7 Theoretical and Empirical Underpinnings for the Role of Peer Interactions in Language Learning and a Conceptualization of Peer-Assisted Learning in Early Childhood Education and Care

For children in the preschool-age, the repeated engagement with narratives provides opportunity to actively engage in and to develop higher-level language skills even before they become fluent readers through school literacy instruction. It has been the aim of the first study to examine the capacity to produce fictional narrative in DLLs with various language socialization patterns and language exposure. Beyond the in-depth analysis of the state and relating factors of DLLs' emergent fictional narrative skills, attention should also be directed at the kinds of interactions that support struggling DLL narrators to acquire communicative competence in the complex area of narrative.

"Opportunities to engage in frequent naturalistic and meaningful interactions with literacy-related artifacts enhance children's literacy knowledge in an implicit manner" (Powell & Diamond, 2012, p. 198) and thus are an important part of early language and literacy support in ECEC. Those sheer opportunities, however, may not be sufficient to successfully acquire decontextualized language skills, such as narrative skills, for children at risk for successful language and literacy development, be it because they come from underprivileged family backgrounds, have developmental delays or impairments, or are DLLs (Hair et al., 2006). Therefore, to meet the needs of all learners, more explicit learning approaches should also be provided in ECEC environments, which not only feature the modeling of a target skill, but also offer ample opportunity for children to practice and consolidate the newly acquired knowledge (Phillips, Clancy-Menchetti, & Lonigan, 2008) in an engaging setting (Justice, Chow, Capellini, Flanigan, & Colton, 2003). Theoretical and empirical appropriations suggest that peers may act as linguistic informants, who provide valuable and engaging models in narrative language learning. Therefore, the second study of the current work will explore a peer-assisted approach in ECEC to support and enhance emerging narrative skills in DLLs.

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Correspondingly, the central goal of the present chapter is to derive the scope and role of peer interaction for language acquisition, by first exploring how peers can create fruitful environments for language and early literacy learning. This approach will be theoretically and empirically explored in the following sections:

To understand the potential of peer-assisted learning approaches for the support of DLLs' emerging narrative skills in ECEC, it is imperative to first delineate and discuss theoretical and empirical underpinnings of peer interactions in ECEC as an environment for the language acquisition of children. In pursuing this goal, first, the definitions of central terms, such as *peers*, *peer interactions*, and *peer relationships in ECEC,* and an overview of the emergence and main theoretical strands guiding research regarding the meaning of peers for early child development will be given (see section 7.1).

Based on a *social-interactionist perspective*, the role and scope of ECEC peer experiences for language development in establishing and maintaining linguistic interactions with their peers, is then considered (see section 7.2). Through the analysis of both, *observational and longitudinal research evidence*, interactional language spaces between children as well as long-term peer effects on language acquisition are targeted, while special attention will be paid to children growing up with more than one language (see sections 7.2.1 through 7.2.5).

Didactically, peers have been included in learning contexts in the realm of *peer-assisted learning activities*, such as *peer tutoring*. After defining such learning settings (see section 7.3.1) and reflecting on their value through the theoretical appropriation of the *relational didactics* framework (see section 7.3.2), a review of the research literature is presented, focusing on peer-assisted learning in the context of language support. Special focus will be given to contextual factors when applying peer-assisted learning in ECEC settings (see section 7.3.3). The present chapter will be concluded by drawing *consequences for the current study* (see section 7.4).

7.1 Exploring the Nature of Peer Interactions in ECEC

Before exploring the role and scope of peers in language development in ECEC, a definition of the term *peer/peers* will be put forth, including a differentiation between the terms *peer interactions* and *peer relationships*.

7.1.1 Delineation of a Working Definition *Peers in ECEC*

The term *peers* encompasses a wide range of ages, capacities, and interactional spaces, which makes it especially ripe for examination. Etymologically, the term peer was originally used to collectively refer to a member of a class of the British nobility, who was also entitled to a seat in the House of Lords of the British Parliament (Simpson & Weiner, 1989). Nowadays, it is typically employed as a colloquial expression in reference to children, adolescents, or adults, who are similar to each other in age. Beyond age, close proximity in social status, ability, and/or knowledge further determines the boundaries of a group of peers, so that, accordingly, peers can be defined as "individuals of similar age, social status, and interest" (Hamit, 2011, p. 1073; also see von Salisch, 2000), which makes the term appropriate for children in ECEC environments.

In contrast to adult-child relationships, which are characterized by unilateral asymmetries in knowledge, skills, authority, and power, peer relationships are set apart by the relative equality of the agents in terms of maturity and ability (Kupersmidt & Dodge, 2004), contributing to more balanced, symmetrical roles. The resulting parallel developmental trajectories generate commonalities in cognitive and socio-emotional competence, communication style, and interest, which make preschool-age peers attractive play partners to each other, and, as they grow older, often more preferable interaction partners than their family members (Rubin, Bukowski, & Laursen, 2009).

Youniss, McLellan, and Strouse (1994) argue that peer relationships have a special potential for child development, as they "are marked by use of symmetrical reciprocity and guided by the overarching principle of cooperation between equals" (p. 102). The approximate symmetric nature of their status does not imply instant cooperation, but also leads to considerable challenges for children, such as the negotiation of resource allocation and activities, as well as a more active role in initiating in sustaining rela-

tionships. Peer conflicts are therefore common among preschoolers, as children have to negotiate complicated, yet central concepts related to power distribution (e.g., Chen, Fein, Killen, & Tam, 2001; Ladd, 2005; Laursen, Finkelstein, & Betts, 2001).

Drawing on these explications, peers in ECEC will be defined here as individuals of similar age, maturity, ability, and social status, who face similar developmental tasks and challenges, share main interests, and who uniquely contribute to each other's development.

7.1.2 Peer Interactions and Peer Relationships in Early Childhood[42]

Toddlers are already capable of coordinating their behavior with other children through initiation, imitation, sharing, and adapting their own response to their partners' expression. They especially enjoy participating in "reciprocating imitative acts" (Eckerman & Peterman, 2001, p. 332) with their peers, both verbally and non-verbally, which ultimately forms the foundation for more elaborated modes of peer communication. With growing age and experience, the amount of attention directed at peers continues to grow in frequency and quality (Dunn, 1993). After the third year of life, children start directly increasing amounts of attention to peers, and spend increasing amounts of time with them, especially if enrolled in child care settings (Kernan, Singer, & Swinnen, 2011). Naturally, entry into ECEC provides a dramatic shift in peer relations, as children begin spending considerably extended time periods with their peers in a variety of scaffolded (e.g., circle time, group activities) and unscaffolded settings (e.g., free play) (Singer & de Haan, 2007). Children's peer relationships further evolve, shifting toward increasing levels of complexity and integration, and quickly, peers turn into one of children's main social reference groups.

In the realm of peer encounters in ECEC, it is reasonable to differentiate between *peer interactions* and *peer relationships*. According to Ladd (2005), the "behavioral processes, such as the sequences of physical or verbal exchanges that occur between

[42] As is the case with many other research areas on human development, the explications on peer interactions and relationships are mainly based on literature from Western cultures. The role of culture and cultural differences in peer relations is less well researched, but see Ladd, Herald, & Andrews (2013) for an overview.

members of a friendship or a peer group" (pp. 6-7) can be characterized as a *peer interaction*; for example, two children looking through a picture book together and talking about the depicted scenes. In this sense, peer interactions represent communicative actions between two or more peers (Blum-Kulka & Snow, 2004), which are often targeted at establishing, expressing, and maintaining friendships, negotiating equality, approaching reciprocity, and establishing solidarity, but also can encompass peer learning scenarios (Philp et al., 2014). Especially in childhood, these interactions are characterized by a high dynamic and complexity (Blum-Kulka & Snow, 2004).

In contrast, a *peer relationship* builds on peer interactions and can be characterized by the "type, nature, and duration of the interactions that occur between children" (Ladd, 2005, p. 7), such that social and communicative encounters between the same peers occur on a regular basis over a period of time. Usually, the nature of those interactions is reciprocal and independent from other relationships (Naylor, 2011, p. 1075), for it is also distinguished by a relatively stable emotional quality, such as unilateral or mutual affection, but also dislike (Ladd, 2005).

While peer interactions and relationships are often dyadic in nature, in institutional settings such as ECEC, they are also embedded in and influenced by a larger *peer group*. Therefore, Howes (2009) distinguishes between "informal" (e.g., friendships, as characterized by the centrality of the relationships) as well as "formal" (e.g., all children belonging to an ECEC classroom) dimensions of peer group experiences (p. 182). While informal groups and, for example, their creation of shared symbolic spaces in play, have a unique quality, they cannot be viewed as being independent from the realm of the larger formal (i.e., institutional and cultural) context in which they occur[43]. In this sense it is important to acknowledge the complexity of influencing factors on peer interactions and relationships, among which are "individual characteristics, social interactions, dyadic relationships, and group membership and composition" (Rubin, Bukowski, & Parker, 1998, p. 573).

[43] As with any area of complex socially-motivated behavior, the development of peer interactions and relationships is a dynamic process, changing and developing over the preschool years. While younger children establish peer relationships based on concrete (play) activities and thus choose playmates who are in physical proximity, with increasing age, children are more drawn to peers with similar interests and cultural identities (e.g., Newcomb & Bagwell, 1995).

7.1.3 Historical Outline of Research on Peer Interactions in Preschool-Age Children

The extension of ECEC in Western countries in the 1970s led to a dramatic change in the life of young children. Organized ECEC settings have since become significant environments of children's day-to-day interactions and experiences (Kernan, Singer, & Swinnen, 2011) and may, when providing high-quality services, promote children's language and academic development (e.g., Dickinson & Porche, 2011; Vandell et al., 2010). Passing a significant amount of their day in ECEC institutions also means that "children of all ages spend extended periods of time in dyadic, multi-party, mixed-age or same-age interactions with their peers" (Cekaite et al., 2014, p. 3). Therefore, while historically[44] research in the area of child development mainly focused on the importance of adult-child-interactions, the body of research on the peer relations of young children has been increasing rapidly, striving to study childhood "from within" (Cromdal, 2009, p. 1473) and progressively leading to a radical change in the view of the meaning of peer interaction in early childhood.

While some researchers studied peer interactions and relationships based on attachment theoretical approaches and focused on the role of parent-child and ECEC practitioner-child relationships for the child's establishment and maintenance of peer experiences (e.g., Howes & Ritchie, 2002), other researchers, building primarily on the pioneering theoretical approximations of Piaget and Vygotsky, brought into focus the child's active role in their development and world appropriation process (e.g., Berndt & Ladd, 1989; Corsaro, 1985; Hartup, 1983; Krappmann & Oswald, 1995; Youniss, 1980):

Coming from a background in developmental psychology, Piaget (e.g., 1926; 1932; 1978) shaped cognitivist theories of child development, conceptualizing the child's learning process as an active acquisition of (sensomotor) structures and schemes in dependency of its developing cognition. With respect to peer interactions, he identified the developmental symmetry of the interacting agents as provoking socio-cognitive

[44] For a more detailed historical overview of the emergence of research on peer interactions and relationships, see for example Rubin, Bowker, McDonald, and Menzer (2013) as well as Rubin, Bukowski, and Parker (1998).

conflict, and therefore acting as a key factor for stimulating cognitive-moral development in the child. In accordance with this notion, researchers such as Sullivan (1953) and later Youniss (e.g., 1980) took up on this notion, arguing that in interaction with peers, children could experience "a sense of equality, interpersonal sensitivity, the need for intimacy, and mutual understanding" (p. 29).

Meanwhile, Vygotsky (e.g., 1967; 1978; 1986/1934) saw slight developmental disparities between peers as ideal triggers for stimulating developmental growth, where the child experiences his or her peer as a model at a level of its own proximal development. Establishing a cultural-historical activity theory, positing the active appropriation of cultural developmental targets, such as language use, in social situations at the core of the child's acquisition process, Vygotsky inspired research exploring the social co-construction of shared meanings, and the role of social interaction partners, such as a teachers or peers, in child learning (Singer & de Haan, 2007) by exploring the developmental space where the transition from interpsychological to intrapsychological functioning occurs. Accordingly, the learning process was posited as an in situ interactive accomplishment, such that the idea of learning as a social process can be conceptualized as not being simply governed by maturation, but rather by exposure to more sophisticated models in scaffolded interactional spaces that tackle the learning space Vygotsky coined—and what came to be his most widely known and most appropriated idea—the *zone of proximal development* (ZPD). According to Vygostky, interactions that target

> […] 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
>
> (1978, p. 86)

support the learner to actively integrate the skills necessary to expand his or her own productions. Finally, the ZPD can also be interpreted as the space where social agents support each other in "going beyond" (Lindfors, 1999, p. 14) what they already know and/or can do. This process, as Wertsch (1985) reasoned, is "a property neither of the child nor of interpsychological functioning alone" (p. 71), but rather "jointly deter-

mined by the child's level of development and the form of instruction involved" (pp. 70-71).

Vygotsky further argues that "the only good kind of instruction is that which marches ahead of development and leads it; it must be aimed not so much at the ripe as at the ripening functions" (Vygotsky, 1986/1934, p. 188). By internalizing the involved processes in the jointly-accomplished task (Schneider & Watkins, 1996) through (repeated) participation in such interactions, children become eventually proficient in carrying out similar activities independently. While some authors argue that it may be difficult to train students to provide appropriate assistance for each other (O'Donnell & Hmelo-Silver, 2013), it has also been suggested that peers may be ideal learning partners because, "as joint participant[s] in everyday activities" (Schneider & Watkins, 1996, p. 158), they may act naturally in each other's ZPD, and thus offer appropriate learning models for the acquisition of narrative skills (e.g. McGregor, 2000; also see section 7.3.3).

Nicolopoulou (2002) cautions that Vygotsky's views have often been interpreted too narrowly in the realm of the potential of peer interaction for child learning: "[…] peer relations have usually, in effect, been conceptually assimilated to the dyadic adult-child model, being treated as another case of expert-novice interaction" (p. 120; also see Nicolopoulou, 1993). Rogoff (1990), however, explicated that the roles in the realm of the ZPD as a jointly constructed space are not firmly set, but rather that learners can transition in and out of the expert and novice status. This phenomenon has been confirmed by research. For example, observing children's early literacy interactions, unilateral flow of knowledge from assumed experts (older peers) to novices (younger peers) was not evident; rather, children naturally shifted roles (Christie & Stone, 1999).

From a broader view, the notion of the child as an active agent in its learning process and the emphasis of social co-construction for child learning can be seen as main common denominators for Vygotsky's and Piaget's work[45] (e.g., Youniss & Damon,

[45] For an overview and critical discussion on Piagetian and Vygotskian contributions for the theorization and empirical study of peer interaction and relationships, see Tudge & Rogoff (2014).

1994; also see Lüdtke, 2012a); a view which is also shared by social-interactionist and relational theories of language acquisition (see sections 7.2 and 2.1.2)[46]. Inspired by these theoretical conceptualizations, works positing the child as a creative and active social agent engaging in actions unified with social, emotional, and cognitive processes, gained momentum in the 1980s and 1990s, resulting in an increase in scholarly attention to child-child-interaction (e.g., Berndt & Ladd, 1989; Corsaro, 1985; Hartup, 1983; Krappmann & Oswald, 1995; Youniss, 1980). Overall, these theoretical and empirical advances led to a shift in the view on children and peer relations, away from seeing children as mainly passive recipients of adult-shaped worlds. On the contrary, for example, Corsaro posited the child as not only being "involved in appropriating information from his or her environment to use in organizing and constructing his or her own interpretations of the world" (2011, p. 12). In fact, from a sociological view, the notion arose that peers actively negotiate and co-construct their own culture, i.e., "a stable set of activities or routines, artifacts, values, and concerns that children produced and share in interaction with peers" (Corsaro & Eder, 1990, p. 197), "while simultaneously contributing to the production of adult societies" (Corsaro, 2011, p. 4; also see Naylor, 2011). This recognition further established the importance and development promoting qualities of peer interactions entirely unique from adult-child-interactions.

Socio-emotionally, from the child's perspective, the most enjoyable aspect of ECEC is engaging in play and other activities with his or her peers (Hännikäinen, 1999), where they discover and express similarities. The establishment and cooperative expression of shared interests—that is, the "joint experience of interests, ideas and actions" (Degotardi & Pearson, 2014, p. 95), creates a sense of belonging and togetherness. For example, Haun and Tomasello (2011) found that 4-year-olds were not only sensitive to their ECEC group mates' verbal statements, but were also likely to publically adjust their proclamations to conform with their peers, even if it meant going against their own judgment. Research in the area of developmental psychology has long established

[46] For an overview and classification of main strands of language acquisition theory, see Lüdtke (2012b).

the integration of a child in a peer group as a marker of social competence (Ladd, 2005), and it continues to view the quality of children's peer relationships as one of the main criterion variables for social adaptation (Rubin et al., 2009) and emotional well-being (Brendgen et al., 2013). Furthermore, a substantial body of research reflects that both successful and difficult childhood peer relations modulate children's socio-emotional development (Gagnon, Nagle, & Nickerson, 2007) and are strong predictors of adjustment later in life (Howes & Phillipsen, 1998; Mercer & DeRosier, 2008).

Overall, the study of early child peer interaction has focused considerable attention on the emergence, maintenance, and changes in peer acceptance and social status, but relatively little research has targeted the role of peers in language development. Before analyzing theoretical and empirical foundations for including peers in didactic settings, such as peer tutoring—one main aspect in the empirical part of this work—the specific contributions of peers to each other's first and second language acquisition in the ECEC context will be further examined in the following sections.

7.2 On the Role and Scope of Peers in Language Acquisition in Early Childhood Education and Care – A Social-Interactionist Perspective

The notion of the child as an active creator and the emphasis of the role of intersubjective co-construction for learning process, as identified in Piagetian and Vygotskian appropriations to the role of peers interactions in child development and discussed previously, is shared by a *social-interactionist viewpoints on language acquisition* (e.g.[47], Bruner, 1983, 1990; Papoušek, 1994; Tomasello, 2003; Tomasello & Farrar, 1986; also see sections 2.1.2 on the emergence and development of narrative in a socio-emotional context and 7.3.2 on the 'relational didactics' framework). One of the basic premises is the understanding that language learning is a fundamentally socio-emotional process, so that the child's social environment, comprising peers, and its role in stimulating language development receive special attention.

[47] Note that an abundance of literature has been produced on this topic and only a selection of sources can be credited here.

By focusing on the establishment of intersubjective interactions that a child will engage in and that present him or her with opportunities to both hear and actively use language, language learning is conceptualized as a process shaped by temporal, spatial, socio-cultural, and emotional factors. Thus, linguistic environments (e.g., in the home and in ECEC) need to provide language exposure, feedback, and practice opportunities through which a child can engage in "frequent, relatively well-tuned, affectively positive verbal interaction" (Chapman, 2000, p. 43) to foster fundamental skills for language development, including decontextualized and narrative skills. In turn, children's participation in social interactions is mediated by their learning and application of language, with peers mediating each other's learning.

Furthermore, from the viewpoint of relational-intersubjective approaches to language acquisition, the role of emotions is emphasized as a significant component in language learning, such that co-constructed relationships between agents, such as peers sharing narratives, is located at the core of any instance of language learning (Lüdtke, e.g., 2005, 2006, 2012a, 2015). Moreover, linguistic meaning is posited as intersubjectively co-constructed and emotionally marked, such that the emotional quality directly mediates intersubjective exchange and is thus central for any successful language acquisition (for an illustration, see Figure 1). Relational emotions and their intersubjective mirroring are seen to drive and regulate language acquisition. This position is supported by research evidence on the unique contribution of intersubjectivity, as mediated by the relational emotional quality, such as expressed in parental sensitivity, to young children's language acquisition (e.g., Bansner & Lüdtke, 2014; Pungello, Iruka, Dotterer, Mills-Koonce, & Reznick, 2009; Raviv, Kessenich, & Morrison, 2004; also see Lüdtke, 2005, 2012a).

While the contribution of adults, such as parents and ECEC practitioners, to child language development is undeniable and well-documented (e.g., Spilt, Koomen, & Harrison, 2015), Rydland and colleagues (2014a) lament a "pronounced emphasis on the adult's role in shaping children's learning trajectories" (p. 354), because of the lack of research efforts dedicated to the peers' role in each other's language development. Indeed, the vast majority of research focusing on meaningful interactions for language

and literacy learning of preschool-aged children has targeted parent-child (in practice, mainly mother-child) as well as ECEC practitioner-child interactions.

Similarly though, in the realm of peer interactions, the successful establishment of intersubjectivity has been constituted as the foundation for any developmental progress, as Tudge and Rogoff (2014) reflect in respect to Piagetian and Vygotskian theorizations of peer interactions:

> It is unlikely that merely sitting next to another person will enhance a child's skills. Neither cognitive conflict nor joint problem solving could function to enhance a child's skills or change a perspective unless the partners establish some degree of intersubjectivity, allowing opportunities for exchange of ideas or for active observation or joint involvement in a task.
>
> (Tudge & Rogoff, 2014, p. 35)

Accordingly, the meaning-making process in language learning and teaching is embedded in and negotiated through intersubjective discourse, which can be seen as the "co-construction of information bearing and meaningful verbal and non-verbal signs, generated, regulated and processed by affects, and their exchange in all codes and modalities" (Lüdtke, 2012a, p. 334). Communicative exchanges between peers reflect their relationships including specific emotional timbres, and aspects of emotionally relevant cultural belonging. Emerging intersubjective co-construction and negotiation processes, which are affected by emotions, lie at the heart of language acquisition in the realm of peer interaction and are intrinsically motivated by a mutual desire for peer exchange (Licandro & Lüdtke, 2012).

The notion of peer relationships forming a part of a learning environment for intersubjective exchange and thus a context for child language development, next to other socio-emotional relations such as in the family[48], also becomes evident when considering the unique contributions peers make to each other's language learning environments.

[48] It is fully recognized that children's peer interactions and relationships cannot be seen as entities entirely separate from those within the family and with other adults, such as ECEC practitioners (e.g., Corsaro, 2011), but rather operating within complex socio-emotional networks. For the purpose of the current work, children's interactions and relations with peers are therefore considered in the context of other important relationships (also see Hay, Payne, & Chadwick, 2004).

> Their special kinds of humor and disagreements, the topics about which they talk, and their explicit socialization about language provide communicative experiences that no doubt complement those experienced with adults.
>
> (Bryant, 2009, p. 352)

The role of peer interactions in creating a "significant context for language acquisition" (Hoff, 2006, p. 70) has a much larger importance than previously anticipated, and research efforts to date have not paid justice to this fact.

Similar to the emergence of developmental psychological and sociological studies of peer interactions and relationships, socio-linguistically motivated research on peer-to-peer talk in ECEC settings arose in the 1970s (e.g., Keenan, 1974), most of which being exploratory and descriptive in nature. To date, one of the most ubiquitous and relatively well-studied areas of preschool peer interaction and peer talk is play activity (for early work, see Corsaro, 1985; for a review, see Blum-Kulka & Snow, 2004; also see Kyratzis, 2004). For example, Andresen (2005) emphasized peer-to-peer role play as a privileged activity in the context of which preschool language abilities develop (also see Pramling Samuelsson & Asplund Carlsson, 2008). Certainly, in these interactional spaces, as Andresen (2005) puts it, "language serves as the central means to create fictitious meanings and plots" (p. 388), provoking rich verbal interaction. However, despite the importance of role play for enhancing emerging language skills, among other aspects of child development, "it cannot be held accountable as the only sort of interaction with significant impact or influence over it" (Branco, 2005, p. 422).

More recent work has shown that preschoolers interacting outside of play settings also independently engage in extended conversations with their peers. For example, O'Neill and colleagues found that the majority of 3- to 5-year-olds' interactions during snack time were linguistic in nature and included various conversation initiations as well as topics different from typical adult-directed turns (O'Neill, Main, & Ziemski, 2009). Also, while adults may not always be available to listen to children's everyday stories, especially in large ECEC institutions—where teacher-directed activities may not occur often throughout a typical day—peers (more) frequently engage in verbal interactions throughout the day. These interactions are also special because preschool-age peers can be, as Bryant (2009) puts it, "[…] relatively uncooperative conversation-

al partners" in comparison to adults. Children are thus required "to deal with participants' limited background knowledge and to be assertive and clever in finding ways to participate," which, in turn, "contribute[s] to the pressure preschoolers feel to communicate more clearly and effectively" (2009, p. 351). Preschoolers will respond to about two thirds of their peers' communicative initiations, as observational studies document (Schuele, Rice, & Wilcox, 1995).

By now, it has been well established that, already in the preschool-age, peers' interactions can have a "frequent, sustained and emotionally engaging" (Bryant, 2009, p. 351) quality, building the foundation for the negotiation of meaning in everyday conversations and shared literacy activities. Consequently, peers do not simply constitute a group of additional interlocutors in the ECEC environment. Despite (or maybe even because) not bringing the same sophisticated linguistic repertoire to the table adults do and possessing overall differences in interactional quality, both cross-sectionally and longitudinally, research evidence has shown that peers' verbal interactions shape their use of linguistic features and directly influence children's language development, as reviewed in the following sections.

A caveat concerning qualitative studies and studies that are small in scope, focusing "on the learning potentials and processes associated with language use in social practices with peers rather than on the outcome of such processes" (Cekaite et al., 2014, p. 4), lies in the mainly descriptive research approaches, such that the types of interactions in young children's peer encounters including the required skills are well documented, but cannot be analyzed in relation to the development of measures of language skills. Meanwhile, a limitation of large-scale quantitative studies is that they cannot take into account individual children's performances or offer satisfactory explanations for the nature of detected peer effects. Therefore, to gain further insight into the role and scope of peer effects on language learning in ECEC, evidence from both approaches to research will be reviewed and discussed, starting with qualitative and observational studies to provide an overview over forms of language behaviors in peer interactions.

7.2.1 Observational Studies Targeting Language Behavior in Peer Interactions

When speaking to peers, children themselves offer forms of communication different from those of adults (e.g., Blum-Kulka & Snow, 2004; Ely & Gleason, 1995) and thus they contribute uniquely to their each other's language development. For once, peer interactions offer a platform for language learners to play and experiment with language (Cekaite, Blum-Kulka, Grøver, & Teubal, 2014), that is, "to try out what they know and confirm and disconfirm use through peer assistance" (Philp et al., 2014, p. 23), as illustrated by the examples of two peers co-constructing a story in section 2.1.2 of this work.

Children may also engage in communicative interactions through repetitions of overheard content. Importantly, as Johansen (2010) emphasizes, children may act as a "creative imitator[s]" (p. 764) when shifting between their roles of overhearer and speaker. Cross-sectional data accumulated by McGregor (2000, study 2) illustrates how preschool-aged children draw on each other's language models in a prompted storytelling activity. Twenty-six African American preschoolers aged 3 to 4 were randomly grouped into 13 pairs. For each pair, one child (e.g., Child A) narrated a familiar story from a book to their peer partner (e.g., Child B). Subsequently, the narrator and the listener exchanged roles (e.g., Child B told the same story to Child A). Within-pair and across-pair comparisons of narrative microstructure (percentage of shared lexical types) and macrostructure (percentage of shared story grammar elements) indirectly assessed to which extent Child B had "borrowed" Child A's story schema. As both measures were significantly higher within pairs, McGregor concluded that preschoolers' narrative models may immediately influence their peers' story generations.

Furthermore, although children are not equally skilled interlocutors as adults, peers do correct each other's language behavior. For example, preschool-age peers can frequently be observed in assessing, criticizing, correcting, and directing one another's actions and language use. In fact, emphasizing the symmetrical nature of peer relationships, Corsaro (e.g., 2011; Corsaro & Eder, 1990) posited the negotiation of conflicts and social status at the core of the establishment of peer cultures, characterized by the regulation of relationships and development of routines among the children. Duchesne,

McMaugh, Bochner, and Krause (2013) delineate important reasons for the higher likelihood of negotiations to occur in peer-peer versus peer-adult interactions:

> First, peers are more willing to challenge one another's ideas than they are the views of an adult. Second, children are particularly motivated to resolve the difficulties as they form part of their relationships – whether it is a matter of being right, of maintaining a friendship, or of keeping the interaction going. (p. 75)

Also, peers frequently engaging in interaction also show a tendency to adjust their spoken language usage to each other. This is a phenomenon well-established for school-age children (Eckert, 2003), but has also been shown for an even younger age[49]. Wyatt (1991) observed ten 3-to 4-year-old dialect-speakers in preschool and found that children differentiated in their use of dialect-influenced forms when addressing adults or peers. When conversing with adults, children used more aspects of the mainstream speech register, but switched to use more dialect features in interaction with their peers. A more recent French study followed 4- to 5-year-olds' spontaneous peer group interactions longitudinally over the time course of one year and reported that frequent and regular peer contact in an ECEC setting led to converged use of selected sociolinguistic speech variants. These effects were unaffected by aspects like ECEC practitioner's speech and child peer acceptance (Nardy, Chevrot, & Barbu, 2014).

Furthermore, early literacy and narrative activities may be developmental areas especially well-supported by peer interactions. Drawing on Vygotsky's (1967) remarks on the role of play in child development, Nicolopoulou (2002) delineates parallels between play and narrative, such that they "represent the union of expressive imagination with rule-governed cultural form" (p. 121), and both can be explored and consolidated in extended peer interactions. This theoretical position is supported by a body of research suggesting that early literacy activities such as joint book reading and storytelling provide a fruitful platform for supportive interactive peer behavior. In a mixed- age (5 to 8 years old) classroom, both younger and older children naturally engaged in multi-directional modeling, assisting, directing, tutoring, negotiating, affirming, and

[49] Note, that Labov argued early on (1972b), that children as young as 3 years of age may follow their peers' sociolinguistic expressions.

contradicting each other in literacy activities (Christie & Stone, 1999; Stone & Christie, 1996; also see Cekaite & Björk-Willén, 2013). Along those lines, children aged 4 to 5 were observed to use rich linguistic array and thus to have the ability to act as "linguistic informants" (Neuman & Roskos, 1991, p. 233) in print-enriched play environments in US-American preschool classrooms.

7.2.2 Longitudinal Evidence for Peer Effects in Language Learning

Besides targeting child behavior (Barbu, 2009), large-scale longitudinal studies have investigated the importance of classroom peer effects[50] on child language growth (Henry & Rickman, 2007; Justice, Petscher, Schatschneider, and Mashburn, 2011; Mashburn, Justice, Downer & Pianta, 2009; Schechter & Bye, 2007).

For example, Henry and Rickman (2007) tested the ability level—i.e. "what a child knows and can do that may influence her peers" (Henry & Rickman, 2007, p. 103) — of children's peers in 119 US preschool classrooms to estimate the effect of peers on 630 4-year-olds' developmental progress. Of the sample, 5.9% were Hispanic (range across classrooms: 0.0%-60.0%), while no information was provided on DLL status. Targeted areas were: cognitive skills, receptive language, and early literacy skills—as assessed via the Peabody Picture Vocabulary Test (PPVT), the Story and Print Concepts assessment, and the Woodcock-Johnson Letter Word Recognition assessment (WJ-LW)—and expressive language, as assessed by a subtest of the Oral and Written Language Scales (OWLS). The scores for children's peers within the classroom were averaged and included as the measure of classroom level peer characteristics. Strongest peer effects emerged for measures of cognitive skills, early literacy abilities in story comprehension and print awareness, and receptive vocabulary, after controlling for program characteristics, child and family characteristics, and pretest scores (Henry & Rickman, 2007).

Furthermore, applying a quasi-experimental design, Schechter and Bye (2007) found the growth in vocabulary (as measured via PPVT) from fall to next spring—

[50] Drawing on Hanushek, Kain, Markman, and Rivkin (2003), Henry & Rickman (2007) define peer effects "as the effects of the ability of peers on an individual child." (p. 103).

controlling for fall scores—in 4-year-old US-American children from low-income families who attended ECEC programs with peers from economically diverse families (n = 35, DLLs among those: n = 19) to be greater than the vocabulary gains in children from low-income families attending ECEC programs that only served children from low-income families (n = 50, DLLs among those: n = 18).

Mashburn and colleagues (2009) found further evidence for peer effects in the area of language development for a sample of 1,812 ethnically and racially diverse[51] 4-year-olds from 453 US-preschool classrooms. Peers' expressive language skills (as assessed by the Oral Expression scale from the OWLS; Carrow-Woolfolk, 1995) made "a unique, albeit small, contribution" (Mashburn et al., 2009, p. 697) to children's receptive and expressive language growth over a school year. Results from further analyses pointed to the fact that children with already advanced linguistic skills may especially benefit from the classroom presence of peers with similarly advanced language abilities. Also, interestingly, peer effects were moderated by the quality of emotional support in the classroom[52], suggesting an at least partial dependence of beneficial peer interactions on a positive and emotionally supportive classroom climate.

Finally, Justice and colleagues (2011) found further evidence for a link between the linguistic progress over a school year of 338 4-year-old children from 49 US-preschool classrooms and the level of language of the peers attending the same class. When analyzing the average peer language level in relation to individual children's language growth over the time course of the ECEC year, they found strong dependencies. Children with low language skills showed a decrease in language ability over the year (on average -1.5 SD), when nested in classrooms in which the average language score was one standard deviation below the mean. In contrast, same-aged children, who also displayed low language skills, but were attending classrooms with average language abilities overall, showed stable language abilities. As such, the results indicated that chil-

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[51] Participants were 52% White, 23% African American, 11% Latino/Hispanic, and 15% other race (Mashburn et al., 2009, p. 691). No information was provided on children's present or past home language use.

[52] The quality of emotional support was assessed by the Emotional Support domain of the Classroom Assessment Scoring System-PreK (CLASS-PreK; Pianta, La Paro, & Hamre, 2008)

dren with stronger initial skills may have peer effects on their initially less-skilled peers, while, in turn, being grouped together with those peers may not lead to detrimental effects in children with initially stronger skills[53]. Importantly, this relation was independent from measures of preschool classroom instructional quality[54]. It should be noted though, that, while participants were ethnically diverse, they came primarily from English-speaking homes: 94% of children spoke the majority language English, while only 6% spoke a language other than English (Spanish) at home.

7.2.3 The Special Role of Peers in Dual Language Learning in ECEC

Especially for DLLs, peer interactions might offer ample opportunities for second language learning. Because of their limited mobility and socio-emotional abilities, young children are encouraged to engage with peers within physical proximity, for example in their ECEC settings, and adapt their language use accordingly, which might lead to a strong motivation to learn the L2 (Jia & Aaronson, 2003). In fact, Fassler (1998), who followed preschool-aged DLLs acquiring English as their second language in an ECEC institution, observed that "many early uses of English were embedded in children's sociability – their eagerness to communicate and their efforts to cultivate friendships" (Fassler, 1998, p. 390).

Long, Bell, and Brown (2004) observed the peer interactions of three Mexican-American 5-year-olds (two boys, one girl) entering an US-American preschool with hardly any previous English contact, over the time course of an academic year. The researchers noted child behaviors such as helping their peers in understanding appropriate classroom behavior and translating and clarifying the teacher's requests, engaging them in side-by-side picture book reading, and praising their peers for display of both Spanish and English language skills. It was concluded that the children were "experts in strategically helping one another" as "they drew from varied cultural experi-

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[53] This finding is especially important, considering concerned parents, who fear that their child's language development may be negatively influenced by the presence of many other children with less advanced skills, e.g., DLLs.

[54] Instructional quality of children's classrooms was assessed in fall and spring by using the CLASS-PreK (Pianta et al., 2008). It should be recognized that the patterns were based on averages, such that they cannot held to be similar for every individual child.

ences to co-create new possibilities for successful participation" (Long, Bell, & Brown, 2004, p. 103)[55].

Focusing on self-organized play activities, Björk-Willén and Cromdal (2009) observed how 4-year old DLLs in preschools in Australia and Sweden took up elements from instructional activities and included them in their in free play, such as object labeling activities, introducing themselves in a different language, and engaging in shared book reading. Moreover, in a video observation study, Cekaite and Björk-Willén (2013) targeted the language interactions of twenty-four 3-to 5-year-olds from English- and Spanish-speaking backgrounds in a Swedish ECEC institution during free play. Children frequently corrected each other's language use in phonetic-phonological and semantic-lexical areas and helped each other in searching for appropriate words. In an observational study with five dyads of English-language learners, Pica and colleagues (1996) noted corrective peer behaviors similar to Cekaite and Björk-Willén (2013), such as the indication of the use of incorrect words.

Meanwhile, Palermo and colleagues (2014) more closely examined the contributions of teacher and peer English exposure on the English vocabulary skills of 4-year-old Spanish-speaking preschoolers ($N = 107$) in ECEC settings in the United States. While no associations emerged between teachers' English use (i.e., frequency of English use during social interactions with the children) and DLLs' English language abilities, preschool observations revealed a significant relation between peer English exposure during the fall and DLLs' expressive vocabulary in the next spring, such that the frequency of children interacting with English speaking peers was related to significant English vocabulary gains over the year (Palermo et al., 2014). In a subsequent study including the same preschool-age Spanish-English participants, Palermo and Mikulski (2014) focused on aspects likely involved in mediating the relation between peer English exposure and vocabulary growth. First, they reported that the support of English vocabulary growth through peer English exposure to may be mediated by English oral proficiency. Second, they also "found support for the idea that children's English oral proficiency facilitates English exposure from peers" (p. 633), such that DLLs with

[55] See Gort (2008) for similar observations of DLLs in elementary school settings.

higher initial English skills were more likely to have access to language-supporting peer interactions. In addition, there was emerging evidence that especially positive peer interactions, i.e., peer interactions characterized by pro-social behavior towards each other, contributed to language learning.

Furthermore, Rydland and colleagues (2014b) examined the vocabulary trajectories of 26 children who were speaking Turkish at home and learning Norwegian as their L2 in preschool and school over the time course of five years. At age 5, when the observations started, children had already around two years of preschool experience. They targeted the amount and richness in vocabulary their peers used when playing together had an influence on target children's vocabulary development. Controlling for children's own vocabulary richness in play activities, maternal education, and teacher-led group talk, growth modeling still revealed an association between "the vocabulary richness of the peers in play […] with higher vocabulary scores for the target children at age five" (Rydland et al., 2014b, p. 222). These peer effects seemed to be especially present in the early years before formal school entry and were not attenuated in the years to come (also see Rydland et al., 2014a).

In turn, as Hoff (2006) points out, the absence of peers as part of the native-speaker input system can contribute to a child not reaching native-like language competence (also see Oller & Eilers, 2002). Still, even when DLLs who share the same language backgrounds engage in play activities, they will often adapt their linguistic expressions to the institutional lingua franca. Björk-Willén and Cromdal (2009) reflect that

> […] such orientation to language choice as a normative feature of the children's conduct during free play […] reveals their sensitivity to the organizational aspects of instructional activities in multilingual educational practice.
>
> (p. 1515)

Another important aspect to consider is that not all children have easy access to peer interactions and struggle to establish relations with their peers. Who those children may be and what consequences may be involved will be discussed in the final section of this subchapter.

7.2.4 Matthew Effects in Preschool Peer Interactions

As discussed in detail in the previous sections, interactions and positive relationships with peers facilitate children's mono- and dual-language development. Yet, it is important to acknowledge the considerable challenges preschool-age children face when interacting with their peer group. Adequate language and behavioral skills can not only be seen being lastingly affected, but also as a prerequisite for initiating and maintaining successful peer interactions and relationships (e.g., Ladd, 2005; Menting, van Lier, & Koot, 2011; Licandro & Lüdtke, 2013; O'Neill et al., 2009).

Multiple studies provide support to the argument that children with low language skills, including DLLs (Gertner et al., 1994), are less likely to establish sustained high quality peer interactions and relationships, and are more likely to be rejected by their peers (Bat-Chava, Martin, & Imperatore, 2014; Conti-Ramsden & Botting, 2004; Gertner, Rice, & Hadley, 1994; Guralnick, Connor, Hammond, Gottman, & Kinnish, 1996; Hadley & Rice, 1991; Menting et al., 2011; Tabors & Snow, 1994; also see Blum-Kulka & Gorbatt, 2014). For example, Tabors and Snow (1994) reported children in US preschools to largely ignore their non-English-speaking DLLs, until they progressed in learning the lingua franca.

Therefore, simply being interested in peer interactions does not ensure successful participation for all children. Those with deviating language development or interaction skills, or simply developmental differences, may already struggle to establish and maintain peer interactions in the preschool-age (Hay et al., 2004). DeLuzio and Girolametto (2011) observed ECEC peer interactions of twelve 3- to 5-year-old children with severe to profound hearing loss, who were equipped with cochlear implants and hearing aids, respectively, and who did not differ from 12 matched control children with typical hearing in terms of frequency of peer initiations, ability to respond to others' initiations, or their skill in maintaining peer interactions. Despite the small sample size, significant differences emerged, such that peers initiated interactions less often with the hearing impaired children than with other typically developing children in the classroom. Also, peer initiations of children with hearing impairment were more often ignored, resulting in overall less access to peer play interactions in the everyday

classroom. This, in turn, may lead to the impediment of language development (Leflot, van Lier, Verschueren, Onghena, & Colpin, 2011), because being exposed to and having the opportunity to practice multi-faceted language skills then is not ensured. Instead, as displayed in Figure 13, children who could well benefit socio-emotionally and linguistically from positive peer interactions may have less access to them. For example, "less proficient L2 learners may have problems becoming ratified participants in the challenging and engaging peer conversations from which they learn" (Rydland et al., 2014b, p. 215), while children with already well-established linguistic skills may benefit even more.

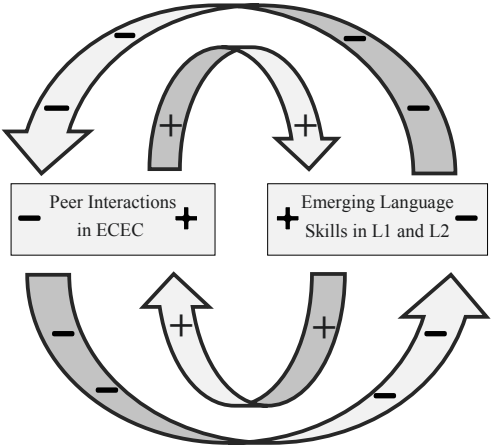

Figure 13. A Simplified Model of the Mathew Effect as Applied to Peer Interactions in ECEC and Emerging Language Skills. Translated from Licandro & Lüdtke (2012, p. 290)

This can be considered an expression of the "Mathew effect" theory (Stanovich, 1986; also see Mashburn et al., 2009; Powell & Diamond, 2012), i.e., "educational sequences where early achievement spawns faster rates of subsequent achievement" (Stanovich, 1986, p. 381), suggesting that well-established language skills facilitate the access to language-promoting peer interactions, and vice versa. These connections are not to be taken lightly, because besides likely negative consequences for language acquisition,

repeated experiences of socio-emotional isolation due to rejection and being disliked by peers may contribute to socio-emotional maladjustment (Mercer & DeRosier, 2008) and have been connected to the genesis of anxiety and/or depression in children (e.g., Hay et al., 2004).

7.2.5 Subsummary: Peers and Language Learning in ECEC

"Whether children influence one another is no longer in doubt. Critical issues, however, concern the manner in which subject and situational conditions interact with social contingencies in determining outcome'' (Hartup, 1999, p. 172). In summation, there is growing evidence that children strongly influence each other's language learning in a variety of ways in ECEC contexts. Taken together, the previously reviewed studies substantiate the notion of peer effects in ECEC settings on mono- and dual-language learning and provide emerging evidence that those may be most powerful in preschool (cf., Henry & Rickman, 2007), when learning is mainly embedded in individual and multi-party social interactions. In case peers do not share the same lingua franca, "The relative symmetry of peers allows for the possibility of collective scaffolding, in which all participants pool knowledge to express themselves in the target language" (Philp et al., 2014, p. 106). However, children who lag behind their peers in linguistic ability (for example, many DLLs relying on the ECEC environment to develop their second language skills) may also have a more difficult access to peer interactions.

An important remaining question to be targeted in the following sections is, if these naturally occurring effects can be applied didactically—that is, if peer-assisted learning strategies can be successfully applied in the ECEC context to support children who already have low language skills. Among these children are DLLs, who are in the process of developing their language skills in the majority language.

7.3 Theoretical Underpinnings and the Application of Peer-Assisted Language Learning to the ECEC Context

After having explored the potential of naturally occurring peer interactions in ECEC for language and early literacy learning, the current chapter will focus on the didactic approaches to the inclusion of peers in early language and literacy learning. To further

explore this type of didactic approach, the following sections seek: first, to derive working definitions of peer-assisted learning and peer tutoring in ECEC; second, to develop a didactic model of peer-assisted language and literacy learning in ECEC on the theoretical backdrop of the *relational didactics* (Lüdtke, e.g., 2010b, 2012b), and finally, to review research evidence further informing the study presented thereafter.

7.3.1 Delineation of a Working Definition of Peer-Assisted Learning in ECEC

Peer-assisted learning (PAL), can be broadly characterized as

> […] the acquisition of knowledge and skill through active helping and supporting among status equals or matched companions. It involves people from similar social groupings who are not professional teachers helping each other to learn and learning themselves by so doing.
>
> (Topping, 2005, p. 631)

As such, it represents an umbrella term for small-group cooperative learning interventions with peers mediating the subject matter, including the form of PAL applied in the second study of the current work, namely peer tutoring. Peer tutoring (PT)[56] is a classic form of dyadic PAL, in which peers take on the roles of a tutor (who may receive previous training) and a tutee to support each other in working on curriculum contents. Didactic situations are often pre-structured by scaffolding procedures and can either apply to specific materials or regulations for interactive behaviors, independent from the type of material used (Topping, 2005; Topping & Ehly, 2001). Broadly characterized, PT has been posited as a special form of peer interaction (Philp et al., 2014). More specifically, PT can be viewed as an "instructional method of students working in dyads or small groups and systematically presenting their peers with opportunities to practice academic skills" (Axe, 2011, p. 1076). This type of didactic method can be considered as a historically well-established and evidence-based practice for working with DLLs (Institute of Education Sciences, 2010; also see McMaster, Fuchs, & Fuchs, 2006). Different combinations of contextual factors determining the organiza-

[56] While it has often been confused with mentoring, these procedures are inherently different, as mentoring also focuses a one-to-one-relationship, but can be characterized by an open counseling approach through a more experienced worker by means of role modeling, positive reinforcement, and raising professional aspirations (cf. Topping, 2005; Topping & Ehly, 1998).

tional delivery dimension, such as the setting (e.g., (preschool-)classroom-based or outside of the classroom setting), the didactic frame (e.g., reciprocal or set roles), and child characteristics (e.g., familiarity with the peer, task, and the didactic setting, same-age or cross-age peers), generate a multitude of possible peer tutoring programs (Topping, 2005; also see Parr & Townsend, 2002). Accordingly, PT activities can range from facilitating both tutee's and tutor's engagement in a constructive academic activity (e.g., Fantuzzo & Ginsburg-Block, 1998), providing access to the general curriculum and enhancing socio-emotional interaction (e.g., Carter, Cushing, Clark, & Kennedy, 2005; Goldstein, English, Shafer, & Kaczmarek, 1997), to supporting the acquisition of selected academic skills (e.g., Harper, Mallette, & Moore, 1991; Kohler & Greenwood, 1990; Rohrbeck, Ginsburg-Block, Fantuzzo, & Miller, 2003).

Furthermore, as has been established in the previous sections, in contrast to an adult, a peer can be characterized as someone of a similar developmental age, who understands the world in similar ways (e.g., Damon & Phelps, 1989; Kernan & Singer, 2011). For this reason, a peer partner does not bring the sophisticated strategies and knowledge that an adult partner would. Learning with peers can be characterized more heuristic than rule-oriented. Children working together may for example settle for an ungrammatical use of language or may not come to a solution or conclusion simply because they forget to do so (Neuman & Roskos, 1991).

In a meta-analysis of PAL activities, Ginsburg-Block, Rohrbeck, & Fantuzzo (2006) found evidence for PAL interventions to be especially effective for children from low SES-families, in urban educational settings, as well as children from minority backgrounds. Also, for school-age children, they found evidence for PAL to be more effective for children in lower grades (1 to 3) than those in higher grades (4 to 6). Still, the central factors in the learning process between peers are not yet entirely clear. In an attempt to address this challenge, the relational didactics framework is posited as a theoretical frame of reference for peer learning activities, emphasizing the intersubjective socio-emotional exchange as the driving force behind peer learning.

7.3.2 A Theoretical Approach to Peer-Assisted Learning on the Backdrop of the 'Relational Didactics' Framework

The conceptualization of *relational didactics* draws on the main reference disciplines of language teaching theory, namely linguistics, language acquisition theory, and general pedagogy and didactics (Lüdtke, 2010a, 2012b), and is mainly informed by relational-intersubjective approaches to language acquisition (e.g., Lüdtke 2005, 2006, 2012a; also see sections 2.1.2 and 7.1). The acquisition of language, then, is based on the intersubjective construction of meaning and depends on the socio-emotional context, as it emerges in the 'right', emotionally supportive learning atmosphere (Lüdtke, 2015). Accordingly, in peer interactions, the acquisition of linguistic knowledge emerges through a self-organized negotiation process, which can be seen to be less about an optimized linguistic input, but more about intrinsically motivated, emotionally regulated construction processes between children. Ideal linguistic models with a slight developmental difference may thereby promote the emergence of 'correct' linguistic constructions (Licandro & Lüdtke, 2012).

Consequently, adapting the concept for peer learning, the socio-emotional relationship of peers is posited as the central linguistic teaching-learning organizer. The actual language teaching environment, where language teaching and learning is professionally organized, can be illustrated with the *language teaching triangle*[57] (Lüdtke, 2010a, p. 38; also see 2012b), which was modified and expanded to adapt the model for language-focused peer tutoring activities (see Figure 14). The function of the *teacher*, traditionally filled by the educational or speech-language professional, is filled here with a peer. As a tutor, he or she mediates the linguistic material, for example a fictional narrative from a picture book, to the *learner*, in this case also a peer, in the role of a tutee.

Contextual factors play a major role in "enabling children to collaborate with one another" (Philp et al., 2014, p. 109). For example, depending on the developmental level of the children, the role of the educational or speech-language professional can vary in

[57] The language teaching triangle was based on the historic *didactic triangle*, illustrating the relation between teacher, learner, subject matter, and instructional methods (for a review, see Klette, 2007).

intensity and specific function. This is especially true for preschool-aged children, who are still developing their ability to engage in extended reciprocal interaction and who may struggle to stay focused when facing a hard or boring task, or to resolve conflicts with one another. Therefore, young children engaging in peer tasks likely require support by an educational or speech-language professional, for example, in the organization of the task, scaffolding, and—if necessary—mediating and modeling.

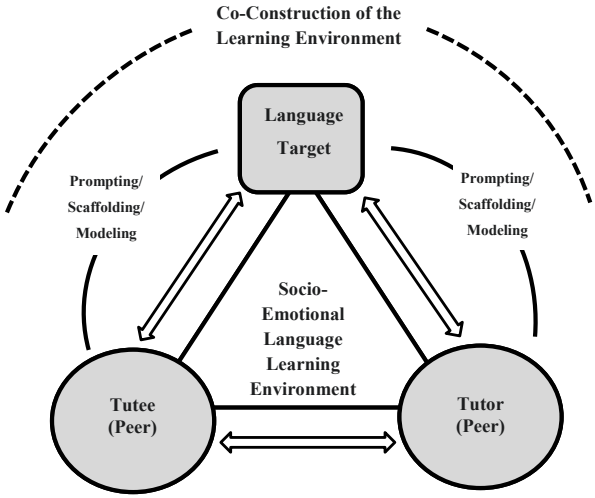

Figure 14. Adaptation of the "Language Teaching Triangle" (Lüdtke, 2010a, 2012b) for Peer-Assisted Language Learning, as Further Developed From Licandro & Lüdtke (2012, p. 293).

This broad characterization with the assignment of the classic roles of teacher and learner does not imply, however, that only one agent (i.e., the learner) can benefit from the interaction and the active engagement with the topic of interest. A historic view of tutors as being surrogate teachers along with a linear transmission of knowledge from the teacher to the tutee through the tutor, alongside with possible negative learning effects on the tutor, has long been superseded (Topping, 2005). Children serving as tutors have demonstrated increased attention to and improved performance in academic tasks as well as improved social interactions (Cushing & Kennedy, 1997; Hunt,

Staub, Alwell, & Goetz, 1994; also see Ginsburg-Block et al., 2006). In cases of prompting, scaffolding, and/or modeling of an educational or speech-language professional, preschool-age peers may further benefit (e.g., McGregor, 2000). Still, Roscoe & Chi (2007) caution, "although there is ample evidence that tutors can learn in a variety of settings, such outcomes are not guaranteed" (p. 539).

7.3.3 State of the Art/ Research on Peer-Assisted Language and Literacy Learning in ECEC

These theoretical explications are consistent with recent research demonstrating that the degree of emotional reciprocity between preschoolers emerged as an important influencing factor in the production of decontextualized language features. Pellegrini and colleagues (1997) observed 64 dyads of friends and children unfamiliar to each other (M_{age} = 5 years, 3 months) in a total of 12 pre-structured narrative, play, and writing settings across a kindergarten year. Analysis of audio-recordings revealed that children expressed more emotional state terms as well as literate language (a composite score of use of cognitive and linguistic terms) when solving conflicts with familiar peers (Pellegrini, Galda, Flor, Bartini, & Charak, 1997; also see Pellegrini, Galda, & Flor, 1997). Similarly, Pellegrini and colleagues (2002) found that children who were on average 5 years and 6 months old expressed more emotional state terms and literate language features when retelling a picture book story to a familiar peer than in interactions with unfamiliar children (Pellegrini, Melhuish, Jones, Trojanowska, & Gilden, 2002). It can therefore be concluded that close relationships between peers are not only meaningful emotionally and socially, but also promote decontextualized language use[58] (also see Jones, 2002).

Furthermore, Daiute and colleagues (1993) observed children from different cultural and linguistic backgrounds (African American, Asian American, Indian American, and European American) in a US classroom when composing narratives with their teacher or with a peer. Overall, teacher-led activities produced more elaborated classic narra-

[58] Note, though, that the interpersonal attraction did not emerge as an influencing factor for preschooler's convergence of sociolinguistic features in Nardy et al.'s (2014) study.

tive structures, but during peer interactions children were more socially engaged and still produced elaborated narrative texts. While the developmental significance of interactions between "experts" and "novices" is beyond question, judging the learning experience, the authors argued that the absolute "[…] expertise is not the most important quality in a collaborator." Instead, the "nature of the interaction" (Daiute, Campbell, Griffin, Reddy, & Tivnan, 1993, p. 61) may be just as—or even more—vital to effective learning interactions. Further evidence can be drawn from studies which included a more closely focus on PAL activities.

When carefully adapting the didactic framework, PAL activities such as PT can be successfully installed in the ECEC environment, as suggested by McGregor's preliminary study (2000, study 3) of a clinician-prompted, peer-assisted narrative intervention in the US-American preschool system. More specifically, two 3-year-old target children, who were among the lowest performers on a narrative task and were confirmed by their classroom teachers as being among the lowest language performers in the classroom, were each paired a with high-achieving age-matched peer (all participating children were African American). During the 10 intervention sessions over the time course of eight weeks, tutors modeled stories from four different picture-books, which the tutee then repeated; both children received support through minimal clinical scaffolding in the form of prompts and recasts. Larger pre- and post-intervention gains in terms of narrative microstructure (total number of words, number of different words, and mean length of utterance) and macrostructure (inclusion of story elements) were evident for children in the experimental group as opposed to children in the control group. Also, children were able to generalize their narrative skills to novel story telling experiences. Furthermore, one of the tutors maintained their performance, while the other also exhibited gains in narrative macrostructure.

Meanwhile, Nicolopoulou (2002) explored the effects of a story telling and story acting practice on the narrative skills of ten 3-to 5-year-olds (all English speaking) from low-SES backgrounds in US-American ECEC settings. The intervention included a daily practice of a child telling a story of choice (mainly fictional) to the practitioner, who recorded it. Later on in the day, the practitioner would read the story aloud to all

children and the story inventor as well as selected peers would act the story out. Target children made higher gains in selected areas of narrative micro- and macrostructure over the time course of an academic year than children from a non-intervention control group (also see Nicolopoulou, Brockmeyer Cates, de Sá, & Ilgaz, 2014).

Taken together, while small in scope, these studies suggest that children's exposure to peers with more advanced narrative skills and the joint construction of stories may be affecting their narrative growth. Furthermore, albeit not studied in depth, there is evidence that these positive peer effects appear to extend to preschoolers with language impairments, such as they can benefit from script knowledge shared by their typically developing peers during play activities. Robertson and Ellis Weismer (1997, study 1) paired eight preschoolers aged 4 to 5 with specific language impairment (SLI) with typically developing preschoolers. Children were supplied with props and were instructed to play "house" for 15 to 20 minutes at four different times within a three-week period. During play activities, children were instructed to tell all they knew about playing house and prompted with "What else do you do?" when appropriate. Otherwise, adults were not part of the ongoing play interaction. The children with SLI who participated in structured play interactions with the untrained peer models demonstrated significant gains in the length of their script reports (e.g., answering the question, "what do you do when you play house?"), the number of different words used, the number of play-theme-related acts within their scripts, and the number of linguistic markers used (also see Law, Garrett & Nye, 2003). In a subsequent study, Robertson and Ellis Weismer (1997, study 2) paired six 4-year-old children with SLI either with each other (two play dyads total) or with a typically developing peer model (two play dyads total) in a single-case, multiple baseline design. Each dyad participated in four play sessions, similar to those reported in study 1, over the time course of three weeks. Both children with SLI paired with typically developing peer partners made marked gains in all targeted areas, namely total number of words and number of different words produced, as well as the verbalization of play-themed acts, and the use of linguistic markers (i.e., temporal, conditional, and other conjunctions), as opposed to their peers with SLI in SLI play dyads, who made little or no gain. Drawing on both

studies, the researchers suggested that carefully planned scripted-play activities with typically developing peers may be one method to facilitate some aspects of language development in children with SLI. Again, though, the small sample size of these studies prohibits a generalization of findings.

However, these results also fall in line with findings by Schmitt (2013), who investigated active ingredients in school-based speech and language therapy for 233 children in kindergarten, first, and second-grade with language impairments, as provided by 73 speech-language pathologists (SLPs). While all children made considerable progress, one main finding was that children seen in therapy sessions together with typically-developing peers made greater gains than those who were not. In fact, this was the only therapy ingredient, next to the group size (i.e., children seen in smaller groups made more gains), which emerged as a significant moderator on child language outcomes. Taken together, these findings further support the use of peer-assisted learning approaches in targeted language support. The fact that children with limited linguistic proficiency—whether due to language impairment or dual language learning (e.g., DeLuzio & Girolametto, 2011; Guralnick et al., 1996; Menting et al., 2011; Tabors & Snow, 1994)—may have limited access to naturally occurring peer interactions with children with more advanced linguistic skills, further underlines the potential benefits of peer-assisted learning approaches.

7.4 Chapter Summary and Consequences for Future Research – Study II

Both theoretically and empirically, peer interactions have been found to offer potent contexts for language acquisition in ECEC settings. From an early age—and in different ways than adults—peers engage in dyadic and multi-party interactions, providing children with the opportunity to verbally co-construct and negotiate meaning, such as in joint play actions, conflict resolution, and story telling activities.

Through these frequent interactions throughout the typical ECEC-day, peers may influence each other in their development. For example, exposure to peers with strong language skills in ECEC can boost language learning in preschoolers (e.g., Justice et al., 2011). Naturally, therefore, “peers who have a larger vocabulary, ability to express

themselves, greater familiarity with print materials, and well-developed social skills could stimulate skill development among the other children within their preschool environment" (Henry & Rickman, 2007, p. 101).

Narrative intervention can be defined as an intervention procedure that uses oral narratives as a medium whereby the participant practices language-related features after a prompt and/or a model (Swanson, Fey, Mills, & Hood, 2005). In the realm of peer-assisted learning activities, a peer will offer the prompt and/or model. Theoretic explications and research evidence underline that PAL activities can be successfully implemented in the ECEC environment and that children engaging in peer learning activities can make considerable progress in selected learning outcomes. Research evidence does not only emphasize the role of peers in language development, but also suggests that peers can be successfully included as language intervention agents in ECEC, provided that careful planning and support of peer-assisted learning is implemented. In storytelling activities, there is emerging evidence that preschool-aged children draw on each other's model, which may have a lasting influence on narrative productions (McGregor, 2000).

While previous studies suggest the successful implementation of peer assisted language learning approaches in the ECEC environment, it should be noted that limitations prevent generalization to a wide population. As reported, most existing studies have significantly small sample sizes and are restricted to a limited cultural frame. As reported studies were sparse and many small in scope, further research is needed to examine the implementation of a peer tutoring approach in ECEC and the potential impact on DLLs' fictional narrative skills.

Support of Emerging Fictional Narrative Skills through Peer-Assisted Intervention: An Exploratory Study (Study II)

As has been established in the previous sections, narrative skills are well recognized as an important skillset underlying a variety of socio-emotional and academic competencies (e.g., McCabe & Bliss, 2003; Nelson, Aksu-Koç, & Johnson, 2001; Norbury et al., 2014). Narrative intervention can serve as a potent tool to support preschoolers in their narrative development, and it is becoming an established feature in the support and clinical treatment of emerging language skills in preschool-age children (Gutiérrez-Clellen, 2012; Paul, 2007). Because there is not a standard method for delivering narrative intervention, research is necessary to support professionals in their endeavor to provide effective and efficient intervention and to identify components that will improve children's abilities to successfully produce narratives. For the current study, an innovative approach was developed and applied involving peer tutors to extend the investigation of effective approaches to narrative intervention. Employing peers as partners in interventions, such as PT, as deducted previously (see section 7.3), can be a promising approach in facilitating selected intervention goals (McGregor, 2000; Topping, 2005). Based on the theoretical background and the empirical evidence reviewed in the previous chapters, the current study pursued the main research aim to *explore the effects of a peer-assisted intervention on the narrative generations of preschool-age DLLs.*

This aim translated to three distinct purposes. The first was to explore the effects of a peer-assisted narrative-based language intervention—more precisely, its effects on indices of the oral fictional narrative generations of preschool-age DLLs. The second was to also target long-term effects of the intervention, while the third was to explore intervention effects on tutors.

All participating children were Turkish-German DLLs aged 3 to 6; testing and intervention occurred in German in the ECEC environment. A pre-posttest design including an intervention group, an intervention control group, and a non-intervention control group was applied to enable careful experimental control of aspects of oral narration as well as an assessment of generalization and maintenance of narrative skills.

The following specific research questions were addressed:

1. *To what extent does engaging a peer tutor in a narrative-based language intervention improve the tutee's generation of fictional narratives?*
2. *To what extent do any improvements in preschoolers' narrative performance maintain following a period of 5 weeks with no intervention?*
3. *Which effect does the intervention have on children serving as the tutors?*