General introduction

Parts of this chapter are based on:
1.1 Introduction

“(Well-structured) talk builds the mind” (Resnick, Michaels, & O’Connor, 2010, p. 163)

Imagine: you wake up one day in a world without language. There are no possibilities for linguistic or verbal communication, no words to name the living creatures you encounter. What would you do? An interesting thought experiment. Needless to say today’s society would not be possible without language. How would we communicate when building skyscrapers? How would we solve complex problems that ask for interdisciplinary collaboration? And how would we program computers to master a range of complex tasks? Without language, none of these human activities would be possible. To quote Wittgenstein (1953), “to imagine a language means to imagine a form of life” (“eine Sprache vorstellen heißt, sich eine Lebensform vorstellen”, p. 21).

Language is the foundation of human society and culture. It enables people to cooperate, relate, think, create, and communicate. To understand the origin of language(s) – or to be more specific, the way in which men use language to communicate – we need to understand both the evolutionary and cultural-historical processes that are foundational to the formation of language. From an evolutionary perspective, language originates in the biological adaptations of the highly unique way in which humans cooperate and interact (Tomasello, 2008). Ontogenetically, linguistic communication is rooted in the cooperative nature of human activity (see for example, Grice, 1975; Levinson, 2006; Tomasello, 2008). Next to these evolutionary processes, language is shaped through history and passed along to successive generations (Vygotsky, 1978; 1987). Both the evolutionary and cultural-historical processes are equally important in our understanding of how people as well as communities and societies use language to communicate and think together.

Yet, what does it mean to learn a language? According to Vygotsky (1987), an important aspect of human development in general and language learning in particular, is the appropriation of cultural tools (Vygotsky meant both physical tools,
such as a hammer, and mental tools, such as language and signs). These tools – in this case language - are shaped through history and acquired by participating in cultural practices in collaboration with others (see also van Oers, 2012a). An important aspect of how children learn a language is that they are born into a world of language-users, and start using it to take part in this world (cf. Mercer, 2000). Consequently, they learn “much else that they need to know, through engaging in conversations with adults” (Mercer, 2000, p. 11) as well as with peers and more knowledgeable others. The famous Australian linguist Michael Halliday even argues that learning a language is the foundation of learning itself (Halliday, 1993). In other words, children simultaneously learn to talk (i.e., learn a language) through participation in cultural practices in which they engage in dialogues with other users of language in their environment and community, and they talk to learn about the world. According to Painter (1999), as soon as children enter school their learning will be dominated by language. Not only do they learn to use language in new ways, but for everything children will be learning they need language to access it (e.g., domain specific knowledge, music, mathematics, etc.) (Painter, 1999).

This view of language as the foundation of human society, local cultures, as well as school-based learning makes it a foundational site for both fundamental and applied research. Through the study of language and human communication, we are able to, for example, understand how people use a language to collaborate or think together. This is not an easy endeavor. To quote Jerome Bruner (1983), the “uses of language are so varied, so rich, and each use so preemptive a way of life, that to study it is to study the world and, indeed, all possible worlds” (p. 176). The way in which people use language is dynamic, unique in its situatedness, and continuously subject to change. This is especially true when one studies how people use language in the context of social interaction or talk.

This dissertation focuses on the complexity, centrality, and development of language in the context of classroom talk and dialogue in early childhood education. More specifically, we will study how classroom talk can become a context in which
children can be supported to learn language, and learn about the world. Thus we explore how classroom talk can be promoted as a site for powerful learning – learning language and “languaging” to learn.

1.2 Research on classroom talk

For over four decades, the study of classroom talk and dialogue has been an established research area in the educational sciences, linguistics, and beyond (for an overview, see Howe & Abedin, 2013; Mercer & Dawes, 2014; Resnick, Asterhan, & Clarke, 2015; Walshaw & Anthony, 2008; Webb, 2009). Leading classroom discourse scholar Cazden (2001) referred to classroom dialogue as “the language of learning,” a productive context in which school learning can take place. As such, research on classroom dialogue focuses on identifying and promoting teacher-child or child-child interactions in school settings that might be most beneficial for children’s learning and development. Nystrand and Gamoran (1991) showed in the early 1990s that classroom dialogue characterized by open questions and discussions (i.e., dialogic classroom talk) is strongly related to children’s learning. Surprisingly, in spite of this research and other studies in the decades that followed, the majority of today’s classroom talk is still dominated by what many call “recitation” (often in the form of Initiation-Response-Evaluation sequences) in which teachers ask closed questions and talk most of the time, giving little space for children’s evidence, reasoning, argument, and collaborative knowledge building. Furthermore, Howe and Abedin (2013) concluded in their review on classroom dialogue that over the past decades we have come to know much more about “how classroom dialogue is organized than about whether certain modes of organization are more beneficial than others” (p. 325). There appears to be a lack of insight into the specific contribution of certain modes of classroom dialogue to children’s learning. Therefore, in this dissertation we aim to provide additional empirical evidence on the relation between specific kinds of
classroom dialogue and children’s learning and development. Learning and development should be interpreted in a broad sense, including: subject matter learning, language learning, identity formation, and learning to reason and think together. However, the research presented in this dissertation will mainly focus on the relation between classroom dialogue and the development of young children’s oral communicative competence.

Yet, what do we mean by oral communicative competence; and why focus on this concept? Oral communicative competence is regarded as the combination of knowledge, skills, and attitudes that “enables a speaker to communicate effectively and appropriately in social contexts” (Schiefelbusch & Pickar, 1984, p. ix). This concept, rooted in the work of linguistic anthropologist, Dell Hymes (1972), emphasizes the pragmatic aspects of language use. As such, this concept moves beyond a systemic and formal focus on language (i.e., grammar, syntactic structures, pronunciation). From a socio-cultural perspective, oral communicative competence is considered an important mediator of self-regulation, learning, and thinking (van Oers, Wardekker, Elbers, & van der Veer, 2008; Whitebread, Mercer, Howe, & Tolmie, 2013). As explained previously, Vygotsky (1987) even argued that language mediates thinking, and that thinking can be considered as the interiorization of language first used to engage in communication with others. Furthermore, previous research has shown that children’s oral communicative abilities are related to peer acceptance (e.g., Fujiki, Brinton, Hart, & Fitzgerald, 1999; Gertner, Rice, & Hadley, 1994; van der Wilt, van Kruistum, van der Veen, & van Oers, 2016), which, in turn, predicts later academic success and sociability (e.g., Braza, et al., 2009; Nærland, 2011). Because of the importance of oral communicative competence, we believe that more research is needed on how to support the development of children’s oral communication skills.

In order for children to communicate successfully, it is not enough to focus on the formal aspects of language use (grammar, syntactic structures, pronunciation; see Celce-Murcia, 2008), but also to include a more communicative focus which entails practicing the different aspects of social interaction in meaningful activities
such as classroom talk (Roth & Spekman, 1984). The studies in this dissertation aim to explore whether inducting children into dialogic classroom talk supports the development of their oral communication skills.

In this dissertation, we use the notion of dialogic classroom talk to emphasize the idea of classroom dialogue as a mutual process based on exchanges among students and teachers that go beyond the monologic approach encountered in the majority of classrooms. We view classroom talk as a socially productive process in which dialogue is linguistically and interactionally configured to support some kind of inquiry learning, shared thinking and communicating, and collective problem solving (see O’Connor and Michaels, 2007; van der Veen, van Kruistum, & Michaels, 2015; and many others such as Wells, 1999; Dobber & van Oers, 2015). This social productive process should always be seen as “an interactional achievement, guided by the teacher, linking academic content and students with one another” (van der Veen, van der Wilt, van Kruistum, van Oers, & Michaels, 2017, p. 691).

1.3 This dissertation

This dissertation aims to contribute to the research field of classroom talk and dialogue in several ways. First, we aim to contribute to the field conceptually by sketching the most important characteristics of dialogic classroom talk and making a case for the importance of dialogic classroom talk for the development of children’s dialogical capacities. Second, this dissertation makes important methodological contributions as it reports on one of the few studies in the field of classroom dialogue that uses a quasi-experimental design to verify whether dialogic classroom talk is more beneficial than a traditional, monologic organization of classroom talk. Third, the majority of research on classroom talk focuses on primary and secondary education students, talk in small-group settings, and the relation between classroom dialogue and content learning. Much remains unknown about the benefits of dialogic
classroom talk in early childhood classrooms, for whole-group settings, and for the development of children’s oral communicative competence. This dissertation extends and builds on the current findings in the field and aims to advance the field by presenting additional empirical evidence on the effects of dialogic classroom talk in whole-group settings on young children’s oral communication skills. Finally, this dissertation contributes to educational practice, as it describes and evaluates an easy-to-use intervention – MODEL2TALK – that teachers can implement in their classrooms to improve the quality of classroom talk, and, consequently, children’s oral communicative competence.

Methodology

In the different chapters of this dissertation, we deliberately started out from a broad methodological perspective on studying classroom dialogue and its effects on, or relation to, learning and developmental outcomes. We argue that this broad methodological perspective is essential, given the complexity of studying classroom dialogue (see Section 1.1), and in order to promote the growth of understanding in this research area. In the first part of this dissertation, we aimed to make a conceptual contribution to the field of research on classroom dialogue. We did so by developing a conceptual framework of dialogic (or productive) classroom talk that could be used as heuristic to theorize and study the relation between classroom dialogue and children’s learning and development (chapters 2 and 3). In the second part of this dissertation, we used multiple designs and methods (i.e., quantitative (interventionist) designs, design-based research, classroom observations, interviews, etc.) to gain insight into the complex nature and educational outcomes of classroom dialogue (chapters 4, 5, and 6).

Context

The studies reported in this dissertation were all carried out in early childhood classrooms (also referred to as kindergarten) throughout the Netherlands.
Participating children were between four and six years old. In 1985, the Primary Education Act came into effect in the Netherlands. As a consequence, separate kindergartens were abolished and integrated into primary schools. Furthermore, the Primary Education Act lowered the starting age for compulsory education from six to five years. However, the vast majority of children in the Netherlands enter primary school shortly after their fourth birthday.

When we use the term early childhood education (or classrooms) throughout this dissertation, we refer to the first two grades of primary schools (in Dutch: kleuterklas). In primary schools in the Netherlands, it is common practice to combine grades one and two.

Research has shown that young children’s experiences in early childhood education are positively related to future academic, social, and language learning (for example, Burchinal, Peisner-Feinberg, Pianta, & Howes, 2002; Stuhlman & Pianta, 2009). It has even been argued that high quality early childhood programs could have lasting impacts on children with a low socioeconomic status (Lamy, 2012). Investing in high quality early childhood education has shown to be a (cost) effective policy strategy in preventing the achievement gap (Campbell & Ramey, 1995). Stuhlman and Pianta (2009) argue that important indicators for determining quality in early childhood classrooms are social climate (e.g., sensitive and responsive teacher-child interactions), and instructional support (e.g., feedback). However, observations in numerous early childhood classrooms have shown that there are significant differences in the quality of early childhood education between teachers (see for example, Bryant, Clifford, & Peisner, 1991; Stuhlman & Pianta, 2009). As a consequence, not all children have equal access to high quality educational experiences. Furthermore, children from low-income families are least likely to enter good quality early childhood education (Stuhlman & Pianta, 2009). Therefore, it is of great importance to keep improving the quality of all early childhood education through the professional development of teachers. The studies presented in this dissertation aim to contribute to good quality early childhood education through an
intervention that supports teachers to improve the quality of classroom talk and interaction. We hypothesize that this intervention might translate into young children’s improved language abilities.

**Outline**

This dissertation consists of seven chapters divided into two parts (see Table 1). The aim of the chapters in part I is a conceptual exploration of dialogic or productive classroom talk. In this part, we will try to answer the following research questions:

1) What is dialogic (or productive) classroom talk and what are its characteristics?

2) What is the importance of dialogic classroom talk in terms of developing children’s dialogical capacities?

Table 1

*Outline of this dissertation*

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The second part builds on this conceptual exploration and presents empirical studies on (dialogic) classroom talk in early childhood education. In this part, we aim to answer the following research questions:

1) How can dialogic classroom talk be promoted in early childhood classroom? And what does it contribute to children’s oral communicative competence?
2) What are the effects of dialogic classroom talk on young children’s oral communicative competence and subject matter knowledge?

In chapter 2, a conceptualization of dialogic classroom talk is described. It is argued that in order for classroom dialogue to be productive it should aim to promote children’s “meaningful learning and cultural development in an emancipatory way” (van Oers, 2012b, p. 59). In this chapter, three interrelated parameters are described to distinguish dialogic or productive classroom talk from monologic classroom talk (see also, O’Connor & Michaels, 2007): (1) dialogic classroom talk has a topic (or object) that gives direction, purpose and duration to the dialogue; (2) in dialogic classroom talk children are given space to create an intersubjective orientation and; (3) for dialogic classroom talk to be productive and accountable to knowledge, it needs to contain elements of a polylogue with knowledgeable cultural-historical others outside the physical space of the classroom. These parameters are to be seen as heuristics that can be used to think about modes of organizing classroom dialogue that might be beneficial for children’s meaningful learning and cultural development.

In chapter 3, a cultural-historical (or socio-cultural) conceptualization of dialogic classroom talk is connected with Dialogical Self Theory (DST). In our globalizing world, classrooms have become heterogeneous places where different cultures, worldviews, religions, perspectives meet. This requires a self that is able to deal with differences, tensions, and uncertainties. We argue that these dialogical capacities and a dialogical self can be developed by inducting children into dialogic classroom talk in which different perspectives are negotiated and in which the voices of others interact with and become part of a multivoiced or dialogical self.

Chapter 4 focuses on the MODEL2TALK intervention. This intervention aims to promote dialogic classroom talk in early childhood education with 4-6 year-old children. MODEL2TALK is a research-based program, drawing on extensive research on classroom talk and dialogue (see also chapters 2, 5, and 6). It consists of a Professional Development Program (PDP) through which teachers are supported to
implement dialogic talk in their classroom and a set of talk tools that support teachers to orchestrate dialogic classroom talk.

In **chapter 5**, dialogic classroom talk (i.e., the MODEL2TAK intervention) was promoted in four early childhood classrooms with 92 children using a design-based approach. The cyclic character of design-based research made it possible to simultaneously develop and evaluate the intervention in classroom practice. Using pre- and post-tests and pre- and post-observations of classroom talk the aim was to simultaneously promote dialogic classroom talk and evaluate to what extent the intervention on dialogic classroom talk contributed to the development of children’s oral communicative competence.

In **chapter 6**, we examined whether a certain mode of classroom dialogue in which children are given space to talk and think together – referred to as productive classroom talk (or the MODEL2TALK intervention) – is more beneficial for the development of young children’s oral communicative competence compared to classroom talk that is predominantly teacher steered and based on recitation (as in largely monologic or traditional classroom talk). This study is one of the few studies in the research field of classroom dialogue that uses a quasi-experimental design to verify whether a specific mode of organization of classroom dialogue is more beneficial that another mode (cf. Howe & Abedin, 2013). In this study, a total of 21 teachers and 469 children participated. 12 teachers and 273 children were assigned to the intervention condition and participated in a PDP on dialogic classroom talk. Nine teachers and 196 children did not participate in this PDP and formed the comparison condition. All teachers orchestrated the same six classroom conversations related to the theme ‘what animal is that?’. Children’s oral communicative competence (using the Nijmegen Test of Pragmatics) and subject matter knowledge (using 12 closed and three open questions) were measured.

In **chapter 7**, the conceptual and empirical explorations are integrated and critically discussed. Furthermore, possible contributions of this dissertation for both theory and educational practice and suggestions for future research are discussed.
References


