

Getting Ready to Read: Promoting Children's Emergent Literacy Through Shared Book Reading in a German Context

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Dedication

This work is dedicated to all of the children from the kindergarten Social
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“The single most important activity for building the knowledge required for eventual success in reading is reading aloud to children”

Becoming a Nation of Readers (1985, p.23).

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List of Abbreviations

ANOVA	analysis of variance
AWST-R	Aktiver Wortschatztest für 3- bis 5-jährige Kinder – Revision (Kiese-Himmel, 2005)
CG	Control Group
<i>d</i>	Cohen's <i>d</i>
<i>df</i>	degrees of freedom
<i>F</i>	F-distribution variable
HET	Heidelberger Elterntraining zur frühen Sprachförderung
HIT	Heidelberger Interaktionstraining für pädagogisches Fachpersonal zur Förderung ein- und mehrsprachiger Kinder
HLI	Home Literacy Environment
LEG	literacy enrichment group
LE-TTG	literacy enrichment and teacher training group
L1	first language acquisition
L2	second language acquisition
M	mean
MB	migration background
<i>N</i>	sample size
<i>p</i>	p-value
<i>SD</i>	standard deviation
SES	socioeconomic Status
SETK 3-5 (ESR)	Sprachentwicklungstest für 3- bis 5-jährige Kinder - <i>Subtest</i> Enkodierung semantischer Relationen (Grimm, 2001)

η^2	partial eta-squared
PISA	Program for International Student Assessment
TTG	teacher training group
WMB	without migration background
*	significant on the 5% level

Abstract

The present study investigated the effects of two methods of shared book reading on children's emergent literacy skills, such as language skills (expressive vocabulary and semantic skills) and grapheme awareness, i.e. before the alphabetic phase of reading acquisition (Lachmann & van Leeuwen, 2014) in home and in kindergarten contexts. The two following shared book reading methods were investigated: Method I - literacy enrichment: 200 extra children's books were distributed in kindergartens and children were encouraged every week to borrow a book to take home and read with their parents. Further, a written letter was sent to the parents encouraging them to frequently read the books with their children at home. Method II - teacher training: kindergarten teachers participated in structured training which included formal instruction on how to promote child language development through shared book reading. The training was an adaptation of the *Heidelberger Interaktionstraining für pädagogisches Fachpersonal zur Förderung ein- und mehrsprachiger Kinder - HIT* (Buschmann & Jooss, 2011). In addition, the effects of the two methods in combination were investigated. Three questions were addressed in the present study: (1) What effect does method I (literacy enrichment), method II (teacher training) and the combination of both methods have on children's expressive vocabulary? (2) What effect does method I (literacy enrichment), method II (teacher training) and the combination of both methods have on children's semantic skills? (3) What effect does method I (literacy enrichment), method II (teacher training) and the combination of both methods have on children's grapheme awareness? Accordingly, 69 children, ranged in age from 3;0 to 4;8 years, were recruited from four kindergartens in the city of Kaiserslautern, Germany. The kindergartens were divided into: kindergarten 1 – Method I ($N = 13$); kindergarten 2 - Method II ($N = 18$); kindergarten 3 - Combination of both methods ($N = 17$); kindergarten 4 - Control group ($N = 21$). Half of the participants ($N = 35$) reported having a migration

background. All groups were similar in regards to socioeconomic status and literacy activities at home. In a pre- posttest design, children performed three tests: expressive vocabulary (AWSTR, 3-5; Kiese-Himmel, 2005), semantic skills (SETK, 3-5 subtests ESR; Grimm, 2001), and grapheme awareness which is a task developed with the purpose of testing children's familiarity with grapheme forms. The intervention period had duration of six months. The data analysis was performed using the software IBM SPSS Statistics version 22. Regarding language skills, Method I showed no significant effects on children expressive vocabulary and semantic skills. Method II showed significant effects for children expressive vocabulary. In addition, the children with migration background took more advantage of the method. Regarding semantic skills, no significant effects were found. No significant effects of the combination of both methods in children's language skills were found. For grapheme awareness, however, results showed positive effects for Method I, and Method II, as well as for the combination of both methods. The combination group, as reported by a large effect size, showed to be more effective than Method I and Method II alone. Moreover, the results indicated that in grapheme awareness, all children (in regards to age, gender, with and without migration background) took equal advantage in all three intervention groups. Overall, it can be concluded with the results of the present study, that by providing access to good books, Method I may help parents involve themselves in the active process of their child's literacy skills development. However, in order to improve language skills, access to books alone showed to be not enough. Therefore, it is suggested that access combined with additional support to parents in how to improve their language interactions with their children is highly recommended. In respect to Method II, the present study suggests that shared book reading through professional training is an important tool that supports children's language development. For grapheme awareness it is concluded that with the combination of the two performed methods, high exposure to shared book reading helps children to informally learn

about the surface characteristics of print, acquire some familiarity with the visual characteristics of the letters and learn to differentiate them from other visual patterns. Finally, it is suggested to organizations and institutions as well as to future research, the importance of having more programs that offer different possibilities to children to have more contact with adequate language interaction as well as more experiences with print through shared book reading as showed in the present study.

Keywords: shared book reading, emergent literacy, literacy enrichment, professional teacher training

1. Introduction

Reading and writing are important life skills. They are a cornerstone for a child's success in our actual literate society. Numerous studies have accumulated evidence that these skills are beginning to develop early in childhood, rather than with the beginning of formal instruction (Richter & Brügelmann, 1994; Whitehurst & Lonigan, 1998). The term 'emergent literacy' is used to describe the precursor skills that children may acquire before reading and writing in a conventional sense, such as oral language, print awareness, and letter knowledge (Justice, 2006; Pence & Justice, 2008; Roskos, Tabors & Lenhart, 2009; Sulzby & Teale, 1991; Whitehurst & Lonigan, 1998). Therefore, shared book reading has been reported to facilitate these important preliminary skills (Burgess, 2002; Bus, van IJzendoorn & Pellegrini, 1995; Jong & Bus, 2002; Karrass & Braungart-Rieker, 2005; Kraus, 2008; Sénéchal, Pagan, Lever, & Ouellette, 2008).

Adult-child shared book reading is shown to help children to improve their vocabulary. Books offer children the possibility to confront more sophisticated words (Hayes & Ahrens, 1988), as well as to use decontextualized language, which according to Snow and Ninio (1986), cannot be found in any other kind of interaction. In addition, adult-child book reading enables the child to construct meaning from the story, and improve vocabulary development (Karweit, 1994). Moreover, shared book reading helps children to understand the difference between print and pictures that print carries meaning, and the ways in which print differs from other patterns. Adult-child book reading helps children to understand how to work with books, and to develop letter knowledge (Brown, Cromer & Weinberg, 1986; Mol, Bus & Jong, 2009; Mol & Bus, 2011; Sim & Bertheisen, 2014). In addition, shared book reading offers to children the possibility to learn the difference between written and oral language, in respect to their different functions, purposes, and forms (Godmann, 1986).

Accordingly, research has reported that the home environment is the first and most effective approach where children may acquire and develop literacy skills (Jong & Leseman, 2001; Pence & Justice, 2008; Sénéchal, LeFevre, Thomas & Daley, 1998). The home literacy environment encompasses the necessary resources and opportunities that enable children to explore and perfect their reading and writing skills, such as frequent verbal communication, parent-child shared book reading, and the availability of printed materials, as well as model the literate behaviors of their parent(s) (Arterberry, Bornstein, Midgett, & Putnick, 2007; Dickinson & McCabe, 2001; Gleason & Ratner, 2009). However, the literature has shown that there are considerable variations in the ways that families interact with their children. Socioeconomic status appears to play an important role in this context (Teale, 1986). Studies in home-based care settings have reported that low income homes have a limited profile of language and early literacy interactions, a paucity of contact with books, and few opportunities and habits of shared reading, when compared to high-income families (Dickinson, Tabors, & Bredekamp, 2001; Neuman, Koh, & Dwyer, 2008; Nickel, 2008; Segel, 1994). In addition to socioeconomic status, another factor shown to affect children's literacy experiences is migration background. Almost one in five residents living in Germany has a migration background (Stanat, Rauch, & Segeritz, 2010).

Studies have indicated that most children with migration background, compared to those without, have a relatively low socioeconomic status and are structurally disadvantaged in the German school system in regards to the acquisition of skills and graduation status (Biedinger, 2009; Schneeweis, 2006; Sulzer, 2013). According to a study conducted by Niklas, Schmiedeler, Pröstler, and Schneider (2011), it is reported that the kindergarten children with migration background, at one a half years before beginning formal education, demonstrated a worse performance in language skills, phonological awareness, and rapid naming. In addition, there is evidence that upon entry into formal schooling, most migration

background children are producing about 500 words, in contrast to their non-migration background counterparts, whom, at the same time, are already producing about 3,800 words (Augst, 1985; Ribaric, 2010; Schwanke & Pütz, 1986). These children are generally showing weak interaction in the family, whom in most cases, do not speak German fluently or even at all. As such, parent-child book reading is not a common activity, and children have few chances to utilize the language outside of their home, before kindergarten or entrance into school (Becker, 2010; Kieferle, Nagel, 2007). Therefore, the kindergarten period, as a learning context outside of their family, plays an important role for those children, particularly for those that receive few inputs in the German language (Buschmann & Jooss, 2011; Roux, 2002). As a result, international, as well as national, language programs have emerged as a substantial support system in kindergartens, introducing new techniques in which teachers may better facilitate child language development (Buschmann & Jooss, 2011; Whitehurst et al., 1988).

Supported by the aforementioned literature, the aim of the present study is to longitudinally explore the effects of two shared book reading methods in children's emergent literacy. The present study will comprise home and kindergarten contexts and seeks to investigate the effects of two methods: Method I - the effects of the availability of 200 extra children's books, distributed in kindergartens in which children can borrow one book weekly and take it home, will be investigated. Method II - the effects of a professional kindergarten teacher training in shared book reading strategies will be investigated. In order to perform the professional training, the *Heidelberger Interaktionstraining für pädagogisches Fachpersonal zur Förderung ein- und mehrsprachiger Kinder (HIT)* (Buschmann & Jooss, 2011) program was chosen. Moreover, the study will investigate the effects of both methods combined. Age, gender, and migration background will be added to the analyses as being possible moderator factors. In regards to migration background, it is important to emphasize, however, that

second language acquisition will not be addressed here. The effects of the three intervention groups will be investigated in the following emergent literacy skills: expressive vocabulary, semantic skills, and grapheme awareness.

Regarding grapheme awareness, the present work will investigate how well a child is able to recognize a grapheme within a set of non-letter distractors. Previous studies (e.g. Sénéchal, LeFevre, Thomas & Daley, 1998), however, have investigated the effects of shared book reading on alphabet knowledge. This means that children's ability to name letters or to recognize a requested letter in the task has been investigated. In addition, these studies have also embedded in shared book reading additional explicit or implicit grapheme-phoneme conversion instruction (Ezell & Justice, 2000; Justice, Kaderavek, Fan, Sofka, & Hunt, 2009; Lovelace & Stewart, 2007). The literature suggests, however, that before children learn the names of letters, children need to understand that letters differ from other common graphic forms, as well as to understand their different purposes and functions (Robins, Treiman, Rosales, & Otake, 2012). Because grapheme awareness is shown to be one of the first step in learning to read and write (Lachmann, 2008; Lachmann & van Leeuwen, 2014; Lachmann, Schmitt, Braet & van Leeuwen, 2014), the present work aims to investigate the effects of shared book reading on children's grapheme awareness without any form of formal or informal instruction to parents and teachers on how to improve children's alphabet knowledge.

The present work is also an attempt to gain a better understanding of the role of shared book reading in both contexts in children's emergent literacy skills as well as to contribute to the current literature. Different from international research, Germany has conducted little studies about shared book reading and its effects. In addition to this, most of those studies have investigated the effects on children's language development, and to present knowledge, this study is the first one in which the effect of shared book on grapheme

awareness without letter instruction is investigated.

1.1 Outline of the Thesis Structure

After the introduction of the study, Chapter 2 presents the review of literature, which was deemed relevant to the purpose of the current study. The theoretical framework begins with an introduction on how literacy emerges and its components (e.g. oral language, print awareness, and alphabetical knowledge) while introducing and going through the significance of the home literacy environment, as well as the value of shared book reading. In addition, socioeconomic status and migration background is discussed, followed by an overview of shared book reading strategies, and findings from empirical studies on how shared book reading supports emergent literacy. Chapter 3 highlights the purpose of the study and research questions. Chapter 4 presents the design of the study, and includes the procedures for the intervention and measures for the data collection. Chapter 5 presents the collected demographic data from participants, followed by the results of the study (pre and posttest). Chapter 6 summarizes the study findings, as well as draws conclusions from the findings, and discusses some study limitations and implications. Chapter 7 concludes the study, and adds suggestions for future research.

2. Literature Review

2.1 Emergent Literacy

Shared book reading has long been considered an important activity that contributes to the development of child's literacy (Sénéchal et al., 1998; Whitehurst et al., 1988). The exposure to book reading increases a child's interest in reading fosters ideas about the world and encourages interactions between adults and children. Furthermore, previous studies have reported that shared book reading provides an ideal setting for language development (Bus et al., 1995; De Temple & Snow, 2003; Ennemoser, Kuhl & Pepouna, 2013; Neuman, 1996; Sénéchal, Lefevre, Hudson, & Lawson, 1996; Wasik & Bond, 2001).

However, before examining the many contributions of shared book reading, it is important to take a look at what exactly is emergent literacy. The term emergent literacy is used to denote children's skills, concepts, attitudes, and knowledge about reading and writing acquired prior to formal schooling (Arnold & Whitehurst, 1994; Deunk, Berenst, & Gloppe, 2013; Justice & Pullen, 2003; Phillips & Lonigan, 2009; Sénéchal, Lefevre, Thomas, & Daley, 1998). According to Whitehurst and Lonigan (1998) the emergent literacy perspective supports the idea that children's literacy¹ skills do not begin with formal schooling, but is indeed a continuous developmental process which begins very early in a child's life (Lonigan, 2007; Richter & Brügelmann, 1994; Sulzby & Teale, 1991; Whitehurst & Lonigan, 1998). From this perspective, there is a growing body of evidence underlining the significance of the child's preschool period of learning as being the most important period for the development of literacy skills (Gleason & Ratner, 2009; Hargrave & Sénéchal, 2000;

¹ Literacy is the ability to read and write (Näger, 2013). However, in a broader sense literacy extends beyond the basic acquisition of reading and writing. In its essence comprises the ability of understand texts and to express themselves through writing, means understand, the ability of understand linguistic abstractions, joying reading, and also familiarity with books (Speck-Hamdan, 2005; Näger, 2013).

Snow, Tabors, Dickinson, 2001; Whitehurst & Lonigan, 1998). Moreover, emergent literacy does not simply happen, but is part of a social constructive process, associated with children's relationships and everyday experiences such as shared book reading at home and kindergarten (Roskos et al., 2009; Sulzby, 1986).

2.1.1 Components of Emergent Literacy

Emergent literacy skills include the development of oral language (receptive and expressive vocabulary, listening comprehension), print awareness (print conventions, tracking), and alphabet knowledge (letter recognition, letter-sound) (for reviews see Zygouris-Coe, 2001). These emergent literacy components (see Table 1) are pointed as keys used to facilitate the acquisition of base knowledge of reading and writing (Allor & Mccathren, 2003; Dickinson & McCabe, 2001; Justice & Kaderavek, 2002; Pence & Justice, 2008; Whitehurst & Lonigan, 1998). The following topics will present de definition of each component.

2.1.1.1 Oral language

Oral language plays an important role in emergent literacy and “is the foundation of learning to read and write” (Roskos, Tabors & Lenhart, 2009, p.1). Klann-Delius (2008) argues that language is itself a complex task to acquire. For instance, complexities lie within the effort to learn speech sounds and words, to acquire the rules of their combination(s) to well-formed, meaningful sentences, as well as the application of this knowledge to cultural context. Language learning also entails how to express thoughts and feelings, describe events, tell stories, relay information, find answers, and participate in social activities, etc. (Klann-Delius, 2008). Children acquire oral language through natural interactions with others in their lives (Justice, Pence, & Beckman, 2005; Rowe, 2012; Tomasello & Todd, 1983; Tomasello

& Farrar, 1986; Vygotsky, 1978), “they develop and grow up as a social beings, immersed in a network of relationships from the start” (Clark, 2009, p. 21).

Table 1. Key areas of children’s emergent literacy. Retrieved and adapted from (Justice & Kaderavek, 2004)

Areas of Emergent Literacy	Description
Oral language	<p>Rich Vocabulary</p> <p>Use of specific syntactic/semantic features characterizing written texts (i.e., adverbs, conjunctions, mental/ linguistic verbs, elaborated noun phrases) in order to explicitly obtain meaning in decontextualized discourse.</p>
Print awareness	<p>Knowledge of how print is organized, including relationships between written language units (e.g., the letters that make up words) and the metalinguistic terminology used to describe print (e.g., letter, word, write). This also includes understanding how books are organized, the form and functions of environmental print, differential features of various print genre, and the development of writing skills.</p>
Alphabet knowledge	<p>Knowledge of the distinctive features and names of individual letters in both upper- and lower-case formats.</p>

According to the zone of proximal development, a theory developed by Vygotsky (1978), the interaction between child and adult is an effective way to develop language skills. Vygotsky defined the zone of proximal development as, “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (p. 86). The author argued that when children achieve, with the assistance of others, that this may be, in certain way, “more indicative of their mental development than what they can do alone” (Vygotsky, 1978).

Moreover, Roskos et al. (2009) presented the areas of oral language that contribute to a better language performance.

- Semantics: Developing meanings for the words children hear and say in their conversations with others.
- Syntax: Learning the rules of how words are linked together.
- Morphology: Learning how to manipulate the smallest units of meaning in the language (called morphemes). The word preschool, for example, has two morphemes: “Pre” (meaning before) and “school”.
- Phonology: Understanding the sound structure of words (Allor & Mccathren, 2003; Gleason & Ratner, 2009; Pence & Justice, 2008; Sonnenschein & Munsterman, 2002). In the first four years of life, children are mastering the production of those sounds that are relevant to their native language (Dickinson & McCabe, 2001).
- Pragmatics: Understanding the social uses of language as well as basic social rules, for example, saying “hello” and “goodbye,” saying “please” and “thank you,” and taking turns in a conversation.

According to Landry and Smith (2007), first language development (L1) comprises a variety of vocabulary that children acquire gradually. Between 2 to 6 months of age, children

typically produce vocalizations called 'coos'. Coos are mostly single-length vowel sounds like "ah" "eh" "uh" and are mostly made in the back of the mouth (Carroll, 2008). About 6 to 12 month old children begin to babble and combine consonant-vowel (CV) or vowel-consonant (VC) sounds. At this stage, two types of babble productions emerge. Reduplicated babbling is when children do repetitive short and long sequences of CV syllables (e.g., *ma/ma/*, */da/da*) and variegated babbling is when children do different sequences of consonants and vowels (e.g., */da/e/ga/ma/*) (Carroll, 2008; Clark, 2009; Klann-Delius, 2008). Sometimes spoken words such as “mama” and “dada” are coos when children make these sounds. However, there is no evidence that such productions are associated with any meaning (Carroll, 2008; Gleason & Ratner, 2009).

The first recognizable words, defined as a holographic stage, appear around 12 – 18 months. These words occur alone in single-unit utterances and express more than the attributed meaning of the single word (Carroll, 2008; Clark, 2009; Klann-Delius, 2008) . Most early word productions are nouns, for example *mama*, *auto*, *mehr*, and *nein*. Adjectives, verbs, prepositions and articles appear later (Szagun, 2013). After the first words appear, children begin to acquire new words slowly. Approximately between 18 and 24 months, the so called 'two-word stage' begins in which children make the switch from using one word to request something (e.g., “*auto*”) to combining words in order to make utterances (e.g., “*auto da*”) (Pence & Justice, 2008; Szagun, 2013). This stage also marks the beginnings of syntax. “Toddlers recognize the value that combining words has over using single words and can use language for many more communicative functions than they did in the one-word stage. Some simple functions that toddlers can express during the two-word stage include commenting (“Baby cry”), negating (“No juice”), requesting (“More juice”), and questioning (“What that?”)” (Pence & Justice, 2008).

On average, between 17 to 24 month old children could acquire a productive

vocabulary of about 40 to 50 words (Wode, 1988). After children acquire the first 50 words, there is a dramatic increase, or a spurt, in vocabulary (Klann-Delius, 2008). During this period children may learn very fast, on average of 7 to 9 words day (Pence & Justice, 2008).

According to Klann-Delius (2008), vocabulary is broken down into two categories: receptive and expressive vocabulary. Receptive vocabulary are the words that the child understands. Productive vocabulary are the words that the child can produce. The receptive vocabulary is developmentally earlier than the productive vocabulary. Children between three to four years of age could have a receptive vocabulary which ranges on an average from about 1,000 to 2,000 words and an expressive vocabulary ranging from about 800 to 1,500 words. Six-year-old children are believed to have a receptive vocabulary size around 9,000 to 14,000 words (Kauschke, 2012).

In respect to second language (L2) acquisition, there are two ways by which children may learn an L2, namely, simultaneously or sequentially/successively (Beller, 2008). Simultaneous bilingual children acquire both languages (L1 and L2) at similar rates before 6 months of age, whereas sequential bilingual children (e.g. some children with migration background) acquire their first language (L1) before age 3 and a second language (L2) later (Beller, 2008; Toppelberg & Collins, 2010). Sequential/successive bilingual children include, for instance, children exposed to one language at home and another language in kindergarten. The language competence of sequential bilingual children may vary depending on the skill sets acquired from extensive exposure to language, such as semantics (Beller, 2008; Oller, Pearson, & Cobo-Lewis, 2007; Toppelberg & Collins, 2010).

Justice and colleagues (2005) state that children learn most words without formal instruction, but instead, through social interactions with others. This means that there will be some considerable variations found within children's vocabulary (Hart & Risley, 1995), and as Justice and colleagues (2005) state, "building a solid foundation of concepts and the words

that label them before children enter school is crucial because children have an easier time learning new words if they already have several words under their belt” (p. 27). That means children that have a broad vocabulary can learn new words with more ease and speed than children with a small vocabulary range. According to Snow, Burns and Griffin (1998), this occurs because children exposed to new words may refine the semantic representations of words that they already have, and consequently, create relationships among the new words.

Children that have the possibility to improve their language have the chance to engage in more complex dialogues with adults (Pullen & Justice, 2003). Snow and colleagues (1998) suggest that during shared book reading for instance, the child can progress from only naming objects in the pictures to asking questions about the content in the text and relate it to their life. The ability to produce and comprehend complex sentences enables children to discuss abstract ideas, absent objects, and past events. The authors believe that “this decreased reliance on immediate context as a support for communication is a developmental accomplishment that may ease the transition to school, where decontextualized language is highly valued” (Snow et al., 1998, p. 49).

2.1.1.2 Print Awareness

Print awareness is one important aspect of emergent literacy and develops gradually over the course of childhood (Justice et al., 2005). This is the ability to understand that print has different functions and provides meaning according to the context in which it appears (menus, books, magazines, lists, telephone books). Moreover, print awareness includes knowledge that a word is made from letters and that it corresponds to speech, and is different from pictures (Adams, 1994; Clay, 1972; Mason, 1984; McCormick & Mason, 1986). According to Goodman (1986), children between 3 and 5 years old may learn that print carries the meaning. Print awareness is to understand that books have a title, and that the

words are read from left to right, or in languages such as Hebrew, from right to left (Allor & Mccathren, 2003; Clay, 1972; Justice & Kaderavek, 2004; Pence & Justice, 2008). Print awareness also includes knowing that there are spaces between words and periods at the end of sentences (Allor & Mccathren, 2003; Whitehurst & Lonigan, 1998).

Print awareness is related to the environment in which children grow up. Children from homes where print has an important place and where children are engaged in shared book reading, have the opportunity to handle such items as papers, pencils, crayons, and they see adults writing for many reasons. This exposure aids children in acquiring concepts about print (Adams, 1994).

2.1.1.3 Letter Knowledge

Letter knowledge was generally suggested as one of the strongest predictors of later reading and writing success (Adams, 1994; Clay, 2005; Honig, 2001; Mason, 1984; Schatschneider, Fletcher, Francis, Carlson, & Foorman, 2004; Whitehurst & Lonigan, 1998). Letter knowledge consists of the ability to distinguish between grapheme shapes (e.g., letters are different from numbers) and its orientation (Lachmann, 2002; Lachmann & Geyer, 2003; Robins, S. & Treiman, R., 2009), that each letter “which forms the smallest meaningful units of a written text” (Lachmann & van Leeuwen, 2014, p.1) has a distinct name, that there are upper- and lower case letters as well as to identify their sounds.

Adams (1994) states that the, “growth in orthographic competence depends integrally first on visual recognition and discrimination of the individual letters, and this implication is consistent with the evidence that letter recognition facility is strongly and causally related to success in beginning reading” (p. 346) (see Figure 1). In addition, according to the Functional Coordination model (Lachmann, 2002; Lachmann and van Leeuwen, 2014), learning to read requires coordination between two skills: visual object perception and the use of spoken

language. These skills are recruited, modified, coordinated and then automatized (Lachmann, Khera, Srinivasan, & van Leeuwen, 2012). This includes the modification of visual strategies applied to object recognition (such as pictures in a book) which are predominantly holistic. Accordingly, grapheme awareness may be seen as the very first step in this process of reading-specific modification of visual strategies required for learning to read and write (Lachman & van Leeuwen, 2014; Lachmann et al., 2012).

One important aspect of children's emergent literacy is to understand how print differs from another common graphic form, pictures. "As symbol objects, printed letters and pictures share some similarities: They are both two-dimensional marks made on surfaces. Children must learn that print looks different than pictures and, even more importantly, that it functions differently" (Robins et al., 2012, p. 2040). Both-de Vries and Bus (2014) suggested that the familiarizations with letter forms starts at an early age since children growing up in a literate society are continuously exposed to print. "Children's visual processing of letters may change and speed up as result of being exposed to letter forms" (p.157). Further, the authors suggest that when children are more familiar with the letter forms, they are in a better position to learn the letters' names and sound.

Therefore, shared book reading may support the development of this important prior condition for learning to read and to write (Lachmann & van Leeuwen, 2014), even before or at a very early stage of formal reading instruction (Nickel, 2007), i.e. before children learn grapheme-phoneme correspondences. Experiences and familiarity with the letters through activities such shared book reading (Justice et al., 2005) can help children to make the connection between the alphabet letters and their broader purpose in reading (Lachmann et al., 2012).

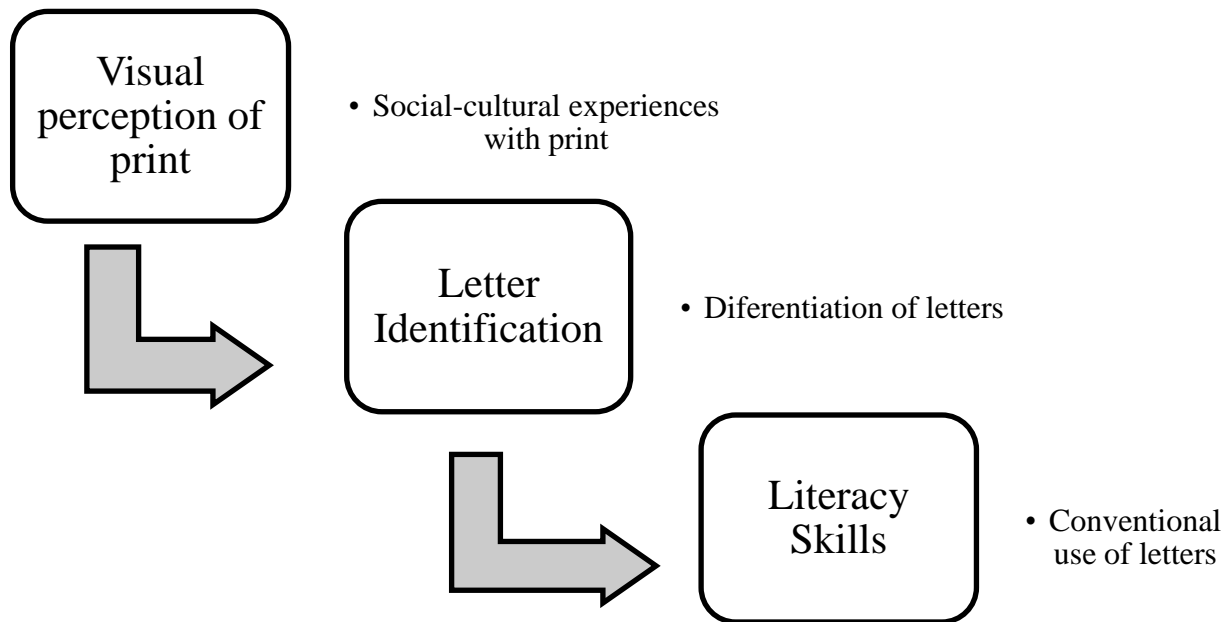


Figure 1. Emergence of print knowledge. Retrived and Adapted (Neumann, Hood, Ford, & Neumann, 2013)

2.1.2 Home Literacy Environment

The first year's life of a child is a critical time for her/his development, and the home is the first social environment in which children thrive and interact with family members. The home environment has been considerate as one of the most effective approaches that support emergent literacy skills (Jong & Leseman, 2001; Pence & Justice, 2008; Sénéchal et al., 1998). Home literacy environment (HLE) can be understood as partaking in activities such conversations between parents and children during mealtimes, playing with toys or reading books. Families can support emergent literacy by creating a home atmosphere in which reading, writing, talking, and listening are a natural part of daily life. Children who are born and grow up in such an HLE may frequently encounter various contexts at home that emphasize literacy, for example (Arterberry, Bornstein, Midgett, & Putnick, 2007; Dickinson & McCabe, 2001; Gleason & Ratner, 2009):

- Exposure to many different types of literature (Children's picture books, alphabet books, magazines, newspapers, and other reading materials)
- Children see adults reading for their own information and pleasure
- Children are read to frequently during the week
- Children are encouraged to ask questions and talk about the stories read to them
- Children have writing supplies readily available to them
- Children see adults writing for real purposes, such as making a grocery list or writing a letter
- Parents take the time to answer children's questions
- Children see their names in print on their belongings and in the home
- Parents talk with children about events taking place in and out of the home
- Frequent visits to public libraries and book stores with the children
- Visits to museums

In fact, such interactions might invoke a child's interest in understanding and mastering the language around them. In addition, such natural literacy opportunities, especially parent-child interactions during shared book reading, have been shown to stimulate a variety of oral language skills (Jong & Leseman, 2001). For instance, Crain-Thoreson and Dale (1992), reported in their study that the frequency of shared book reading in the home at age 24 months was a significant predictor of child language ability at age 2 ½ years and 4 ½ years as well as for print knowledge at 4 ½ years. Sénéchal (2006), also found relations between home literacy practices and language development. The author found that exposure to shared book reading was significantly related to vocabulary scores in kindergarten ($r = .26, p < .05$), reading comprehension in Grade 4, as well as the frequency with which children reported reading for pleasure in Grade 4.

Frijters, Barron, Roderick and Brunello (2000) reported in a study about home

literacy, that there was a correlation ($r = 0.43$) between the number of children's books at home and receptive vocabulary measure. They also found a correlation ($r = 0.39$) between the number of children's books in the home and how often the child is read to.

Lehrl, Ebert and Roßbach (2013) conducted a home literacy study with 343 German children. At baseline, children were about 3 years old and the researchers continued to collect data until the children were in Grade 2 of primary school. Results showed a strong correlation between reading comprehension with the quality of parent-child interactions ($r = .20, p < .05$) and book exposure ($r = .21, p < .05$). The authors were also interested in knowing what impact home literacy activities in the kindergarten years have on reading literacy in Grade 2. Regression analyses showed that shared book reading was related to reading comprehension ($\beta = .09, p < .10$).

A study conducted with 6-year-old children ($N = 193$) across Singapore (Yeo, Ong, & Ng, 2014) also investigated the effects of HLE and children's reading skills and reading interest. The children's ethnic distribution: 81.3% were Chinese, 2.6% were Malays, 9.8% were Indians and 6.2% were reported as 'other'. Results showed a moderate relationship between the HLE and children's word reading ($r = .41$), reading comprehension ($r = .37$) and reading composite ($r = .40$). Regarding home literacy activities which predicted children's reading interest, parents engaging the child in reading and writing was the best predictor ($\beta = .359, p < .001, p < .001$). Affect ($\beta = .253, p < .01$) and verbal participation ($\beta = .150, p < .05$) also showed to be a predictor of children's reading interest. The authors concluded that parents who were more involved in home literacy activities tended to have children showing advanced reading skills.

A recent study (Hutton, Horowitz-Kraus, Mendelsohn, DeWitt, & Holland, 2015) investigated the effects of the home reading environment and its relation to children's brain activity. While listening to an age-appropriate story, 3 to 5 year-old children ($N = 19$) had

their brain activity measured with an oxygen-level-dependent functional magnetic resonance imaging (fMRI). The results reported that higher reading experience and more books in the home are positively correlated ($p < .05$) with neural activation in the parietal-temporal-occipital association cortex (PTO). According to the authors, areas in the PTO are active during reading, and effectively assist in assigning semantics to letters and words (Dehaene, 2013; Shankweiler, Mencl, Braze, Tabor, Pugh, & Fulbright, 2008). In the study, the activation of the PTO is associated with the home reading environment, reflected in the recruitment of oral language skills, and supports context and semantics. Moreover, the authors concluded that children who had high home reading exposure were found to have activation in brain areas supporting mental imagery (when no visual stimulus is presented) and narrative comprehension. Further, children that can use mental imagery, “may better manage the transition from picture- to text-based books as they advance in school” (Hutton et al., 2015, p. 472).

However, many studies have indicated that those contexts at home, outlined, are related to socioeconomic status, parent education level and cultural backgrounds (Baker, Sonnenschein, Serpell, Fernandez-Fein & Scher, 1994; Hart & Risley, 1995; Leseman & Jong, 1998; Payne, Whitehurst, & Angell, 1994; Rodriguez & Tamis-LeMonda, 2011). Such factors may be directly linked to children's emergent literacy development. Section 2.3 will present further details on the impact of such factors.

2.2 The Value of Shared Book Reading

As previously mentioned, emergent literacy is strongly connected with later literacy skills. In an attempt to understand the correlations between emergent literacy and later literacy, many studies have aimed to examine which early literacy experiences could better support the development of emergent literacy. Several studies in children's early literacy are

giving widespread attention to shared book reading (Bus et al., 1995; Mason & Allen, 1986; Phillips & Lonigan, 2009; Sénéchal et al., 2008; Sulzby, 1985; Whitehurst, Arnold, Epstein, Angell, Smith & Fischel, 1994, Whitehurst et al., 1988). Reading and looking at books with children is widely indicated as one of the best ways for a child to successfully prepare for school (DeTemple & Snow, 2003). Bus (2003) argues that “there are of course, other literacy-related activities that contribute to children’s literacy development; however, book reading seems to be one of the most influential ‘natural’, literacy-related family activities” (p.3).

Shared book reading refers to an adult reading a book to a child or a group of children (Trivette & Dunst, 2007). Due to the fact that stories contain clues that help decipher the meaning of unknown words, shared book reading is a potentially rich tool for the development of skills such as vocabulary inference. Burgess (2002) for instance, investigated the relationship between shared book reading and oral language in 4 and 5 year old children. 115 children from middle class homes participated in the study. In addition to other measures, an HLE questionnaire was assessed via parental responses. The results of the study indicated that shared book reading is related to children's oral language ability, expressive and receptive vocabulary, as well as phonological sensitivity.

Sénéchal and colleagues (2008) conducted a study with 4-year-old children ($N = 106$) and one of the parents. The results showed that shared book reading at home was significantly related to expressive vocabulary (accounted for 10% of the variance), as well as morphological and syntactic comprehension of words and complex sentences.

In a quantitative meta-analysis comprising 33 studies ($N = 3,410$) Bus and colleagues (1995) reported that shared book reading has a stronger association ($d = .59$) with later literacy, accounting for about 8% of the variance in outcome measures. The results supported the hypothesis that shared book reading has at least a modest correlation with child language

growth, emergent literacy and reading achievement.

A longitudinal study conducted by Karrass and Braungart-Rieker (2005) investigated the effects of shared parent-infant book reading on children language abilities when children were at 4 and 8 months of age ($N = 87$) and again at 12 and 16 months of age. The results showed that shared book reading at 8 months was related to language abilities at 12 months ($F(1,30) = 6.16, p < .05$); they also found a statistically significant effect on expressive language ($F(1,30) = 3.04, p < .05$). For the 4-months-old children no significant effect related to later language was found.

Through shared book reading, children begin to understand that there is a difference between pictures and printed letters, that the print letters can create words and, consequently represents language which can be read from left to right (Goodman, 1986; Snow & Ninio, 1986). In addition, shared book reading introduces to children a useful context of pictures and symbols that allow them to play and be creative at the same time (Beals, De Temple, Jeanne & Dickinson, 1994; Wells, 1986). The possibility to speak, write and/or act in their own stories allows for the recognition of the difference between oral and written language (Justice & Kaderavek, 2002; Lonigan, Burgess, & Anthony, 2000; Sulzby, 1986; Sulzby & Teale, 1991). Another benefit of shared book reading is that the books offer more sophisticated words and complex language than children normally encounter in spoken language (Duursma, Augustyn, & Zuckerman, 2008; Wells, 1986). Hayes and Ahrens (1988) analyzed three different categories of language, namely: written language sampled anywhere from preschool books to scientific articles, words spoken on different types of television shows and adult speech. They found that children's books contain 50% more rare words than found in television or conversations with peers.

A recent study (Montag, Jones, & Smith, 2015) also analyzed the words found in children's books with those found in child-directed speech. For the study, 100 recommended

books for children between 0 to 60 months of age were selected, and the lexical diversity to parent-child conversations (children aged between 0 to 60 months) were compared. Using a type-token method, the authors found that picture books contained 1.72 times more unique words than child-directed speech, and that the words found in the picture books are from a more diverse set of vocabulary items. The authors conclude that children whose parents read to them on a frequently basis are exposed to words that they would have never found in speech alone. Moreover, books support the production of a set of relatively uncommon words. Montag and colleagues (2015) suggest that, “each book may be different from others in topic or content, opening new domains for discovery and bring new words into play” (p. 6). Nagy (2007) states, however, that the difference between the text found in books and normal conversations is not exclusively a matter of unknown vocabulary or more complex syntactic structures, but also a difference in the way that language is used and processed. Accordingly, the language found in books is almost decontextualized.

Decontextualized language refers to an abstract way of speaking used to share information about something removed from the immediate context (Curenton & Justice, 2004; Hindman, Wasik, & Erhart, 2012). Decontextualized language (synonymous with the terms immediate or concrete) (Hindman et al., 2012) uses cues to connect the story to the children’s own life experiences by adding information or drawing inferences or conclusions. The utterances in a decontextualized language are usually longer, require the use of a more precise vocabulary, and require children to engage in higher level reasoning (Morgan & Goldstein, 2004; Rowe, 2013). In contrast to this, contextualized language is typical of everyday face-to-face conversations, which are more similar to other conversations with repetitive components, and is aimed at understanding individual pieces of the story in and of themselves (Hindman et al., 2012; Montag et al., 2015). It provides a lower demand opportunity to focus on new words or concepts. Contextualized language is conveyed through

extra-linguistic devices, for instance, gesture, intonation, facial expressions, and share information about the here and the now (Curenton & Justice, 2004; Hoff, 2013; Nagy, 2007).

2.2.1 The nature of Parent-Child Shared Book Reading

Some studies have aimed to investigate the practices of adult- child book reading and have tried to discover effective strategies during shared book reading that would optimize child language development. (Wasik & Bond, 2001; DeTemple, 2001, Dickinson & Smith, 1994). Bus (2003) states that only parents reading a text aloud to children is not enough to learn from being read to, much less a motivation for younger children who stories may not be attractive by themselves. That means parents should have to find ways to make the book interesting to the children.

According to Ninio and Bruner (1978), the adult possesses a skill that the child either lacks or has a very primitive sense of. Therefore, in order to bridge the gap between their own world and the one found in the books, active parental presence is needed, especially during the time when children are unfamiliar with the structure of stories and the way in which sentences are constructed (Bus, 2003; Wells, 1986). In the study about child-mother joint attention, Tomasello and Todd (1983) found that children who engaged in longer periods of joint attention with their parents had a larger set of vocabulary. The shared meaning between the adult and the child is a central component that facilitate specific aspects of child language development (Tomasello & Todd, 1983). Farrant and Zubrick (2012) also reported the importance of joint attention and parent-child book reading for the development of early vocabulary. The benefits of shared book reading are, “strongly dependent on how parents supported their children” (Bus, 2003, p.4).

Studies have identified a number of adult interactive behaviors that affect the quality of parent-child book reading such as, questioning, scaffolding dialogue and responses, praise

or positive feedback, offering and extending information, clarifying information, sharing personal reactions, restating information, and directing discussion and relation concepts to life experiences (Morrow & Gambrell, 2000).

Flood (1977) in a descriptive correlational approach, investigated the relationship between parental reading style and child performance on pre-reading related tasks. In the Study, fourteen components of the parent-child reading situation were identified; six of which revealed to have a broad importance, namely:

- 1) Total number of words spoken by the child,
- 2) The number of questions answered by the child,
- 3) The number of questions asked by the child,
- 4) Warm-up preparatory questions asked by the parents,
- 5) Post-story evaluative questions asked by the parents and,
- 6) Positive reinforcement by the parents.

Further, Flood (1977) reported parent- child interactive reading to be a ‘cyclical’ model involving four steps that parents should pay attention to in order to gain effective results from the reading activity: First step – children gain from preparation to reading warm-up questions (“Do you want to read this book?”). Second step – children need to be part of the process (asking and answering questions, relating content to experiences). Third step – parents need to reinforce children’s efforts. Fourth step - post story evaluative questions need to be asked (“did you like the story?”, “Do you think Danny’s mothers liked the gift?”). Such questions complete the cycle and help children learn to assess, evaluate, and integrate (Flood, 1977). Flood (1977) argued that, “children need to be involved in the story from beginning to end; they need to interact with the reader – their parent – to extend ideas, to question their own understanding, and to relate their ideas to experience” (p. 867).

Ninio & Bruner (1978) investigated in a longitudinal study the achievement of

labeling during a mother-infant shared picture-book reading. The sessions were video-recorded in the home once every two to three weeks. The authors found four interactive dialogues routinely characterized by the mother, namely: 1) attentional vocative dialogue (“Look!”), 2) questions (“What’s that?”), 3) label (“There are rabbits”, “It’s a ...”), and 4) feedback (“Yes”, “You are right”, “Yes, it is”) (Ninio & Bruner, 1978).

To make adults more involved and encourage them to initiate conversations with the children, Wells (1986) suggested:

- When the child appears to be trying to communicate, assume he or she has something important to say and treat the attempt accordingly;
- Because the child’s utterances are often unclear or ambiguous, be sure you have understood the intended meaning before responding;
- When you reply, take the child’s meaning as the basis of what you say next – confirming the intention and extending the topic or inviting the child to do so him- or herself;
- Select and phrase your contributions so that they are at or just beyond the child’s ability to comprehend

De Temple & Snow (2003) give much importance to the “non-immediate talk” that is produced by adult-child book reading interactions which go beyond the text or illustrations. Such talk makes connections and predictions to the child’s experiences, to books that were already read, discusses the meaning of the words, adds information, etc. Furthermore, the authors presented the book reading quality (global rating of reader performance) that combines: reading intonation, reading fluency and comfort level. De Temple and Snow (2003) argue that “readers who include little or no talk about the book may nonetheless successfully engage children through the use of an effective, animated, and lively reading style that demonstrates their own enjoyment and comprehension of the story” (p.26).

A study which took place in New Zealand by Reese, Cox, Harte and McAnally (2003) investigated different reading styles of mothers to their 40- and 58-month-old children ($N = 40$). The children and their mothers were divided into group 1 and group 2. The families were visited three times by the researchers who provided them with unfamiliar storybooks. The mothers were asked to read the books in their usual way. The sections were audiotaped. In order to look at the level of comments during book reading, the authors developed coding categories for maternal utterances (See table 2) (Reese, et al., 2003). As a result, the group 1 denominated *describers* requested more labels, provided and requested more picture descriptions and requested more evaluations. The group 2 denominated *comprehenders*, provided significantly more evaluations and inferences, and requested and provided more personal experiences.

In addition to the above aforementioned, the amount that children are exposed to written language also plays an important role, particularly for vocabulary expansion (Nagy, Anderson, & Herman, 1987). Wells (1985) showed that the amount of time that children listened to stories between 1 and 3 years of age was significantly correlated with their language skills at 5 years of age and their reading comprehension skills at 7 years of age. Similarly, Stevenson and Fredman (1990) reported a relation between the frequency of parent-child shared book reading and their child(ren)'s reading, spelling, and IQ scores, first when their children were in preschool and again when the children were 13 years old.

Table 2. Coding maternal utterances during book reading. Retrieved from Reese, Cox, Harte and McAnally, (2003), p. 43.

Code	Description
Labels	Labels request or provide character identification and labeling of objects, colors and animals.
Picture descriptions	Descriptions request or provide an explanation or elaboration of plot information beyond that given in the text, but focus on what has happened or is happening in the text, rather than on why it has happened.
Evaluations	Evaluation request or provide a judgment or state an individual's personal preference.
Inferences	Inferences request or provide predictions about what will happen in the story in addition to reasoning about mental states and causality in the story.
General Knowledge	General knowledge utterances request or provide information about the real world, including definitions and counting routines.
Whole book	Whole book comments request or provide title and author information or print concepts.
Confirmation / correction	Confirmations confirm the partner's previous utterance, often consisting of a repetition plus yes, right, or good. Corrections correct the partner's previous utterance.
Personal experience	Personal experiences request or provide a connection between the child's experiences and the text.

2.3 Family Social Class Differences

Snow and colleagues (1998) argue that many factors may be involved in children becoming at-risk for learning failure: organic conditions (cognitive deficiencies, hearing and visual impairment, attention deficit, specific language impairment, etc.); limited acquisition of literacy skills and family-based factors such as the home literacy environment, migration background, and socioeconomic status (SES). In the present study, the family factor will be controlled for.

Many children in early age, due to the immersion in a home environment rich in literacy, have the opportunity to experience and acquire the fundamental concepts of emergent literacy. Consequently, the school life unfolds relatively effortlessly for such children (Justice, Chow, Capellini, Flanigan, & Colton, 2003). However, Payne and colleagues (1994) state that there is a substantial variability in the home literacy environment which may have significant effects on child language development and later reading. These differences appear to be a consequence of parental education and family income (Arterberry et al., 2007).

Neuman (1996) argues that such variability in many families have a strong influence in parents' participation and involvement in their child's educational experiences. Many children from low-SES homes are often reported to have limited exposure to oral language (Ninio, 1980), interact seldom with written language and have few resources available to them (Payne et al, 1994). These children belong to families that have limited to no resources to vital learning materials such as books, papers and pencils and have few hours of shared book reading exposure (Adams, 1994). Baker, Fernandez-Fein, Scher and Williams (1998) showed that 90% of the middle-income parents reported daily shared book reading, whereas 52% of the lower-income parents reported reading books daily with their children. Visits to public libraries and book stores for many children, and even exposure to adults who like to

read for themselves, is uncommon (Justice et al., 2003). Raz and Bryant (1990) in their study showed that middle-income parents reported more trips to the library, more books owned by the child, and more parent-child reading time. Adams (1994) states that, “children from these homes not only miss the literacy coding of their parents, but grow up in a larger environment where reading and writing are peripheral and peripherally value activities” (p. 87). Aram and Levin (2001) for instance, conducted a study on the relation between emergent literacy and socioeconomic status with forty-one low SES children (5;5-6;0 years old) and their mothers. The researchers found differences in all sociocultural background factors including maternal literacy, children literacy tools, activities at home and maternal mediation. Many studies show that a considerable number of children from low-income families that enter kindergarten with low language skills usually tend to be behind those from higher income families (Adams, 1994; Clay, 1972).

Hart and Risley (1995) in a longitudinal study examined the effects of home experiences on children’s language development. The researches recorded and analyzed the verbal interactions in families when children were 10 months old up to 3 years of age. 42 families participated in the study. Based on the parent’s occupation, educational level, and family income, the families were grouped into three socioeconomic categories: professional ($N = 13$), working-class ($N = 23$) and welfare-dependent ($N = 6$) (For more detailed information see Hart and Risley, 1995; 2003). The results of the study revealed that 86% to 98% of the words used by each child by the age of three were derivate from their parents’ vocabulary. In addition, children from welfare families heard an average of 616 words per hour while those children from working-class families heard an average of 1,251 words per hour and those from professional families heard an average of 2,153 words per hour. Furthermore, the results revealed that the children from the welfare families had experience with almost 13 million words - much less than the working-class (26 million words) and

professional families (45 million words) (See figure 2) (Hart & Risley, 1995; Hart & Risley, 2003).

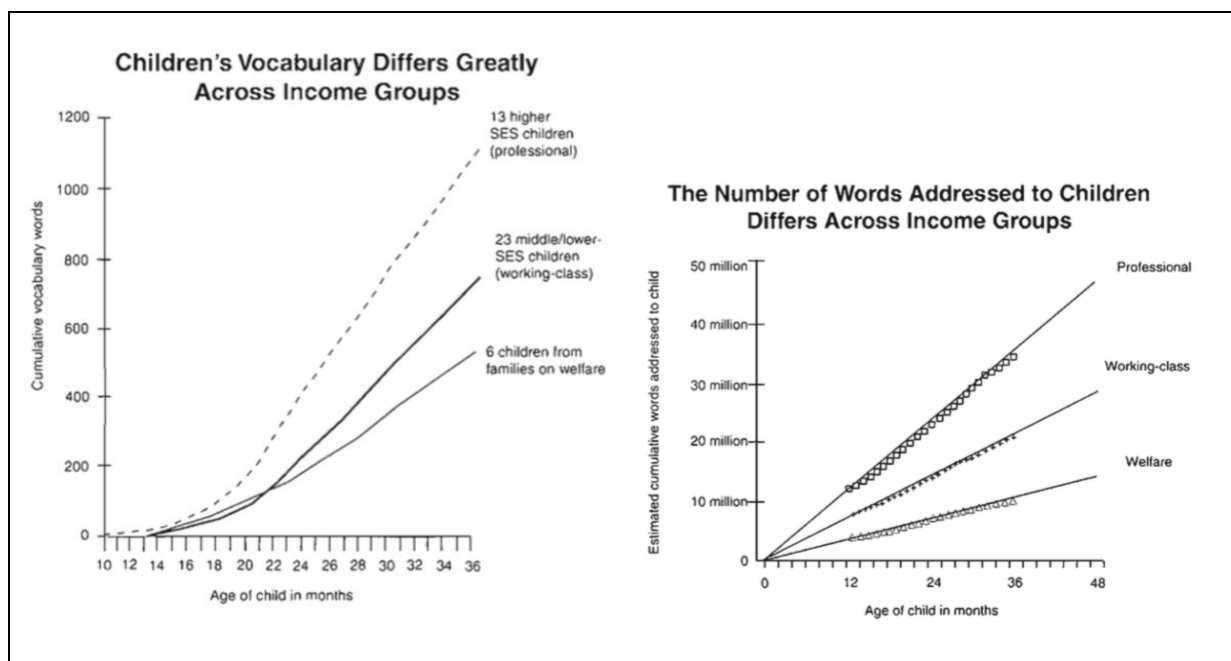


Figure 2. Children's Vocabulary Differences (Hart & Risley, 2003).

To ensure the long-term implications of home experiences on language development, 29 of the 42 families participated in a follow-up child evaluation of school performance when the children were in third grade. Researchers found that vocabulary usage at age three was associated with scores at the ages of nine and ten on receptive vocabulary ($r = .58$) and language development ($r = .74$) (Hart & Risley, 1995).

There are also differences between the low SES groups regarding adult-child interactions. For instance, a study conducted by Weisleder and Fernald (2013) with infants from low SES Latino families (living in the United States), reported variability in the total amount of adult speech to the infant. Across the 29 participant families, over the course of 10 hours, the amount of adult speech accessible to the infant ranged from almost 29,000 adult words to fewer than 2,000 words.

Ninio (1980) performed a study in Israel which investigated vocabulary acquisition

during mother-child picture-book reading ($N = 40$) within two social classes: middle and lower. The children ranged in age between 17 and 22 months. The results revealed that high-SES mothers spoke about 20% more words and 30 % more utterances than low-SES mothers. Low-SES mothers used scarce vocabulary to describe pictures. They pointed out and taught the names of 17% less objects, 24% less actions, and 47% less attributes. Moreover, low-SES children showed to produce less vocabulary than the high-SES children (Ninio, 1980).

Teale (1986) investigated home background influences on child literacy development for a period ranging from 3 to 18 months. In the study, 22 low-income families participated, with children between 2 1/3 and 3 1/2 years of age, from a community in San Diego, U.S.A. The results showed that child shared book reading in most homes was not a regular part of the practices of everyday life. The book reading activity occurred four or five times a week for three houses, whereas in 19 households, reading occurred only about five times per year. For one child shared book reading averaged 26 minutes per day. For the other 23 children, it averaged less than 20 minutes per month or less than 4 hours per year.

The study conducted by Dickinson and Snow (1987) examined two social classes ($N = 15$, middle-class, and $N = 18$, working class) and their differences in children's emergent literacy skills in the environmental context. The kindergartens (mean age: 5 years 2 months) that participated in the study were described as excellent regarding literacy activities. The results reported that middle class children showed significant and sizable scores on all three pre-reading measures (literacy, print decoding – alphabet knowledge, print production, and comprehension). The authors suggested that all children from both social class groups have some exposure to literacy-related activities, however, low SES children may have less exposure, resulting in a limited acquisition of those concepts. In terms of early literacy skills, Dickinson and Snow (1987) concluded that attendance at high-quality kindergarten was not sufficient for balancing the difference of the two social groups.

Adams (1994) reported that a child from a middle class family enters first grade at age six with 1,000 to 1,700 hours of one-on-one storybook reading whereas a child from a low-income family enters with 25 hours. Large social-class differences have also been found in the availability and usage of printed materials in the home (Feitelson & Goldstein, 1986; McCormick & Mason, 1986).

The longitudinal work conducted by Fernald, Marchman, and Weisleder (2013) followed 48 infants (aged 18 to 24 months) using real-time measures of spoken language processing. One of the goals was to examine differences in the crucial aspects of early language development in relation to family SES. The authors differentiated between words overheard from television and adult conversations and those directed at the children. The authors found that differences in SES were significantly correlated with vocabulary as well as with accuracy and reaction time. Children at 18 months of age, from higher SES showed more advanced vocabulary, ($p < .02$), more accuracy, ($p < .001$), and speed, $r = -.50$, $p < .001$ in spoken word recognition. SES also showed to correlate with the language measures when children were at 24 months old: vocabulary: $r = .29$, $p < .05$; accuracy, $r = .30$, $p < .05$; reaction time, $r = -.45$, $p < .001$. Moreover, some low SES children at 18 months ($N=12$), showed to have a vocabulary of fewer than 50 words, whereas only eight children of high SES showed to have a vocabulary of about 50 words or less. Further, high SES children at 24 months produced on average 450 words, while low SES children produced about 150 fewer words.

Parallel to the SES, another factor that has gained attention in studies on the home literacy environment and child literacy development, is migration background status (Becker & Beck, 2011; Biedinger, 2009; Duursma, Romero-Contreras, Szúber, Proctor, Snow, August & Calderón, 2007; Paetsch, Wolf, Stanat, & Darsow, 2014; van Steensel, 2006).

2.3.1 Migration Background in Germany

The flow of migration has occurred throughout time, in all places, and Germany is no exception in this regard. Today, many immigrants make up a considerable proportion of the German population. In compliance with the Statistisches Bundesamt (2013), the following defines the term migration background:

- **1. Generation** - Parents and children who immigrated to Germany
- **2. Generation** - Parents immigrated but the children are born in Germany
- **3. Generation** - Parents and children are born in Germany
- **4. Unilateral migration background** - corresponds to the children whose only one parent has migration background.

According to the Mikrozensus², in 2012 approximately 16.3 million persons with migration background lived in Germany (see Figure 3). That corresponds to 20 percent of the total population (Statistisches Bundesamt, 2013). The majority group of migrants in Germany are from Turkey (18%) followed by Poland (9%) and Russian (7%) (Statistisches Bundesamt, 2013).

Migrant groups bring with them different migration experiences, cultures, traditions, values, norms and religious beliefs, different languages, socio-economic backgrounds as well as varying levels of education (Schmidt & Eichhorn, 2007). In addition to the heterogeneity that forms the migrant community in Germany, they also present differences compared to the German without migration background.

² The Mikrozensus is an official sample statistic, conducted annually and survey one percent of all households in Germany. The Mikrozensus contains important structural data about the population (including detailed information about migration background), questions about family and household context as well as employment, family income, education and professional training.

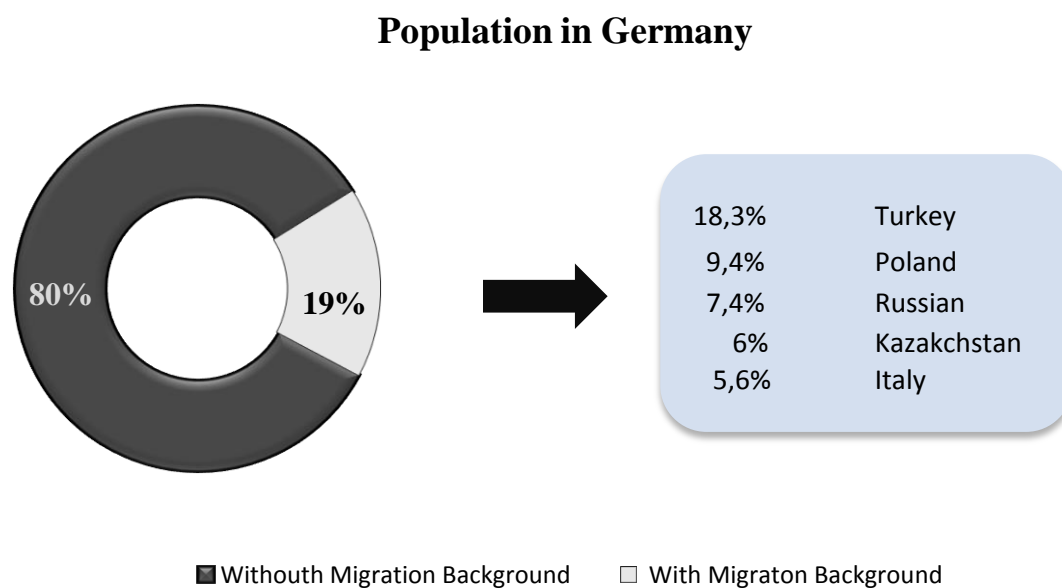


Figure 3. Population in Germany (Statistisches Bundesamt, 2013)

Persons with migration background have, in many cases, low socioeconomic status, low education level, and a lack of proficiency in the German language. This fact is often reflected in a difficulty finding adequate work in the German labor market compared to individuals without migration background (Schmidt & Eichhorn, 2007). According to Mikrozensus (2012), 13,9% of persons with migration background do not have a school degree and 40.1% have no work qualifications, whereas the corresponding percentages for the without migration background are 1.8% and 15.5%, respectively (Schmidt & Eichhorn, 2007, Statistisches Bundesamt, 2013). Tardaguila (2007) argues that this lack of economic resources combined with the low levels of education of migrant parents or parents with migration background, influences the educational outcome of these children.

Regarding the children with migration background, the ones under 5 years of age alone accounts for 30% of the child migrants aged 0 – 15 years (Statistisches Bundesamt, 2013). The children under 5 years of age do not represent a minority (see Figure 4). In the

following topic, the relationship between children with migration background and level of education, according to some (inter)national studies will be presented in more detail.

Children Population in Germany

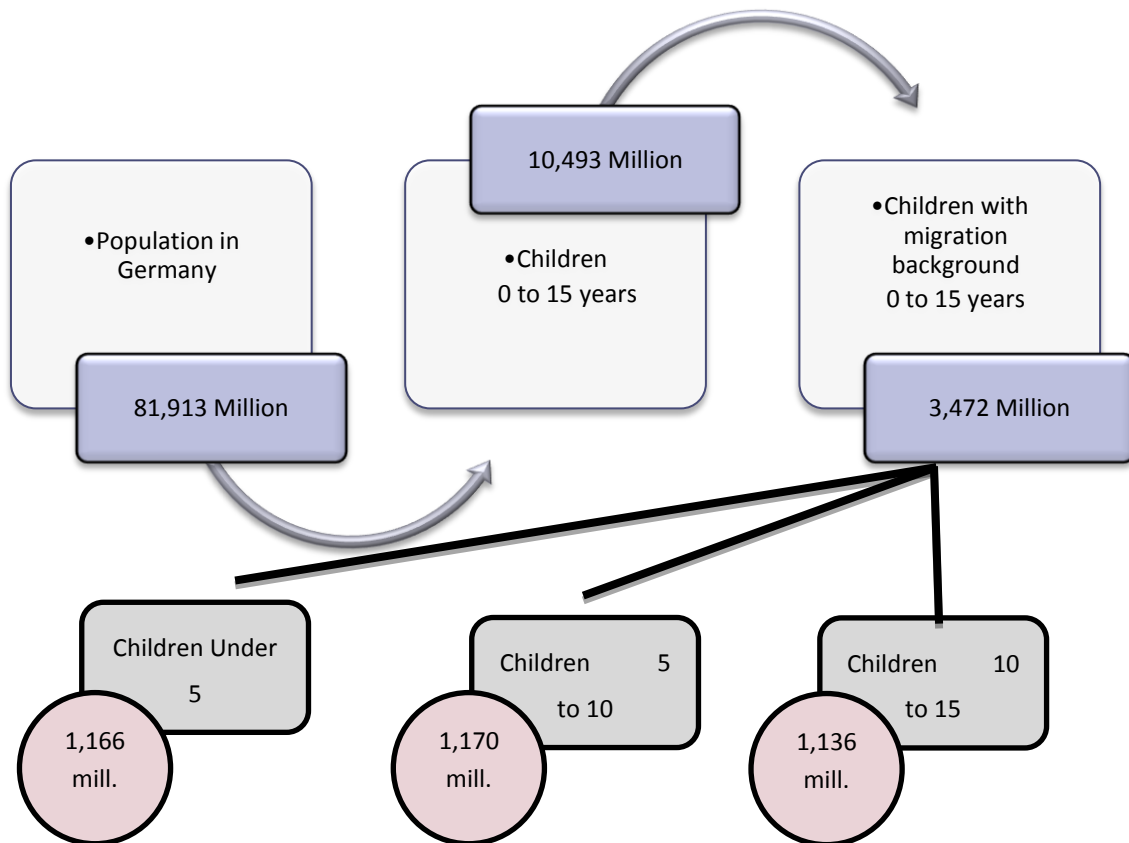


Figure 4. Overview of children population with and without migration background in the age range of 0 to 15 years.

2.3.2 Education and Children with Migration Background in Germany

Since education is widely described as a key to integration and offers more equality of opportunities, children with migration background and their school performance are a topic of educational and political German debate.

The discussion in Germany became more intense after the results of international studies such as PISA³ and IGLU⁴. These studies brought to light the disparity in terms of school achievement between those with and without migration background and pointed to those children with migration background and with low socioeconomic status as more disadvantaged compared to their peers without migration background (Biedinger, 2009; Fereidooni, 2011). The results of the PISA 2000 for instance, showed a big disparity. The differences in reading literacy performance between children and adolescents with and without migration background in most other participating countries, was lower than in Germany. Compared to the scores of other OEC⁵ countries, took Germany at the 21 place, below to the OECD average (Baumert, Klieme, Neubrand, Prenzel, Schiefele, Schneider, Stanat & Tillmann 2001; Roux, 2002).

The following are the results:

- 10% of the students did not even reach the lowest level of the five proficiency levels on the reading literacy scale

³ PISA (*Programme for International Student Assessment*) is a triennial international survey which aims to evaluate education systems worldwide by testing the skills and knowledge of 15-year-old students. The study was initiated by the Organization for Economic Cooperation and Development – OECD as part of its INES program, which provides the OECD member countries with internationally comparable data about their educational systems. PISA covers three areas: reading skills, mathematical literacy and scientific literacy. The definition of the areas covered not only the mastery of the intended curriculum, but also has important knowledge and skills that in adult life needed. The study across curricular competencies is an integral part of PISA. The main focus is on the mastery of processes, the understanding of concepts, as well as the ability to deal with a range of different situations. The first study in 2000 had a total of 32 countries, 28 where members of the OECD. Artelt, Baumert, Klieme, Neubrand, Prenzel, Schiefele, Schneider, Schümer, Stanat, Tillmann & Weiß, (2001).

⁴ IGLU (*Internationale Grundschul-Lese-Untersuchung*) is an official German translation of the PIRL – Progress in International Reading Literacy. IGLU is an international comparative study of students' reading literacy performance at the end of the fourth grade. The study is performed every five years. The focus of the IGLU is aimed not only at student school performance, but also at evaluating students' home life and factors which might affect performance. Germany has participated since the first study in 2001 (Bos, Lankes, Prenzel, Schwippert, Walther & Valtin, 2003).

⁵ OECD (*Organisation for Economic Co-operation and Development*) is an international economic organisation of 34 countries founded in 1961 to stimulate economic progress and world trade. It is a forum of countries committed to democracy and the market economy, providing a platform to compare policy experiences, seek answers to common problems, identify good practices and coordinate domestic and international policies of its members. For more details see <http://www.oecd.org/>

- 13% of tested students only reach the lowest proficiency level and almost 10% are not even proficient at this level
- Almost one-quarter (23%) of the students can only read at an elementary level⁶
- 42% of the students indicated not reading for pleasure, whereas the OECD average was 31%

The PISA Study 2000 brought forward a differentiated picture of education in Germany (Fereidooni, 2011). The large disparities in students' performance compared to the other countries placed this German group in a so called at-risk group (Baumert, Klieme, Neubrand, Prenzel, Schiefele, Schneider, Stanat & Tillmann, 2001; Roux, 2002). For such poor performances, the following were detected (Baumert, Klieme, Neubrand, Prenzel, Schiefele, Schneider, Stanat & Tillmann, 2001; Fereidooni, 2011):

- 21,7% of the students have migration background (about 70% have been in the German kindergarten system)
- Low socio economic status
- About 15% of the students assigned to the at-risk group were not identified as poor readers by their teachers

Despite the effort made after the results of the first PISA study, children with migration background still showed less school participation and less school achievement than the children with no migration background (Kiziak, Kreuter, & Klingholz, 2012). Regarding the end of kindergarten (around six year-old), an average of 40% children with migration background have problem in mastery the German language (Schöler, Roos, Schäfer, Dreßler,

⁶ PISA distinguishes five levels of reading ability. They describe the ability to solve tasks in many degrees of difficulty. Among others, the difficulty depends on the text complexity and the students' familiarity with the subject. "For example, students proficient at Level 5 on the reading literacy scale (expert level) are capable of locating information that is deeply embedded in a text, even when the content and form of the text are unfamiliar and it is necessary to infer which information is relevant to the task. In contrast, students who are proficient at Level 1 (elementary level) are able to find explicitly stated information in familiar text types only if these contain little competing or distracting information. The proficiency levels make it possible not only to rank students' performance but also to describe what they can do Baumert, Klieme, Neubrand, Prenzel, Schiefele, Schneider, Stanat & Tillmann, (2001).

Grün-Nolz & Engler-Thümmel, 2002). Moreover, they are often in *Förderschulen*⁷ and *Hauptschulen*⁸ and less often at *Realschulen*⁹ and in special *Gymnasien*¹⁰ (Schmidt, 2012). According to Schmidt (2012), 40.9 percent of the students with migration background reached only a secondary school qualification (*Hauptschulabschluss*) whereas the proportion for those without migration background corresponded to 23.5 percent.

In most cases when they enter school and begin formal reading instruction, they demonstrate the lack of emergent literacy abilities that are necessary for learning to read and write successfully. “This lack of skills can result in the inability of students to become literate” (Tardaguila, 2007, p.18). In many cities in Germany the number of children with migration background that repeats the same grade level is twice high as compared to the children without migration background. Moreover, one out of every fourth children with migration background attend a school where the migrant population is the majority, whereas each one out of every twenty children without migration background go to school where the migrant population is the majority (Leisen, 2013). Those children that do not speak German at home make up the concentration. According to Leisen (2013), each sixtieth child speaks their homeland language with friends.

The literature has pointed to the lack of German language skills as a main cause for school failure for some of the children with migration background (Artelt, Baumert, Klieme, Neubrand, Prenzel, Schiefele, Schneider, Schümer, Stanat, Tillmann & Weiß, 2001; Baumert, Klieme, Neubrand, Prenzel, Schiefele, Schneider, Stanat & Tillmann, 2001; Becker, 2011; Becker & Beck, 2011; Biedinger, 2009; Fereidooni, 2011; Kiziak et al., 2012; Stanat, Rauch, & Segeritz, 2010; Tardaguila, 2007). However, in respect to equality of opportunity in a social and political sense, language is the foundation in which life is actively structured and

⁷ *Förderschule* is a German school for children with learning difficulties.

⁸ *Hauptschule* is a German secondary school leaving certificate (fifth to ninth school year).

⁹ *Realschule* is a German secondary school leaving certificate (fifth to tenth school year).

¹⁰ *Gymnasium* is a German high school leaving certificate (fifth to twelfth or thirteenth school year).

interpersonal relations are conducted in a pluralistic society (Bäck & Haberleitner, 2011). However, many of these children do not have enough language stimulation in their maternal languages much less in German and they generally interact in a weak fashion in the family (Becker, 2010; Kieferle & Nagel, 2007). Thus, these children are at a disadvantage and will be faced with unequal opportunity issues in society.

Furthermore, most children have few chances to use the language outside of home. Most families with migration backgrounds live in neighborhoods with their peers, (same homeland, same language and culture) where cultural facilities, stores, and restaurants in the respective language of origin, do not allow informal learning of the language, in this case, German (Kiziak et al., 2012). A certain degree of segregation shows that 43,7% individuals from families with migration background live in big cities (Minimum of Inhabitants number – 100.000) and only 28,1% are without migration status (deGroot & Sager, 2010; Friedrich, 2008). For instance, according to deGroot and Sager (2010), in some regions of Berlin more than half of the residents have a migration background. In particular families with Turkish and Eastern European roots live in neighborhoods where many families from their own group of origin live as well.

For Kiziak and colleagues (2012) these points are completely interconnected with the fact that migrants have on average lower income, education, and a higher rate of unemployment than those without migration background. According to Leisen (2013), about a fifth of the children attending *Hauptschule* with migration background in Germany works in a problematic learning context, they present low cognitive abilities, learn difficulties and behavior problem.

2.3.3 The Profile of German Kindergarten Settings

Most low SES children including those with migration background often come to

kindergarten with low vocabulary levels. For example, upon entry into a formal school system, children with migration background produce on average about 500 words in contrast to the children without migration background whom can produce already about 3,800 words (Augst, 1985; Ribaric, 2010; Schwanke & Pütz, 1986). For those children that get few inputs in the German language and have not experienced enough informal literacy activities at home, the learning contexts outside of the family, such as those in kindergarten, play an important role.

However, regarding kindergarten settings, it is important to note that there are differences between kindergartens in other countries (e.g. USA, Canada, and Brazil) and the German kindergarten. In countries other than Germany, kindergartens foster a gradual and pedagogical variety of instruction. Typically, the kindergartens offer many opportunities for learning letters, names and sounds, as well as exposure to pre-reading activities that call attention to the phonological segments of words. The culture of home literacy facilitates the acquisition of letters and letter names by the time they enter kindergarten (Mann & Wimmer, 2002). On the other end, in Germany children typically attend kindergarten from age of 2 or 3 years until school entry at the age of 6 years. These Kindergarten groups are typically mixed in age, usually with several educators being simultaneously in a group of 10 to 25 children. The kindergarten model has had its long tradition of focusing on social pedagogy; thus, education in kindergarten institutions has not been properly defined as a school oriented model and has no uniform curriculum (Leu & Schelle, 2009; Ping, 2012).

The onset of literacy instruction is delayed until children are in the first grade. The kindergarten years are spent on activities other than letters and reading such that most children arrive in first grade without reading ability and with very limited letter knowledge (Mann & Wimmer, 2002). The professionals that work in kindergartens have therefore been regarded not only as teachers, as well as in primary education or secondary education, but as

Erziehern – Erzieherinnen educators or social pedagogues (Leu & Schelle, 2009).

However, since results of first PISA 2000, was previously discussed in section 2.42 of this work, the central point of activities in German kindergartens has focused on the introduction of language as one of the most important skills to be worked on, especially for children with migration background (Ping, 2012). This topic will be discussed further in section 2.5.1.

2.4 The nature of Shared Book Reading in Kindergarten Settings

In fact, many children in kindergarten, especially those from low SES and with migration background, are more willing to acquire some literacy skills due direct contact with teachers. “The more input a child receives in a specific language, the better the child performs on vocabulary, reading, and writing tests in that language” (Scheele, Leseman & Mayo, 2010). Thus, the opportunities of being part of conversations with teachers, such as during shared book reading (which should normally be followed by a variety of complex words), allow children to develop their language skills (Massey, 2004; Milburn, Girolametto, Weitzman, & Greenberg, 2014).

Morrow and Brittain (2003) investigated the nature of book reading from pre-kindergarten to Grade 8 classrooms. For the study, they distributed 500 surveys to teachers. The authors were interested in knowing how interactions during shared book reading take place in classrooms, and how often teachers read to children. As a result, teachers from kindergarten schools reported that they read (shared book reading) to their children in order to promote the joy in reading, to motivate them to read, as well as to connect literacy to content areas. Further, teachers also asked the children questions before and after reading, and facilitated interactive discussions. Many teachers also included questioning techniques and used read-aloud as a scaffolding tool for the independent use of reading strategies.

However, other studies have appointed out that such opportunities for interaction during shared book reading are limited and not well explored (Wasik, Bond, & Hindman, 2006). For instance, Dickinson and Tabors (2001) conducted a study on the preschool language and literacy environments of seventy four low-income children. Book reading events occurred almost two to three times per week during group times. The authors presented that despite the well-known benefits of shared book reading, only 4% of teachers read with the children more than 20 minutes per day. Experiences of teachers reading with individual children were reported as rare. Furthermore, they audio-taped interactions during free play time. They reported that four-year-old children spent about 17% of the time engaged in meaningful conversations with their teacher and 18% of the time talking with other children. However, 59% of the time was spent not talking at all. Massey (2004) states that most teachers tend to spend a great amount of time facilitating children's play, but conversation times are filled with low stimulating content and abstract thinking.

2.4.1 Teacher-Child Interactions during Shared Book Reading

Shared book reading can make a difference for children's emergent literacy development. However, studies have suggested that it is not enough to only share a book with the child in order to help them, but the type and amount of verbal interactions between an adult and a child during story reading also show influence (Morrow, 1988; Sénéchal et al., 2008; Whitehurst et al., 1988; Whitehurst & Lonigan, 1998).

According to Snow and colleagues (1998), teachers who interact verbally in rich dialogue with children are contributing to their vocabulary growth. In turn, those verbal interactions are correlated with children phonological awareness, reading comprehension and subsequent learning success (Snow et al., 1998). The way in which the book is read has a significant impact on the learning that takes place. "It is the responsibility of the teacher to

structure the read-aloud in ways that match the text, the intent of the reading, and to meet the needs of the children who are listening” (Kindle, 2011, p. 16). In this context, some international studies have investigated the nature of the teacher-child shared book reading event.

In a study Dickinson and Smith (1994) the patterns of teacher-child interaction during shared book reading were examined with low income 4-year-old ($N = 25$) children. Within a period of one year, sessions of shared book reading were videotaped in large group setting. The teacher could choose the books that they wanted to read in the classrooms. All conversations that occurred before, during, and after book reading were analyzed. After analyses, the classrooms were identified and divided into three distinct approaches to book reading: co-constructive, didactic-interactional, and performance oriented (Dickinson & Smith, 1994).

The co-constructive approach classrooms conducted reading time in an engaged, dialectical manner in which teachers asked questions to elicit critical thinking, conversation, and motivation among students. They also included a little talk before and after the reading. The following example illustrates the nature of the talk.

“The teacher has finished reading the page and silently points to one of the pictures:

1. Child: He’s sad, he’s sad.
2. Teacher: Why do you think he’s sad, Jake?
3. C: He’s sad because he wants the teddy bear.
4. T: You think so?
5. C: Yeah.
6. T: But how can you tell that he’s sad?
7. C: By his face” (Dickinson & Smith, 1994, p. 112).

The didactic-interactional approach classrooms were engaged in limited amount of talk. The teacher- child interaction consisted of either immediate recall or task organization. According to the authors, the teachers encouraged the children to talk about familiar or

repeated text and answer simple questions that are based directly on the text (Dickinson & Smith, 1994). The teachers used gesture and intonation before the phrase to be repeated. Such strategies appeared when teacher would involve disruptive children. Moreover, this approach was characterized by the manner in which teachers read the complete section of text and then asked simple comprehension questions.

1. Teacher: “(Reads text) ‘...the female Robin.’
2. T: So, we have the male robin and the female robin.
3. T: (The teacher points to these birds on the page)
4. T: What was the male robin doing?
5. T: Raise a quiet hand and tell me.
6. T: What was he doing?
7. T: Uh, Brian?
8. Child: Uh, sitting there on the tree.
9. T: No.
10. T: What was he doing, Lauren?
11. C: Singing.
8. 12. T: He was singing” (Dickinson & Smith, 1994, p. 113).

The performance-oriented approach included talks before and after reading the book. The book introductions were characterized by discussions and comments regarding why this book was chosen. After reading, talks appeared to be more analytical in nature. Teachers encouraged predictions and personal connections, as well as the analyses of vocabulary (Dickinson & Smith, 1994).

- “1. Teacher: What’s ‘the mother bird’s soft down`? Does anyone know what that is?
2. Child: It’s laying down.
3. T: Well, it’s not laying down.
4. T: They call it ‘against her down`.
5. T: The down are her feathers, her soft feathers.
6. C: Cuddle, cuddle.
7. T: They cuddle against her down, the down is her feathers” (Dickinson & Smith, 1994, p. 114).

Dickinson, McCabe, and Anastasopoulos (2003) conducted another study about shared book reading in kindergarten, using data from four distinct studies. The data were collected from 85 children when they were 3 and 4 years old. The authors conducted visits to the classrooms, videotaped large group reading times, audiotaped teacher-child conversations, interviewed teachers, and observed the curriculum. In their analyses considering the nature of the book reading event, they found that thoughtful analytical conversations during book reading were fundamental in supporting children's literacy development. However they found that such type of conversation were uncommon, instead, teachers spent more time in organization of the task, simple feedback, and naming activities (Dickinson et al., 2003). Dickinson and colleagues (2003) suggested that teachers should take into consideration issues like timing, amount, and type of questions asked about the book, discussions, group management, style, and the nature of child engagement. Among other, the authors suggested that teachers should be aware about the importance of analyzing the meaning of words as well as to examine the reasons why one event followed another.

Moschovaki and Meadows (2005) conducted a study on the cognitive engagement of teachers and children during book reading in Greek kindergartens. Twenty teachers from twenty classrooms participated in the study. The age ranges were from 3.5 to 5.5 years. Each session was tape recorded. For the study, the authors adopted different cognitive demand levels to code the data based on work from Wells (1975) as well as from Dickinson and Smith (1994), the cognitive levels were: high, medium, and low, and included a level of management of interaction as well. Cognitive levels which are high include all utterances that engage the participants in sustained discussion during which they have to, for instance, formulate alternative solutions or hypotheses, demonstrate their knowledge of each word, assume the role of another person, and interpret characters' actions or feelings (Moschovaki & Meadows, 2005). The medium cognitive level covers utterances, "that are not likely to

engage the participants in sustained discussion, which requires from them to apply thinking skills of increased difficulty” (Moschovaki & Meadows, 2005). This includes clarifying what was stated, asking questions in order to understand pictures, analyzing vocabulary as well as personal experiences.

Functioning in the low cognitive level entails comprehending utterances in which the focus is on the book's illustrations or the text read by the teacher. For instance, presenting and discussing the information about the book (writer, illustrator, etc.), naming objects, describing pictures, and recalling the text of the story (Moschovaki & Meadows, 2005). The management of interaction means the monitoring of utterances during the reading session via feedback response, giving or requesting attention, and defining appropriate behavior. The findings revealed that most of the utterances were related to a low cognitive level of functioning and management of interaction (Moschovaki & Meadows, 2005). The discussions were conducted mostly among others to explain book illustrations and feedback responses. The authors found that the teachers participated more than the children in book reading and that children's participation was related to teachers' participation at the level of cognition (Moschovaki & Meadows, 2005). They found that talking about personal experiences raised great discussions in the groups and that all children wanted to talk about their personal experiences related to the story in the book (Moschovaki & Meadows, 2005).

The study from Pentimonti and Justice (2010) investigated teachers' use of scaffolding strategies during shared book reading. Five teachers and children of the age of 4 years participated in the study. The study examined six scaffolding strategies (see Table 3). The results of the study revealed that teachers used more low scaffolding strategies (96%) in which the most used strategies were generalizing, reasoning and predicting. High support scaffolding strategies were used at a minimum (4%), more accurately, one high support scaffolding strategy per read-aloud session (Pentimonti & Justice, 2010).

Table 3. Description and examples for six scaffolding strategies. Retrieved from (Pentimonti & Justice, 2010).

Low Support Strategies		Example
Generalizing	Prompts children to extend the lesson content beyond the lesson itself – to past or future personal experiences.	Tell me about a time you felt really nervous. Where were you and what was happening?
Reasoning	Prompts children to explain why something happened or will happen, or to explain why something is the way it is.	Some animal have big jaws and other animals have small jaws. Angel can you tell me why?
Predicting	Prompts children to describe what might happen next or to hypothesize the outcome of an event/activity.	What can you think they will find?
High Support Strategies		Example
Co-Participating	Prompts children to produce a correct answer to a task through their completion of the task with another person – the teacher or a peer.	Jose, bat and cat rhyme. Let's say it together: bat, cat.
Reducing choices	Prompts children to complete a task by reducing the number of choices of correct answers.	What is this part of the animal called? Is it the teeth or the jaw?
Eliciting	Prompts children to produce a correct answer to a task by providing an exact model of the ideal response.	What does this word say? This word says Danger. Rashaun, say "Danger".

2.4.2 Shared Book Reading Intervention Programs in Kindergarten Settings

As reported in the literature, the qualities of adult language behavior play a fundamental role in child language development. In accordance with this, international studies on language programs sought to introduce a new approach in the way that adults interact with children, particularly disadvantaged children with low levels of language skills (Aram & Biron, 2004; Arnold & Whitehurst, 1994; Karweit & Wasik, 1996; Neuman, 1999; Tizard, Schofield & Hewison, 1982). Taking into account such factors as outlined in previous sections, different interventions have been suggested in studies in order to improve the adult-child shared book reading practices (Ping, 2012; Trivette & Dunst, 2007). Those interactions have shown some common strategies that adults can incorporate during book reading (Justice & Pullen, 2003) such as:

- Provide children with quality inputs of oral language, labels, forms, and functions
- Encourage children's active participation in shared reading events
- Scaffold¹¹ children's gradual use of more sophisticated productions

According to Morrow (1990), the interactive shared book reading style provides the adult a "great deal of progressive information about what the child knows about a story, the complexity of their understanding, how they construct meaning based on their own background information and the information in the story, as well as what they look for in a story". Interactive shared book reading follows some techniques in order to engage the children in the story before, during, and after the reading (Trivette and Dunst, 2007).

Before reading the story, the adult can for instance, encourage the child to make verbal predictions about what they think will happen in the story. During the story, the adult

¹¹ Scaffolding is a term that „refers to an instructional strategy whereby teachers initially expect children to participate or respond at lower levels of knowledge, skill, or confidence, and gradually increase their expectations of the children's participation“ (Milburn, Girolametto, Weitzman, and Greenberg, 2014). Scaffolding strategies are for instance, closed questions in order to engage the child in book reading (e.g. What is this?), and open questions which facilitates de development of children language (e.g. What do you think she is trying to do?) (Pentimonti and Justice, 2010)

may make comments about what is happening on the page, and pose some questions. After the reading, the adult can engage the child in a discussion about what was read and the child can make meaningful connections about the story and their own life experiences (Byington, 2013). Morrow (1990) also identified nine interactive reading behaviors that should be performed during shared book reading, these are: questioning, scaffolding (Wood, Bruner, & Ross, 1976) dialogue and responses, offering praise or positive reinforcement, giving or extending information, clarifying information, restating information, directing discussion, sharing personal reactions, and relating concepts to life experiences. Justice and Kaderavek (2002), presented some techniques of shared book reading in order to increase children's interaction and interest in books. In this scenario, the adult allows the child to be more active during the activity (see Table 4 for more details about the technique).

However, the most well-known intervention program was developed by Whitehurst and colleagues. Whitehurst and colleagues (1988) first described an intervention program called *dialogic reading* which refers to a specific art of communication between adult and child about a book or other visual material. The dialogic reading intervention was designed with the purpose of accelerating young children's language development and presents the interaction mode of the child-adult techniques during a shared book reading. Dialogic book reading is based on three general principles (Whitehurst et al., 1988; Whitehurst et al., 1994; Zevenbergen, Whitehurst & Zevenbergen, 2003):

- 1) Adults should encourage the child to participate
- 2) Adults should provide feedback to the child
- 3) Adults should adapt scaffolding styles as the child's language abilities evolve

The next section will present with more details the dialogic reading intervention.

Table 4. Techniques for increasing shared book reading. Retrieved from Justice and Kaderavek (2002), p. 10.

Activity	Description
Pausing	Pause occasionally during reading and wait for the child's comments. Pause after turning to a new page so the child can look at the picture and spontaneously comment or question. Pause after reading each page so the child can comment on story or pictures.
Let child pick the reading location	Children enjoy reading in different places: on the floor, in a favorite chair, on the back steps. Allow the child to pick the reading location.
Increase child's opportunities to physically manipulate the book	Allow the child to hold the book. Encourage the child to freely turn the pages. Use books featuring manipulable features e.g., slot books, flat books.)
Match the interaction to child's abilities and interests	Adapt the story, the words, or the discussion in any way that makes the book more enjoyable for the child. As children mature and develop, they will be more interested in the "real" story.
Ask child to "read" the book to you	Children enjoy "reading" a familiar book. It's fine to say, "Wow, I like the way you read that book," even if they are not really reading.

2.4.3 Dialogic Reading

Unlike the traditional way of reading wherein the adult reads and the child passively listens, dialogic reading changes roles, makes the child active in reading and in turn, they learn to become storytellers. The adult learns to use the technique in separate phases which are performed over a period of two or three weeks (Arnold, Lonigan, Whitehurst & Epstein, 1994). The program first adopts two assignments specifically for two- and three-year old children that will be presented in the following topics.

2.4.3.1 Dialogic Reading: Segment 1 for Two- and Three-Year Old Children

1. Ask “What” questions.

For example, the adult points to a bike and asks the child, “What is this?”. Different from questions that require only “yes” or “no” answers, “What” questions are open-ended and encourages the child to talk and are much more effective in improving language.

2. Follow answers with questions.

When the child knows the name of an object in the book, the adult may ask questions about this, such as inquiring about its shape, color, or what the object is being used for. Such questions encourage the child to talk about the object.

3. Repeat what the child says.

If the child says “dog” a possible response might be, “That’s right! It is a dog”. Repeating the response prompts the child to speak, and gives the child feedback about whether or not the response is correct.

4. Help the child as needed.

If a child cannot answer a question, provide them with a model of an answer and ask the child to repeat what you said. For instance, you may say “That is a helicopter. Can you say helicopter?”.

5. Praise and encourage.

It is possible to give feedback in many ways when the child says something about the book. For instance one can say, “That’s right”, “Nice job”, “Very good”.

6. Follow the child’s interests.

“At this age it is not important to read all of the words on a page or talk about every picture. It is important to talk about the things that the child likes. When the child points at a picture, or begins to talk about part of a page, use this interest as a chance to encourage the child to talk”. (Arnold & Whitehurst, 1994).

7. Have fun.

Aside from promoting language development, the program was designed so that the children enjoy shared book reading; in addition, they also learn very well when they have fun.

2.4.3.2 Dialogic Reading: Segment 2 for Two- and Three-Year Old Children

After two or three weeks that the child and adult have gained experience with the first part of the program, the adult is invited to follow three steps in which they pose less structured questions that help to exercise the child’s critical thinking:

1. Ask open-ended questions.

Here the child is invited to talk about something in the book. Questions such as, “What do you see on this page?” or “Tell me what is happening here?” are more difficult than specific or closed questions. “When the child does not know anything else to say about a picture, provide a multiword description and try to elicit repetition, such as, “The duck is swimming. Now you say the duck is swimming” (Zevenbergen & Whitehurst, 2003).

After a few days practice, the child should begin to offer multiword phrases spontaneously in response to the request “Tell me about this” (Arnold & Whitehurst, 1994; Zevenbergen & Whitehurst, 2003).

2. Expand what the child says

Here it is important not only to repeat again the child's comments but also to expand on what the child says about the picture. For instance, if he or she says "that is a dog", you might say "Yes, right, that is a big dog". The adult should be wary of adding too much information, thus making it more difficult for the child to repeat.

3. Have fun

In any case, it is important to have fun during shared book reading.

In continuation of the dialogic reading intervention program, Whitehurst and colleagues (1994) described techniques for four- and five-year old children. The assignments differ from those used with younger children (Kraus, 2008). In this way, the adult assumes a new position and changes the style of questioning by making them more specific. The child's responses are then evaluated and expanded (Zevenbergen & Whitehurst, 2003). With the purpose of making assignments clear and easy to remember, the acronyms CROW and PEER were developed. Those acronyms are associated with the type of questions posed to the child at the time of shared book reading (Zevenbergen & Whitehurst, 2003).

CROWD refers to the question types that are:

1. Completion prompts

Here, the child is invited to complete what the adult began to say, for instance, "When we went into the car, we all put on our_____." (Zevenbergen & Whitehurst, 2003). This type of question exposes the child to a type of linguistic structure that is important for later reading.

2. Recall prompts

These are questions geared toward eliciting memory of what has previously been read.

3. Open-ended prompts

These prompts are recommended to be used with books rich in illustrations. The child is

invited to explain in his or her own words about a picture in the book or to create an end to the story. The adult may say: “Oh, look here, can you tell me what is happening on this page?”. Open-ended prompt questions aid the child in increasing expressive fluency of speech.

4. Wh- prompts

These prompts are questions that begin with: What, Where, Why, etc., and help the child learn new vocabulary.

5. Distancing prompts

Here the questions are about the book are connected with the world outside. One question might be, “Did you ever go to a parade like Susie did?” (Zevenbergen & Whitehurst, 2003)

PEER remembers the adult to:

1. Use prompts

The adult should prompt the child to say something about the book. The child is challenged to name objects and to tell about the story.

2. Evaluate

Here, the adult should evaluate and praise the child’s correct responses and for the incorrect, give alternative answers in order to improve the child’s answers (Zevenbergen & Whitehurst, 2003).

3. Expand

It is important to expand the child’s response by rephrasing and adding information to it. The adult will repeat the child’s verbalization and add information to it.

4. Repeat

In this prompt, the adult should make sure that the child has learned from the expansion. The child is invited to repeat the expanded utterances. (Zevenbergen & Whitehurst 2003).

2.5 Effects of Shared Book Reading Interventions

Over the years, several studies were conducted in order to evaluate specific shared book reading strategies or interventions and their effects on child oral language development as well as in letter knowledge prior to formal schooling (for an overview see Mol & Bus, 2011; Bus et al., 1995; Scarborough & Dobrich, 1994). In the following, some studies will be presented that took place either at home or kindergarten, as well as in home and kindergarten settings.

2.5.1 Effects of Shared Book Reading on Language Development

Whitehurst and colleagues (1988) first evaluated the effects of the program 'dialogic reading' on language skills of 2-year-olds ($N = 30$) at home. The mothers of all participants were European American and from a high SES standing. The mothers of the experimental group participated in two-week assignments in two half-hour training sessions. Within these sessions, the technique was explained by the trainer. The mothers were able to practice and received feedback on the various aspects of their child-directed speech during story time (Whitehurst et al., 1988). The mothers of the control group read to their children as they usually did. The examined audiotapes showed a significant increase in MLU (mean length utterance; - 2.55) compared to the control group. The expressive vocabulary test showed a significant ($p = .009$) 6 month gain ahead of the control group. The receptive vocabulary test showed no significant gain for the treatment groups. On the expressive language measures, the experimental group at a nine month follow up test maintained a significant ($p = .0625$) 6 month advantage over the control group.

Valdez-Menchaca and Whitehurst (1992) also investigated the effects of dialogic reading techniques on children of low-income families in Mexico. Twenty children of the age of two participated in the study. Teachers were trained in dialogic reading in thirty 10 to 12

minute individual training sessions every week. Children were read to individually by a teacher. The results showed that the effect size across the three measures (verbal expression, expressive vocabulary, receptive vocabulary) was 1.56. Children in the intervention group produced a significantly greater number of utterances ($F(1.18) = 4.7, p < .001$) as well as longer ($F(1.18) = 4.1, p = .001$) and more complex sentences ($F(1.18) = 4.7, p = .001$) than children in the control group. With this study, the authors concluded that such interventions encouraging the use of interactive reading strategies implemented by trained teachers can be effective in enhancing child language abilities.

Whitehurst and colleagues (1994) conducted another home-school study in the field of dialogic reading. 73 children, aged 3 years, from low income families took part in the study. According to self-reports from the families, half of the children were defined as Black, a quarter Hispanic, and a quarter White. Only about one third of the children had ever visited a public library with their parents. The five kindergartens that participated in the study were divided into home and kindergarten reading, kindergarten only reading, a play group in the kindergarten classroom, and a control group. The intervention lasted 6 weeks. Teachers and parents were trained in a dialogic reading style via videotape training. Teachers should read in small groups with no more than five children for about 10 minutes daily.

The books to be read were previously chosen by the researchers. Results from post-tests showed that dialogic reading in kindergarten only yielded significant effects on the children's receptive vocabulary ($d = .13$) compared to children in the control group. However, the home and school conditions produced even greater significant effects in the children's receptive vocabulary ($d = .24$). The expressive vocabulary yielded an effect size of .18 for the dialogic reading in kindergarten only, and .43 for the dialogic reading in kindergarten and at home. Follow-up tests conducted after six-month post-testing revealed that the children in the reading conditions were still ahead of those in the control group in

vocabulary testing. In addition, the study showed positive correlations between children's performance on language tests and aspects of the home literacy environment, for instance the number of books in the home and child's level of enjoyment in book reading.

Hargrave and Sénéchal (2000) investigated the effects of shared book reading with Canadian kindergarten children on the acquisition of vocabulary. Thirty-six children (divided into two kindergartens) between the ages of 3 and 5 with poor vocabulary skills participated in the study. The teachers in the kindergarten took part in a one-hour group dialogic reading session during the week prior to the intervention. The dialogic reading training which was provided to one of the two kindergartens was videotaped. Within each group, teachers were instructed to read ten books. The kindergarten teachers in the control group were instructed to read as usual, without any special instructions or accommodations. The results showed beneficial effects of dialogic reading. Children in the intervention group had higher expressive vocabulary scores in comparison to children in the control group. In the four-week intervention period, children in the dialogic reading group showed an increase in expressive vocabulary (from 26% to 54%) that would normally occur at four months (Hargrave & Sénéchal, 2000).

The work of Wasik and Bond (2001) presented the effects of an intervention called 'interactive book reading' on literacy development. Four-year-old children ($N = 127$) of low-income families participated in the study. 94% of the children were African Americans. Teachers ($N = 2$) participated in a training consisting of interactive book reading techniques (asking open-ended questions aimed at creating opportunities for children to talk, etc.) similar to the dialogic reading strategies. The teachers were asked to read the books with the children twice a week. The intervention was conducted within groups along a time span of 15 weeks. The results showed that children in the intervention group performed significantly better in vocabulary ($F(1,20) = 13.69, p < .001$) than children in control group.

In continuation to the study, Wasik, Bond and Hundman (2006) examined the effects of teacher training in specific book reading and conversation strategies. 16 teachers and 207 children of Head Start¹² kindergartens took part in the study. The training was conducted once a month for two hours and included individualized coaching. Teachers were trained in explicit oral language strategies in book reading (e.g. asking open questions, promoting vocabulary learning), why it was important to use such strategies, and how it could be adapted in the classroom. Teachers should read the book at least once per day during circle time. The intervention was conducted over a period of 9 months. The results showed that teachers in the intervention group who asked more open questions during book reading yielded a correlation score of .38 with receptive language scores. Among other techniques, teachers asked children to talk more about their ideas or about an object that the children were using, provided feedback, and encouraged more than a one-word response. Further, children in the intervention group had larger gains in expressive ($d = .44$) and receptive ($d = .73$) vocabulary.

The recent work of Milburn and colleagues (2014) revealed that professional training for teachers about strategies during shared book reading is effective. In their study, 20 teachers and 76 children (55 months old) participated. Teachers were trained in three full-day and one half-day workshops as well as three individual classroom visits. The results showed that teachers in the intervention group used a greater number of open questions, responsive statements, and different words as compared to the control group. They also maintained longer book-related conversations than the control group. The authors concluded that professional development training in shared book reading can enhance teachers' ability to facilitate conversations with children during book reading.

¹²Head Start is an American program that promotes the school readiness of young children from birth to age 5 from low-SES. In addition to educational services, the program provides children and their families with health, nutrition, social, and other services. Head Start services are responsive to each child and family's ethnic, cultural, and linguistic heritage (<http://www.acf.hhs.gov/programs/ohs/about/head-start>).

2.5.2 Effects of Shared Book Reading on Letter Knowledge

Letter knowledge was also investigated in the field of shared book reading (Brown, Cromer & Weinberg, 1986; Mol, Bus & Jong, 2009; Mol & Bus, 2011; Sim & Bertheisen, 2014) since it was identified as one of the strongest predictors of later reading and writing success (Adams, 1994; van Kleeck, 2003). For instance, Mason, Kerr, Sinha, and McCormick (1990) conducted a home-school study in order to evaluate the effects of a program called 'Little Books' on children's print concept awareness and reading abilities. The Little Books program consisted of books which are designed to promote a child's emergent literacy. The books have nine pages with one simple line of words that match the illustration. These books stress print and meaning so that children can begin to make connections between the spoken and written word. 10 teachers and 240 children participated in the study.

Most children were from low-income families and at risk for school failure. Teachers participated in a workshop in order to introduce the program followed by individual visits when teachers began using the Little Books. Teachers were instructed to implement the program in small groups and individually. Each Friday, children received a copy of the book to take home and share with family members. The intervention lasted around one year for all weeks longer than three days, with one book per week. In total, 28 books were read and discussed. The results reported a substantial increase in performance in a letter naming task ($F(1,224) = 13.70, p = < .001$). Further, the results showed that Little Books can make substantial gains in language development, print concept awareness, and reading abilities. Mason and colleagues (1990) concluded that informal shared book reading could enhance aspects of early literacy development for at-risk children in kindergarten.

Other studies have proposed an additional explicit instruction of grapheme-phoneme conversion rules during shared book reading (Ezell & Justice, 2000). They argue that because children spend more time looking at illustrations rather than at print (Evans & Saint-Aubin,

2005), verbal (e.g. questions and comments about letters) and non-verbal (e.g. gestures, pointing) print referencing within the shared book reading context may increase children's attention to print (Lovelace & Stewart, 2007; Stewart & Lovelace, 2006); As a consequence of being used in tandem, children's print knowledge increased faster within shorter periods of time compared to the typical shared book reading experience (Baker, 2013; Evans & Saint-Aubin, 2005; Justice & Kaderavek, 2002; Piasta, Justice, McGinty, & Kaderavek, 2012; Sénéchal, Lefevre, Thomas, & Daley, 1998).

For instance, Justice, Kaderavek, Fan, Sofka, and Hunt (2009) examined the impact of teachers' use of print referencing during shared book reading sessions. Four-year old children ($N = 143$) from 23 classrooms participated in the study. The teachers implemented a 30-week shared book reading program using a set of 30 storybooks. The books selected contained print salient features such as speech bubbles, font changes, etc. Teachers in both conditions participated in workshops according to their specific intervention. Moreover, they were asked to conduct the shared book reading sections in a large group activity every Monday and then read the book three additional times during the week.

14 classrooms were assigned to the print referencing intervention and teachers were instructed in how to use print referencing with opportunities to practice during the workshop. Teachers received a manual which describes specific strategies during shared book reading in how to build children's print knowledge. In addition to the story books, printed cards were provided which included techniques that teachers could use for various levels of ability. The 9 classrooms that used only shared book reading on a daily basis read the same set of storybooks as the teachers in the print referencing group. Teachers were instructed to use their typical reading style and participated in a workshop on the importance of shared book reading in the preschool classroom and received general guidance on high-quality reading interactions. The results have shown that shared book reading with print referencing have

significant gains in children's print concept ($p = 0.025$) and alphabet knowledge ($p = 0.007$) measures as compared to the shared book reading condition only. The authors conclude that print referencing through shared book reading may be a useful approach in facilitating child print knowledge.

The study by Justice, McGinty, Piasta, Kaderavek, and Fan (2010) reported the effectiveness of teachers' use of print referencing within a period of 30 weeks, during class shared book reading with 4-5 year-old children ($N = 379$) from project STAR¹³. Children were assigned to three intervention groups: High dose of print knowledge (using print referencing four times a week), low dose of print knowledge (using print referencing two times a week), and typical reading. Teachers in the print knowledge conditions used explicit references to specified print targets within each shared book reading session. Teachers in the shared book reading only conditions read the same set of book as they usually did. Results have shown that children who participated in a print-referencing style of reading had significantly higher print knowledge scores (alphabet recognition, word and print awareness, name writing) than did the children in the only shared book reading condition. Regarding the difference in language across the groups (sentence structure, word structure, and expressive vocabulary), no difference was found. The authors conclude that print-focused shared book reading may contribute to children's literacy development.

Piasta and colleagues (2012) also reported an increase in attention to print during shared book reading. Four-year-old children ($N = 550$) participated in a 30-week shared reading program implemented by their teachers. All teachers participated in training about shared book reading, however, the teachers of the intervention groups learned about how to make general verbal print references and the teachers in the control groups focused on the

¹³ STAR – „Sit together and Read“ is a program for preschool children. The program aims improve children's early reading, spelling, language, and comprehension skills through increasing the frequency of print-references during shared book reading in whole class - See more at: <http://www.childtrends.org/?programs=project-star-sit-together-and-read#sthash.sxYYfSJz.dpuf>.

importance of high quality reading practices. Children in intervention groups participated in shared book reading 2 or 4 times per week during which their teachers verbally and nonverbally referenced print. The children in the control groups participated in typical book reading with their teachers. The results showed that shared book reading with an explicit print reference had significant impacts on children's reading, spelling, and comprehension outcomes than children in the regular reading comparison condition ($ps < .024$). The authors argue that such interventions prior to formal schooling offers a potential preventive mechanism to reduce the gap of child literacy skills before it begins to widen (Piasta et al., 2012).

2.6 Shared Book Reading in Germany

As previously reported, factors such as parental education level, family income, or migration background all influence the development of children literacy skills. Within the German context, Low levels of the German language may greatly impact chances and levels of integration and equal opportunities in regards to education and work life in Germany. For Roux (2002) and others (Buschmann & Jooss, 2011), the conclusion showed to be clear that the promotion of child language skills have a fundamental importance, particularly for children with migration background, and this encouragement and assistance should begin before entrance into school. In reply to this acknowledged need, German kindergartens have evolved in order to fit the role of providing a rich context for children to acquire literacy skills and to aim at closing the gap between those children with literacy-rich homes and those with little-to-no experience; As a result, more challenges must be faced in the daily life of the kindergarten teacher. According to Ping (2012), teachers not only, "have to take care about the children, but also they have to start educating them through some instructional activities, to enhance their literacy competences so that they will be ready for school" (p.7).

As a consequence, early language programs came to light in German kindergartens to give the opportunity to improve or to enhance the quality of baseline knowledge for disadvantaged children. Due to the fact that a large part of language development stems from social interactions between children and their caregivers, language programs have tried, as researchers state, “to enhance and supplement children's social and linguistic experiences by establishing natural, interactive, communication-based relationships between at-risk children and their environment” (Brandone, Salkind, Golinkoff & Hirsh-Pasek, 2006, p. 508). Gasteiger-Klicpera and colleagues (2009) state that in recent years, a great number of language programs in almost every state in Germany, such as “*Sag mal was*” (Roos, Polotzek, & Schöler, 2010), and the *DACHS* study, have been implemented before entry into school (see Lisker, 2011 for language programs overview). Another example of a language program is the *Heidelberger Interaktionstraining für pädagogisches Fachpersonal zur Förderung ein- und mehrsprachiger Kinder – HIT* (Buschmann & Jooss, 2011), developed for training kindergarten teachers. The HIT program, which was chosen in order to perform the teacher training for the current study, will be described in the following section (2.6).

According to the *Stiftung Lesen*¹⁴ study in 2007 (Ehmig, 2013), through a telephone interview with parents of children under 14 years old ($N = 1.000$), 42% of the parents reported not reading books with the child as often, and one in five parents do not read a book with the child at all. Regarding families with migration background ($N = 250$), 42% do not read a book with the child at all. Moreover, the study reports that low school graduation and low family income results in low shared book reading in the family. In 2008 (Ehmig, 2013) in which 4 to 11 year old children ($N = 875$) participated, 37% of the children reported not participating in shared book reading at home, nor in kindergarten or school.

However, 33% of those children reported the desire to participate in shared book

¹⁴ *Stiftung Lesen* is a foundation that supports programs, such as *Lesestart*, in early children development in the family and kindergarten regardless of financial, cultural or social background based on reading competency. For more details see www.stiftunglesen.de.

reading. A study in 2013 reported similar results as the 2007 study for children aged 3 to 5 years. 6% of the parents in 2013 read more books to their child than in 2007, and 14% of the families with low income read more books to their child in 2013 than in 2007 (see Tables 5 and 6).

According to Ehmig (2013), although shared book reading has been recognized and is becoming more frequent in many families in Germany, there are still many children (one in three children more precisely) that do not have the possibility to experience shared book reading with their families. Moreover, few studies on the shared book reading experience in a German context have been conducted relating to the home literacy environment or kindergarten settings and its effects on children's emergent literacy (Niklas & Schneider, 2013). One such study, conducted by Wieler (1997) investigated the shared book reading practices in different SES families. The author found that mothers of higher SES used more often conversation in a dialogue-oriented interaction during shared book reading activities than mothers from a lower SES.

Niklas & Schneider (2010) investigated the impact of HLE on children's emergent literacy in a sample of about 400 children with a mean age of 4;10 years. The study reported that children with a migration background, and at least one parent born outside of Germany, as well as families with a lower SES, showed to have a less favorable home literacy environment, for instance, fewer numbers of books, less parent-child book reading, and fewer visits to public libraries. Another recent study conducted by Niklas and Schneider (2013) reported that children with parents born outside of Germany and with occupations considered of lower prestige, spend less time in parent-child book reading activities, and frequent public libraries less often, however, more time is spent watching television.

Table 5. Frequency of shared book reading at home for children in age of 3 to 5 years old. Retrived from Ehmig (2013)

Frequency of shared book reading at home		
	2007	2013
At least once a week	82	88
Seldom or never	18	12

Table 6. Frequency of shared book reading at home for children in age of 3 to 5 years old according to family income. Retrived from Ehmig (2013)

Frequency of shared book reading at home according to family income				
	2007		2013	
	At least once a week	Seldom or never	At least once a week	Seldom or never
Low income	67	32	81	19
Middle income	86	14	87	12
High income	92	6	91	8

The study conducted by Ping (2012) investigated the practices of shared book reading on children with migration background and teachers in German kindergartens. Children were between the ages of 3 to 6 years ($N = 24$). Teachers were trained in special techniques and were given a specific picture book. The reading sections were videotaped and analyzed by using a qualitative content analyses method. The results of the analysis indicated that teachers used different reading styles even though all teachers received the same instructions. Moreover, during the observations, the author identified three forms of interaction:

- 1) Educator- child interaction
- 2) Peer interaction (between and amongst children)

3) Group (educator- child) interaction

Further, the strategies were categorized as instructional and personal management strategies. The instructional strategies were characterized by naming and labeling as well as giving feedback in the form of confirmation. The personal management strategies were characterized by handling teacher-child personal interaction, managing floor selection, and maintaining children's interests. Teachers also used strategies denominated as low cognitive level, for instance, labeling or describing pictures. (See Ping, 2012 and Moschovaki & Meadows, 2005 for an overview).

A recent study conducted by Ennemoser, Kuhl, and Pepouna (2013) looked at the effects of dialogic reading (Whitehurst et al., 1988) in children with migration background. Children ($N = 45$) with migration background from ages 5 to 6 participated in the study. Children in the intervention group participated in dialogic reading sections. Teachers participated in a dialogic reading training divided into five sections before the start of the study. Children in the control group participated in a *vorlaufkurs*. The *vorlaufkurs* is a program designed for children one year before entry into school which presents low levels of German language knowledge. The program offers activities involving rhymes, poems, songs, shared book reading, games, puzzles, and craft activities. The results have shown effects of the dialogic reading intervention on semantic skill measures ($F(1, 42) = 5.57; p < .05$) and morphologic ($F(1, 42) = 7.78; p < .01$). The authors conclude that dialogic reading plays an important role in helping children with migration background to develop their language knowledge.

2.6.1 The Heidelberger Interaktionstraining für pädagogisches Fachpersonal zur Förderung ein- und mehrsprachiger Kinder - HIT

The Heidelberger Interaktionstraining für pädagogisches Fachpersonal zur Förderung ein- und mehrsprachiger Kinder – HIT¹⁵ (Buschmann & Jooss, 2011) is a training program conceptualized from the FRIZ – Frühinterventionszentrum. The FRITZ is a center which works with the prevention of child developmental disorders in the field of language and thinking through diagnosis, consultation, and training for parents and teachers. The program, which was developed in the years 2006/2007, is an extension of the Heidelberger Elterntraining zur frühen Sprachförderung – HET program for parents and their children within the age range of two to three years, whose language development is significantly delayed.

The HIT concept is the same as the HET, but addressed to kindergarten teachers of children with and without migration background that are considered “at risk” for language delay. With an interactive concept of human linguistic programming, the training’s content is aimed at taking advantage of the knowledge, strategies, and competences of the teachers. The focus is to instruct and to make teachers aware of how to integrate and support the promotion of linguistic skills within the child's daily routines; Examples of how this can be achieved are through activities such as shared book reading situations, through dialogic reading techniques (Whitehurst et al., 1988), meal times, play times, or helping the children to change their clothes, etc. (Buschmann & Jooss, 2011; Buschmann, Jooss, Simon & Sachse, 2010; Buschmann & Sachse, 2011). In addition, a significant purpose in the training is to intensify the teacher awareness for situations in which personal contact with the child is possible. The number of participants is extended up to a maximum of 15 teachers.

The training is composed of five meetings (see Table 7) which take place every three

¹⁵ See more details at http://www.fruehinterventionszentrum.de/hit_alltagsintegrierte_sprachfoerderung_in_kitas/

to four weeks, over a period of six to eight months (Buschmann, Jooss, Simon & Sachse, 2010). Each meeting takes five hours. In this context, the use of specific language learning strategies includes the usage of illustrations, and exercises for the time in between sessions as well as practices in small groups. Moreover, an important aspect of the program is the coaching system in which teachers should videotape a book interaction with a child for individual discussions with the instructors. Furthermore, for each training session, teachers receive support material for the immersion of the content (Sachse, Jooss, Simon & Buschmann, 2011).

Table 7. Training Content. Retrieved and translated from Buschmann and Sachse (2011)

	Content
1. Meeting	<p>Basic knowledge on the conduct of language development and delays / disorders in language development</p> <p>Multilingualism</p> <p>Basic principles of language-promoting communication</p>
2. Meeting	<p>Use of picture books – Part I</p> <p>Framework, principles</p> <p>Use of targeted language teaching strategies, selection of books</p>
3. Meeting	<p>Intuitive language teaching behavior</p> <p>Use of picture books – Part II</p> <p>Motivate Through targeted questions to talk</p> <p>Language retardant behavior</p>
4. Meeting	<p>Supervision based on its own video recordings</p> <p>Transfer to games and other activities in kindergarten</p> <p>Use of movement songs, finger plays, language games</p>
5. Meeting	<p>Use of picture books Part III</p> <p>Corrective feedback dialogic reading</p> <p>Language support under current Kita projects</p> <p>Oral motor</p>

3. Study Purpose and Research Questions

The aim of the current longitudinal study is to investigate the effects of two methods of shared book reading on children's emergent literacy. The two methods under investigation are:

Method I: Literacy Enrichment

Two hundred extra, selected, children's books, chosen as optimal for shared book reading, are distributed in kindergartens. In a system similar to how a library operates, the children are encouraged every week to borrow a book and to take it home to read with their parents. A written letter is sent to the parents encouraging them to read the books frequently with their children.

Method II: Teacher Training

Kindergarten teachers participate in a specialized training, which provides them with techniques on how to promote child language development through shared book reading. The training will be conducted by the *Heidelberger Interaktionstraining für pädagogisches Fachpersonal zur Förderung ein- und mehrsprachiger Kinder – HIT* (Buschmann & Jooss, 2011).

The goal of the study is to investigate the effects of these two shared book reading methods. In addition, the effects of Method I and Method II in combination are also investigated. Therefore, a three-kindergarten group intervention design is established:

- Kindergarten 1 – Method I
- Kindergarten 2 – Method II
- Kindergarten 3 – Combination of Method I and Method II

A fourth group is included as a control group. The effects of the two shared book reading methods are investigated in the following child emergent literacy skills: expressive vocabulary, semantic skills, and grapheme awareness.

In respect to grapheme awareness, it is important to note that the goal of the present study is to investigate how well a child is able to recognize a grapheme within a set of non-letter distractors. This task is different from previous studies in which the effects of adult-child book reading in children's grapheme-phoneme knowledge (the ability to name letters or to identify the requested letter) were investigated. In addition, these studies have also embedded in shared book reading additional explicit or implicit alphabetical instruction (Ezell & Justice, 2000; Justice, Kaderavek, Fan, Sofka, & Hunt, 2009; Lovelace & Stewart, 2007). In the present study, however, formal instruction is given only in Method II to teachers on how to support child language development through shared book reading. No instruction on the written register/print in the books is included in the present study, neither to parents nor to teachers.

Considering the kindergarten groups that will take part in the study, the aim of this study is to answer the following questions:

- 1- *What effect does method I (literacy enrichment), method II (teacher training) and the combination of both methods have on children's expressive vocabulary?*
- 2- *What effect does method I (literacy enrichment), method II (teacher training) and the combination of both methods have on children's semantic skills?*
- 3- *What effect does method I (literacy enrichment), method II (teacher training) and the combination of both methods have on children's grapheme awareness?*

In addition, socioeconomic status and children's literacy experiences at home will be controlled for through a family questionnaire. Further, age, gender, and migration background are included as possible moderator factors.

The results of the present study are expected to provide insight into the effects of the investigated methods both in home and in kindergarten contexts and therefore, to contribute

to the current research, as well as to institutions and organizations that promote shared book reading programs in early childhood. In addition, the methods implemented in the study may improve children's grapheme awareness as an effect of shared book reading, especially in the German context, where most studies in this field have concentrated on children's language skills.

4. Method

4.1 Study Design

Four kindergartens schools in the city of Kaiserslautern, Germany, were invited to participate in the study. Each kindergarten (see Figure 5) allocated a specific intervention group:

Kindergarten 1	Method I - Literacy Enrichment
Kindergarten 2	Method II - Teacher Training
Kindergarten 3	Combination of literacy enrichment and teacher training Methods
Kindergarten 4	Control Group

Figure 5. Distribution of the groups.

Permission to perform this study in these kindergarten schools was formally requested to the city administration of Kaiserslautern. The selection criteria included: kindergartens with a higher proportion of low-educated group contexts; kindergartens comparable in respect to children's cognitive abilities, language development, and socioeconomic status.

After permission was granted for the execution of the study, the city administration chose the kindergartens and did the first study presentation. Each kindergarten could choose in which intervention group they would like to take part. The kindergarten selection process took six months after which each school was thoroughly debriefed with a presentation as well as a detailed explanation of the program (See Appendix A).

4.1.1 Method I - Literacy Enrichment

For the Literary Enrichment method, 200 additional, different books were disposed in the two kindergarten groups (100 books for the intervention group with method I and 100

books for the intervention group with the combination of both methods) (see Figure 6). The books were chosen according to their potential in supporting vocabulary growth with colorful illustrations, but also with text in large print to better convey the story, in order to support emergent literacy (see Appendix D and E). The association “*pro - Verein zur Förderung von Projekten für junge Menschen e.V.*” donated the books to the project. In a system like a public library, all books were registered with a borrowing code, arranged on a bookcase located at a particular place where the children have easy access and were able to choose the book they enjoyed. In addition, in order to inform the parents about the establishment of the books, a letter was sent home attempting to motivate the parents (see Appendix F) and included an extra request to read the borrowed books with their children as often as possible.



Figure 6. Books disposed in the kindergarten groups with the Method II

Once during the week (Thursdays from 9:30 to 11:00 am for the intervention group with method I and Wednesdays from 9:30 to 11:00 am for the intervention group with the combination of both methods) and coordinated by a graduate student, the children could borrow a new book after giving back the book borrowed from the previous week in order to acquaint the children with library rules. However, there was no financial consequence or any kind of punishment, aside from some kind of scolding. If the book was lost or damaged, borrowing a new book was still possible. Children were free to choose any book. The graduate student did not put any pressure nor did she make any suggestions. In order to inform the parents, each child received a form with their name and the date when the book was borrowed and when it should be returned. At the end of the intervention, the books were donated to each respective kindergarten participant who participated in the literacy enrichment method.

4.1.2 Method II - Teacher Training

The teachers of the kindergartens (for the intervention group with the Method II and for the intervention group with the combination of both Methods) participated in a professional training, which gives instructions about shared book reading strategies. The teacher training was conducted based on the *Heidelberger Interaktionstraining für pädagogisches Fachpersonal zur Förderung ein- und mehrsprachiger Kinder – HIT* (Buschmann, A. & Jooss, B., 2011). As previously mentioned in section 2.6, the program was developed to train educators of young monolingual or bilingual children. The objective of the program is to promote and integrate language skills into daily routines. However, for the present study, only one aspect of the training program was investigated, namely *shared-book reading* with children. The teachers were engaged in a dialog book reading training, which was implemented during this six-month study period. The training occurred in three sessions

(4 hours each session) of five lessons each with an interval of 1 month between each session, and took place at the University of Kaiserslautern. The cost of the HIT training program was covered by the study.

The shared book reading training was offered to all teachers ($N = 20$) of the two intervention groups. All teachers that received the training were randomly assigned to two mixed course groups with the same instructor in order to insure that teachers of both conditions received the same instruction. Sixteen teachers completed all three training sessions (Method I, $N = 7$; combination of both methods, $N = 9$). The training consisted into verbal instructions, video demonstrations, model learning and joint collaboration of activities. In addition to the general content and training interaction, the teachers should apply what they have already learned in the practice phase with the children in their kindergarten in order to improve their techniques. With the purpose to coach teachers, the teachers were encouraged to videotape a storybook situation for analysis purposes in the next group meeting. In addition, to intensify the content of each exercise, the teachers received written material in an understandable and attractive form. The following topics were covered in the training:

- Shared book reading
- The teachers as a language model
- General assistance in learning to talk
- Books selection
- Direct verbal affect
- Communication between teacher and child
- The importance of communication strategy
- The method of shared book reading
- Dialogic reading

After training, the teachers were instructed to use the learned shared book reading strategies three to four times per week with one child at time, for approximately 15 minutes each child, in a location outside of the classroom, in order to avoid possible distractions. The books used were from the corners of the bookshelves from each classroom. In reading logs, each week from Monday to Friday, the teachers should mark the frequency of book activity performed from both child and teacher. Each kindergarten was visited weekly to collect the logs, check compliance with the intervention, and provide guidance to resolve any difficulties with conducting the intervention.

4.1.3 Combination of Literacy Enrichment and Teacher Training

The kindergarten children participated Method I and in Method II, in combination.

4.1.4 Control Group

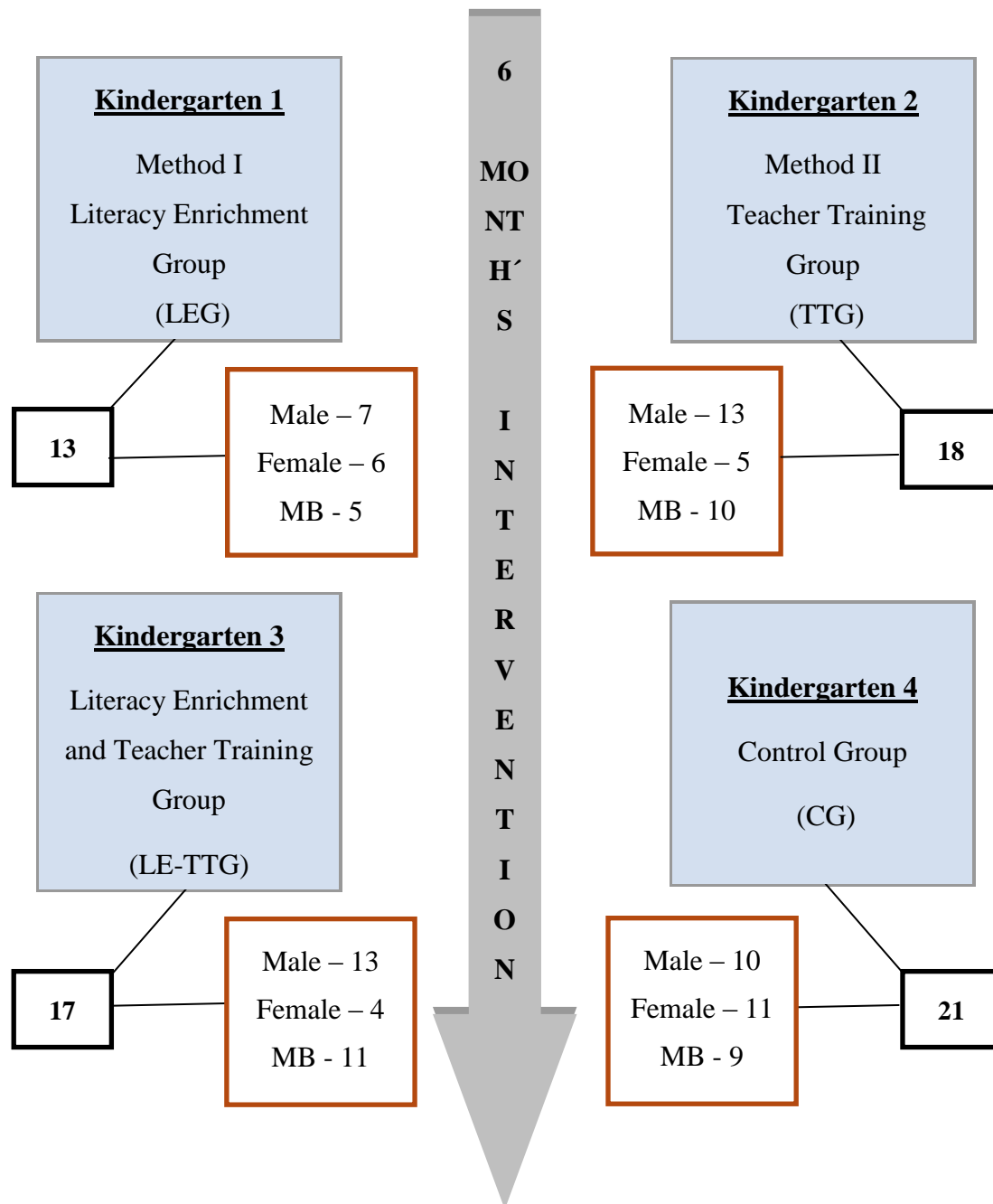
The control group did not participate in any special instruction or activity. As Thanks for participating on the study, the kindergarten received, at the end of the study, a book library valued at € 300,00.

4.2 Participants

The sample size of the study was composed of 69 children, ranged in age from 3;0 to 4;8 years ($M = 4.12$, $SD = 0.54$). From the 69 children 43 were male and 26 were female. 35 children had migration background. The children were recruited from four kindergartens in Kaiserslautern, Germany. The participants were divided among four kindergarten centers: literacy enrichment group (LEG), teacher training group (TTG), literacy enrichment and teacher training LE-TTG), control group (CG) (see Figure 7).

Pretests

Expressive Vocabulary -AWST-R – 3-5; Semantic Skills - SETK-3-5 (ESR); Grapheme Awareness

**Posttests**

Expressive Vocabulary -AWST-R – 3-5; Semantic Skills - SETK-3-5 (ESR); Grapheme Awareness

Figure 7. Overview of the study design

Note. MB = Children with migration background

4.3 Material

A questionnaire was developed for the parents to record their SES status as well as the child's literacy experiences at home (see Appendix C). Frequency of shared book reading activities for the literacy enrichment Method and for the teacher training Method was controlled by reading logs. Two of the measures applied in this study are the psychometric tests AWST-R (expressive vocabulary) and SETK – Subtest ESR (semantic skills). A third applied test is a grapheme awareness self-developed task. The tests were administered to each participant individually in their kindergarten by two trained graduate students. The materials are described in detail below.

4.3.1 Family Questionnaire

In the present study, SES was controlled through a children's family questionnaire in which requested general information about the child and the parents. In addition to inquiries of age, birthdate, it also included questions about the child's literacy experiences within the family as well as the frequency of kindergarten attendance and the child's interests. The part of the questionnaire for the parents inquires about the nature of academic degree achievement (if any), vocational training, professional standing, as well as family net income. Moreover, the questionnaire includes a section addressed only to parents with migration background.

4.3.2 Shared Book Reading Frequency

Frequency was controlled for by reading logs which included, for the Method I, the number of forgotten books, parent-child book reading the frequency of children's absences (filled in by the graduated student). For the Method II, the frequency of teacher-child book reading was controlled for, as well as the absences of both teachers and children (filled in by the teachers).

4.3.3 Measure of Expressive Vocabulary

The AWST-R (Kiese-Himmel, 2005) is an individual standardized and normed picture naming test to assess the expressive German vocabulary for children aged 3;0 to 5;5 years (see Figure 8). The test is comprised of 81 items, which differ among 51 substantives (*ein Blatt* – sheet, *einen liegestuhl* – deck chair) and 24 verbs (*bügeln* – ironing, *stricken* – knitting, *schreiben* – write, *schwimmen* – swim). The child is instructed to verbalize what can be seen in the picture or what action is being performed (*Was ist das?* - for substantive or *Was macht die/der?* – for verbs) (Kiese-Himmel, 2005). One point is given for each correct answer. The raw score is transformed into a T-value. Two parallel versions have been developed each with 37 items (Version 1 for pre-test and version 2 for posttest); these items hold the same level of difficulty. For this data analysis, only the raw score was used instead of T-value. The presentation of the pictures was given using a laptop. The test takes about 15 – 20 minutes.





		<p><i>Was macht die/der?</i> <i>schälen</i> What is she/he doing? peel</p>
<p>Questions: <i>Was ist das?</i> (What is this?) <i>Was macht die/der?</i> (What is she/he?)</p>		<p><i>Was macht die/der?</i> <i>Fahrrad fahren</i> What is she/he doing? Ride bike</p>
		<p><i>Was ist das?</i> <i>Fuchs</i> What is this? Fox</p>

Figure 8. AWST-R 3-5 (Kiese-Himmel, 2005)

4.3.4 Measure of Semantic Skills

The SETK 3-5 (Grimm, 2001) is an individual, standardized, and normed test developed to record the differences in receptive and productive language levels in childhood development. The test is comprised of four subtests. The procedure was developed for the age range of 3;0 to 5;11 years and can be performed within 20 to 30 minutes. For this study only the subtest ESR - *Enkodierung Semantischer Relationen* was used. The ESR includes 11 picture cards (see Figure 9) which aim at assessing the possibility of encoding the images verbally (Grimm, 2001). The child should answer the question: *Was kannst du auf diesem Bild sehen?* – What do you see in the picture? The ESR is applied only to 3;0 to 3;11 years old children. For this reason, only the DAWA-Raw score was used in data analysis. The DAWA-Raw score is calculated by summing the number of correct single words per utterance (AWA), then divided by 11 (the sum of the total cards).



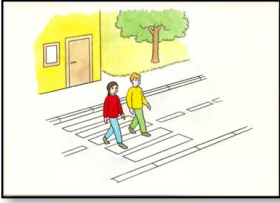

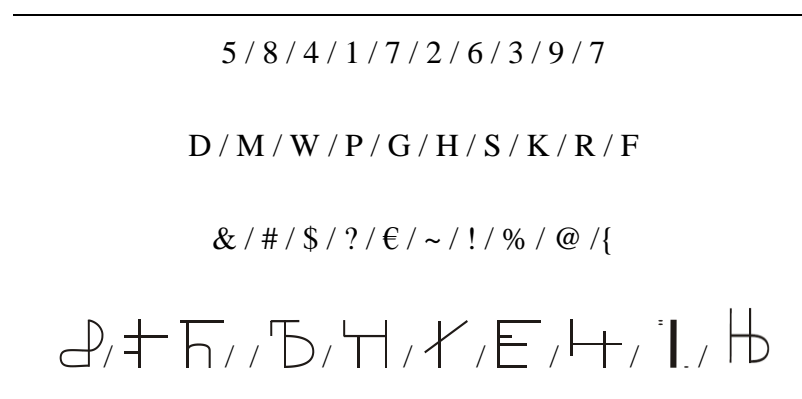
		<p><i>Die Katze springt in den Eimer.</i> The cat jumps into the bucket.</p>
<p>Question:</p>		<p><i>Die Kinder gehen über die Straße.</i> The children are going across the street.</p>
<p><i>Was kannst du auf diesem Bild sehen?</i> What can you see in this picture? <i>Was siehst du hier?</i> What are you seeing here?</p>		<p><i>Der Junge klettert über den Zaun.</i> The boy climbs over the fence.</p>

Figure 9. SETK 3-5 subtest ESR (Grimm, 2001)

4.3.5 Measure of Grapheme Awareness

The grapheme awareness test is self-developed. The test is embedded in a power point presentation of ten slides. In each of the slides, children were asked to recognize a grapheme presented amongst three non-letter distractors, displayed simultaneously on the computer screen, by pointing to it without the requirement of naming it. In each of the ten slides, a display with the four items was presented individually (See Figure 10): one like-letter, one number, one typographic symbol, and one upper case letter in varying locations, either upper left / right, or lower left / right of the screen. For each correct answer, the child received one point, which at the end of the test application accumulates to a final score.



Wo ist der Buchstabe? – The child should point to the location of the letter.

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Figure 10. Grapheme Awareness task

4.4 Procedure

After informed consent obtained for each child's participation from the parents (see Appendix B), the test sessions (pre- and posttests) were administered at the kindergartens in a separate room. The children were tested individually. Testing was conducted by two graduate students with German as their native language and accompanied by the researcher. The graduate students were introduced to the participants before administering the tests. The tests were applied one after the other without any break in the following sequence: vocabulary test (AWST-R), semantic skills (SETK – subtest ESR), and letter recognition. The test session did not exceed 30 minutes. The tests for each kindergarten occurred from 9.00 to 11:00 am. Six months after the pretests were given the posttests were given by a different graduate student from the one who performed the pretests.

4.5 Data analysis

The data analysis was performed using the software IBM SPSS Statistics version 22. The following statistical methods were applied in the present study:

The chi-square test was used to determine the differences in terms of percentage distributions in the four groups. The analysis of variance with repeated measures (ANOVA) was done for each set of dependent variables (results from expressive vocabulary; AWST-R – *Aktiver Wortschatztest*, semantic skills; SETK 3-5 Subtest ESR – *Enkodierung Semantischer Relationen* and grapheme awareness) with the following two factors: Time (Pretest vs. Posttest as within-subject factors) and Group (literacy enrichment group (LEG), teacher training group (TTG), literacy enrichment and teacher training group (LE-TTG), and the control group (CG)). Partial eta squared was reported as a measure of effect size. Furthermore, age, gender, and migration background were included as possible moderator factors. With each instance that the assumption of homogeneity of variance has been violated

(as revealed by the non-parametric test KS -Kolmogorov-Smirnov test), bootstrapped *t*-tests were conducted. Bootstrapping is a nonparametric method, which, according to the literature (Bollen & Stine, 1990; MacKinnon, Lockwood & Williams, 2004; Preacher & Hayes, 2004), has shown to be an appropriate measure for not normally-distributed data.

Moreover, multiple testing corrections were used when more than one *t*-test was conducted for each dependent variable. The alpha value of .05 established for this study was adjusted by the Holm (step down) Bonferroni procedure (Aickin & Gensler, 1996; Holm, 1979). In addition, Cohen's *d* (Cohen, 1988) was reported as a measure of effect size. Cohen's *d* values for the effect size can be interpreted as $d = 0.20$ as a small effect, $d = 0.50$ as a medium effect, and $d \leq 0.80$ as a large effect.

5. Results

The present chapter first provides the general socio-demographic data of the family questionnaire and the data of the frequency of shared book reading activities. Next, according to research questions, the findings will be presented on the effectiveness of method I, method II, and the combination of both.

- **Family Questionnaire (Section 5.1)**

- Children General Data (Section 5.1.1)

- Family Socio Economic Status (Section 5.1.2)

- Children Home Literacy Activities (Section 5.1.3)

- Migration Background - Family Knowledge of German language (Section 5.1.4)

- **Shared Book Reading Frequency (Section 5.2)**

- Literacy Enrichment (Section 5.2.1)

- Teacher Training (Section 5.2.2)

- **Research Question 1 (Section 5.3)**

- 1- What effect does method I (literacy enrichment), method II (teacher training) and the combination of both methods have on children's expressive vocabulary?*

- **Research Question 2 (Section 5.4)**

- 2- What effect does method I (literacy enrichment), method II (teacher training) and the combination of both methods have on children's semantic skills?*

- **Research Question 3 (Section 5.5)**

- 3- What effect does method I (literacy enrichment), method II (teacher training) and the combination of both methods have on children's grapheme awareness?*

5.1 Family Questionnaire

Of the 69 distributed parental questionnaires, 67 were completed and returned to the schools. In some cases, not all questions were fully answered, with the consequence that the number of answers for each question can vary. Therefore, the valid percent was reported based on frequency.

5.1.1 Children General Data

The 69 children participants were between the ages of 3;0 to 4;8 years old ($M = 4.12$, $SD = .54$) at the time of their initial assessment. The sample consisted of 62% males ($N = 43$) and 37% females ($N = 26$) (see Table 8). Even though the number of boys and girls was unequal, the sample size did not differ significantly in all four groups ($\chi^2(3) = 4.53$; $p = .21$).

Half of the participants ($N = 35$, 50.7%) had a migration background. The German-born MB children in this study were the second generation of migrants in their family. That means all children were born in Germany. Broken down by ethnicity, participation rates were: Russian ($N = 19$); Albanian and Turkish ($N = 3$ respectively); Arabic, Kurdish and Portuguese ($N = 2$ respectively); Tunisian, Mandingo, Romanian, and Urdu ($N = 1$ respectively) ($\chi^2(3) = 2.80$; $p = .42$).

In relation to the parents of the MB children, 84% have reported being born outside of Germany ($N = 28$ - mothers; $N = 28$ - fathers). They also reported living in Germany for about 13,20 years on average ($N = 24$; $SD = 6.65$, Min. 4; Max. 31).

Table 8. Overview of the sample participants according group

	<i>N</i>	Gender		Age	WMB	MB
		Male	Female	<i>M (SD)</i>	<i>N</i>	<i>N</i>
LEG	13	7	6	4.24 (0.55)	8	5
TTG	18	13	5	4.07(0.62)	8	10
LE-TTG	17	13	4	4.21(0.41)	6	11
CG	21	10	11	4.02 (0.54)	12	9
Total	69	43	26	4.12 (0.54)	34	35

Note. LEG = literacy enrichment group; TTG = teacher training group; LE-TTG = literacy enrichment and teacher training; CG = control group. WMB = without migration background; MB = with migration background.

5.1.2 Family Socio Economic Status

Data were obtained from the parental questionnaire via response categories for income, education level, vocational training, and professional status. No significant differences in relation between the four participant groups were found $F(3.64) = .569$, $p = 0.63$, partial $\eta^2 = .28$. Parents (53,4 %) reported an income less than 2,000 Euros monthly and 38% reported an income between 2,000 to 3,000 Euros monthly. Regarding level of education, 61% ($N = 39$) of the fathers had an equivalent of 9¹⁶ to 10¹⁷ years of schooling, whereas 76% ($N = 50$) of the mothers have an equivalent of 10 to 12-13¹⁸ years of schooling. 42% ($N = 25$) of the fathers and 60% ($N = 36$) of the mothers reported having a *Lehre oder vergleichbare Abschlus*.

27% ($N = 16$) of the fathers reported no professional training. For the mothers, this number was 15% ($N = 9$). The majority of the fathers worked full time (77%, $N = 48$) and 6% ($N = 4$) reported unemployed. 41% ($N = 26$) of the mothers worked part-time and 19% ($N = 12$) reported unemployed (see Table 9 and 10 for detailed data).

¹⁶Hauptschulabschluss

¹⁷Mittlere Reife, Realschule

¹⁸Fachhochschulreife, Abitur, Gymnasium

Table 9. Family socio economic status

	LE (N = 13)		TTG (N = 18)		LE-TTG (N = 17)		CG (N = 21)	
	N	%	N	%	N	%	N	%
Family Income¹⁹ ($\chi^2 (21) = 21.37, p = .43$)								
Below 1000, - €	2	15.4	1	5.9	1	11.1	1	5.6
1000, - to 2000, - €	2	15.5	1	6	1	11	1	5.6
2000, - to 3000,- €	2	14.15	8	47	4	44.5	8	44.5
3000, - to 4000,- €	5	38.5	6	34.13	4	44.5	7	39
Over 4000,- €	4	31	1	6	0	0	0	0
School Degree – Father ($\chi^2 (12) = 25.98, p = .31$)								
Without School Degree	0	0%	0	0%	4	33.3	2	9.5
9 years school	2	16.7	6	33.3	0	0%	10	47.6
10 years school	6	50	6	33.3	2	16.7	7	33.3
12/13 years school	4	33.3	4	22.2	5	41.7	1	4.8
Others (University Study)	0	0%	2	11	1	8.3	1	4.8
School Degree – Mother ($\chi^2 (12) = 6.71, p = .87$)								
Without Scholl Degree	0	0%	1	5.6	1	7.7	1	4.8
9 years school	2	15.4	4	22.2	1	7.7	4	19
10 years school	7	53.8	7	38.9	5	38.5	11	52.4
12/13 years school	4	30.8	6	33.3	6	46.2	4	19
Others (University study)	0	0%	0	0%	0	0%	1	4.8
Professional Training – Father ($\chi^2 (9) = 10.19; p = .33$)								
No Professional Training	3	25	5	31.3	5	41.7	3	15.8
<i>Lehre oder vergleichbarer Abschluss</i>	3	25	6	37.5	4	33.3	12	63.2
<i>Fachschule/Techniker/Meister oder vergleichbarer Abschluss</i>	5	41.7	2	12.5	2	16.7	3	15.8
<i>Hochschulabschluss, Fachhochschulstudium, o Ä</i>	1	8.3	3	18.8	1	8.3	1	5.3
Professional Training – Mother ($\chi^2 (9) = 6.185, p = .72$)								
No Professional Training	1	8.3	3	20	3	25	2	10
<i>Lehre oder vergleichbarer Abschluss</i>	6	50	9	60	8	66.7	13	65
<i>Fachschule/Techniker/Meister oder vergleichbarer Abschluss</i>	3	25	2	13.3	0	0%	2	10
<i>Hochschulabschluss, o Ä</i>	2	16.7	1	6.7	1	8.3	3	15
Professional Situation – Father ($\chi^2 (12) = 12.589; p = .40$)								
No Job	2	16.7	0	0%	1	9	1	4.8
Full-time Job	8	66.7	14	77.8	8	72.7	18	85.7
Part-time Job	2	16.7	4	22.2	1	9	0	0%
Training / Studying	0	0%	0	0%	1	9	1	4.8
Professional Situation – Mother ($\chi^2 (12) = 20.40, p = .06$)								
No Job	1	7.7	5	33.3	1	7.7	5	23.8
Full-time Job	6	46.2	0	0%	2	15.4	4	19
Part-time Job	4	30.8	9	60	5	38.5	8	38
Technical Training - Studying	2	15.4	1	6.7	2	15.4	4	19

¹⁹ Monthly net income. This refers in Euros to the amount after deduction of taxes and social security contributions. For self-employed: the average net income less operating expenses.

Table 10. Family Socioeconomic Status: Information about the MB and WMB families

	WMB (N = 34)		MB (N = 35)	
	N	%	N	%
Net Monthly Family Income ($\chi^2 (21) = 17.24, p = .69$) - ($\chi^2 (15) = 15.14, p = .44$)				
Below 1000,- €	3	10.3	2	7
1000,- to 2000,- €	10	24	12	43
2000,- to 3000 - €	12	41.5	10	36
3000,- to 4000,- €	3	10.3	4	14.3
Over 4,000,- €	1	3.4	0	0%
School Degree – Father ($\chi^2 (9) = 22.775, p = .27$) - ($\chi^2 (12) = 12.71, p = .39$)				
Without School Degree	4	12.4	2	6.5
9 years school	12	37.5	6	19.4
10 years school	8	25	13	41.9
12/13 years school	8	25	6	19.4
Others (University Study)	0	0%	4	12.9
School Degree – Mother ($\chi^2 (9) = 8.09; p = .52$) - ($\chi^2 (12) = 7.37; p = .83$)				
Without Scholl Degree	1	2.9	2	6.5
9 years school	7	20.6	4	12.9
10 years school	19	55.9	11	35.5
12/13 years school	7	20.6	13	41.9
Others (University study)	0	0%	1	3.2
Professional Training – Father ($\chi^2 (9) = 17.71, p = .04$) - ($\chi^2 (9) = 7.247, p = .61$)				
No Professional Training	8	26.7	8	27.6
<i>Lehre oder vergleichbarer Abschluss</i>	10	33.3	15	51.7
<i>Fachschule/Techniker/Meister oder vergleichbarer Abschluss</i>	8	23.3	5	17.2
<i>Hochschulabschluss, Fachhochschulstudium, o Ä</i>	5	16.7	1	3.4
Professional Training – Mother ($\chi^2 (9) = 7.492, p = .58$) - ($\chi^2 (9) = 7.86, p = .54$)				
No Professional Training	3	9	6	23.1
<i>Lehre oder vergleichbarer Abschluss</i>	22	66.7	14	53.8
<i>Fachschule/Techniker/Meister oder vergleichbarer Abschluss</i>	5	15.2	2	7.7
<i>Hochschulabschluss, Fachhochschulstudium, o Ä</i>	3	9	4	15.4
Professional Situation – Father ($\chi^2 (12) = 13.05, p = .36$) - ($\chi^2 (6) = 12.68, p = .50$)				
No Job	2	6.5	2	6.5
Full-time Job	23	74.2	25	80.6
Part-time Job	3	9.7	4	12.9
Training / Studying	2	6.5	0	0%
Professional Situation – Mother ($\chi^2 (12) = 11.92, p = .45$) - ($\chi^2 (12) = 22.80, p = .06$)				
No Job	4	12.5	8	27.6
Full-time Job	8	25	4	13.8
Part-time Job	12	37.5	14	48.3
Technical Training – Studying	7	21.9	1	3.4

Note. WMB = without migration background; MB = with migration background. Chi-square is first reported for WMB children and second for MB children

5.1.3 Children Home Literacy Activities

To evaluate the literacy experiences at home, there were questions about book exposure as well as the availability of books at home, and the frequency of library trips. Chi-square analyses reported no significant difference between the groups.

53% ($N = 35$) of the parents reported shared book reading with the child daily and 33% ($N = 22$) more than one time a week. 30% ($N = 20$) of the children look at book almost every day by themselves. The parents reported owning on average 71 books ($N = 57$; $SD = 145.82$; Min. = 0, Max. = 1000; $F(3,56) = 1.49$, $p = .23$). The children had an average of 27 children's books at home ($N = 62$; $SD = 24.02$; Min. = 0, Max. = 140; $F(3,62) = 0.37$, $p = .78$).

In relation to the frequency of library trips, only 6% ($N = 4$) of the parents reported to go frequently to a public library with their child, contrasted with 71% ($N = 46$) who never attended. 47% ($N = 31$) of the children watched television daily. The parents reported the frequency of TV viewing for their child to be an average of 1.75 hours ($N = 62$; $SD = .91$; Min. = .50, Max. = 5) per day. The following tables (11 to 16) contain further details for all children home literacy activities and for the WMB and MB children as well as chi square analyses.

Table 11. Shared book reading activities at home for all children

	Daily		Often at the week		Ca. once a week		Less than once a week		Never	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
LEG (<i>N</i> = 13)										
adult-child book	10	76.9	2	15.4	1	7.7	0	0%	0	0%
child-book alone	4	30.8	7	53.8	1	7.7	1	7.7	0	0%
TTG (<i>N</i> = 18)										
adult-child book	7	39	6	33.3	3	16.7	2	11	0	0%
child-book alone	6	33.3	8	44.4	1	5.6	3	16.7	0	0%
LE-TTG (<i>N</i> = 17)										
adult-child book	8	57	6	43	0	0%	0	0%	0	0%
child-book alone	5	35.7	4	28.6	4	28.6	1	7.1	0	0%
CG (<i>N</i> = 21)										
adult-child book	10	47.6	8	38	1	4.8	1	4.8	1	4.8
child-book alone	5	23.8	12	57	1	4.8	2	9.5	1	4.8

Note. adult-child book = ($\chi^2(12) = 12.34, p = .41$); child-book alone = ($\chi^2(12) = 10.63, p = .56$)

Table 12. Shared book reading activities at home for MB and WMB children

	Daily		Often at the week		Ca. once a week		Less than once a week		Never	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
WMB (<i>N</i> = 34)										
adult-child book	20	59	9	26.5	3	8.8	2	5.9	0	0
child-book alone	11	32.4	17	50	3	8.8	3	8.8	0	0
MB (<i>N</i> = 35)										
adult-child book	15	47	13	41	2	6.3	1	3	1	3
child-book alone	9	28	14	43.8	4	12.5	4	12.5	1	3

Note. adult-child book = ($\chi^2(4) = 2.91, p = .57$); child-book alone = ($\chi^2(4) = 1.71, p = .78$)

Table 13. Literacy activities: Information about the four groups

LEG (N = 13)	N	Min.	Max.	Mean	SD
Children` books at home	13	10	60	32.38	19.17
Parents` books at home	13	2	1000	145.00	274.31
Child TV hours per day	11	1	3	1.54	.68
TTG (N = 18)	N	Min.	Max.	Mean	SD
Children` books at home	16	2	50	23.75	18.16
Parents` books at home	14	0	300	55.71	88.26
Child TV hours per day	18	1	5	2.16	1.20
LE-TTG (N = 17)	N	Min.	Max.	Mean	SD
Children` books at home	13	4	78	29.85	25.64
Parents` books at home	13	1	250	47.92	69.46
Child TV hours per day	14	.50	3	1.50	.73
CG (N = 21)	N	Min.	Max.	Mean	SD
Children` books at home	20	0	140	25.95	30.17
Parents` books at home	17	0	200	45.24	47.39
Child TV hours per day	19	1	3	2.68	.74

Note. Children books at home = ($\chi^2 (72) = 85.49, p = .13$); parents books at home = ($\chi^2 (81) = 94.79, p = .14$); child TV hours per day = ($\chi^2 (12) = 14.39, p = .27$)

Table 14. Literacy activates for MB and WMB

WMB (N = 34)	<i>N</i>	Min.	Max.	Mean	SD
Children` books at home	34	3	78	30.71	21.47
Parents` books at home	30	1	1000	98.7	191.29
Child TV hours per day	32	.50	3	1.57	.73
MB (N = 35)	<i>N</i>	Min.	Max.	Mean	SD
Children` books at home	28	0	140	23.71	26.70
Parents` books at home	27	0	200	40.52	55.92
Child TV hours per day	30	.50	5	1.95	1.05

Note. Children books at home = ($\chi^2 (24) = 23.03, p = .51$); parents books at home = ($\chi^2 (27) = 36.72, p = .10$); child TV hours per day = ($\chi^2 (4) = 4.65, p = .32$)

Table 15. Library trips frequency for the four groups

Library trips	Frequently		Sometimes		Rarely		Never	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
LEG (N = 13)	1	7.7	2	15.4	0	0	10	77
TTG (N = 18)	2	11	2	11	2	11	12	67
LE-TTG (N = 17)	1	6	2	12	1	6	10	58.8
CG (N = 21)	0	0	0	0	6	29	14	67

Note. Library trips = ($\chi^2 (9) = 11.09, p = .26$)

Table 16. Public Library frequency

Library trips	Frequently		Sometimes		Rarely		Never	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
WMB (<i>N</i> = 34)	3	9	3	9	4	12	24	70
MB (<i>N</i> = 35)	0	3	3	10	5	16	22	71

Note. Library trips = (χ^2 (3) = 1.06, $p = .78$)

5.1.4 Migration Background - Family Knowledge of German language

The German language questionnaire was developed only for families with a migration background. Given five choices on a rating scale (very good; good; average; bad; very bad), parent(s) should estimate their fluency in German. For the mothers, 24% ($N = 7$) rated their level of German fluency at “very good”; 38% ($N = 11$) rated “good” and 27% ($N = 8$) rated “average” fluency. For the fathers 30% ($N = 9$) rated their level of German fluency at “very good”; 53% ($N = 16$) rated “good” and 13% ($N = 4$) rated “average” fluency. 50% of the mothers ($N = 17$) reported speaking German as well as another language in the same frequency at home; 43% ($N = 13$) reported speaking only the other native language in the home (non-German). Regarding the fathers, 44% ($N = 13$) reported speaking German and the mother tongue in the same frequency at home and 37% ($N = 11$) reported speaking only their mother tongue in the home.

The questionnaire also covered the main language spoken by the child in the home. The parents reported that 33% of the children ($N = 10$) speak German and another language at the same level at home. 68% of the children ($N = 19$) speak only German outside of the family. 58% ($N = 17$) of the children learned German outside of the family, namely 49% in kindergarten (see Table 17).

Table 17. Family Language Knowledge

German Knowledge	Very Good		Good		Average		Bad		Very Bad	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Mothers (<i>N</i> = 29) (χ^2 (12) = 9.50, <i>p</i> = .66)	7	24	11	38	8	27.6	2	7	1	3.4
Fathers (<i>N</i> = 30) (χ^2 (9) = 10.68, <i>p</i> = .29)	9	39	16	53.3	4	13.3	1	3	0	0

Language Frequency	Only German		Only another Language		German and another Language in the same amount	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Mothers (<i>N</i> = 30) (χ^2 (3) = 5.28, <i>p</i> = .15)	0	0	13	43.3	17	56.7
Fathers (<i>N</i> = 29) (χ^2 (6) = 6.74, <i>p</i> = .34)	5	17.2	11	38	13	44.8

5.2 Shared Book Reading Frequency

5.2.1 Literacy Enrichment

The literacy enrichment Method (in the kindergarten with the Method I and in the kindergarten with the combination of both Methods) encompassed twenty four potential borrow days, in which old books are returned and new ones are borrowed. Mean number (see Table 18) of borrowed books per child in the two intervention conditions ranged from 6 to 22 ($M = 15.08$, $SD = 4.21$). An independent t-test revealed that the difference in reading frequency between the two groups was not significant $t(28) = 2.232$, $p = .34$.

In regards to the frequency for children with and without migration background, the mean number of borrowed books per child ranged from 6 to 20 ($M = 14.07$, $SD = 4.17$) for WMB children and from 7 to 22 ($M = 16$, $SD = 4.16$) for the WMB children. (see Table 19). The difference in reading frequency between WMB and MB children was not significant $t(28) = -1.224$, $p = .23$.

Table 18. Mean and standard deviation for literacy enrichment

	LEG ($N = 13$)				LE-TTG ($N = 17$)			
	<i>M</i>	<i>SD</i>	Min.	Max.	<i>M</i>	<i>SD</i>	Min.	Max.
N. children bowered books	13.23	4.18	6	21	16.47	3.74	7	22
N. forgotten books	6.38	4.42	1	16	5.60	3.64	1	16
parent-child book reading	20.15	11.25	6	45	23.53	8.46	6	38
N. children absence days	3.77	2.08	1	7	2.93	2.49	1	9

Note. *M* = Mean, *SD* = Standard Deviation, Min. = Minimum, Max. = Maximum

Table 19. Mean and standard deviation for literacy enrichment - children with (MB) and without migration status (WMB)

WMB	LEG (N = 8)				LE-TTG (N = 6)			
	M	SD	Min.	Max.	M	SD	Min.	Max.
N. children bowered books	11.88	4.01	6	20	17	2.19	14	20
N. forgotten books	7.88	4.48	1	16	5.83	1.94	3	8
days of parent-child book reading	17.62	12.19	6	45	28.33	4.45	20	32
N. children absence days	3.63	1.68	1	6	1.75	.95	1	3

MB	LEG (N = 5)				LE-TTG (N = 11)			
	M	SD	Min.	Max.	M	SD	Min.	Max.
N. children bowered books	15.40	3.84	11	21	16.18	4.44	7	22
N. children bowered books	15.40	3.84	11	21	16.18	4.44	7	22
days of parent-child book reading	24.20	9.25	10	33	20.90	9.12	6	38
N. forgotten books	4	3.67	1	10	5.44	4.55	1	16

5.2.2 Teacher Training

The teacher training Method (for the TTG and for LE-TTG) encompassed 122 potential kindergarten days for shared-book reading activities based on the training. The mean number (see Table 20) of shared book reading sections per child in the two intervention conditions ranged from 3 to 38 ($M = 19$, $SD = 8.60$). An independent t-test, according to Holm Bonferroni correction, revealed that the difference in reading frequency between the two groups was not statistically significant, $t(33) = 2.14$, $p = 0.04$.

In regards to the frequency for children without and with migration background, the mean number of shared-book reading frequency per child ranged from 6 to 32 ($M = 17.90$, SD

= 7.63) for WMB children and from 3 to 38 ($M = 19.80$, $SD = 9.31$) for the MB children (see Table 19). The difference in reading frequency between WMB and MB children was not significant $t(33) = -.636$, $p = .52$. Moreover, the teachers were requested to evaluate the training at the end of the study, giving a rating on a scale of 1 to 6. The training was evaluated on an average rating of 2.56 ($SD = .72$, Min. = 2, Max. = 4).

Table 20. Mean and standard deviation for the shared book reading frequency

	LEG (N = 18)				LE-TTG (N = 17)			
	<i>M</i>	<i>SD</i>	Min.	Max.	<i>M</i>	<i>SD</i>	Min.	Max.
Days of shared book reading (teacher and child)	16.11	5.31	6	27	22.06	10.40	3	38
Teacher's absence days	15.39	13.31	0	48	12.35	7.43	1	24
Children absence days	25.11	15.49	2	54	17.88	12.88	3	48

Note. *M* = Mean, *SD* = Standard Deviation, Min. = Minimum, Max. = Maximum; LEG = literacy enrichment group; LE-TTG = literacy enrichment and teacher training group

Table 21. Mean and standard deviation for the shared book reading frequency - children with (MB) and without migration background (WMB)

WMB	TTG (N = 8)				LE-TTG (N = 6)			
	<i>M</i>	<i>SD</i>	Min.	Max.	<i>M</i>	<i>SD</i>	Min.	Max.
Days of shared book reading (teacher and child)	14.63	5.12	6	21	22.17	8.69	9	32
Teacher's absence days	16.38	13.32	7	48	8.50	8.15	1	15
Children absence days	24	16	6	54	11.83	7.05	3	21

MB	TTG (N = 8)				LE-TTG (N = 6)			
	<i>M</i>	<i>SD</i>	Min.	Max.	<i>M</i>	<i>SD</i>	Min.	Max.
Days of shared book reading (teacher and child)	17.30	5.41	8	27	22	11.63	3	38
Teacher's absence days	14.60	13.97	0	48	14.45	7.46	1	24
Children absence days	26	15.88	2	49	21.18	14.37	4	48

Note. *M* = Mean, *SD* = Standard Deviation, Min. = Minimum, Max. = Maximum; TTG = teacher training group; LE-TTG = literacy enrichment and teacher training group; WMB = without migration background, MB = with migration background

5.3 Research Question 1

1- What effect does method I (literacy enrichment), method II (teacher training) and the combination of both methods have on children's expressive vocabulary?

To answer this question, an ANOVA with repeated measures for AWST-R (raw score) was carried out (means and standard deviations are presented in Table 22). The ANOVA showed a main effect of Time $F(1.65) = 30.661, p < .001, \eta p^2 = .32$. A related t-test revealed that the improvement from Pretest ($M = 12.42, SD = 7.613$) to Posttest ($M = 14.99, SD = 7.768$) was significant, $t(68) = -5.239, p = < .001, d = 0.631$. There was a main effect of Group $F(3.65) = 3.646, p = .017, \eta p^2 = .144$. The LEG achieved higher scores ($M = 19.50, SD = 5.97$), $ts \geq -2.708, p \leq .011, ds \geq 0.938$ compared to the other intervention groups: TTG ($M = 12.44, SD = 7.88$), LE-TTG ($M = 12.41, SD = 6.45$), and CG ($M = 12.23, SD = 7.23$), $ts \leq .085, p = .93$.

Moreover, the ANOVA revealed an interaction between Time and Group, $F(3.65) = 2.731, p = .05, \eta p^2 = .11$. The results of the paired-samples t-test revealed significant improvement over Time for all intervention groups (LEG, $p = .020$; TTG, $p = < .001$; LE-TTG, $p = .024$) however, after Holm Bonferroni correction, only the TTG remained significant ($t(17) = -5.848, p = < .001, d = 1.38$) (see Figure 11). No significant improvement over Time was found for the CG $t(20) = -.865, p = .397$.

Table 22. Means and standard deviations of the all four groups for AWST-R 3-5 in Pre and Posttest

	LEG (N = 13)		TTG (N = 18)		LE-TTG (N = 17)		CG (N = 21)	
	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
<i>M</i>	18.15	20.85	10.28	14.61	11	13.82	11.86	12.62
<i>SD</i>	6.91	5.49	7.77	8.30	6.87	6.85	7.18	7.83

Note: *M* = mean, *SD* = standard deviation; LEG = literacy enrichment group; TTG = teacher training group; LE-TTG = literacy enrichment and teacher training group; CG = control group

Expressive Vocabulary

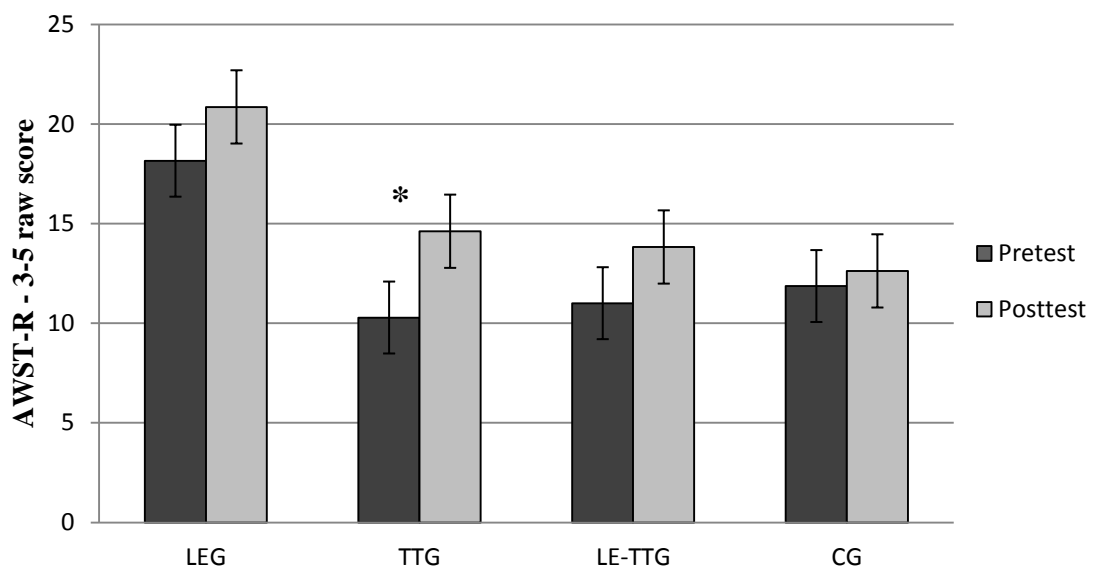


Figure 11. AWST-R means performance over Time according to group for all children.

Note. * = Significant value over Time according to Holm Bonferroni correction. LEG = literacy enrichment group; TTG = teacher training group; LE-TTG = literacy enrichment and teacher training group; CG = control group

Moreover, age, gender, and migration background were added as possible moderator factors. As can be seen in Table 23, for age and gender, no significant effects of these two factors were found from the results.

For migration background, however, (Means and standard deviations for MB and WMB children are presented in Table 24), two separate ANOVAs (one for MB children and one for WMB children) revealed a main effect of Time for MB children $F(3.31) = 18.129, p = .000, \eta p^2 = .369$, and for WMB children $F(3.30) = 12.087, p = .002, \eta p^2 = .287$. An independent t-test revealed that WMB children achieved higher scores ($M = 16.12, SD = 6.83$) at Pretest ($t(67) = 4.51, p < .01$) and at Posttest ($M = 18.85, SD = 6.74$); ($t(67) = 4.65, p < .01$) as compared to MB children (Pretest, ($M = 8.83, SD = 6.60$), (Posttest, $M = 11.23, SD = 6.86$). There was a main effect of Group for MB children, $F(3.31) = 3.321, p = .032, \eta p^2 = .243$, whereas no main effect of Group was found for WMB children, $F(3.30) = 1.203, p = .32, \eta p^2 = .107$. The interaction between Time and Group was significant for the MB children $F(3.31) = 4.796, p = .007, \eta p^2 = .317$ (see Figure 13). However, no significant interaction was found for the WMB children $F(3.30) = .361, p = .781, \eta p^2 = .035$. The results of the paired-samples t-test revealed an improvement over Time for MB children in the TTG ($p = .002$) and in the LE-TTG ($p = .029$). However, after Holm Bonferroni correction, only the TTG remained significant ($t(9) = -4.488, p = .002$). No improvement was found in the LEG $t(7) = -2.049, p = .110$, and in the CG $t(8) = -1.152, p = .283$ (see Figure 12 and 13).

Table 23. AWST-R - ANOVA with repeated measures for age and gender as moderator factor

ANOVA with repeated measures	Age	
	3 year (N = 27)	4 years (N = 42)
main effect of Time	$F(1.23) = 29.12$ $p < .01, \eta p^2 = .560$	$F(1.38) = 7.69$ $p = .009, \eta p^2 = .168$
main effect of Group	$F(3.23) = .319$ $p = .81, \eta p^2 = .040$	$F(3.38) = .84$ $p = .03, \eta p^2 = .198$
interaction between Time and Group	$F(3.23) = 1.49$ $p = .24, \eta p^2 = .163$	$F(3.38) = .84$ $p = .47, \eta p^2 = .063$
ANOVA with repeated measures	Gender	
	Male (N = 43)	Female (N = 26)
main effect of Time	$F(1.39) = 17.70$ $p < .01, \eta p^2 = .312$	$F(1.22) = 8.66$ $p = .008, \eta p^2 = .283$
main effect of Group	$F(3.39) = 1.80$ $p = .16, \eta p^2 = .122$	$F(3.22) = 2.53$ $p = .083, \eta p^2 = .256$
interaction between Time and Group	$F(3.39) = 2.06$ $p = .12, \eta p^2 = .137$	$F(3.22) = 1.27$ $p = .30, \eta p^2 = .148$

Table 24. Means and standard deviations for AWST-R 3-5 in Pre and Posttest for MB and WMB children

MB	LEG (N = 5)		TTG (N = 10)		LE-TTG (N = 11)		CG (N = 9)	
	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
<i>M</i>	15.80	19	7.50	12	7.73	10.55	7.78	6.89
<i>SD</i>	4.97	4.30	6.46	7.55	5.79	5.08	6.94	5.81
WMB	LEG (N = 8)		TTG (N = 8)		LE-TTG (N = 6)		CG (N = 12)	
	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
<i>M</i>	19.63	22	13.75	17.89	17	19.83	14.92	16.92
<i>SD</i>	7.83	6.09	8.25	8.49	4.14	5.63	5.91	6.31

Note: *M* = mean, *SD* = standard deviation; LEG = literacy enrichment group; TTG = teacher training group; LE-TTG = literacy enrichment and teacher training group; CG = control group. MB = children with migration background; WMB = children without migration background

Expressive Vocabulary Children with Migration Background

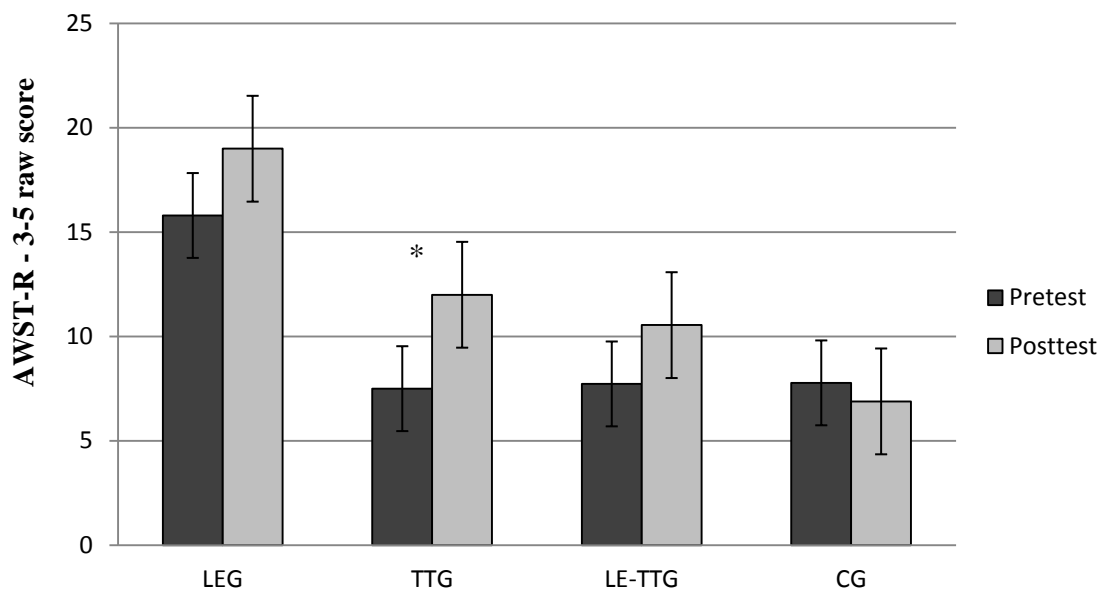


Figure 12. AWST-R means performance over Time according to group.

Note. * = Significant value over Time according to Holm Bonferroni correction. LEG = literacy enrichment group; TTG = teacher training group; LE-TTG = literacy enrichment and teacher training group; CG = control group

Expressive Vocabulary Children without Migration Background

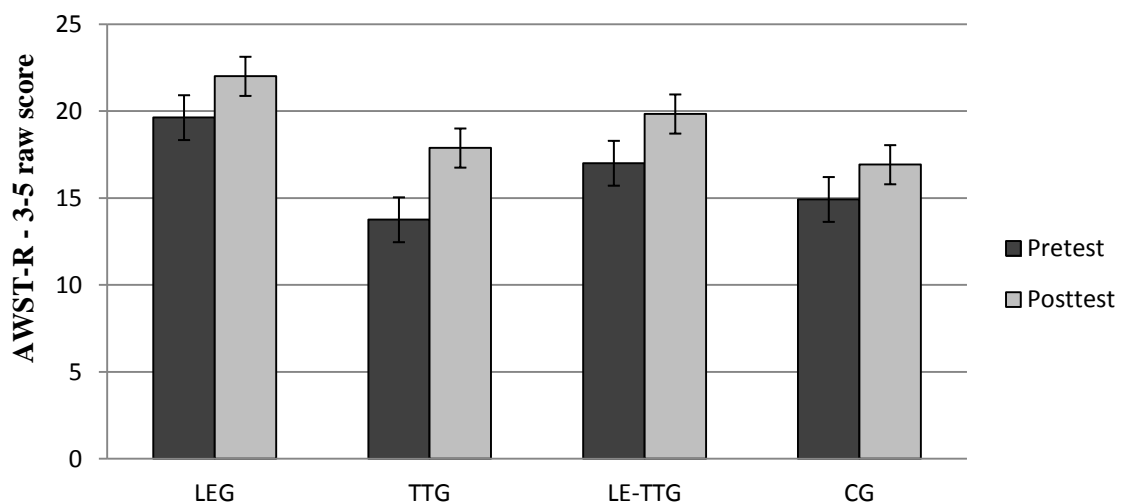


Figure 13. AWST-R means performance over Time according to group for children without migration background.

Note. LEG = literacy enrichment group; TTG = teacher training group; LE-TTG = literacy enrichment and teacher training group; CG = control group

5.4 Research Question 2

2- *What effect does method I (literacy enrichment), method II (teacher training) and the combination of both methods have on children's semantic skills?*

In the subtest ESR (*Enkodierung Semantischer Relationen*) measure, children were asked to answer the question: *Was kannst du auf diesem Bild sehen?* – What do you see in the picture?. The test aimed to examine how complete and accurate the child could verbally describe with their own words the images she/her sees in the cards. To answer the present research question, Analyses of Variance with repeated measures for SETK subtest ESR (Raw score – this subtest is only for 3;0 to 3;11 year-old children, normalized) was carried out. General means and standard deviations, as well as the different components of an utterance (verb, name, and preposition) for this test are presented in Table 25.

The ANOVA showed a main effect of Time $F(1.65) = 58.61, p < .001, \eta p^2 = .474$. A related t-test revealed that the improvement from Pretest ($M = 2.532, SD = 1.362$) to Posttest ($M = 3.573, SD = 1.727$) was statistically significant, $t(68) = -7.894, p < .001, d = .95$. ANOVA revealed a marginal significant effect of Group, $F(3.65) = 2.315, p = .084, \eta p^2 = .97$. However, no significant interaction between Time and Group for any group was found, ($F(3.65) = 1.028, p = .386, \eta p^2 = .045$).

Table 25. Means and standard deviations for SETK 3-5 Subtest ESR in Pre and Posttest as well as the different components of the children utterance (verb, name and preposition)

	LG (N =13)		TTG (N = 18)		LE-TTG (N = 17)		CG (N = 21)	
	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
M	3.40	4.45	2.16	3.43	2.42	3.10	2.33	3.53
SD	1.44	1.39	1.17	1.50	1.22	1.84	1.38	1.90
Verb ($F(3.64) = 1.41, p = .24$)								
M	5.40	3.40	2.58	6.27	2.89	6.50	5	6.94
SD	8	2.37	1.78	2.65	2.02	6.50	2.85	3.26
Name ($F(3.37) = 1.73, p = .17$)								
M	15.31	17.23	12.22	14.44	14.44	13.53	11.52	14.81
SD	4.19	4.36	5.94	5.23	4.81	5.45	4.47	5.17
Preposition ($F(3.31) = 0.95, p = .42$)								
M	5.91	6.50	3.25	6.27	2.63	5.64	5	7.38
SD	4.98	3.72	2.05	3.52	2.77	4.31	6.68	3.35

Note. M = Mean, SD = Standard Deviation

Summary of the Findings for Language Skills

No significant effects in language skills could be found for the Method I. For Method II, significant effects were found for expressive vocabulary. These results are consistent with previous studies (Buchmann and Jooss, 2011; Opel, Ameer & Aboud, 2009; Hargrave & Sénéchal, 2000; Milburn, Girolametto, Weitzman & Greenberg, 2014;; Valdez-Menchaca & Whitehurst, 1992; Wasik and Bond, 2001; Wasik, Bond & Hindman, 2006) which have investigated the effects of shared book reading and professional teacher training. Additionally, analyses conducted for migration background, which was considered a moderate factor, showed that Method II was especially effective in improving expressive vocabulary for the children with migration background. No effects of age and gender could be found. Further, no intervention effects were found for semantic skills, which is not consistent

with previous studies (Ennemoser, Kuhl, & Pepouna, 2013; Jungmann et al., 2013; Simon & Sachse, 2013). Finally, no significant effects could be found for the combination of both methods.

5.5 Research Question 3

3- What effect does method I (literacy enrichment), method II (teacher training) and the combination of both methods have on children's grapheme awareness?

To answer the present question, Analyses of variance with repeated measures was carried out. Means and standard deviations for general grapheme awareness as well as for letters, numbers, pseudo letters and typographic symbols are presented in Table 26.

The ANOVA with repeated measures revealed a main effect of Time, $F(1.65) = 21.093$, $p < .001$, $\eta^2 = .245$. A related t-test revealed that the improvement from Pretest ($M = 2.87$, $SD = 2.216$) to Posttest ($M = 5.06$, $SD = 3.715$) was significant, $t(68) = -5.266$, $p = \leq .001$, $d = .634$. There was a main effect of Group, $F(3.65) = 3.265$, $p = .027$, $\eta^2 = .131$. However, there was a marginal significance for the interaction between Time and Group, $F(3.65) = 2.591$, $p = .060$, $\eta^2 = .107$. Because the groups were not homogeneous, as showed in the Kolmogorov-Smirnov-Test (Pretest; $Z = 0.84$, $p = .20$ and Posttest; $Z = .088$, $p = 0.20$), additional bootstrapped confidence intervals were conducted (see Table 27). The results revealed significant improvement over time for all intervention groups, and the results remained significant after Holm Bonferroni correction (LEG $t(12) = -3.200$, $p = .008$, $d = 0.89$; TTG $t(17) = -2.639$, $p = .017$, $d = 0.62$; LE-TTG $t(16) = -4.302$, $p = .001$, $d = 1.04$) (see Figure 14). No effects were found for the CG $t(20) = -0.972$, $p = .343$.

Moreover, age and gender and migration background were added as possible

moderator factors, however, no effects of these factors could be found in the results (see Figure 28).

Table 26. Means and standard deviations for grapheme awareness in Pre and Posttest as well as of the different components of the test (letters, numbers, like-letters and typographic symbol).

	LEG (N = 13)		TTG (N = 18)		LE-TTG (N = 17)		CG (N = 21)	
	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
M	2.85	6.49	2.61	5.33	3	7.41	3	3.86
SD	2.51	3.68	1.78	3.72	2.42	3.46	2.32	3.29
Numbers ($F(3.36) = 0.583, p = 0.63$)								
M	4.54	4.71	5.50	4.91	5.50	4.91	2.64	4.76
SD	3.55	3.03	3.20	3.36	3.66	3.83	2.45	2.75
Like-Letters ($F(3.18) = 1.607, p = 0.22$)								
M	1.69	2.25	1.83	2.50	1.41	2.33	2.14	2
SD	1	.0	1.54	1.37	1.50	1.52	1.42	.89
Typographic Symbols ($F(3.18) = 1.675, p = 0.20$)								
M	2	3.67	2.92	1.67	2.25	2.17	3.07	2.50
SD	1.09	3.78	1.50	.70	1.38	1.83	1.22	1.35

Table 27. Bootstrapped *t*-tests - Improvement over time of the four groups in the grapheme awareness test.

Group	Mean	Standard error	<i>p</i>	Low border of CI	High border of CI
Method I - LEG	-3.62	1.08	.013	-5.76	-1.61
Method II - TTG	-2.72	0.98	.02	-4.60	-0.72
Combination - LE-TTG	-4.42	1.02	< .01	-6.29	-2.41
Control Group	-0.86	0.88	.37	-2.52	0.86

Note. Analyses were conducted with bootstrapped *t*-tests for dependent samples. Confidence intervals (CI) which do not include 0 indicate significant results.

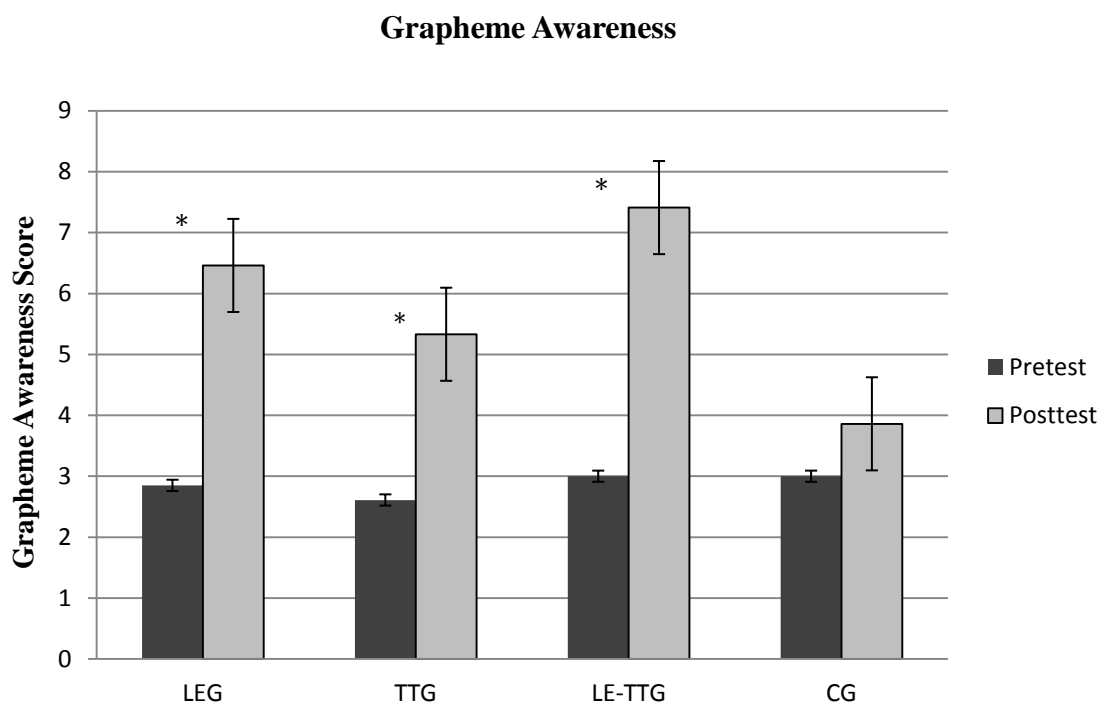


Figure 14. Grapheme awareness means performance over Time according to group.

Note. * = Significant value over Time according to Holm Bonferroni correction. LEG = literacy enrichment group; TTG = teacher training group; LE-TTG = combination of literacy enrichment and teacher training group; CG = control group

Table 28. Grapheme Awareness - ANOVA with repeated measures for age, gender and migration background as moderator factors

ANOVA with repeated measures	Age	
	3 years (N = 27)	4 years (N = 42)
main effect of Time	$F(1.23) = 10.61$ $p = .003, \eta p^2 = .316$	$F(1.38) = 23.92,$ $p < .001, \eta p^2 = .386$
main effect of Group	$F(3.23) = 2.38$ $p = .095, \eta p^2 = .237$	$F(3.38) = .96$ $p = .41, \eta p^2 = .071$
interaction between Time and Group	$F(3.23) = 1.91$ $p = .15, \eta p^2 = .200$	$F(3.38) = 1.62$ $p = .19, \eta p^2 = .114$
ANOVA with repeated measures	Gender	
	Male (N = 43)	Female (N = 26)
main effect of Time	$F(1.39) = 17.08$ $p < .01, \eta p^2 = .305$	$F(1.22) = 15.26$ $p = .001, \eta p^2 = .410$
main effect of Group	$F(3.39) = 1.00$ $p = .40, \eta p^2 = .072$	$F(3.22) = 1.12$ $p = .36, \eta p^2 = .133$
interaction between Time and Group	$F(3.39) = 1.74$ $p = .17, \eta p^2 = .118$	$F(3.22) = 1.38$ $p = .27, \eta p^2 = .159$
ANOVA with repeated measures	Migration Background	
	MB (N = 35)	WMB (N = 34)
main effect of Time	$F(3.31) = 16.60,$ $p < .001, \eta p^2 = .350$	$F(1.30) = .15.60,$ $p < .001, \eta p^2 = .034$
main effect of Group	$F(3.39) = 1.80$ $p = .16, \eta p^2 = .122$	$F(3.22) = 2.53,$ $p = .083, \eta p^2 = .256$
interaction between Time and Group	$F(3.31) = .880,$ $p = .462, \eta p^2 = .078$	$F(3.30) = 2.11,$ $p = .120, \eta p^2 = .174$

Summary of the Findings for Grapheme Awareness

The present result showed positive effect for all intervention groups in grapheme awareness. Additionally, Cohen's d revealed a large effect size for the LG-TTG, $d = 1.04$, indicating that the combination of both methods was more effective than method I and method II applied individually. The result for grapheme awareness indicated that all children (age, gender, with and without migration background) weighed more or less equal in the three intervention groups.

6. Discussion

Chapter 5 will present an overview of the study design followed by a discussion of the findings, including possible explanations for the nature of those findings, study limitations as well as suggestions for future research.

The aim of the present longitudinal study was to investigate the effects of two methods of shared book reading on three- to four-year-old kindergarten children, on the following emergent literacy skills: language development (expressive vocabulary and semantic skills) and grapheme awareness (the ability to choose a letter out of a series of non-letter distractors). The two investigated methods of shared book reading were:

Method I: Literacy Enrichment - extra children's books were distributed in kindergarten and children were encouraged every week to borrow a book to take home and read with their parents. Furthermore, a written letter was sent to the parents encouraging them to read frequently with their children at home.

Method II: Teacher Training - kindergarten teachers participated in structured training which included formal instruction on how to promote child language development through shared book reading. The training was conducted by the *Heidelberger Interaktionstraining für pädagogisches Fachpersonal zur Förderung ein- und mehrsprachiger Kinder – HIT* (Buschmann & Jooss, 2011).

In addition, the effects of the two methods in combination were investigated. Therefore, an intervention design involving three kindergarten groups was established:

Kindergarten 1 – Literacy Enrichment

Kindergarten 2 – Teacher Training

Kindergarten 3 – Literacy Enrichment and Teacher Training in combination

A fourth kindergarten group participated as a control group, in which no intervention was performed. Moreover, socioeconomic status and literacy activities at home were

controlled through family questionnaires in order to constitute a uniform sample. Additionally, age, gender, and migration background were added as possible moderator factors.

The following research questions were addressed in the present study: (1) What effect does method I (literacy enrichment), method II (teacher training) and the combination of both methods have on children's expressive vocabulary? (2) What effect does method I (literacy enrichment), method II (teacher training) and the combination of both methods have on children's semantic skills? (3) What effect does method I (literacy enrichment), method II (teacher training) and the combination of both methods have on children's grapheme awareness?

Overall, the results of the present study indicated the Method I showed no significant effects on children expressive vocabulary and semantic skills. The Method II showed significant effects for children expressive vocabulary. In addition, the children with migration background showed to take more advantage of the teacher training. Regarding semantic skills, no significant effect could be found. No significant effects of the combination of both Methods in children language skills could be found. For grapheme awareness, however, results showed positive effects for Method I, and Method II, as well as for the combination of both methods. The combination group, as reported by a large effect size, showed to be more effective than Method I and Method II individually. Moreover, the results indicated that in grapheme awareness, all children (in regards to age, gender, with and without migration background) took equal advantage of Method I, Method II, and the combination of both.

6.1 Shared Book Reading and Language Development

One of the goals of the present study was to investigate the effects of Method I, Method II as well as the combination of both methods in children language skills.

The results of the study showed that Method I (literacy Enrichment) was not effective in improving children's expressive vocabulary and semantic skills. The results suggested that a single intervention, in spite of an adequate number of books provided, as well as informal attempts at motivating parents to read these books frequently with their children, was not enough to improve children's linguistic skills. No observations, in regards to the parent-child interactions, were conducted in the present study. However, it is suggested that the kinds of linguistic strategies and interactions used by the parents during shared book reading at home, may explain the lack of significant effects. Firstly, the parents may have read the borrowed books verbatim, using a traditional approach, in which the adult is more active than the child during the interaction.

Secondly, the parents may have urged the children to label more pictures in the book, rather than making the use of decontextualized language (Hindman et al., 2012). The use of decontextualized language in shared book reading activities allow children to connect the story to their own life experiences, and helps them to improve their capacity to learn and use complex utterances with grammatical structure. Furthermore, as Sonnenschein and Munsterman (2002) states, "reading with children is important but what actually occurs during reading interactions may be as important as the frequency with which such reading occurs" (p. 335). In other words, children need support to be able to understand the complex events related to the language used in the story. Children's experiences with storybooks are more valuable when adults engage themselves in the story time interaction. Children are required to respond while adults provide them with relevant information. Children's questions and comments to the story are an important component of the interactive process. In addition, research has demonstrated that giving children opportunities to respond is an important variable in children's development of language skills (Gettinger & Stoiber, 2013).

For example, according to Bastian (2014), when parents use labels as a method to

interact during parent-child book reading, the interaction is usually followed by four ‘cyclic’ structures: first, the adult elicits the child’s attention by using words such as ‘look!’. After capturing the child’s attention, the question ‘What is that?’ may be asked, followed by positive feedback (‘yes that is ...’). Other studies have also reported that for instance, parents who frequently use questions such as ‘What is this?’ have children with less complex language (Hoff-Ginsberg, 1986; Tomasello & Farrar, 1986). In addition, it is suggested that in such types of linguistic interaction, children could learn some vocabulary, however, results were not replicated for the condition of learning to produce complex verbal utterances (Crystal (1987). Reese (2013) also reported that in their study many preschoolers (children were just over 4 years old) were not yet in the level of processing and remembering basic events of the story; they could not understand the context in the story completely, and had trouble understanding the concepts of cause and effect. After reading a story, the researcher asked some ‘factual’ questions about the book. Some children were able to recall the name of the main character in the story and some events. However, when ‘inferential’ questions (e.g. why...?) were posed, only few children could give a complete answer. For this reason, Van Kleeck (2008) suggests that, some “inferential questions embedded in stories” during adult-child book reading, is highly recommended.

In addition, because 39% of the families in the present study reported to have children with migration background, some considerations should be made around this factor. Research has reported that the cultural background of a family is a factor that may affect the manner in which interactions will be conducted with the child. In addition, many of those families view activities such book reading as more of a formal instruction than as entertainment (Bus, Leseman, & Keultjes, 2000; Bus & Sulzby, 1996). According to the study of Jaekel, Schölmerich, Kassis and Leyendecker (2011) for instance, Turkish families reported that shared book reading did not make part of their parent-child routines, and they tended to

delegate the responsibility of their children's literacy experiences to the school. A study conducted with (Bus et al., 2000) families during parent-child book reading activity showed that Surinamese-Dutch parents were more restrictive and discipline-oriented than Dutch parents by reading with their children. Moreover, the authors argued that when parents do not see relatedness and relevancy in literacy, they were less inclined to engage in meaning-related discussions which may make the story more understandable and enjoyable for both parent and child. In addition, parents' beliefs and expectations around their child's literacy future should be taken into account (DeBaryshe, 1995; DeBaryshe & Binder, 1994). According to Klein and Biedinger (2009), this is an important aspect, because such aspirations about children's educational future may determine the parental literacy behaviors before children start formal school. Furthermore, parents may be motivated to participate in such shared book reading activities, however, if they do not really understand the importance and are not strongly connected with the significance of the activity, then the contents of the books may not be absorbed by the children in an agreeable and pleasant way (Bus et al., 2000).

Accordingly, based on the present results, it is suggested for future research that the availability of good books, as illustrated in Method I, could be combined with some formal or informal instruction to parents in how to improve their strategies in order to support their children's development of language during shared book reading activities (Aram, Fine, & Ziv, 2013; Whitehurst et al., 1988). Through some informal instruction or even from formal instruction, parents could, for instance, learn the importance of asking children to anticipate what they believe will occur in the story, make some evaluations, extend children's comments, and ask for clarifications (Suggate, Schaughency & Reese, 2013). Moreover, parents may learn in such instructions that, "the meaningfulness of utterances derive from their use in performing overtly communicative acts" (Ninio & Snow, 1999, p. 03). In addition to the aforementioned, future research should investigate the nature of families' shared book

reading interactions, especially regarding families with migration background in German context, as this could aid in the development of future programs that are directed towards this group of children.

Despite the fact that Method I showed no significant effects in language skills, the present study may suggest that the availability of storybooks supported by Method I, may have encouraged the connection between home and school activities and indirectly motivated and stimulated more frequent literacy practices at home (Deunk, Berenst, de Glopper, 2013). In addition, this intervention may have encouraged children to experience the ‘intimacy’ of shared reading in home settings (Merchant, 2008) by providing children opportunities to interact with parents and making recreational reading part of the home routine (Meyer, Ostrosky, Yu, Favazza, Mouzourou, van Luling, & Park, 2015; Morrow & Weinstein, 1986; Wigfield & Asher, 1984). This point is an important aspect of Method I, since parental involvement in their child's literacy development, “matters for their achievement, motivations and well-being in the school” (Menheere & Hooge, 2011, p.144). Often times, parents gave positive feedback, appreciating the availability of good books provided to their children, and some mothers created a special bag for carrying these books.

Furthermore, it is suggested that literacy enrichment is an exemplary method which could easily be implemented in other kindergarten centers due to the relative low cost and that it does not involve parental participation in regards to cost. The 200 books were estimated to cost 1,000 euros. At the end of the interventions, out of 200 books, only one book was damaged, and five books were not returned to the kindergartens. At the end of the study, the books were available to all children in the two kindergartens groups (Method I and the combination of both methods), possibility implementing a rotation-borrowing system. The rotations’ principle (coordinated by the German association “*pro - Verein zur Förderung von Projekten für junge Menschen e.V.*” which supported the present study with the books’

donation), offers the possibility of a book exchange with other kindergarten centers every year²⁰. One limitation of the present study is, however, that no control measure was taken to know if kindergartens have made use of this possibility.

In addition, Method I offered higher quality picture books to children in which text and pictures were enough to retain children's attention, as compared to some books they have at home. Research has shown that some children's books held at home show low quality in both text and picture, not being attractive to children (Elliott & Hewison, 1994; Marsh, 2003). It is also suggested that the method implemented may have attracted and increased children's and parents' general attention to books. Similar effects have also been reported in the literature (Robins et al., 2012; Wade & Moore, 1996).

Further, it is suggested that the frequent usage of books through the borrowing method may have allowed children to acquire some indirect skills in how to deal with the variety of books usually faced in public libraries, and that children may have learned how to choose a book on their specific topic (Deunk et al., 2013; Hurrelmann, Hammer, & Nieß, 1993; Nell, 1988). In addition, the literature has suggested that parents who frequent libraries with their children realize the importance of these visits for literacy development (Baker et al., 1997; Hurrelmann, Hammer, & Nieß, 1993). The present work suggests that Method I may have animated and made parents aware of the importance of children visiting and making use of public libraries, since 71% of the families (equivalent for the MB and WMB families) in the present study have reported to have never visited a public library with their children. In the present study, it was not possible to control for this assumption, however, future research should cover this aspect. In the current study, it could be observed informally that children were highly motivated to choose a new book each week (in the kindergarten with Method I and in the kindergarten with the combination of both methods). Some of the children were

²⁰ The control group, as already reported in the method chapter, participated in any intervention. However, at the end of the study, as thanks for participation, the association „pro - Verein zur Förderung von Projekten für junge Menschen e.V.“, in name of the study, have donated the sum of 100 books to the kindergarten children.

self-motivated to make predictions of the outcome of the stories in these borrowed books or to discuss contents of the material upon returning them. The children also discussed if they liked or did not like the book, and sometimes they were also influenced by the choices of other children.

Finally, the present study suggests that by providing access to good books, Method I may help parents involve themselves in the active process of their child's literacy skills development. However, it is concluded with the present results that for parents who lack proficiency/understanding on how to assist their child during shared book reading, it is clearly suggested that only access to books is not enough to improve children's language skills. Therefore, access combined with additional support in how to improve their language interactions with the children (Boyce, Innocenti, Roggman, Norman, & Ortiz, 2010; Buschmann, Jooss, Pietz, 2009), is highly recommended.

The Method II showed positive effect for expressive vocabulary, but not, however, for semantic skills. The result found for expressive vocabulary are consistent with other studies which have found similar results for professional teacher training instruction (Buchmann and Jooss, 2011; Opel, Ameer & Aboud, 2009; Hargrave & Sénéchal, 2000; Milburn, Girolametto, Weitzman & Greenberg, 2014; Valdez-Menchaca & Whitehurst, 1992; Wasik and Bond, 2001; Wasik, Bond & Hindman, 2006). Further, when adding age, gender and migration background as moderator factors, no significant effects could be found for age and gender. For migration background however, the children with migration background showed to profit more from Method II. The result, however, should be interpreted with caution, since the present sample size was small. It is important to note that the MB children showed at the pretest and posttest lower vocabulary scores when compared to the WMB children. This discrepancy was also reported by the Becker (2010) study. Jungmann and colleagues (2013) state that because children with migration background are often shown to have general low

levels of German language knowledge (due to the fact that at home, German is spoken very little or not at all), it seems plausible that the MB children would take more advantage of the interaction opportunities provided to them, such as this one presented in the study.

In this day and age it is very common to find cultural and linguistic diversity backgrounds in classrooms. Consequently, teachers need to be sensitive and to modify their language interactions to meet the needs of those children. Moreover, such groups of children may learn from word meaning discussions and/or from the techniques embedded into reading (Kindle, 2011). Kindle (2011) also suggests that, “children who have limited experience with growing vegetables will need more discussion prior reading a book on the topic than children who have extensive experiences” (p. 17). Accordingly, through such professional training conducted in Method II, it is suggested that teachers might also intentionally learn to include more opportunities for children to talk during book reading.

In the present study, it the interaction between teacher and child was not controlled for, and for this reason, it is not possible to show what strategy was the most effective. However, in the training, teachers learned particular techniques of adult-child speaking (Buchmann and Jooss, 2011) for instance, using open questions, how to give corrective feedback, how to use expansions and to how motivate children to speak and to become more active during the story. Such strategies that can powerfully affect what as well as how much a child can learn as well as seeming to be the key for the effectiveness of the training. This assumption is also supported by other studies (Lever & Sénéchal, 2011; Milburn et al., 2014; Whitehurst et al., 1988). Moreover, teachers learned how to create a scenario for incidental vocabulary learning, which means that the development of word knowledge may occur through natural contexts that differ from formal teaching (Valdez-Menchaca & Whitehurst, 1992).

In such incidental contexts through shared book reading, children are exposed to an

unstructured and richly meaningful environment that can be accessed via language, and the process of acquiring some knowledge is based on children's spontaneous interest, and not on a preselected sequence of topics (Valdez-Menchaca & Whitehurst, 1988). After the children expressed interest in some subject or aspect of the story (it could be verbally or nonverbally), the teacher began to interact with them by requiring and helping the child to verbalize their thoughts on the story.

Aside from the positive effects of Method II in expressive vocabulary, however, it cannot be assured that teachers have in fact changed their language behavior as suggested by the aforementioned techniques. This aspect could imply no effects on semantic skills in Method II as well as for the combination of both methods, since it requires diversity and frequent use of decontextualized language.

The combination of both methods showed no effects for expressive vocabulary and semantic skills. Studies that have involved home-school conditions have found positive effects in child language development, however, formal training was given to the parents and to the teachers (Mason et al., 1990; Whitehurst et al., 1994; Lonigan & Whitehurst, 1998). According to the results, it is supposed that the lack of effects seems to be related to the quality of adult-child interactions during shared book reading at home and in kindergarten. Studies supporting this idea (Dickinson & Tabors, 2001; Lonigan & Whitehurst, 1998; Hindman, Connor, Jowkes & Morrison, 2008; Sonnenschein & Munsterman, 2002; Wasik, Bond, & Hindman, 2006) state that the activity of shared book reading, with or without training, is not well explored. That means that such opportunities may widely differ in the nature of the adult-child utterances as well as in the intensity of book reading activity. In addition, as suggested by Watson (2008), teachers may have given too many comments about the words, and thus broke the flow of the story, and in turn, making the teachers more active than the children. According to the literature, teachers should narrow their feedback to two or

three words and brief vocabulary facilitation which could promote harmony between teacher and child conversing during shared book reading (Dickinson & Smith, 1994; Justice et al., 2005; Wasik & Bond, 2001; Watson, 2008).

Further, language development includes the “opportunity to verbalize the to-be-learned words” (Sénéchal & Cornell, 1993). This is an important aspect that should be reinforced in future studies, since today, it is very common in kindergarten classrooms to have diversity in children's background experiences. One point is that most children with MB, for instance, may learn and speak the German language only in kindergarten (Niklas et al., 2011). In the present sample, according to the family questionnaire, 58% of the children with migration background have learned German outside of home, namely 49% of them in kindergarten. For this reason, kindergartens should offer more intensive opportunities for language interaction to those children.

Regarding frequency of shared book reading, this aspect may also account for the lack of effects in Method II (in semantic skills) and in the combination of both methods (in expressive vocabulary as well as for semantic skills). In the six month study, the dataset consisted of 124 potential available days (Monday to Friday) for teacher-child shared book reading sessions in both intervention groups. However, according to the data recorded from the teacher-child frequency logs (for Method II and the combination of both methods), children appeared to attend kindergarten for only 70 days. Further, only a mean of 38 days was reported in which teacher-child shared book reading was performed. This reported frequency, however, is considered low since teachers (for Method II and for the combination group) were asked to conduct shared book reading sessions with the children three to four times a week for approximately 15 minutes.

Another issue that may have affected the effectiveness of Method II as well as the combination of both methods is teachers' compliance. This aspect was not formally

controlled for, however, observations and teachers' verbal reports should be taken into consideration. Assuming that the technique requires the full attention of one teacher, teachers were instructed to go into a separate room with one child at a time in order to avoid noise and possible distractions; Teachers however, did not follow this instruction in most cases, mostly due to the other kindergarten programs, a lack of staff, children's absences, as well as the high number of children within one group (on average 23 children per group with two teachers). In addition to this, the kindergarten that participated in the combined intervention opened a kindergarten for 2 year old children. Therefore, teachers were busy acclimating to the environment, establishing a system and routine, along with other tasks that come with launching a new kindergarten. In Germany, on average, the acclimation period of children in a new kindergarten is about one month (depending on the child, perhaps more). In addition, one of the parents is accompanying the child during this stage. The children (aged two years) were not all coming at the same time, but instead, at different times throughout the year. One teacher, due to the early age of a specific group of children, was fully engaged in taking care of those children. It should also be noted that during the intervention period, many teachers were sick, on vacation, or in other training. During the majority of those situations, the teachers that participated in the training were in the kindergarten classrooms, but due to a lack of staff, they were required to oversee the other groups or to receive children of the other groups. Even the director of the kindergarten was often in charge of one children's group due to this problem.

It is assumed that the related challenges that teachers have faced in daily kindergarten activities in the present study, may have affected primarily the effectiveness of the method, particularly for the kindergarten with the combination of both methods, differentiating from research showing positive effects of training. However, in some studies, graduate students outside of kindergarten were trained in dialogic reading strategies in order to better conduct

the adult-child book reading, (e.g. Ennemoser et al., 2013).

Moreover, another point of attention is that teachers reported to conduct reading sessions in groups of three or four children in the classroom (reported for both kindergartens with Method I and with the combination of both Methods). Group size during shared book reading may have also influenced the relative effectiveness of the method, since it seems to provide less opportunity for the children to participate actively (Whitehurst, Epstein et al., 1994). Furthermore, shared book reading in groups require more effort from the teachers in regards to control and management of the children (Lonigan & Whitehurst, 1998; Weitzman, Girolametto & Greenberg, 2006) in order to perform all interactions that would be required by the technique (e.g., level of feedback, open questions, encouraging the child to be more active) (Whitehurst et al, 1988). In addition, the child holding the book themselves could also be difficult due to the group size (Neuman, 1996). In addition to this, children with low levels of language and/or from disadvantaged backgrounds and/or with migration background may initiate conversations with teachers less often than children from an advantaged background. Moreover, there are few opportunities for high-quality interactions (Weitzman, Girolametto, & Greenberg, 2006) and children may be engaged in a limited amount of talk (Dickinson & Smith, 1994). According to Wells (1986):

What seems to be more important is that, to be most helpful, the child's experience of conversation should be in a one-to-one situation in which the adult is talking about matters that are of interest and concern to the child, such as what he or she is doing, has done or plans to do, or about activities in which the child and adult engage together. The reason for this is the fact that, when both child and adult are engaged in a shared activity, the chances are maximized that they will be attending to the same objects and events and interpreting the situation in similar ways (p. 44).

The time/duration of the training could have, to some extent, also impacted the

effectiveness of the training, and may not be enough to shape teachers' behaviors for their interactions with the children. It is important to note however, that the program used in the present study was an adaptation of the HIT program. That means, the normal program offered to train teachers (as evaluated in the study conducted by Buschmann & Jooss, 2011, and by Simon & Sachse, 2013) is compounded into five meetings of five hours each. In the present study, the training had three meetings, each lasting four hours. In the present study, the teachers had 13 hours less than the official program, which could have to some extent impacted the effectiveness of the training. Furthermore, one aspect of the HIT training is the individual or small group coaching. In the HIT program, teachers were instructed to videotape some interactions between teacher-child during the shared book reading activity, in order to examine the nature of teacher participation, offer alternative techniques, improve teachers' inputs, etc. In the present study, four video cameras were lent to the kindergartens (for Method II and for the combination of both methods) at the first meeting section and instructions were given to teachers on how to film the interaction as well as the importance of such activity. However, no teacher completed the activity until end of training. Thus, no individual or small group coaching could be given to the teachers based on their experiences with the children. Studies however, have pointed out that such kind of coaching in professional training is highly recommended in order to shape the language in which the children are exposed to, since some teachers' behaviors are difficult to change without intensive assistance (Dickinson, Hofer, Barnes, & Grifenhagen, 2014; Neuman & Cunningham, 2009; Powell, Diamond, Burchinal, & Koehler, 2010).

Based on this assumption, it seems plausible that the professional coaching should also be available after training to the teachers, since everyday new challenges may be faced when teacher-child book reading interactions in fact are being conducted. Furthermore, the group of the HIT program that conducted the training did not make a previous visit to the

kindergartens to assess the routines of the teachers. However, this could be taken as a suggestion for future training programs, because as reported by a study by Neuman (1996), each kindergarten faces a different reality and cultural diversity; even teachers' knowledge and experiences may be different. With such a "context-specific approach", the training could be focused on the needs of this specific group. Further, Neuman (1996) argue that:

Staff development designed to enhance reading aloud and alter heavily skill-based instruction needed to acknowledge and work with teachers' beliefs. Recognizing that these beliefs reflected a social reality and understanding of the world from individuals' experiences and unique perspectives, trainers would seek not so much to change beliefs but to stretch them in ways that might allow for new practices (p. 294).

It is important to note however, that the aim of the present study was not to conduct an evaluation study of the HIT program, but rather, to investigate the effects of formal teacher instruction in shared book reading. Nevertheless, the study may offer some suggestions to the HIT program as well as to future studies that aim to investigate programs with formal instruction to teachers.

Furthermore, in the present study, teachers were instructed to use the books available in the classrooms, but which books the teachers used to read with the children was not controlled for. Studies (Jong & Bus, 2002; Kaderavek & Justice, 2005; Moschovaki & Meadows, 2005; Stadler & McEvoy, 2003; Watson, 2008) conducted in this field reported that the type of book may affect what children learn from them. For instance, books with narrative text may engage children in, "greater interaction around the meaning of the story and its connection beyond the text" (Neuman, 1996, p. 509). Whereas books like the 'pop-up book' may appeal more to children's sensory learning and distract them from the content of the book and relevant information of the story (Tare, Chiong, Ganea, & Deloache, 2010). Moreover, Dickinson and colleagues (2014) reported in a study that the amount of

sophisticated language used by the teachers during shared book reading was related to the nature of the book read. The authors found that teachers who discussed narrative books (narratives books are books that often offer problems and challenges that characters may be faced with) with the children, made use of more complex syntax and more vocabulary discussion than teachers that used predictable text books (predictable texts are books with repeated contexts, often rhyming, containing few characters, and well-developed brief plots, normally one sentence per page).

In addition to this, one important aspect that was instructed at the teacher training was the selection of books according to children and their interests, including how they can see themselves in the story which may facilitate children learning from context. However, if teacher have in fact take care about this aspect, was not controlled for. The amount of times these books were read, e.g. more than once, (in all three intervention groups) was also not controlled for. According to the literature however, (Snow & Ninio, 1986; Trivette, Simkus, Dunst & Hamby, 2012) reading the same story more than one time allows children to familiarize themselves with the story and therefore, to remember, practice and assimilate the words, and provides children with the exposure of more complex language. Future studies in Germany context should include this aspect.

Finally, it should be considered that the kindergarten system contributes to such differences. Although the importance of intensive language promotion for disadvantaged children is acknowledged, the kindergarten system in Germany is still mostly presented as a supportive environment and based on children's wishes. The kindergarten stage has so far only played an indirect role in children's development and is not taken as a place for literacy instruction (Biedinger, 2009; Leu & Schelle, 2009). Neuman (1999) also showed in their study that fundamental goals reported by kindergartens were socialization, safety, and nurturance, but not early literacy. Moreover, according to Lonigan and Whitehurst (1998),

such contexts of a supportive environment could be difficult to motivate teachers to include techniques of formal instruction training, and to frequently engage children in learning specific skills, such as ones proposed in the teacher training, even though they are in a natural context, since it is not considered as a function of kindergarten but as a function of formal schooling. It is important to note that teachers of both kindergarten group with the Method II, showed in general to be interested in the training, as well as to lament the low teacher-child interaction frequency.

Aside from all related challenges that may have impacted the effectiveness of Method II (for the kindergarten with Method II as well as for the kindergarten with the combination of both methods), the present study suggests that shared book reading, through professional training, is an important tool that should be available to all kindergarten teachers. This suggestion particularly applies to children with migration background, because as reported in the literature, most of these children show a lower performance than peers without migration background regarding language skills even before entering formal schooling (Niklas et al., 2011). In addition, the present findings suggests the need for more rigorous intervention studies investigating the effects of teacher training on shared book reading in language development, in a German Context.

6.2 Shared Book Reading and Grapheme Awareness

Positive effects were found for grapheme awareness in Method I. The results showed that even without explicit letter instruction, as reported in other studies (Aram, 2006; Ezell & Justice, 2000; Justice, Pullen & Pence, 2008; Piasta et al., 2012), shared book reading may informally help children to become aware of the difference between printed letters and other visual patterns (Clay, 1972; Goodman, 1986; Teale & Sulzby, 1986; Robins, Treiman, Rosales & Otake, 2012).

The result from the teacher training also showed positive effect on children's grapheme awareness. The literacy enrichment method showed, however, higher effects than the teacher training method. Because learning to read first requires visual recognition of the letters (Adams, 1994) a first plausible explanation for the difference between the two methods may be that it is an effect of direct and frequent visual contact. At home, children were exposed to one-on-one shared book reading, whereas in kindergarten, teachers deemed individual reading sections as difficult, resulting in small reading groups and consequently, reducing the visual contact with the printed aspect of the book and child's possibility to handle the book. In the present study, frequency of shared book reading at home was carried out by a graduated student asking the children how often they have read the book at home with the parents. According to the reported data, of the 24 potential weeks for parent-child book reading, children reported a minimum of once a week ($M = 22$ days; Min: 6, Max. 45), in which the books were read at home. Future studies should control for this variable by sending reading logs to the parents for a clear registration of how often the books are read during the week.

Second, another aspect that may have impacted the effectiveness of Method I was the 'library' system. As reported in the section before, children that participated in kindergartens with Method I, could choose a book to borrow and take home. What could be observed was that, most children first looked at the book's contents in order to know which book they would like to borrow. Accordingly, it is implied that this activity of taking a book off of the book shelf was an informal opportunity for contact with the print. Each time a child borrowed a book, it was logged/registered. This is also assumed to be another informal contact with print. It is important to clarify that this procedure, conducted by the graduate student, was not used to give instructions on the print register. However, sometimes children requested the graduate student to read the book title, and other times the graduate student read the book title to the

child. No kinds of formal or informal instruction (e.g. point to the written title during reading, etc.) were added in the process. This strategy was used in order to establish certain closeness to the children and to make the borrowing time more relaxed and enjoyable.

The borrowing sessions in Method I were coordinated by a graduate student, however, the method could be implemented by the teachers, as also suggested by Morrow and Weinstein (1986), and by Robinson, Larsen and Haupt, (1996). In their studies, teachers reported that conducting such types of intervention was easy and not time consuming or disruptive to their kindergarten program. Moreover, when teachers are involved in meaningful interactions with the child in the routine of borrowing a book, they could help children to choose a book by elaborating on details of the book, for example, the title, talking about the contents of the book, or reading some pages of the book (Deunk et al., 2013). The process of choosing a book, according to Deunk et al. (2013) is also an important part in which teachers are able to integrate emergent literacy knowledge by making children active in the writing process (e.g. writing the book title, date of return, etc.).

Third, the books quality may have affected children's attention. In Method I, books which were believed to have harmonic aspects between text and pictures in the pages were selected with the intention to keep children's attention. This statement goes in accordance with Mol and Bus (2011), which also reported that narrative books predicted print knowledge. However, because in Method II teachers used books that they usually have in classrooms and no control was made for the books' quality, this assumption could not be verified. Future studies should also control for this aspect in order to present a transparent outcome.

The combination group showed higher effect on children's grapheme awareness when compared to Method I and Method II applied individually. It is argued that the frequency of book exposure at home and at kindergarten may be the most straightforward explanation to why the combination of both methods was more effective. The results were also supported in

the literature (Deunk et al., 2013; Robinson, Larsen & Haupt, 1996; Kim, 2009; Sawyer et al., 2014; Sonnenschein & Munsterman, 2002) that rather than formal instruction, frequency of shared book is positively associated with print knowledge. Moreover, the results suggested that the combination of both methods leads to a higher familiarization with the letter forms, which may come before letter-sound learning (Both-de Vries & Bus, 2014; Lachmann & van Leeuwen, 2014).

Nevertheless, caution should be taken when comparing the present results with international studies. Firstly, because most studies conducted in this field have investigated letter knowledge, which means children were asked to verbalize the letter names or to point to the requested letter (Ezell & Justice, 2000; Sénéchal et al., 1998). In the present study however, grapheme awareness was investigated, meaning, how well a child is able to recognize a grapheme within a set of non-letter distractors.

Secondly, differences in orthography must be considered. In a shallow or transparent orthography like German, the grapheme-phoneme correspondence rules are highly consistent, meaning that the correspondences between letters and sounds are close to a one-to-one ratio. Deep or nontransparent orthographies like English contain more inconsistent correspondences, as well as morphological influences on spelling, so that the same letter may represent more than one sound or the same sound may represent more than one letter (Defior, Martos & Cary, 2002; Landerl, Wimmer, & Frith, 1997; Seymour, Aro, & Erskine, 2003). Such factors may explain why countries like the USA introduce the alphabet in the earlier stages of kindergarten, which lead to the third point referring to the differences in school systems. Children in Germany normally do not participate in any formal instruction in the kindergarten stage according to the curricula, and most children enter Grade 1 (after reaching the age of six years) with little knowledge of letters and without any reading ability (Mann & Wimmer, 2002; Niklas, et al., 2011) . Moreover, according to Mann and Wimmer (2002):

Letters are introduced not by name but by sound and initial reading is little else than word decoding via sound blending. This synthetic phonics approach is relatively easy to realize as the letter-sound relations are simple and the whole writing system is quite consistent (p.654).

On the other hand, English-speaking kindergartens usually offer activities that encourage learning the letter names and their sounds with activities that require giving pre-reading attention to the phonological segments of words (Mann & Wimmer, 2002). Thirdly, formal home literacy teaching is not highlighted in most German homes as compared to English speaking homes. The majority of British and American parents prompt their children to exert their energies on planned and goal-oriented activities. Unlike most parents in Germany consider social skills to be more important than academic skills, and place social skills as amongst the most important skills needed before beginning school, followed by communication skills (see LEGO Learning Institute, 2003 for an overview of the study). Moreover, most parents in Germany direct their children to spend more time freely choosing what to do.

Because letter knowledge is suggested to be one of the strongest predictors of later reading and writing success (Clay, 2005; Honig, 2001; Leppänen, Aunola, Niemi, & Nurmi, 2008; Mason, 1984; Schatschneider et al., 2004; Stevenson & Newman, 1986), grapheme awareness may be considered an important first step in the process required for learning to read and write (Lachmann, 2008; Lachmann & van Leeuwen, 2014; Lachmann et al., 2014). As reported in the literature review, according to the Functional Coordination model (Lachmann, 2002; Lachmann et al., 2012; Lachmann & van Leeuwen, 2014), learning to read requires first the coordination of two skills: visual object perception and the use of spoken language. Therefore, according to the results, it is assumed that the two investigated methods informally support the development of the visual perception (letter forms) which is an

important prior condition of literacy development before children learn grapheme-phoneme correspondences. In addition, even though children may have focused more time and attention on the pictures rather than the text in the book, as suggested in other studies (Evans & Saint-Aubin, 2005; Evans et al., 2008), it is concluded that with the combination of the two performed methods, high exposure to shared book reading helps children to informally learn how print looks like, acquire some familiarity with the visual characteristics of the letters, and its orientation (Lachmann, 2002; Lachmann & Geyer, 2003; Robins, S. & Treiman, R., 2009), as well as to begin learning how it differs from other visual patterns.

According to Goodman (1986), children that have the opportunity to participate in a rich print environment, are “continuously interacting with, organizing, and analyzing the meanings of the visible language” (p. 7). Accordingly, through an environment that takes into account experiences with print, where children may explore those materials, they may acquire “the basic ability to visually perceive and process fine patterns and symbolic shapes that may distinguish letters from other symbols” (Neumann, 2013, p. 7). In addition, as Neumann and colleagues (2013) state, “over time, via exposure to and socio-cultural interactions with surrounding print, children become aware that these graphic symbols possess meaning and function” (p. 4).

Regarding age, gender, and migration background, no effects of any of the possible moderator factors could be found. This could be attributed to small sample size. For gender, the study conducted by Mason and colleagues (1990) found that females performed better than males in a letter-knowledge measure. Future studies should investigate this factor with a large sample size for grapheme awareness, perhaps such effects could also be found. The present study, however, showed some limitations that should be taken as suggestions for future research in order to obtain a more accurate and reliable outcome.

First, only ten random letters of the 26 contained in the alphabet were used in the

present study. Second, only uppercase and not lowercase letters were investigated. Further, because no observational analyses were conducted during the interactions, it can be not excluded that teachers and/or parents may have used informal interactions in the written text (e.g. giving some explanation of the letters), because some children, while pointing to the letter in the grapheme task, also verbalized them. Third, the family questionnaire did not include questions about family writing experiences with the children. Future studies should control for those aspects and also it is suggested to add measures of print (e.g. book orientation, concepts of word, orientation of the text on the page, identify the book title) as suggested by Neuman (1996) and by Justice, Bowles, and Skibbe (2006).

Despite the many reported effects of letter knowledge in the literature, none, to the present knowledge, has been reported on the effects of shared book reading in grapheme awareness. Future studies should be conducted in this field, since this is reported as one first step in learning to read, and should also involve younger/older children in order to strengthen the generalizability of any effects.

In light of the increasing amount of research on the importance of shared book reading in children's emergent literacy development, there are still many children that enter school with few emergent literacy knowledge and have had few experiences with shared book reading at home (Adams, 1994). This is possible to see in many families with different cultural backgrounds or with different SES (Jaekel, et al., 2011). In conclusion, it can be suggested to future research as well as to institutions and organizations, the importance of having more programs that offer different possibilities to those children in order to have more contact with the printed word through shared book reading as was showed in the present study.

7. Conclusion

Taking into account the important effects of shared book reading highlighted in the literature, this work sought to better understand which kinds of adult-child book reading are appropriate in order to improve child emergent literacy at home and in kindergarten settings.

The present longitudinal study investigated the effects of two methods of shared book reading on child emergent literacy skills such as expressive vocabulary, semantic skills, and grapheme awareness. Using an intervention design in three kindergarten groups, each with children aged three to four years, the two investigated methods of shared book reading were:

Method I: Literacy Enrichment - 200 extra children's books were distributed in the kindergarten and the children were encouraged to borrow a book every week to take home and read with their parents. Furthermore, a written letter was sent to the parents encouraging them to read frequently with their children at home.

Method II: Teacher Training - the kindergarten teachers participated in formal instruction on how to promote child language development through shared book reading. The training was conducted by the *Heidelberger Interaktionstraining für pädagogisches Fachpersonal zur Förderung ein- und mehrsprachiger Kinder – HIT* (Buschmann & Jooss, 2011).

In addition, the effects of the two methods combined were investigated. A fourth kindergarten group participated as a control group in which no intervention was performed. Moreover, socioeconomic status and literacy activities at home were controlled for through the use of the children's family questionnaire in order to constitute a uniform sample. Additionally, age, gender, and migration background were added as possible moderator factors.

Overall, the findings of the present study showed that:

- Method I (literacy enrichment) - No significant effects were found for language skills. Positive effect was found for children's grapheme awareness.

- Method II (teacher training) - The method improved expressive vocabulary and was especially effective for children with migration background. No significant effect was found for semantic skills. The Method showed positive effect for children's grapheme awareness.
- The combination of Method I and Method II - No significant effects were found for language skills. The combination showed positive effect for children's grapheme awareness, as shown by a large effect size.

Given the findings of the present study, Method I showed that, in order to improve child language skills through shared book reading, more than motivation and the availability of good books is imperative, especially when it involves families with migration background. Therefore, access to good books combined with additional instructions whether informal e.g. bookmarks (Meyer et al., 2015) or through formal training to parents (which could in fact impact the quality of the language interactions) is highly recommended. The Method I showed however, that the availability of 'higher quality' storybooks, have encouraged the connection between home and school activities as well as indirectly motivated and stimulated more frequent literacy practices at home. Moreover, the method has provided the parents with the opportunity to involve themselves in the active process of their children's literacy development. In addition, the method allowed parents and children the opportunity to experience the intimacy of shared book reading in a positive relationship. In addition, the method has also provided to children some indirect skills in how to deal with the variety of books usually faced in public libraries.

These findings are also an important contribution to the research in shared book reading, especially in a German-speaking context where few studies have been conducted in this field (e.g. Niklas & Schneider, 2013; Wieler, 1997).

Positive effect of the Method I was also found for grapheme awareness. As grapheme

awareness is shown to be one first step in the emergent literacy process of learning to read and write (Lachmann, 2008; Lachmann & van Leeuwen, 2014; Lachmann et al., 2014), it seems plausible that organizations and institutions should invest more in such programs, as presented in Method I, which used a relatively simple procedure in kindergarten centers and received positive feedback from the families.

Method II showed positive effects for expressive vocabulary. Positive effect was also found for grapheme awareness, even though the method was focused on shared book reading strategies of language development. Kindergarten teachers need to be equipped with the skills to provide a rich language environment for the children. The findings showed that formal instruction to teachers in shared book reading strategies has potential to improve children's vocabulary, particularly for those with a migration background who showed low levels of expressive vocabulary in comparison to children without migration background. Through formal training, teachers may be made aware that they are not only fostering and nurturing teacher-child relationships, but also improving their interactions with their children and learning how to create a scenario for language interactions in which the child takes a more active role in the story. When children are actively involved, they may improve vocabulary as well as learning how print appears. The training provided the teachers with strategies that encourage the child to make verbal predictions about what they believe will occur in the story. During the story, the adult may comment on what is happening on the page, and pose some questions. After reading, the teacher may engage the child in a discussion about what was read, thus facilitating any meaningful connections to be made about the story and their own life experiences. Finally, the current study indicates that professional teacher training can yield promising outcomes and enhance teachers' ability to engage children in shared book reading activities.

Although there are many positive implications, the method showed some limitations

which could be considered as causes for the lack of effects in semantic skills. These limitations may also have impacted the effectiveness of the method in the combined group which showed no significant effects in any of the language skills. In light of this, it is recommended for future studies to control for confounds such as the manner in which teachers conduct verbal interactions in order to investigate if teachers have in fact changed their linguistic behavior as suggested in the training. Other confounds to control for are: the group size, the quality of the kindergarten books, and the importance of coaching the teachers, which could be useful in discovering and tailoring teachers' specific needs.

The large effect size for the grapheme awareness task within the combination of both methods demonstrated that when families and teachers are both involved in their children's emergent literacy, children may profit enormously. The findings showed that the two methods of shared book reading in combination support anecdotal evidence for the development of grapheme awareness which is, as already reported, an important prior condition for literacy development. Further, it is concluded that the home-school exposure to shared book reading helps children to visually learn how print looks like, acquire familiarity with the visual characteristics of the letters, and to begin learning how it differs from other visual patterns.

The kindergarten stage is critical to the development of emergent literacy skills that will help children to develop even further in formal schooling. In a “synergistic” way (Baker et al., 1997), parents and teachers play an important role in aiding children in this important stage of their lives. As a result, shared book reading is indicated as one activity that should be incorporated into home and school routines. In addition, the costs of the books (which was donated to the study) in Method I as well as the costs of the teacher training in Method II, should be looked upon as an investment, rather than as a liability, in the child's future. This investment works not only for the children and family members, but also for the society in general. Moreover, as suggested by Heckman (2011):

The logic is quite clear from an economic standpoint. We can invest early to close disparities and prevent achievement gaps, or we can pay to remediate disparities when they are harder and more expensive to close. Either way we are going to pay. And, we'll have to do both for a while. But, there is an important difference between the two approaches. Investing early allow us to shape the future; investing later chains us to fixing the missed opportunities of the past (p. 47).

Finally, the results of the current study have provided important implications and recommendations regarding parental and teacher involvement in children's emergent literacy. These findings expand on the understanding of children's experience with shared book reading and provides guidance for future studies, as well as for teachers, parents, and other professionals regarding specific strategies that may be used to improve children's emergent literacy skills.

7.1 Suggestions for Future Research

In light of the results presented above, the following are suggestions for future research:

- Sample size: future studies should be replicated with larger sample sizes which would increase statistical power and consequently increase external validity
- Follow-up analyses, in order to show if gain in the competencies may be sustained long after intervention
- Future studies should include more systematic forms of data collection, e.g. direct observation by visiting homes/kindergartens to collect observational data from family/teacher interactions, audio recording, and parental/teacher interviews in order to identify the nature of shared book reading at home as well as in kindergarten
- Future studies should formally investigate parents and teachers beliefs regarding child

literacy development

- Future studies should include formal observations about children's level of motivation and interest during shared book reading
- Future studies should include concepts about print - (e.g. book orientation, concepts of word, orientation of the text on the page, book title)
- Future studies should include other types of language measure such as children's spontaneous storytelling, as well as baseline measures of intelligence, which is considered a precursor of language competence (Niklas & Schneider, 2013)

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Appendix A

Study Flowchart

Preliminary Work

- | | | |
|----------------|--------------|--|
| Phase 1 | January 2011 | <ul style="list-style-type: none"> • Visit and contact to the 4 kindergartens • Parent's consent • Preparation for the initial assignment |
|----------------|--------------|--|

Initial Assessment - Pretest

Measures:

- | | | |
|----------------|----------------------|--|
| Phase 2 | March to
Jun 2011 | <ul style="list-style-type: none"> • (AWST-R 3-5; SETK 3-5(ESR); Grapheme Awareness • Demographic Family Questionnaire • Teacher Questionnaire |
|----------------|----------------------|--|

Teacher Training

- | | | |
|----------------|----------|--------------|
| Phase 3 | May 2012 | Two meetings |
|----------------|----------|--------------|

Teacher Training

- | | | |
|----------------|------|-------------|
| Phase 4 | July | One meeting |
|----------------|------|-------------|

Interventions Group

- | | | |
|----------------|--------------------------------|--|
| Phase 5 | August 2011 to
January 2012 | <ol style="list-style-type: none"> 1. Teacher Training and Library 2. Teacher Training 3. Library 4. Control Group |
|----------------|--------------------------------|--|

Final Assessment Post-test

- | | | |
|----------------|--------------------------|---|
| Phase 5 | January to
April 2012 | <p>Measures:</p> <ul style="list-style-type: none"> • AWST-R 3-5 • SETK 3-5 – Subtest ESR • Grapheme Awareness |
|----------------|--------------------------|---|
-

Appendix B



Stiftung für die TU Kaiserslautern
Stiftungshaus Villa Denis
Burg Diemerstein

Technische Universität Kaiserslautern

Lehrstuhl für Psychologie der
Frühförderung

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Projektpartner:	Steffi Sachse - Universität Ulm Anke Buschmann - Universität Heidelberg Bettina Joos - Universität Heidelberg
Sponsor:	Stiftung für die TU Kaiserslautern

Kaiserslautern im Januar 2011

INFORMATION UND EINVERSTÄNDNISERKLÄRUNG FÜR ELTERN

Liebe Eltern,

mit diesem Brief möchten wir Sie über eine geplante Studie informieren und Sie um Ihr Einverständnis für die Beteiligung Ihres Kindes bitten.

WORUM GEHT ES IN DER STUDIE UND WAS BEDEUTET DAS FÜR IHR KIND?

Wir, die Arbeitsgruppe „Psychologie der Frühförderung“ an der Universität Kaiserslautern führen im Kindergartenjahr 2011 ein Forschungsprojekt in verschiedenen Kindergärten in Kaiserslautern durch. Es soll untersucht werden, ob das Einrichten und Begleiten einer Leihbibliothek und/oder das geschulte Dialogische Buchanschaun die Entwicklung der Sprache und der Vorläuferfähigkeiten des Schriftspracherwerbs beeinflussen. Zu diesem Zweck wird in einer KiTa eine betreute Leihbibliothek eingerichtet, in einer zweiten Einrichtung werden die ErzieherInnen professionell im Dialogischen Vorlesen geschult und in einer dritten Einrichtung sollen beiden Maßnahmen parallel realisiert werden. Um die Auswirkungen auf die Sprachentwicklung der beteiligten Kinder zu untersuchen soll diese über drei Messzeitpunkte skaliert werden, das heißt, wir sind darauf angewiesen, dass Ihr Kind an einer entsprechenden Erhebung teilnimmt. Um die Wirkung weiterer Faktoren auf die Sprachentwicklung und bestimmte Wechselwirkungen einschätzen zu können, bitten wir auch Sie als Eltern, an einer schriftlichen Befragung teilzunehmen. Neben den drei erwähnten Tagesstätten soll eine weitere Einrichtung als „Kontrollgruppe“ teilnehmen, an der zunächst

keine der Maßnahmen durchgeführt wird. Diese Einrichtung erhält nach Abschluss der Messung einen Buchbestand zur freien Nutzung. Am Projekt sollen Kindern im Alter von 3 bis 5 Jahren teilnehmen.

Vielen Dank für Ihre Unterstützung!

Ihre Kindertagesstätte nimmt an diesem Projekt teil. Die ErzieherInnen dieser Einrichtung erhalten ein professionelles Vorlesetraining zur Optimierung des Leseverhaltens, welches zum großen Teil auf dem Heidelberger ErzieherInnen Trainingsprogramm basiert und auch von den Autoren dieses Programmes durchgeführt wird. Um die Auswirkungen des Trainings abgrenzen zu können, werden Kinder in der Kita mit ErzieherInnen, die an dem Training teilgenommen haben, mit Kindern verglichen, deren Erzieherinnen kein Training erhalten haben.

Was kommt konkret auf Sie zu, wenn Sie und Ihr Kind an unserem Projekt teilnehmen? Wir werden zu drei Zeitpunkten des Kindergartenjahres 2011 folgende Informationen von den beteiligten Kindern, Eltern und Erzieher/innen erheben:

- **Kinder:** Stand der Sprachentwicklung
- **Eltern:** Vorleseverhalten im Elternhaus (Elternfragebogen); ergänzend wird 1x ein Fragebogen zum familiären Hintergrund eingesetzt

Die Untersuchung wurde vom zuständigen Referat der Stadt Kaiserslautern geprüft und genehmigt. Die Auswahl der Kindertagesstätten erfolgte durch die Stadt. Die Leitung der Einrichtung sowie die beteiligten ErzieherInnen unterstützten die Maßnahmen.

Alle Personen, die Ihr Kind im Rahmen dieser Untersuchung betreuen, sind besonders zur Verschwiegenheit verpflichtet. Die studienbezogenen Untersuchungsergebnisse werden ausschließlich in anonymisierter Form in wissenschaftlichen Veröffentlichungen verwendet. Vollkommene Vertraulichkeit wird uneingeschränkt zugesichert.

Sollten während des Verlaufs des Forschungsprojektes Fragen auftauchen, so können Sie jederzeit an Patricia de B. Castilho Wesseling wenden: castilho@sowi.uni-kl.de 205 4971.

Wir bitten Sie, uns bei unserem Forschungsprojekt zu unterstützen und die beigefügte Einverständniserklärung zur Teilnahme Ihres Kindes an dem Projekt zu unterschreiben.

Wir freuen uns auf eine vertrauensvolle Zusammenarbeit mit Ihnen und verbleiben mit freundlichen Grüßen,

Patricia de Brito Castilho Wesseling

**Einwilligungserklärung der Erziehungsberechtigten
zur Untersuchung im Rahmen der Studie**

Name des Kindes: _____ Alter: _____

- Mein Kind **darf** an der Studie teilnehmen
- Mein Kind darf **NICHT** an der Studie teilnehmen.

.....
Ort, Datum

.....
(Unterschrift der/des Erziehungsberechtigten

Im Rahmen der Studie ist das sprachliche Umfeld, in dem die Kinder aufwachsen, von Interesse. Bitte teilen Sie uns dazu folgende Informationen mit:

Welche Sprachen spricht Ihr Kind? (Bitte kreuzen Sie eine Alternative an.)

- ① Ausschließlich Deutsch
- ② Deutsch und eine andere Sprache / andere Sprachen, welche? _

- ③ Nicht Deutsch, sondern eine andere Sprache bzw. andere Sprachen, welche?

Welche Sprachen werden in der Familie gesprochen?

- ① Ausschließlich Deutsch, d. h. alle Familienmitglieder sprechen untereinander und mit dem Kind ausschließlich Deutsch
- ② Deutsch und eine andere Sprache, bzw. andere Sprachen, welche? _____
- ③ Ausschließlich eine andere Sprache bzw. andere Sprachen, welche?

Appendix C



Stiftung für die TU Kaiserslautern
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Studie: Förderung von Sprache und Vorläuferfähigkeiten des Schriftspracherwerbs durch Bibliotheksbereitstellung/ -nutzung und Dialogisches Buchanschauen

Liebe Eltern,

vor Ihnen liegt der bereits angekündigte erste Fragebogen für die Eltern der Kinder, die an unserer oben genannten Studie teilnehmen.

Der Fragebogen ist in zwei Themengebiete unterteilt. Zum einen geht es darum, wie ist die Interesse für Bücher, wie beschäftigt sich zu Hause und wie ist die Sprachkenntnisse Ihres Kindes. Zum anderen erfragen wir einige allgemeine Angaben zu den Lebens- und Lernbedingungen in Ihrer Familie, denn diese können einen Einfluss auf die Sprachentwicklung und auf die Grundlagen des Schriftspracherwerbs haben. Es ist wichtig, dass möglichst alle Eltern diese Fragen beantworten.

Ihre Angaben werden von uns absolut vertraulich behandelt. Das heißt:

- Zu den Fragebogendaten erhalten ausschließlich Projektmitarbeiter Zugang.
- Zu keiner Zeit werden wir Daten an den Kindergarten Ihres Kindes weitergeben.
- Veröffentlichungen der Ergebnisse der Studie beziehen sich nicht auf einzelne Kinder und lassen keinen Rückschluss auf den Einzelnen zu.

Ihre Angaben sind freiwillig. Um aus dem Forschungsprojekt tragfähige Aussagen ableiten zu können, ist es aber wichtig, dass Sie möglichst alle Fragen beantworten.

Bitte kreuzen Sie Zutreffendes an oder tragen Sie die Informationen auf dem Bogen ein.

Beispiel: Nein Ja Beispiel: → Wie lange? Seit 2 Jahren

Wir danken Ihnen für Ihre Bereitschaft, uns zu unterstützen! Für Rückfragen stehe ich Ihnen jederzeit unter der Telefonnummer 0631 / 205-4975 zur Verfügung.

Bitte geben Sie den ausgefüllten Fragebogen **XXXXXXX** im Kindergarten Ihres Kindes ab! Legen Sie den Fragebogen dazu in den beigefügten Rückumschlag ein.

Mit freundlichen Grüßen

Elternfragebogen

Wer hat den Fragebogen ausgefüllt? ① Mutter ② Vater ③ Andere Person:

I. Allgemeine Angaben zum Kind

1. Name des Kindes: _____ 1a. Geburtsdatum:

2. Geschlecht des Kindes: ① Männlich ② Weiblich

3a. Geburtsland des Kindes: ① Deutschland ② Anderes Land → Welches?

3b. Wenn anderes Land – seit wann ist Ihr Kind in Deutschland?

III. Interessen des Kindes

20. Wie oft beschäftigt sich Ihr Kind zu Hause mit folgenden Dingen?

		Täglich	Mehrmals pro Woche	Ca. 1x pro Woch e	Weniger als 1x pro Woche	Nie
a	Draußen spielen, klettern, Radfahren	①	②	③	④	⑤
b	Allein spielen	①	②	③	④	⑤
c	Basteln, Lego spielen, Malen	①	②	③	④	⑤
d	Fernsehen	①	②	③	④	⑤
e	Musik hören, singen	①	②	③	④	⑤
f	Bücher anschauen / allein	①	②	③	④	⑤
g	Bücher lesen / mit Erwachsenen	①	②	③	④	⑤
h	Mit anderen Kindern spielen	①	②	③	④	⑤
i	Puppen, Kaufladen, Polizei usw. spielen	①	②	③	④	⑤
j	Computerspiele → Welche? _____	①	②	③	④	⑤
k	Sonstiges → Was? _____	①	②	③	④	⑤

21. Wie viele Kinderbücher besitzt Ihr Kind? Ca. _____ Bücher

22. Hat Ihr Kind derzeit ein Lieblingsbuch? ① Nein ② Ja →
Welches? _____

23. Wie oft besuchen Sie mit Ihrem Kind eine öffentliche Bibliothek?
① Nie ② Selten ③ Manchmal ④ Häufig

24. Wie viele Bücher für Erwachsene besitzen Sie als Eltern zu Hause?
(Zeitungen, Zeitschriften und Kinderbücher bitte **nicht** mitzählen.)
Ca. _____ Bücher

25. a) Wie viele Stunden schaut Ihr Kind pro Tag Fernsehen? Ca. _____ Stunden
b) Was schaut Ihr Kind eher? Deutsches Fernseh
 Fernsehen aus _____ (Bitte Land eintragen.)

26. Gibt es im Kinderzimmer einen Fernseher? Nein Ja

IV. Kindergartenbesuch

27. Seit wann besucht Ihr Kind den Kindergarten (in Deutschland)?

Seit _____ (Monat/Jahr, z.B. September 2006)

28. Besucht Ihr Kind den Kindergarten als Integrationskind? Nein Ja

29. Wie viel Zeit verbringt Ihr Kind in der Regel täglich im Kindergarten?
_____ Stunden/Tag

30. Wird Ihr Kind außer von Ihnen und im Kindergarten regelmäßig von weiteren Personen betreut?

Nein

Ja → Von wem (z.B.

Oma)? _____

→ Wie viele Stunden pro Woche? _____ Stunden

31. Erhielt Ihr Kind im Kindergarten schon früher eine spezielle Sprachförderung?

Nein

Ja → Wie lange (Zeitraum in Monaten oder Jahren)?

→ Wie oft wurde Ihr Kind in der Woche gefördert? _____ mal

V. Sprachliche Entwicklung und Sprachkenntnisse des Kindes

32. Machen Sie sich Sorgen um die sprachliche Entwicklung Ihres Kindes?

Nein

Ja → Warum? _____

33. War oder ist Ihr Kind in logopädischer Behandlung (vom Kinderarzt verschrieben)?

Nein

Ja → Warum und welche

Behandlung? _____

→ Wann und wie lange?

→ In welcher/welchen Sprache(n) wurde Ihr Kind behandelt?

34. Welche Sprachen spricht Ihr Kind?

Deutsch

Deutsch und andere Sprache(n) →

Welche? _____

③ Nur andere Sprache(n) → Welche?

35. Mit wie vielen Jahren hat Ihr Kind begonnen zu sprechen?

- ① Deutsch: mit _____ Jahren
 ② Andere Sprache: mit _____ Jahren → Welche?

③ Andere Sprache: mit _____ Jahren → Welche?

36. Wie schätzen Sie die Sprachkenntnisse Ihres Kindes ein?

(① = Sehr gut, ② = Gut, ③ = Mittel, ④ = Schlecht, ⑤ = Sehr schlecht)

Bitte ggf. weitere Sprachen eintragen.

a	Deutsch	① ② ③ ④ ⑤	① Kann ich nicht beurteilen
b	_____	① ② ③ ④ ⑤	① Kann ich nicht beurteilen
c	_____	① ② ③ ④ ⑤	① Kann ich nicht beurteilen

I. Allgemeine Angaben zur Familie

4a. Geburtsland der Mutter: _____ **4b. Geburtsland des Vaters**

4c. Falls zutreffend: Seit wann ist Ihre Familie in Deutschland? _____

5a. Wie viele Geschwister hat Ihr Kind? _____ **5b. Wie viele Geschwister sind älter?** _____

7. Welcher ist Ihr höchster Schulabschluss?

	Vater (a)	Mutter (b)
ohne Schulabschluss	①	①
Hauptschulabschluss (9 Schuljahre)	②	②
Mittlere Reife (Realschule, 10 Schuljahre)	③	③
Fachhochschulreife/Abitur (Gymnasium o. Ä.; 12 /13	④	④
Sonstiges → Was? _____	⑤	⑤

8. Welche abgeschlossene Berufsausbildung haben Sie?

	Vater (a)	Mutter (b)
Keine abgeschlossene Berufsausbildung	①	①
Lehre oder vergleichbarer Abschluss	②	②
Fachschule/Techniker/Meister oder vergleichbarer Abschluss	③	③
Hochschulabschluss, Fachhochschulstudium, o. Ä.	④	④
Sonstiges → Was? _____	⑤	⑤

9. Wie lässt sich Ihre derzeitige berufliche Situation beschreiben?

	Vater (a)	Mutter (b)
Vollzeit	①	①
Teilzeit	②	②
Ausbildung/Studium	③	③
Nicht berufstätig	④	④
Sonstiges → Was? _____	⑤	⑤

10. Wie hoch ist das monatliche Nettoeinkommen Ihres Haushalts insgesamt?

Gemeint ist dabei die Summe, die nach Abzug der Steuern und Sozialversicherungsbeiträge übrig bleibt. Bei Selbständigen: das durchschnittliche Nettoeinkommen abzüglich der Betriebsausgaben.

- | | | | |
|---------------------|-----------------------|---------------------|-----------------------|
| unter 1000,- € | <input type="radio"/> | 2500,- bis 3000,- € | <input type="radio"/> |
| 1000,- bis 1500,- € | <input type="radio"/> | 3000,- bis 3500,- € | <input type="radio"/> |
| 1500,- bis 2000,- € | <input type="radio"/> | 3500,- bis 4000,- € | <input type="radio"/> |
| 2000,- bis 2500,- € | <input type="radio"/> | über 4000,- € | <input type="radio"/> |

Alle weiteren Fragen richten sich an Familien, in denen mehrere Sprachen gesprochen werden. Wenn Sie in Ihrer Familie ausschließlich deutsch sprechen, sind Sie an dieser Stelle mit dem Fragebogen fertig.

37. Welche Sprache spricht Ihr Kind überwiegend in der Familie?

- a) mit Vater: ① Deutsch ② Andere Sprache(n) ③ Deutsch und andere Sprache gleichviel
- b) mit Mutter: ① Deutsch ② Andere Sprache(n) ③ Deutsch und andere Sprache gleichviel
- c) mit Geschwistern: ① Deutsch ② Andere Sprache(n) ③ Deutsch und andere Sprache gleichviel

38. Welche Sprache spricht Ihr Kind überwiegend außerhalb der Familie?

- ① Deutsch ② Andere Sprache(n) ③ Deutsch und andere Sprache gleichviel

39. Wo hat Ihr Kind hauptsächlich Deutsch gelernt?

- ① Innerhalb der Familie
② Außerhalb der Familie →

Wo? _____

40. Falls das Kind nicht in Deutschland geboren wurde: Wie verlief die sprachliche Entwicklung bis zum Zeitpunkt der Ausreise?

- ① Unauffällig ② Auffällig (z.B. langsamer als bei anderen Kindern)

VI. Sprachliches Umfeld des Kindes

41. Sprachkenntnisse der Eltern (① = Sehr gut, ② = Gut, ③ = Mittel, ④ = Schlecht, ⑤ = Sehr schlecht)

41a. Mutter

a	Deutsch	① ② ③ ④ ⑤
b	Andere Sprache(n)	① ② ③ ④ ⑤
	_____	① ② ③ ④ ⑤
	_____	① ② ③ ④ ⑤

40b. Vater

a	Deutsch	① ② ③ ④ ⑤
b	Andere Sprache(n)	① ② ③ ④ ⑤
	_____	① ② ③ ④ ⑤
	_____	① ② ③ ④ ⑤

42. Welche Sprache sprechen die einzelnen Familienmitglieder überwiegend in der Familie?

Vater	① Nur Deutsch	② Andere Sprache(n)	③ Deutsch und andere Sprache gleichviel
Mutter	① Nur Deutsch	② Andere Sprache(n)	③ Deutsch und andere Sprache gleichviel
Geschwister	① Nur Deutsch	② Andere Sprache(n)	③ Deutsch und andere Sprache gleichviel
Weitere Familienmitglieder (z.B. Tante, Oma)	① Nur Deutsch	② Andere Sprache(n)	③ Deutsch und andere Sprache gleichviel

43. Welche Sprache sprechen die einzelnen Familienmitglieder überwiegend mit Ihrem Kind?

Vater	① Nur Deutsch	② Andere Sprache(n)	③ Deutsch und andere Sprache gleichviel
Mutter	① Nur Deutsch	② Andere Sprache(n)	③ Deutsch und andere Sprache gleichviel
Geschwister	① Nur Deutsch	② Andere Sprache(n)	③ Deutsch und andere Sprache gleichviel
Weitere Familienmitglieder (z.B. Tante, Oma)	① Nur Deutsch	② Andere Sprache(n)	③ Deutsch und andere Sprache gleichviel

44. In welcher Sprache unterhalten Sie sich während des Essens?

① Nur deutsch; d.h. alle Familienmitglieder sprechen untereinander und mit dem Kind nur deutsch.

② Deutsch und andere Sprache(n) → Welche?

③ Nur andere Sprache(n) → Welche?

45. Wie ist es in Ihrer Familie?

In welcher Sprache schimpfen Sie mit Ihrem Kind?	① Nur Deutsch	② Deutsch und andere Sprache(n) → Welche? _____	③ Nur andere Sprache(n) → Welche? _____
In welcher Sprache trösten Sie Ihr Kind?	① Nur Deutsch	② Deutsch und andere Sprache(n) → Welche? _____	③ Nur andere Sprache(n) → Welche? _____
In welcher Sprache unterhalten Sie sich mit Ihrem Mann / Ihrer Frau bzw. Ihrem Partner / Ihrer Partnerin?	① Nur Deutsch	② Deutsch und andere Sprache(n) → Welche? _____	③ Nur andere Sprache(n) → Welche? _____

Appendix D

List of Books – Method I – Literacy Enrichment

- | | |
|---|--|
| 3063 So weit so gut! | 2144 Elmar rettet den Regenbogen |
| 2984 Mutig, Mutig! | 2261 Der Weihnachtsvogel |
| 0095 Der Hühnerhof | 2372 Eiertanz + Gänsemarsch |
| 0230 Das Hirtenlied | 2373 Es war einmal ein Zauberer ganz allein |
| 0234 Jakobs erstes Schwimmfest | 2374 Bunte Spielwiese |
| 0317 Malik. Die Maus | 2395 Wintertraum und Weihnachtswichtel |
| 0555 Jan und Julia im Kindergarten | 2395 Ein Brief für Rötte |
| 0746 Das gehört mir | 2398 Ich mache heute was ich will |
| 0754 Sonne im Winter | 2436 Die Überraschung |
| 0945 SO viele Sachen | 2462 Kennst du das? |
| 0991 Bommel im Wald | 2463 Wetter |
| 1116 Kinderzimmer kreativ gestalten | 2507 O du fröhlich |
| 1126 Freche Löffelkerlchen | 2623 Vickie und die starken Männer |
| 1154 Pezze Tino | 2640 Woher kommen nur die kleinen Babys |
| 1262 Weihnachtswimmelbuch | 2670 Das Geheimnis der Bären |
| 1378 Snowman kommt | 2905 Albert macht Quatsch |
| 1856 Komm, ich zeig dir was ich esse | 2906 viele Bunte Zappleltiere. Mein erstes Fingerspielbuch |
| 1952 Katze und Maus im Schnee | 2921 Seit es dich gibt ist alles anders |
| 1971 Moritz heißt noch immer Meier | 2983 Wenn Tiere schlafen gehen |
| 1975 Die Räuberspatzenbande | 2991 Was ein Tag alles bringt |
| 1981 Rufus und Linus spielen leise und laut | 2998 Der Baum ist mein Haus |
| 1982 Tim und Nina malen | 3004 Kunterbunte Detektivgeschichten |
| 1992 Sehen + sprechen. Guck doch mal | 3005 Kunterbunte Zahnfeegeschichten |
| 1993 Sehen + Sprechen | 3018 Prinzessin Rosabella |
| 1995 Ich mag den Wind | 3021 Wasserelfe Aelin |
| 1999 Anna um Land verkehrt herum | 3022 Luftelfe Tara |
| 2024 Wo ist Lola | 3023 Wir sind die Wölfe |
| 2025 Mats und die Steifenmäuse | 3036 Viel Spaß im Kindergarten |
| 2029 Nelly und Nero | |

-
- | | |
|---|--|
| 3038 Märchen von weisen Frauen | 3055 Der Traumzirkus |
| 3039 Lisa und die Zaubergerte | 3056 Das Schatsucherfest |
| 3040 Fledermaus und Gruselkraus | 3057 Pooja das Elefantenmädchen |
| 3041 Der liebste Wolf der Welt | 3058 Auf den Flügeln der Phantasie |
| 3042 Ich hasse Rosa | 3059 Prinzessin Viv und die wilden
Räuber |
| 3043 Kiki | 3060 Zum Kuckuck mit den Eiern |
| 3045 Peterchens Mondfahrt | 3062 Der kleine Bär sucht das Glück |
| 3047 Wie der Floh dem Menschen half | 3064 Der Zottelbär |
| 3048 Lisa und Luisa | 3065 Wau sucht Wau |
| 3049 die kleinen Piraten und die
abenteuerliche Seefahrt | 3066 Prinzessin Silberperle |
| 3050 Gespenstergeschichten | 3067 Anna und das Rotkehlchen |
| 3051 Hexschen Purpurfee | 3068 Die Taube Noahs |
| 3052 Laura und Amelie | 3070 Ich will nicht zum Frisör |
| 3053 Die Abenteuer des Ritters Gawain | 3071 Clown Nino |
| 3054 Der Tag an dem das Äffchen wütend
war | 3082 Kuschelhaarwuschel |
| 3054 Die Amsel und der Papagei | 3083 Mimmelitt das Stadtkaninchen |
| | 3085 Wollen wir Freunde sein |

Appendix E

List of Books –Combination of Method I and II

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| 0032 Weihnachten im Stall | 2644 Der Weihachtsvogel |
| 0058 Der Bär auf dem Spielplatz | 2689 Ein Tag mit Elmar |
| 0092 kurze Segensworte aus der Bibel | 2694 Mein türkisch Bildwörterbuch |
| 0240 Swimmy | 2695 Rund um mein Haus |
| 0551 Kannst du brüllen | 2841 Ich hab dich so lieb |
| 0944 So viele Tiere | 2843 Murkel ist wieder da! |
| 1042 Kevin seaside picnic | 2918 Mein allererstes Buch vom Essen |
| 1043 Clara goes to school | 2992 Ein Kuss für den Frosch |
| 1312 Es leuchtet hell ein Stern in dunkler Nacht | 2993 Muckelchen und Mick Radieschen. Ein Osterhasenabenteuer |
| 1337 Fiete Anders | 2994 Katzensprung |
| 1373 Der Buchstabenbaum | 2995 So ein Fest! |
| 1520 Weihnachten bei Großvater | 2996 Pirat Unheimlich |
| 1641 Welches Tier entdeckst du hier? | 2997 Philippo und der versunkene Schatz |
| 1999 Die Maus fliegt zum Mond | 2999 Jens mal so mal so |
| 2111 Ein Papa für Ilja Igel | 3000 Hellen Schneiders Tiergeschichten für Kinder |
| 2201 Die Geschichte vom Löwen der nicht schreiben konnte | 3001 Konrad kann knuddeln |
| 2354 Meine erste Einkaufstasche | 3002 Meister Hubras Kleckserei |
| 2360 Nicki | 3003 Kunterbunte Cowboygeschichten |
| 2361 Kleiner Waschbär weiß alles besser | 3006 Prinzessin LU |
| 2362 Was macht kleine bären froh | 3007 Pünktchen geht in den Kindergarten |
| 2363 Wichteltheater | 3008 Prinzessin Vivi und die wilden Räuber |
| 2369 Karlinchen | 3009 Piro und die Dampfloek |
| 2371 Kasimirs Weltreise | 3010 Winni. alles gute Gute zum Geburtstag, Mama! |
| 2388 Wo wächst der Pfeffer | 3011 Ben Boggel und das Abenteuer mit dem Kristallritter |
| 2402 Leon ist anders | 3012 Piro und der Bagger |
| 2403 Weihnachts Wimmelbuch | 3013 Timm Erpel der Ausreißer |
| 2612 Die drei Weisen aus dem Morgenland | |
| 2622 Der blaue Autobus | |

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- | | |
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| 3014 Tamino Pinguin und das größte und schönste Geschenk der Welt | 3072 Nicht erwischt |
| 3015 Mit Adebar nach Afrika | 3073 Der kleine Bär. Die schönsten Vorlesegeschichten |
| 3016 Leo und der Regenbogen | 3075 Tschuldigung, es tut mir leid |
| 3017 Geschichten vom frechen Vampir | 3077 Frisch und frech |
| 3019 Mutig, mutig, kleine Meerjungfrau | 3078 Der Baum ist mein Haus |
| 3020 Erdgnom Amar | 3079 Prahlgänschen |
| 3024 Mannfred Mai erzählt von Schulgespenstern, Fussballfreunden und anderen Helden | 3080 Wau sucht eine Frau |
| 3025 Maler Hoppelmann | 3081 Als Lili noch klein war |
| 3026 Hasenjunge Dreiläufer | 3084 Zwei Millionen Schmetterlinge |
| 3027 Krachen und Heulen und berstende Nacht | 3086 Niklas und die rote Schachtel |
| 3028 Silvester unter Zauberstein | 3087 Drei verflixte Wünsche |
| 3029 Lara und Leo | 3074 Die kleine Piratin und die neues 13 |
| 3030 Ganz schön schlau, die dumme Sau | 3088 Schlaf schön mein Traumsternchen |
| 3031 Mercy Watson Wunderschwein | 3089 Lulu im Museum |
| 3032 Rudi Hasenfuß und der Riesendrache | 3090 Bilderbuchschatz |
| 3033 Noch so ein Tag | 3091 Wolfi und die sieben Geislein |
| 3034 Jetzt hole ich mir eine neue Mama | 3092 Franz, der Junge der ein Murmeltier sein wollte |
| 3035 Das Pandamädchen | 3093 Der tapfere Toni |
| 3037 Der winzige Pepe | 3094 Ganoven, Hexen und Piraten |
| 3046 Für meinen allerbesten Freund | 3076 19 Mädchen und ich |
| 3061 die kleine Raupe mit dem großen Hunger | 3095 Nein, das esse ich nicht! Oder doch?! |
| 3069 Der kleine Herr Wunder | 3096 Mein Freund das Krokodil |

Appendix F



Technische Universität Kaiserslautern

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Stiftung für die TU Kaiserslautern
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Projektpartner:	Steffi Sachse - Universität Ulm Anke Buschmann - Universität Heidelberg Bettina Joos - Universität Heidelberg
Sponsor:	Stiftung für die TU Kaiserslautern

Projekt: Förderung von Sprache und Vorläuferfähigkeiten des Schriftspracherwerbs durch Bibliotheksbereitstellung/-nutzung und Dialogisches Buchanschauen/Vorlesen“

Liebe Eltern,

seit Anfang Juni ist die Leibbibliothek mit ca. 90 tollen Büchern in Ihrer KITA im Rahmen des oben genannten Forschungsprojektes der Arbeitsgruppe „Psychologie der Frühförderung“ an der Universität Kaiserslautern eingerichtet.

Das bedeutet, dass Ihr Kind jeden Mittwoch zwischen 9:30 Uhr und 11:00 Uhr ein Buch pro Woche ausleihen kann. Wir bitten Sie darauf zu achten, dass ein neues Buch erst ausgeliehen werden kann, wenn das ausgeliehene Buch der Vorwoche zurückgebracht wurde. Zu Ihrer Erinnerung werden wir an jedem Buch ein Zettel mit dem nächsten Abgabedatum anbringen.

Wir bitten Sie oft wie möglich, gemeinsam mit Ihrem Kind die Bücher anzuschauen und vorzulesen.

In den nächsten 6 Monaten werden wir die Buchausleihe begleiten und die Frequenz der Ausleihe festhalten, um den Einfluss auf die Sprachentwicklung der Kinder zu untersuchen. Nach Ablauf des Projekts steht der Buchbestand der Einrichtung weiterhin zur Verfügung.

Herzlichen Dank,

Personal Data:

Patricia de Brito Castilho Wesseling

Education and Professional Experience:

Since 2009	Doctoral student at the University of Kaiserslautern
01 - 03/2013	Academic Interchange at Department of Psychology: Child Language and Literacy Research Lab – Carleton University – Canada
2010 - 2011	Maternal leave
2006 - 2007	Interchange at Université D’Orleans - DEF (diplome d’etudes en langue francaise) - France
2002 - 2005	Study of Philosophy at the Pontifícia Universidade Católica do Paraná (Brazil)
2001 - 2002	Teaching Diploma at the School Nossa Senhora de Sion (Brazil)