when staff and funds are limited. Even though observations might give a more reliable measure of whether the programme users apply the programme as intended, one might also argue that one or two independent observations of a programme session does not guarantee that users are not "over-performing" and following the programme more strictly on the specific days the observer is present. In summary, then, the issue of valid fidelity checking could be considered a general limitation of the field, and it is noteworthy that relatively few studies actually address fidelity of implementation directly (Zaslow, Tout, Halle, Whittaker & Lavelle, 2010). In the current study, independent observations would, however, also have enabled a comparison between the pedagogues running BookFun and those carrying out reading-as-usual in order to firmly ensure that the latter group were in no way dialogical in their personal style.

5.3.2. LIMITATIONS IN RELATION TO PROFESSIONAL DEVELOPMENT

The second research sub-question of this thesis concerned BookFun's potential to support the pedagogues' continued professional development. In regard to this question there are some limitations that should be taken into consideration. A limitation related to BookFun itself as an instrument for developing professionalism is the relatively limited extent of direct instruction: the introductory course to BookFun only lasts for one day with no further follow-up. Within the field of professional development one-day introductory courses are often considered an ineffective method for skill acquisition compared to workshops with several days' duration or yearlong continuous professional development. A literature review on features of effective professional development conducted by the US Department of Education in 2010 showed that models of professional development with intensive and extensive training were associated with positive outcomes for educators as well

as children. However, models with even small amounts of professional development were also associated with positive outcomes (Zaslow et al., 2010). For example, Whitehurst's studies only involved a one-time 30-minute introduction to the dialogical reading technique (Valdez-Menchaca & Whitehurst, 1992; Whitehurst et al., 1988; Whitehurst & Lonigan, 1998).

It is possible that the BookFun course might have been more skill oriented, thus giving the pedagogues more fertile ground for professional development, if the course had consisted of several workshops. This model would, however, put a strain on the day-care centres' staffing with the concomitant risk that some pedagogues might not be able to attend all of the workshops. Therefore, an alternative could be in-house coaching that followed up on the introductory course, but this would be quite a cost-intensive solution.

A further limitation in the account of professional development in this thesis concerns the organisational perspective. This aspect also concerns the implementation and sustainability of the programme. Based on a literature review, Stiman and colleagues (2012) conclude that contextual influences on sustainability encompass both outer context, e.g. policies and legislation as discussed in articles III and IV, and inner context, i.e. the culture and the structure in the institution. The thesis has only investigated the latter aspect from the perspectives of the pedagogues. To obtain a more comprehensive understanding of the organisational level of the implementation, the day-care centre leaders could have been involved, with particular reference to how they supported the implementation of BookFun. This aspect was, however, beyond the scope of the thesis.

5.3.3. VALIDITY, GENERALISABILITY AND RELIABILITY

The validity of the study's findings could have been strengthened if the limitations presented in the previous section of the discussion had been addressed; however, for reasons related to limited time and funding this was not possible. The current section will argue for the results' validity, generalisability and reliability in spite of those limitations. When scrutinising the quality of a study's results there are two central criteria that should be taken into consideration: validity and reliability. Assessing a study's internal validity requires critical reflections concerning the conclusions drawn based on the empirical findings, including consideration of possible alternative explanations of the findings.

The quasi-experimental design employed in the matched controlled trial reported in article I has good internal validity as alternative explanations and biases are minimised and controlled through the random selection of participants and the use of control groups. Using reading-as-usual as a control especially strengthens the study's internal validity, as argued in section 5.2.1.

The internal validity of the qualitative study is strengthened by the large number of interviews and by the systematic analytic approach. By following the steps of Thematic Content Analysis (Braun & Clarke, 2006) I have tried to embed the strategy for analysis within systematic methods for the production of new knowledge (Zachariae, 1998). Furthermore, relevant interview quotes have been included in the results, thus providing the reader with direct access to the specific data upon which I have based my interpretations.

External validity relates to whether the results can be generalised beyond the study's context (Coolican, 2009). Because the study was conducted in a real world setting day-care centres, instead of, for instance, a lab, the results can be said to have good generalisability to other settings – i.e. to other real-world Danish day-care centres. This could also be referred to as good ecological validity (Coolican, 2009). Moreover, with a large number of randomly-selected participants, the results from the quantitative study have good population validity – it is likely that the effects of BookFun shown in this study would generalise to other Danish 3-6-year-olds. The population validity is, however, more limited in the qualitative part of the mixed methods design. Even so, the qualitative interview study was carried out in three large municipalities distributed across Denmark and aimed to achieve a geographically representative sample of pedagogues (Denmark has only 5.6m inhabitants and 98 municipalities). Qualitative interview studies cannot achieve the same generalisability as a quantitative study, but it is important to keep in mind that this is not the purpose of a qualitative study. Instead, the advantage of the qualitative method is that it enables access to the personal perspectives and experiences of the interviewee, addressing issues that an experimental study could not shed light on.

Reliability concerns the credibility of the results and whether results would be replicated if a different researcher followed the same procedures. Therefore, reliability first and foremost relates to the researcher's transparency in the description of methods, procedures and interpretations. For the quantitative as well as the qualitative study in this thesis, these different stages of the research process have been operationalized, documented and described systematically. However, while the results of the effect study have a very good possibility of being replicated by a different researcher who follows the same procedures, this cannot be said for the qualitative results. A general point of criticism for qualitative studies is that the method's person dependency causes the reliability to be compromised (Yin, 1994). A different interviewer following the same interview guide could pose the same questions but, given that the interview is a type of social interaction between interviewer and interviewee, it is not certain that a different interviewer would elicit exactly the same answers.

The discussion of the results' validity and reliability has handled the qualitative and the quantitative results separately. However, the main strength of the design lies in

its combination of the two methods, which enables a richer description of the field of research. Investigating a phenomenon from multiple angles and with different research methods strengthens the overall validity of the study as the comparison of the different data sets' results can verify and reinforce one another.

5.3.4. FUTURE RESEARCH AND DIRECTIONS

The present study has evaluated the effect of BookFun on children's language skills and how the programme could contribute to professional development as well as inclusion in the day-care centres. Despite the abovementioned limitations there is evidence that BookFun did in fact significantly improve some aspects of language development, and based on the interview results BookFun showed potential to support inclusion in the day-care centre and professional development among pedagogues. In the meantime, an important aspect to consider is whether the changes in children's language development and the changes in the pedagogues' shared book reading practices can be maintained in the long term, which is crucial in order to truly impact change. Future studies should therefore include longitudinal components that measure the sustainability of implemented ELPs and also look into how the effect of an intervention evolves in time and in relation to the development of the child and its future literacy.

As concluded in the previous section, the combination of multiple methods creates a strong research design, and it is one of the current study's major contributions that it investigates an ELP with qualitative as well as quantitative methods. In general, the field of early literacy would benefit from more studies using mixed method designs, especially because early literacy is nested within a complex, messy reality that is best understood through multiple investigative tools (Greene, 2007 quoted in De Lisle, 2011). The current study combined a matched, controlled trial with qualitative interviews, but other ways of mixing methods might also be fruitful: for instance, combining surveys with interviews in the investigation of programme implementation and professional development. Initial interviews could be used to establish central themes and the professionals' views and surveys could be developed around these themes and distributed to a larger sample of pedagogues applying the same programme in order to validate the findings and assess their generalisability.

The current thesis has focused on the group effect of BookFun, comparing the means of the different experimental groups. However, within this project's data set there also lies the possibility of combining information from different data gathering methods. For instance, a case study could compare the individual child's test scores pre- and post-test with findings from observations and with pedagogues' statements regarding the child's gains from participating in BookFun. This type of design would be especially relevant when looking into, for instance, the potential benefits of BookFun for bilingual children or language-impaired children. Also, in

an immediate continuation of the research of the current thesis, it would be especially pertinent to investigate the effect of BookFun on children with poor language skills and children at risk of school failure.

The current discussion chapter began with a discussion of the articles' results in relation to the aims and research questions of the thesis, followed by a discussion of the study's implications, contributions and limitations. The following chapter will sum up the conclusions that can be drawn based on the overall study.

CHAPTER 6. CONCLUSION

The objective of the current study was to evaluate how the ELP BookFun could support development in the day-care centres among early educators as well as children for the purpose of improving social inclusion. The overview text's theoretical background therefore focussed mainly on three areas: early literacy and language development, professional development, and inclusion in the day-care centres.

Having an early literacy programme as its field of research, the thesis's research design incorporated the exploration of the children's development of language abilities through quantitative measures and also employed qualitative interviews to investigate the early educators' professional development. The empirical foundation of the thesis was pre- and post-tests of 77 3-4-year-old children and 36 individual interviews with early educators. Taken together, the quantitative and qualitative studies presented in this thesis suggest that, in evaluating the effect of an ELP, mixed methods designs are useful in shedding light on children's early literacy and language benefits as well as early educators' professional development.

Returning to the aims posed in section 3.1 of the overview text, it is now possible to derive some conclusions. The investigation has shown evidence that BookFun can promote preschool children's language development. A set of ANCOVA analyses revealed that BookFun significantly improved expressive and receptive vocabulary compared to both an active reading-as-usual control group and a passive control group. Compared to the reading-as-usual group, children in the BookFun group were also able to generate significantly more words in a semantic fluency task. Since semantic fluency is an executive function loaded task, a tentative conclusion

needing further investigation is that there might be executive benefits of BookFun. As for narrative abilities, the findings of the effect study suggest that BookFun may promote narrative production, but results also showed both reading groups (dialogical reading and reading-as-usual) improving significantly more than the passive control group, pointing to the effect of reading itself on narrative abilities. More research comparing dialogical reading and reading-as-usual is needed to clarify this finding. The results from the qualitative interviews further supported the findings that BookFun can promote language development, as the pedagogues also experienced an effect of BookFun on children's vocabulary and pragmatic language skills.

The findings from the second article of the thesis suggested a potential gap between practice and politics as regards the promotion of early learning in Denmark. This gap was evident in the fact that interviews with the early educators prior to the launch of BookFun indicated that they did not work in a structured manner and did not focus on learning as requested by the political acts. These aspects related to existing pedagogical practices were foreseen as potential challenges for the implementation of a structured ELP. Therefore, this potential gap was important to take into consideration when investigating the second research question of the thesis, namely how the implementation of an ELP such as BookFun could support the pedagogues' continued professional development.

Taken together, the findings from the qualitative study suggest that the implementation and the pedagogues' application of BookFun have great potential to support pedagogues' social learning processes as well as their professional development in regard to skills and reflections on practices.

The interview study showed that the pedagogues consider BookFun to be a *pedagogical* tool, which they have taken ownership of. Also, based on the analysis of the interviews, BookFun showed great potential to support professional development by providing early educators with new knowledge on language development and on how to support children's language acquisition. Applying this knowledge in BookFun fostered pedagogues' professionalism by encouraging reflections about their own practices, which made them consider the importance of their pedagogical competencies – and how they applied these in BookFun. However, as regards the potential of BookFun to support professional development, it could be a limitation that BookFun has only a one-day introductory course without further in-house training or coaching. Results illustrate how the early educators' development of a new professionalism, reflections on current practices and development of an ownership of BookFun were all crucial processes in changing practices and in the successful implementation of the new programme. Pedagogical initiatives in the day-care centre such as BookFun can facilitate social learning processes, which could create a platform for an academic boost for children as well as for professionals in the day-care centre.

The background section 2.6. stated how this thesis views language abilities and social competencies as interrelated, which is why a language based, pedagogical intervention could possibly aid inclusion in the day-care centres in various ways. As discussed in article IV, improving inclusion is a common focus for politicians and pedagogues in Denmark. Pedagogues did not seem to have a concerted or structured approach to working with inclusion prior to the implementation of BookFun (article II). After having been introduced to BookFun, pedagogues saw the clear potential of this programme as a tool to strengthen inclusion. The current thesis therefore suggests that BookFun offers a structured way for pedagogues to work towards the New Nordic School goals concerning inclusion.

Based on the thematic content analysis, article III showed three ways in which BookFun, from the perspectives of early educators, can enhance inclusion in the day-care centres. These were through (1) children's improved language abilities, (2) the formation of social communities within the reading groups, and (3) increasing children's confidence. Furthermore, it was evident from the analysis that the application of BookFun has potential to contribute to inclusion in the day-care centres through an increased focus on inclusion among pedagogues, several of who described BookFun as an inclusion tool. These results support the idea that BookFun is able to promote inclusion through (1) supporting children's language and thereby providing them with better access to other children's communities, play and social relations, and (2) offering pedagogues tools for building a more inclusive environment in the day-care centre – as argued in the background chapter. However, it is a limitation that the results solely rely on the pedagogues' appraisal of BookFun's potential to support inclusion, as no direct measure of inclusion was included in the effect study's test battery. Further follow-up studies are also needed to evaluate whether BookFun will contribute to ensuring the establishment of communities in the day-care centre that reflect active and equal participation for all, as targeted by the Alliance for Inclusive Education (2009).

This thesis has contributed to the field of early literacy with a combined examination of child development and professional development in the implementation of the first Danish ELP. Recognising these different levels when assessing the effect and quality of an ELP and its potential to create change for children as well as for professionals is crucial. Taken together, the thesis finds support for BookFun's potential to support development in the day-care centres among both early educators and children for the purpose of establishing pathways to improved social inclusion.

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APPENDICES

Appendix A. Mindmap: Working paper

The Mindmap is a worling paper illustrating the connestions between central aspects of the empirical articles. "Improving inclusion" is the mindmaps centre illustrating how the remaining topics connests to this central theme and to each other. The colored blocks highlight the thesis's main fields of research. The Roman numbers in red indicate the specific articles that deal with the individual themes.
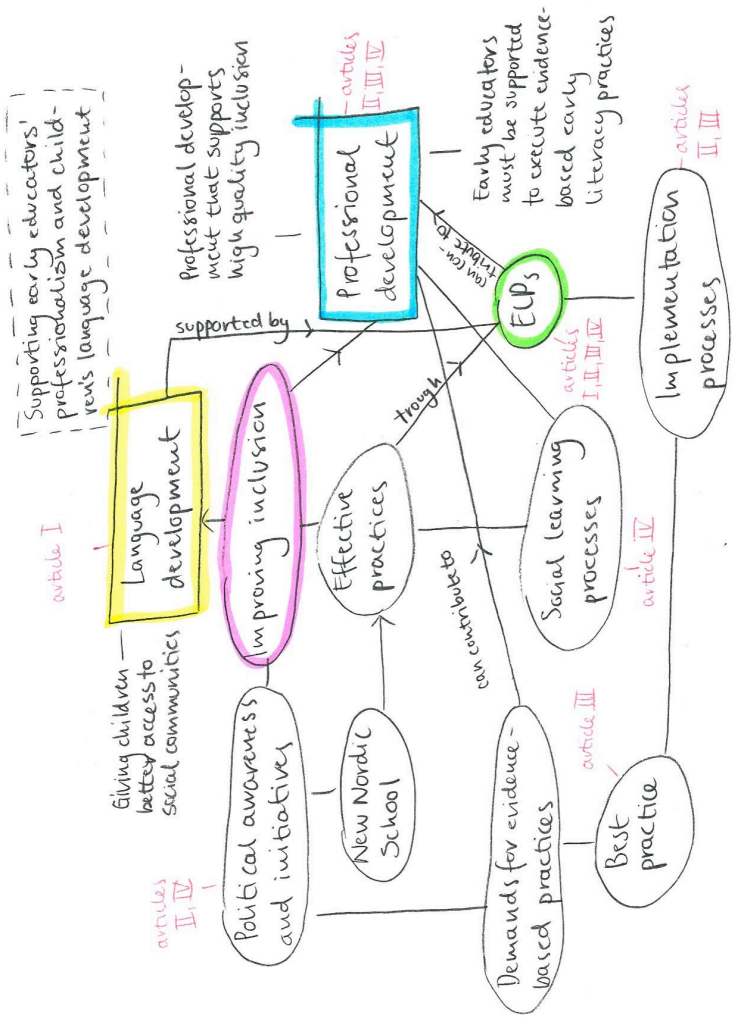
Appendix B. Consent form

The consent form has been translated to English.

PILOT PROJECT: CHILDREN'S COMMUNICATIVE DEVELOPMENT

Dear parents,

Your child's day-care centre is participating in the Mary Foundation's project regarding children's communicative development, which Aalborg University is evaluating. Therefore, we would like to ask your consent for your child to participate in the evaluation of the pilot project.

The evaluation consists in various tasks. For instance we could show pictures of animals or vehicles and ask your child to tell a short story or name the pictures. We ensure full anonymity so that your child will not be identified by name.

In out experience, children find it fun to participate and we will of course be very aware of the comfort of your child's during the evaluation.

We hope that you will give us your consent and that you in that case will contribute to enabling a better understanding of children's language development.

We would ask you to please hand in the consent form in your child's day-care centre.

Best wishes,

Kristine Jensen de López, Ph.D.
Professor in developmental psychology
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Aalborg University
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Appendix C. Interview guides

The interview guides have been translated to English. In the right column the questions written in black indicate the overall interview questions, whereas the questions in grey were applied as possible follow-up questions if the pedagogue herself did not elaborate on these issues based on the initial questions.

Pre-programme interview:

Themes and research questions	Interview questions
Briefing – information on the purpose of the interview (getting insights into your day-care centre and your perspective on reading aloud), recording, consent, anonymity.	Opening: try to describe an ordinary day here in the day-care centre and what importance reading has in your workday as a pedagogue? Is reading aloud something the day-care centres focuses on/think has value, and what does the children think about reading?
The reading situation – How is the reading structured and what does the pedagogue do?	Could you describe an ordinary situation in which you read books in the day-care centre? How and where does the reading take place? How many children are involved? How often do you conduct joint reading in the da-care centre? Does the pedagogues have fixed routines and hours for reading or is it less structured? Does the pedagogue apply any "devices", e.g. gesticulating, body language and other thing when reading?
Finishing the book – Which possibilities does the pedagogue create in order for the children to process and engange in concersation regarding the book? – What does the pedagogue focus on when processing the book that has been read? Which types of questions do they pose?	Could you tell me a little bit about what happens when you have finished reading a book? Does the pedagogue and the children talk about what has been read? Do you continue working with the story, and if so, how? Retelling, asking questions, certain activities connected to the book? After having read a book, do you conduct any activities related to the book?
Social inclusion and stimulation of	Does the day-care centre have any special language

language development	stimulating initiatives? Which and how? How would you describe the social community of the children in the day-care centre?
Expectations for the BookFun project	In closing: What expectation do you have for the BookFun project and what benefits children and pedagogues might have to gain from it? Have you ever heard of dialogical reading?
Closing	Thank you for your help! Do you have any questions?

Post-programme interview

Themes and research questions	Interview questions
Briefing – information on the purpose of the interview (your experiences conducting BookFun in the pilot phase), recording, consent, anonymity.	Opening: try to describe what is has been like to conduct BookFun in the 12week pilot phase? More specific: Is there anything that has been difficult? Elements of BookFun that did not fit into your everyday? Have you read all of the books, used all of the "good words"? How has it been working with the reading groups?
Changes to the pedagogues' practices – Have the pedagogue's own practives regarding shared book reading changed? Does the pedagogue experience that BookFun fits into her own pratices and the pedagogical practice of the day-care centre?	If you imagine that you were so sit down and read a book for the children this afternoon would there be anything you would do differently as to before you were on the BookFun course? Which aspects from BookFun did you find useful? Which elements from the introductions course and materials have you applied? (dialogical reading, creative activities) Do you experience that you have encoporated BookFun in your own approach and practices? What fitted in and what did not fit in? Could you describe whether you think that BookFun fits into your day-care centre's pedagogical

	practices? Could BookFun contribute to and further develop some of the day-care centre'spedagocial initiatives and focus areas? (e.g. appreciatory pedagogics, inclusion).
Legitimacy and prioritisation of book reading – Has BookFun enabled a legalisation of book reading and changes to the discourse regarding "leaving the rest of the staffing group" and regarding the priority of reading?	I the first interviews many pedagogue espresesd challenges conncted to actually reading aloud – e.g. finding time, space and staff for reading. Severeal pedagogues expressed that they did not find it "legitimate" to work with only a small group of children as this left their colleagues with more work. Do you experience that the introduction of BookFun has changed this? Has shared book reading received a higher priority in the day-care? Are the children more pre-occuoied with reading? Do you imagine that shared book reading will besome a fixed feature in the work day? How have the challenges regarding time and space for reading aloud been handled? Based on the first interviews I got the impression that reading often has a practical function, used for quieting down and comforting. Which function do you experience that reading aloud has now? Has is become a tool in itself? (instead of a means to an end or yet another playing activity).
BookFun's possible contributions to language developments and hereby also social inclusion - Does the pedagogues experience that BookFun has stimulated the children's language development and how? - Can a language intervention contribute to social inclusion?	The effect: Do you experience that BookFun has had a positive effect on the children's development of communicative competencies? Can you give concrete examples as to how this has been expressed? The Mary Foundations focus area is bullying and well-being. Do you experience that BookFun has contributed to the social community/inclusion in the day-care centre, or do you imagine that it would be possible in the long run? Do you experience that the children who have participated in BookFun have developed better communicative competencies that can aid in peer relations and in resolution of conflicts? Do you experience that working with BookFun has created better relations between the children and a

	more inclusive day-care centre?
The future of the day-care centre and of BookFun	In closing: Du you think the day-care centre will expand and continue applying BookFun? Have you planned how you are going to use BookFun compared to the pilot phase? How structured are you planning to run BookFun? Are you going to work with fixed reading groups? Do you have specific criterias for which children should be offered participation in BookFun? Are the remaining pedagogues in the day-care centre going to learn dialogical reading? How do you experience that parents have welcomed their children's participation in BookFun? Would it be helpful if volunteers could conduct BookFun with the children? Do you think the introduction course is nessesary for other pedagogues to apply BookFun? (or would a thorough introduction video be suffiecient?)
Closing	Thank you for your help! Do you have any questions?

Note: Both pre- and post-programme interview also included a survey-like section with specific questions regarding the children who also participated in the observations.

SUMMARY

This thesis focuses on the development of early literacy in Danish day-care centres through the evaluation of the first structured Danish early literacy programme, BookFun, which is based on dialogical reading combined with creative, aesthetic activities. The objective of the thesis is to explore how BookFun can support children's language development as well as early educators' professional development in order to create pathways to improved inclusion in the day-care centres. The empirical foundation of the thesis uses a mixed methods design. A matched controlled trial with 77 3-4 year old children showed that BookFun is a powerful tool for boosting children's vocabulary and verbal working memory (measured by semantic fluency) in a more effective way than regular book reading. Results from an interview study with 18 early educators showed that they could successfully integrate BookFun with their existing practices and that the programme has the potential to support professionalism as well as inclusion in the day-care centres. The results are discussed in relation to the central research questions and the contributions, implications and limitations of the study are considered. In conclusion, the thesis finds support for BookFun's potential to support development in the day-care centres among both early educators and children, thus creating pathways to improved inclusion.