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Examining Children's Language Experiences Across Pre-K Classroom Activity Settings

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Examining Children's Language Experiences Across Pre-K Classroom Activity Settings

A dissertation submitted in partial satisfaction of the requirements for the degree of

Doctor of Philosophy in Education

By

Yiching Deborah Huang

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ABSTRACT OF THE DISSERTATION

Examining Children's Language Experiences

Across Pre-K Classroom Activity Settings

by

Yiching Deborah Huang

Doctor of Philosophy in Education

University of California, Los Angeles, 2013

Professor Alison L. Bailey, Chair

This two-part dissertation study examined children's language experiences across activity settings (i.e. whole group, small group, free choice, etc.) that are typically found in Pre-K classrooms. Study 1 involved quantitative secondary analysis of a large corpus of time-sampled observations in Pre-K classrooms. Study 2 involved micro-level analyses of videotaped teacher-child interactions and teacher interviews in two Pre-K classrooms. The findings of Study 1 suggest that children's language experiences vary as a function of activity setting. Children are most likely to experience teacher-child interactions that support their oral language development during whole group activity settings. However,

conversations occurring within the context of whole group activity settings are characterized by lower levels of teacher-child joint attentional engagement than conversations that occur during small group or free choice. Study 2 found that patterns of teacher talk varied in subtle ways across activity settings in the two classrooms studied and these differences reflected teachers' overarching pedagogical goals as well as specific instructional goals for particular activity settings. Taken together, findings from the two studies in this dissertation help to paint a nuanced picture of how and why children's language experiences vary across activity settings in Pre-K classrooms.

The dissertation of Yiching Deborah Huang is approved.

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2013

DEDICATION

To Mom and Dad

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CHAPTER I: INTRODUCTION

In the United States, the proportion of children attending early education programs has risen dramatically over the past four decades. Between 1970 and 2010, the Pre-Kindergarten (Pre-K) enrollment rate for 3- and 4-year-old children increased from 20 to 53 percent (U.S. Department of Education, 2012). Given the increasing number of children attending Pre-K programs and the importance of the early childhood years for children's language development, it is not surprising that a large body of research has examined support for children's language development in early learning settings (e.g., Dickinson & Tabors, 2001; Dickinson & Porche, 2011). Moreover, many professional development interventions have been devised for the purposes of improving teacher support for children's oral language development in early childhood classrooms (e.g. Dickinson & Caswell, 2007; Girolametto, Weitzman, & Greenberg, 2003; Neumann & Cunningham, 2009; Wasik, Bond, & Hindman, 2006). These interventions have had some success, but more work needs to be done as teacher-child interactions which support children's oral language development occur infrequently in many Pre-K classrooms (Dickinson, McCabe, & Clark-Chiarelli, 2004; Justice, Mashburn, Hamre, & Pianta, 2008). More research examining children's language experiences in Pre-K classrooms is needed to improve the design and efficacy of professional development interventions.

This two-part dissertation study adds to the existing literature by examining children's language experiences across activity settings (i.e. whole group, small group, free choice, etc.) that are typically found in Pre-K classrooms. Study 1 involves quantitative secondary analysis of a large corpus of time-sampled observations in Pre-K

classrooms. Study 2 entails case studies of two Pre-K classrooms, and involves micro-level analyses of videotaped teacher-child interactions and teacher interviews. Taken together, findings from the two studies in this dissertation help to paint a nuanced picture of how and why children's language experiences vary across activity settings in Pre-K classrooms. Importantly, these findings could lead to a better understanding of how teachers can enhance their support for children's oral language development with strategies that are specifically tailored to particular activity settings.

The remainder of this dissertation is organized as follows. Chapter 2 introduces the conceptual framework, reviews existing research, and highlights current gaps in the research literature. Chapter 3 provides an overview of the dissertation, outlining the study paradigm and design, and delineating the overarching research aims that guided this dissertation. Chapter 4 includes research questions, methods, and results pertaining to Study 1, as well as a discussion of results and limitations to consider. Research questions, methods, results, discussion, and limitations pertaining to Study 2 are described in Chapter 5. Chapter 6 begins with an integrative summary of findings from both Study 1 and Study 2, and concludes with implications for research and practice.

CHAPTER II: LITERATURE REVIEW

Conceptual Framework

This dissertation study examines children's language experiences within the context of Pre-K classrooms, and is guided by a conceptual framework that draws from various theoretical perspectives and existing research. Figure 1 depicts a representation of this conceptual framework, which draws from social interactionist perspectives on language development, research examining the influence of activity settings and daily routines on teacher-child interactions in Pre-K classrooms, and ecocultural theory.

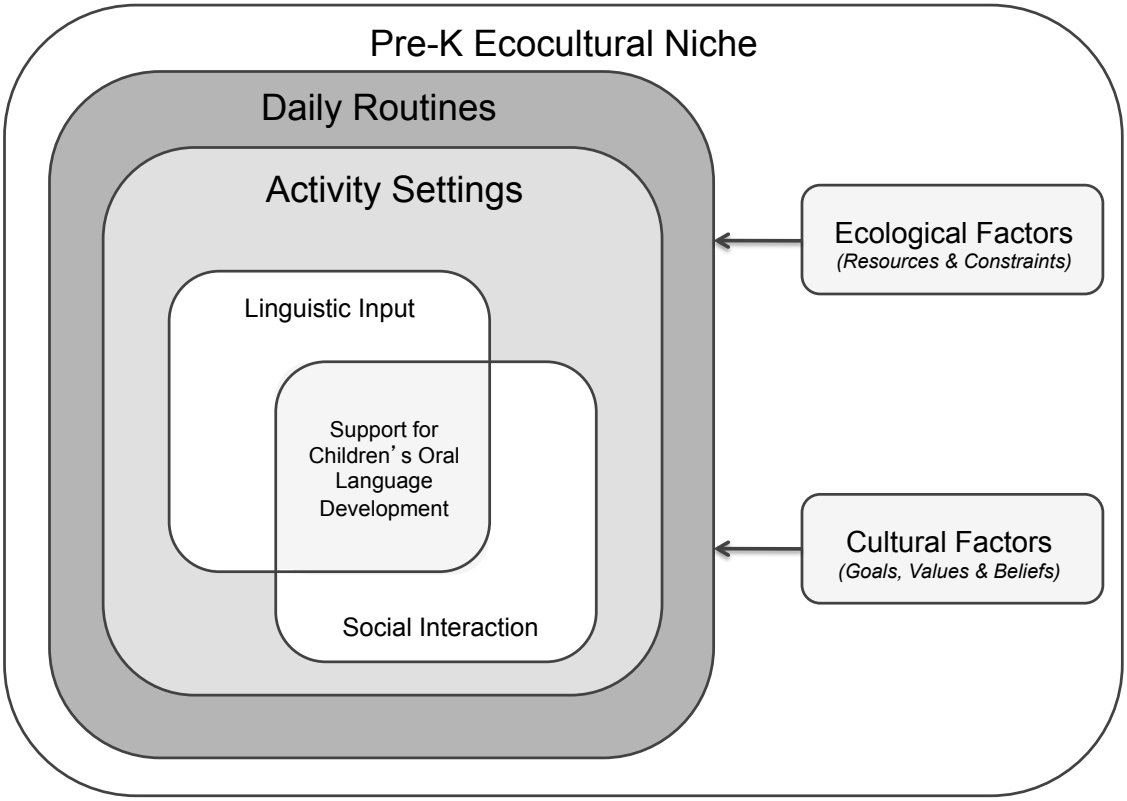

Figure 1. Conceptual Framework

In accordance with social interactionist perspectives on language development, the model suggests that support for children's oral language development in Pre-K classrooms depends on the quality of the linguistic input that teachers provide as well as

the quality of the social interactions that children experience with their teachers (e.g., Gallaway & Richards, 1994). Additionally, in light of research which has shown that teacher-child interactions and children's opportunities for learning vary across Pre-K classroom activity settings (e.g., Booren, Downer, Vitiello, 2012; Vitiello, Booren, Downer, & Williford, 2012), the model acknowledges that teacher language input and teacher-child social interactions should be considered within the context of activity settings and daily classroom routines. Finally, in accordance with ecocultural theory (Weisner, 2002), the model proposes that daily classroom routines and activity settings are influenced by ecological (i.e., resources and constraints) and cultural (i.e., goals, values, and beliefs) factors that are salient in the ecocultural niche surrounding Pre-K classroom environments. The remainder of this chapter reviews existing literature that informs the conceptual framework guiding this dissertation.

Social Interactionist Perspective

Language researchers working within a social interactionist framework stress the importance of social influences on children's language acquisition (Gallaway & Richards, 1994; Snow, 1994). The social interactionist perspective shares theoretical roots with sociocultural accounts of human development, which emphasize the role that adults play in facilitating children's development (Vygotsky, 1978; Rogoff, 2003). A social interactionist view of language acquisition hypothesizes that language development has biological and social determinants, with the emphasis being placed on social factors. Over the past few decades, the work of social interactionist language researchers has greatly added to our understanding of how adults impact children's language development (e.g. Gallaway & Richards, 1994; Dickinson & Tabors, 2001).

Their work has shown that aspects of adult language input and adult-child social interaction are influential in shaping children's oral language development. Features of input and interaction that facilitate children's language development are described next, followed by a discussion of gaps in the literature that motivate this dissertation.

A large body of research has shown that adult language input plays a role in children's language development. The amount of adult language input that children receive is an important factor in their language development. Hart & Risley (1995) recorded and analyzed parent-child verbal interactions in 42 families, from the time children were 10 months to 3 years old. Their findings showed that there is wide variation in the amount of words that children hear during the first few years of life, and these differences are associated with children's vocabulary growth. They found that children who received more adult language input showed advantages in their language abilities and school performance.

Another important factor to consider is the quality of the language input that children are exposed to. Studies have shown that children's language development is facilitated by adult language input that is lexically rich. Dickinson, Cote, and Smith (1993) related vocabulary richness in teacher speech to children's language and literacy outcomes in kindergarten. In their analyses, they found that the extent to which teachers used "rare words" was significantly related to several child outcomes in kindergarten. Vocabulary richness in teacher speech was positively associated with growth in children's receptive vocabulary, as well as their ability to comprehend a story and formulate word definitions (Dickinson & Tabors, 2001). In another study, Weizman and Snow (2001) found that the density of sophisticated vocabulary words that children heard

at age 5 predicted children's vocabulary knowledge in kindergarten and 2nd grade. More recently, Dickinson and Porche (2011) found that preschool teachers' use of sophisticated vocabulary predicted children's 4th grade reading comprehension and word recognition skills.

Research also suggests that children's language development is supported when adults make an effort to keep conversations focused on a particular topic for an extended period of time (McCabe & Peterson, 1991; Dickinson & Tabors, 2001). McCabe and Peterson (1991) explored the link between adult strategies for eliciting children's narratives and children's independent narrative skill. They found that topic-extending talk was positively associated with children's narrative competence while switching topics was negatively correlated with children's narrative skill. Dickinson (2001a) examined the influence of extended teacher-child discourse on children's language and literacy outcomes in kindergarten. Analyses revealed that extended teacher-child discourse was strongly associated with children's performance on tests of early literacy and receptive vocabulary, and moderately associated with children's ability to formulate definitions and produce narratives.

Another important feature of teacher-child discourse is the extent to which children are taking conversational turns. Conversations foster children's language and literacy development to a higher degree when children's verbal contributions are being elicited and they are actively participating in the dialogue (van Kleeck, 2004). Within the preschool context, it has been shown that children's language production varies as a function of the types of prompts their teachers use to control conversations in the classroom. According to Girolametto, Weitzman, van Lieshout, and Duff (2000),

children's language production is inhibited when teachers dominate conversations by using frequent verbal turns and when teachers use language for the purposes of behavior management. In contrast, teachers' use of open-ended questions and clarification questions facilitates greater child language productivity and lexical diversity.

Studies also suggest that aspects of adult-child social interaction are consequential for children's language development. Children benefit from sensitive, responsive caregivers who are skilled at creating episodes of joint attentional engagement. Within the context of adult-child conversations, sensitive caregivers create episodes of joint attentional engagement by following the child's lead and responding in semantically contingent ways. (Tamis-Lemonda, Bornstein, & Baumwell, 2001; Girolametto & Weitzman, 2002). Importantly, research has shown that establishing and maintaining joint attention during adult-child conversations is critical for children's language development, as it helps children to make the connection between the language that is being spoken and what it is referring to (Tomasello, 1988; 2003; Carpenter, Nagell, & Tomasello, 1998). Tomasello and Todd (1983) were among the first to demonstrate that differences in the extent to which mother-child dyads are able to establish and maintain joint attentional focus are associated with children's language growth. They videotaped mother-child dyads at monthly intervals over a 6-month period and found that children's vocabulary size at the end of the period was positively related to the amount of time they spent in joint attention episodes with their mothers. More recently, studies have found that when early childhood teachers are provided with in-service training on using language facilitation strategies that promote joint engagement, children's verbal productivity improves (Girolametto, Weitzman, & Greenberg, 2003).

In sum, studies examining adult influences on children's language development have identified several features of adult language input and adult-child social interaction that support children's language development. Based on the extant literature, we know that children's language development is facilitated when sensitive, responsive adults engage them in extended conversations. Furthermore, we know that conversations are particularly supportive of children's language development when adults use lexically rich language, solicit children's conversational turns, and promote high levels of joint attentional engagement.

Although research has identified several features of adult language input and adult-child social interaction that are consequential for children's oral language development, less is known about the extent to which these facilitative aspects of input and interaction *co-occur* in early childhood classrooms. In the existing early childhood education research literature, aspects of input and interaction have been examined separately. As a result, we do not know the extent to which children simultaneously experience rich language input *and* high levels of responsive involvement and joint attentional engagement during conversations with their teachers. More research is needed to address this gap in our understanding of children's language experiences in early childhood classrooms.

It is important to acknowledge that the research reviewed in this section was primarily conducted in the United States. As such, the findings of these studies reflect particular values and norms that are relevant in the U.S. but may not be meaningful from a cross-cultural perspective. The facilitative aspects of input and interaction discussed in this section should not be considered a universal prescription for how to facilitate

language acquisition. Indeed, children all around the world acquire language even though adult-child interaction and child-directed adult speech are rare or even considered inappropriate in some cultures. Nevertheless, the literature reviewed in this section is useful for thinking about how to support children's language development in Pre-K classrooms in the U.S. Importantly, the facilitative aspects of input and interaction identified by this literature have been linked to differences in children's language abilities and later school success.

Activity Settings and Daily Routines

In early childhood classrooms, children's language experiences occur within the context of activity settings such as whole group, small group, free choice, meals, and transitions, which collectively make up the daily classroom routine. Group size and teacher-child ratios vary across activity settings, as do the roles inhabited by teachers and children in their interactions, affecting the quantity and quality of adult language input and adult-child social interaction that children experience. Studies suggest that the quantity and quality of teacher-child interactions varies across activity settings, but different patterns of findings emerge depending on whether researchers analyze interactions from a teacher-level or child-level perspective. The remainder of this section reviews studies exploring teacher-child interactions within the context of Pre-K classroom activity settings and identifies gap in the literature which warrant further research.

Studies examining teacher-child interaction patterns from a teacher-level perspective have shown that rich language input and responsive involvement is most likely to occur during activity settings characterized by smaller group sizes, lower

teacher-child ratios, and less teacher directiveness. For example, studies have found that meals and free play are prime activities that give rise to opportunities for extended discourse (Dickinson & Tabors, 2001), rates of decontextualized talk are highest during meals (Gest, Holland-Coviello, Welsh, Eicher-Catt, & Gill, 2010), and teachers are more likely to engage children using "language stimulation techniques" during small group (1-5 children) as opposed to large group (6-10 children) activities (Turnbull, Anthony, Justice, & Bowles, 2009). Responsive teacher-child interactions are also most likely to occur during activity settings characterized by smaller group sizes and less teacher directiveness. Child-directed free choice activities are most likely to elicit responsive teacher interactions while teacher-directed whole group activities provide few opportunities for teachers to respond contingently to child-initiated topics of conversation (Girolametto, Weitzman, van Lieshout, & Duff, 2000).

In contrast, when teacher-child interaction is examined from the point of view of the child, studies suggest that opportunities for children to engage with teachers are most likely to occur during activity settings characterized by larger group sizes, higher teacher-child ratios, and more teacher directiveness. Studies suggest that teacher-child interactions occur infrequently during free choice activities. In the Home-School Study of Language and Literacy Development (Snow, Tabors, & Dickinson, 2001), observations of 4-year-old children during free choice revealed that children, on average, spent only 17% of their time interacting with a teacher (Dickinson, 2001b). Two recent studies suggest that teacher-directed activities such as whole group are associated with more positive engagement with teachers and child-directed activities such as free choice are associated with more positive interactions with peers and tasks (Booren, Downer, &

Vitiello, 2012; Vitiello, Booren, Downer, & Williford, 2012). Another recent study found that daily classroom routines are related to children's opportunities for engaging in conversations with their teachers. Fuligni, Howes, Huang, Hong, and Lara-Cinisomo (2012) identified patterns of daily routines in classrooms and found that, compared to children in "High Free Choice" classrooms (i.e. majority of the day spent in child-directed free choice activities), children in "Structured-Balanced" classrooms (i.e., relatively higher proportions of the day spent in teacher-directed whole- and small-group activities) had more opportunities to engage in conversations with their teachers and higher receptive vocabulary scores at the end of the year.

To summarize, studies examining the influence of activity settings and daily routines on teacher-child interactions have shown that children's language experiences vary greatly over the course of a typical day in an early childhood classroom. From the existing research two patterns of findings have emerged, depending on whether classroom interaction is examined from the perspective of the teacher or child. Studies that examine teacher-child interaction from the point of view of the teacher have shown that activity settings such as free choice, meals, and small group, which feature smaller group sizes, lower teacher-child ratios, and less teacher directiveness, are prime activities for rich teacher language input and responsive teacher-child interaction. However, analyses that provide a child-level view of classroom life suggest that individual children's opportunities to engage with teachers during these prime activities for rich language input are extremely limited and most of the teacher-child conversations that children experience in early childhood classrooms occur during whole group time.

In the extant literature, studies have taken either a teacher-level or child-level approach to analysis, yielding an incomplete picture of classroom life and leaving several unanswered questions. Research that takes a teacher-level approach to analysis does not account for individual children's experiences. These studies have shown teacher-child interactions that facilitate language development are more likely to occur during free choice, meals, and small group, but we are left wondering about the extent to which individual children have access to teachers during these activities. Research that takes a child-level approach to analysis does not account for what the teacher is doing if the teacher is not interacting with one of the target children randomly selected for analysis. These studies have shown that children experience more teacher talk and more positive engagement with teachers during whole group, but we are left to wonder about what teachers are doing during free choice, when they are often present despite not being engaged with the target child.

More research involving detailed analyses of teacher-child conversations across activity settings is needed to understand how activity settings shape children's opportunities for language learning. Specifically, combining both teacher-level and child-level analyses will help to provide a clearer picture of what's happening in classrooms. Currently, it is clear that activity settings involve tradeoffs for children's language learning, but additional research is needed to gain a more nuanced understanding of these tradeoffs.

Ecocultural Theory

According to ecocultural theory, activity settings commonly found in Pre-K classrooms, such as whole group, small group, and free choice, are perceptible

instantiations of the larger ecological and cultural system or ecocultural niche that surrounds teachers and children in Pre-K classrooms (Gallimore & Goldenberg, 1993; Weisner, 2002). As such, activity settings are shaped by ecological (i.e., resources and constraints) and cultural (i.e. goals, values, and beliefs) factors, which teachers must balance as they construct their daily classroom routines (Weisner, 2002).

Researchers coming from an ecocultural perspective have contributed greatly to our understanding of how ecological and cultural factors enable and constrain processes that relate to human development. One productive line of research has investigated Latino immigrant children's literacy development within the home context. In a recent chapter written by Goldenberg, Gallimore, and Reese (2005), the authors summarize what they have learned from 15 years of longitudinal research investigating literacy learning opportunities in low-income Spanish-speaking households. Using multiple samples and a diverse array of mixed methods approaches, they have identified several broad ecocultural categories of contextual influence on children's literacy experiences and development. Influences include family history and community demographics (e.g., family cultural and literacy background, community context), job-related constraints and enablers (e.g., hours available for children, on-the-job-training), domestic routines, roles, and child care (e.g., home literacy practices, mother and father participation), institutional connections and familiarity (e.g., home-school and home-church connections), cultural schema (e.g., parents' literacy theories and beliefs, attitudes toward formal schooling), and community heterogeneity (e.g., exposure to alternative cultural schema) (Goldenberg, Gallimore, & Reese, 2005).

The previous paragraph describes a program of research that has applied ecocultural theory as a tool for investigating children's literacy development within home contexts. This program of research has come a long way in helping us to understand how ecocultural factors enable and constrain home literacy environments in ways that are consequential for children's learning. To date, ecocultural theory has not been used to examine support for children's oral language development in Pre-K classrooms. Elucidating ecological and cultural factors that enable and constrain teacher-child interactions across activity settings in early childhood classrooms is a potentially fruitful line of inquiry that is explored in this dissertation. Specifically, this dissertation explores the relationship between teachers' pedagogical goals and children's language experiences across activity settings in Pre-K classrooms.

CHAPTER III: OVERVIEW OF THE DISSERTATION

Study Paradigm and Design

This dissertation study is guided by principles associated with pragmatism. Researchers who align themselves with the pragmatic paradigm are chiefly concerned with understanding a problem and solving it. They are less concerned with philosophical assumptions about what they know and how they know it, and more concerned about finding out what works. As a result, researchers operating within a pragmatic paradigm often flexibly integrate the use of quantitative and qualitative methods in search of the answers they seek (Creswell, 2003). In recent years, the field of developmental science has been greatly enriched by mixed-methods approaches to studying developmental processes (Weisner, 2005). As a result, more researchers have become advocates of and experts in integrating quantitative and qualitative research.

Both quantitative and qualitative data and analyses were used to address the aims of this dissertation. This dissertation utilized a sequential design involving two studies. Study 1 employed quantitative secondary analyses using an existing data set that includes a large corpus of time-sampled observational data. Study 2 applied both quantitative and qualitative analyses to classroom video and teacher interview data collected in two Pre-K classrooms. Although each study produced distinct results (Chapters 4 and 5), the final interpretation of results in this dissertation (Chapter 6) integrates findings from all analyses conducted for this dissertation as a whole. Integrating findings that incorporate multiple modes of data collection and approaches to analysis is a strength of mixed-methods research design (Creswell, 2003).

Research Aims

This dissertation was motivated by several gaps in the current research literature. First of all, we know that adults can facilitate children's language development by providing rich language input and promoting high levels of joint attentional engagement, but we do not know the extent to which these facilitative aspects of input and interaction co-occur across various activity settings in Pre-K classrooms. Second, based on existing literature, it is clear that the quantity and quality of teacher-child interactions varies across activity settings in early childhood classrooms. However, we currently have an incomplete picture of classroom life because studies tend to adopt either a teacher-level or child-level approach to analysis. A combination of teacher- and child-level analyses can afford a more nuanced view of potential tradeoffs in the quality of children's language experiences across various activity settings. Third, more research is needed to explore the relationship between teachers' pedagogical goals and variation in children's language experiences across activity settings in Pre-K classrooms. To address these gaps in understanding, the research aims of this dissertation were to:

1. Examine the extent to which teacher-child interactions in Pre-K classrooms are simultaneously characterized by rich language input and high levels of joint attentional engagement and determine what classroom activity settings are more likely to set the stage for such interactions.

2. Provide a detailed, moment-by-moment account of teacher language input and children's opportunities for joint attentional engagement across activity settings in a small sample of Pre-K classrooms.

3. Explore the relationship between teachers' pedagogical goals and children's language experiences across activity settings in Pre-K classrooms.

The first research aim was addressed using quantitative secondary analysis of an existing data set that includes a large corpus of time-sampled observations. The second and third research aims were addressed using a mixed-method approach that involved language transcript analysis and coding of classroom video and teacher interview data collected for the purposes of this dissertation.

CHAPTER IV: STUDY 1

Research Questions

The overarching goal of Study 1 is to examine children's language experiences in Pre-K classrooms and to determine whether the quantity and quality of these experiences varies as a function of activity settings. Specifically, Study I is guided by the following research questions:

RQ1: In Pre-K classrooms, to what extent do children experience teacher-child interactions that are characterized by rich language input and high levels of joint engagement?

RQ2: What Pre-K classroom activity settings are more likely to set the stage for teacher-child interactions that are characterized by rich language input and high levels of joint engagement?

Method

Study 1 uses existing data from the Los Angeles Exploring Children's Early Learning Settings (LAExCELS) study, a longitudinal investigation of school readiness among low-income children in Los Angeles County, California. The following section delineates a subset of the sampling procedures, data collection procedures, and measures used in the original investigation; only aspects that are relevant in the current study are described. For a full description of methods employed in the original study, see Fuligni, Howes, Lara-Cinisomo, and Karoly (2009), Fuligni, Howes, Huang, Hong, Lara-Cinisomo, and Karoly (2012), and Howes, Fuligni, Hong, Huang, Lara-Cinisomo, and Karoly (2013).

Sample

In the LAExCELS study, a variety of early childhood education programs serving low-income children in Los Angeles County were selected to represent a range of diverse

learning settings available to low-income children. In the first year of the study, the sampling procedure involved recruiting public and private center-based preschool programs and family child care programs serving 3-year-olds. Programs were included if they served low-income families exclusively or made spaces available for families qualifying for subsidies. Within each program, up to four target children were randomly selected among families that agreed to participate. In addition to these target children, a comparison group of children not attending any licensed early learning program was recruited. Children were recruited for the comparison group using several methods that were likely to yield low-income families; for example, mailings to families on Los Angeles County's eligibility list for subsidized child care and flyers in publicly-funded health and nutrition programs. During the second year of the study, target children from the study classrooms and comparison group children were followed into any early learning programs they attended as 4-year-olds.

The analyses for the current study are conducted with data obtained during the second year of the LAExCELS study to examine 4-year-old children's experiences in center-based Pre-K classrooms. The sample includes 162 children in 89 classrooms. The children represented in this sample come from primarily low-income families (median income-to-needs ratio of 1.15) with diverse maternal education levels, ranging from 2nd grade to the attainment of a graduate degree (median = high school graduate). More than half of the children sampled were girls (57%) and approximately two-thirds of the children were Latino (67%). Among the classrooms sampled, 54% were in public programs and 46% were in private programs. Most public programs (59%) offered part-day services. In contrast, a majority of private programs (71%) provided full-day

services. Group size ranged from 8 to 58 children, with a mean of 20.8 (SD = 7.8) and the average child-adult ratio was 7.8 (SD = 2.4).

Procedures and Measures

Classroom Observations. During each year of the LAExCELS study, highly trained research staff visited each program for at least two days to conduct classroom observations. An extensive battery of measures was used to capture a wide array of features related to children's learning experiences, including the global quality of interactions and academic experiences provided; emotional support, instructional support, and classroom organization; and time spent in various activity settings, academic activities and interactions. This study analyzes data collected using the Emergent Academics Snapshot (EAS) (Ritchie, Howes, Kraft-Sayre, & Weiser, 2001).

Emergent Academics Snapshot. The Emergent Academics Snapshot (EAS) (Ritchie et al., 2001) uses a time-sampling procedure to capture aspects of adult-child interaction and children's engagement in various activities. Snapshot observations are conducted over the course of a program morning. During this observation period, up to four target children are observed in sequence. To begin, the observer locates the first target child and spends 1 minute observing and coding the child's activities and interactions. Then the observer moves on to the next target child. This process continues until a minimum of 30 and up to 50 observations have been collected for each child.

Data collected for three coding categories of the EAS were analyzed for the purposes of this study: (1) Activity Setting, (2) Child Engagement, and (3) Teacher-Child Social Integration. *Activity Setting* is a forced-choice category indicating the general participant structure of the time period. Activity setting codes include whole group,

small group, free choice, meals, and basics. *Child Engagement* is a non-mutually exclusive rating of the pre-academic content area addressed by the target child's activity. Child engagement codes include pre-reading, letter/sound, writing, oral language development, math/number, science, social studies, computer, gross motor, fantasy play, and aesthetics. The child engagement code of interest in this study was oral language development, which was coded whenever the teacher facilitated the target child's expressive language. *Teacher-Child Social Integration* captures the extent to which the child is attentively and collaboratively engaged with the teacher in reciprocal social interactions. Teacher-child social integration includes the following mutually exclusive codes: not engaged, minimally integrated, and fully integrated. See Appendix I for a detailed description of all the EAS codes that were relevant for this analysis.

For the purposes of this study, a new coding category was created, called *High Oral Language Support*. High Oral Language Support was coded for observations that were simultaneously coded for oral language development and fully integrated levels of teacher-child social integration.

Data collected using the time-sampling methodology employed in the EAS can be used in a variety of ways, depending on the unit of analysis (e.g. Kontos, Burchinal, Howes, Wisseh, & Galinsky, 2002; Fuligni et al., 2012). Typically, snapshot observations are aggregated because the unit of analysis is the child or classroom. In studies that focus on the child as the unit of analysis, within-child snapshot observations are aggregated to produce summary scores, which represent the proportion of the observation time period that a particular activity or interaction was observed for a given child. In studies where the classroom is the unit of analysis, snapshot observations can be

further collapsed to produce classroom level scores. For the purposes of this study, snapshot observations were not aggregated for analysis. Since the goal was to examine patterns in the co-occurrence of teacher-child interactions (i.e., teacher-child social integration, oral language development, high oral language support) and contextual classroom factors (i.e., activity setting), time-sampled EAS data was analyzed at the event level. A total of 5925 observations (relatively evenly distributed across 89 classrooms) was available for analysis.

Training and Reliability. Each of the observational tools used in this study required extensive observer training and assessment of reliability. Training included initial group introductions and background readings for each measure, videotaped observations for practice purposes, in-the-field practice including debriefing with a certified trainer, and reliability testing done either in the field or via master-coded videotapes. The trainers were individuals with MAs or PhDs in child development or psychology who had been trained by and established interobserver reliability with the PIs and/or the developers of each measure and also had skills in training others on the measure. For all measures, trainers met the reference standard that had been set by the researchers as an adequate level. Requirements for certification of observers before collecting data included successful completion of the training course as well as achievement of item-level scores of at least *kappa* greater than or equal to .65 with the trainers. Kappas of .65 or higher are viewed as indicating good agreement (Landis & Koch, 1977).

Results

Descriptive Analyses

RQ1: In Pre-K classrooms, to what extent do children experience teacher-child interactions that are characterized by rich language input and high levels of joint engagement?

To address the first research question, descriptive analyses were used to examine the occurrence of varying levels of teacher-child social integration, oral language development, and high oral language support. The extent to which these interactions occurred within various activity settings was also examined.

Frequencies for activity setting, teacher-child social integration, oral language development, and high oral language support are reported in Table 1. In nearly half of the observations recorded, children were involved in free choice activities (44%). The remaining observations were relatively evenly divided among whole group (15%), small group (10%), meals (15%), and basics (16%). In a majority of the observations, the target child was not engaged with a teacher (52%). When the target child was engaged with the teacher, he or she was more likely to be minimally integrated (34%) than fully integrated (14%). Oral language development was only observed in 9% of all recorded observations. These observations were distributed across 82% of the children and 87% of the classrooms sampled. Among the children sampled, 18% did not experience oral language development at any point in the observation period. Among the classrooms sampled, oral language development was never observed in 13% of the classrooms. High oral language support comprised only 5% of all the observations recorded. These observations were distributed across 61% of the children and 65% of the classrooms sampled. Among the children sampled, 39% did not experience high oral language

support at any point in the observation period. Among the classrooms sampled, high oral language support was never observed in 35% of the classrooms.

Table 1 also reports the percentage of observations coded for oral language development, various levels of teacher-child social integration, and high oral language support within each activity setting. During free choice activities, children were unengaged with the teacher 77% of the time. Fully integrated levels of teacher-child social integration were more prevalent during small group (22%) and whole group (18%) than during meals (13%), free choice (12%), or basics (11%). Children were most likely to experience oral language development and high oral language support during whole group activities and least likely to experience such interactions during free choice activities. During whole group activities, children experienced oral language development in 23% of the observations and high oral language support in 9% of the observations. In contrast, during free choice activities, children only experienced oral language development and high oral language support in 4% and 3 % of the observations, respectively.

Table 1

Descriptive Statistics

	Overall (N = 5925)		% Within Activity Settings				
	n	%	Whole Group	Small Group	Free Choice	Meals	Basics
Activity Setting							
Whole Group	869	15					
Small Group	614	10					
Free Choice	2618	44					
Meals	862	15					
Basics	962	16					
Teacher-Child Social Integration							
Not Engaged	3072	52	13	30	77	38	45
Minimally Integrated	2036	34	69	48	11	49	44
Fully Integrated	817	14	18	22	12	13	11
Oral Language Development	535	9	23	13	4	12	6
High Oral Language Support	273	5	9	8	3	6	3

Logistic Regression Analyses

RQ2: What Pre-K classroom activity settings are more likely to set the stage for teacher-child interactions that are characterized by rich language input and high levels of joint engagement?

To address the second research question, logistic regression based on a generalized estimating equations (GEE) approach (Liang & Zeger, 1986) was used to determine the relative likelihood of experiencing various levels of teacher-child social integration, oral language development, and high oral language support across different activity settings. This statistical approach is useful for fitting logistic regression models when the data involves repeated assessments of categorical outcomes (e.g., Kontos et al., 2002; Powell, Burchinal, File, & Kontos, 2008).

The results of logistic regression analyses are reported in Tables 2 and 3. The model in these analyses is a reference cell model. As such, parameter estimates test whether there is an increase in the likelihood of an outcome (e.g., high oral language support or fully integrated) co-occurring with various factors of interest (e.g., activity settings), in comparison to the likelihood of the outcome co-occurring with the factor selected as the reference cell condition. For example, in Table 2, the parameter estimate β = -1.27 for free choice indicates that children were significantly less likely to experience high oral language support during free choice than whole group (reference cell). The odds ratio indicates the extent to which each factor of interest increases or decreases the likelihood of co-occurrence with the outcome, in comparison to the factor selected as the reference cell. An odds ratio of greater than 1 indicates that the probability of the outcome co-occurring with the factor of interest is higher than the probability of the outcome co-occurring with the reference condition. An odds ratio of less than 1 means the probability of the outcome co-occurring with the factor of interest is lower than the probability of the outcome co-occurring with the reference condition. For example, in Table 2, an odds ratio of .28 for free choice indicates that the odds of children experiencing high oral language support during free choice is 28 percent of the odds of them experiencing high oral language support during whole group (reference cell). In other words, children were 3.57 times more likely experience high oral language support during whole group as opposed to free choice activities.

For the first set of regression analyses, shown in Table 2, I used the full corpus of observations (N = 5925) to model the log odds of high oral language support as a function of activity setting. Results indicate that children were significantly more likely

to experience high oral language support during whole group than during free choice (β = -1.27, $p < .001$) or basics (β = -1.15, $p < .001$). Children were 3.57 times more likely to experience high oral language support during whole group as opposed to free choice activities and children were 3.13 times more likely to experience this support during whole group than during basics. Results also showed that children were significantly more likely to experience high oral language support during small group than during free choice (β = -1.21, $p < .001$) or basics (β = -1.09, $p < .001$). Children were 3.33 times more likely to experience high oral language support during small group rather than free choice activities and children were 2.94 times more likely to experience this support during small group than during basics.

Table 2

Predicting High Oral Language Support from Activity Setting

	All Observations (N = 5925)		
	β	(S.E.)	Odds ratio
Activity Setting			
Reference Cell: Whole Group			
Small Group	-.06	(.21)	.94
Free Choice	-1.27***	(.21)	.28
Meals	-.37	(.19)	.69
Basics	-1.15***	(.25)	.32
Reference Cell: Small Group			
Whole Group	.06	(.21)	1.06
Free Choice	-1.21***	(.20)	.30
Meals	-.31	(.21)	.74
Basics	-1.09***	(.25)	.34

*p<.05, **p<.01, ***p<.001

For the second set of regression analyses, shown in Table 3, only observations coded for oral language development were included in the analysis. Using this restricted sample (N = 535), I modeled the log odds of fully integrated teacher-child social integration as a function of activity setting. Results suggest that children were significantly more likely to be fully integrated during teacher-child interactions that support oral language development when such interactions occurred within the context of free choice activities rather than whole group (β = -1.30, $p < .001$), meals (β = -.67, $p < .05$), or basics (β = -.85, $p < .01$). Children were 3.70, 1.96, and 2.33 times more likely to be fully engaged during free choice as opposed to whole group, meals, and basics, respectively.

Table 3

Predicting Fully Integrated Teacher-Child Social Integration from Activity Setting

	Observations with Oral Language Development (N = 535)		
	β	(S.E.)	Odds ratio
Activity Setting			
Reference Cell: Free Choice			
Whole Group	-1.30***	(.29)	.27
Small Group	-.33	(.30)	.72
Meals/Snacks	-.67*	(.31)	.51
Basics	-.85**	(.26)	.43
Reference Cell: Small Group			
Whole Group	-.96**	(.28)	.38
Free Choice	.33	(.30)	1.40
Meals/Snacks	-.34	(.32)	.71
Basics	-.52	(.32)	.60

*p<.05, **p<.01, ***p<.001

Results also showed that children were significantly more likely to be fully engaged during teacher-child interactions that support oral language development when such

interactions occurred within the context of small group as opposed to whole group (β = -.96, $p < .01$) activity settings. Children were 2.63 times more likely to be fully engaged during small group than whole group activities.

Discussion

This study found that teacher-child interactions, which support children's oral language development, occur infrequently in many Pre-K classrooms. Of the 5,925 observations that were analyzed in this study, only 273 (5%) involved teacher-child interactions that provided high support for children's oral language development. Additionally, this study examined support for children's oral language development across Pre-K classroom activity settings and found that various activity settings provide differential opportunities for oral language support.

Analyses showed that high support for children's oral language development was more likely to occur during whole group and small group activity settings. High oral language support was approximately 3 times more likely to occur during whole group and small group than during free choice or transitions. One possible explanation for this finding has to do with children's opportunities for engagement with their teachers. During whole group activity settings, all the children in the classroom have the opportunity to be involved with the teacher. In contrast, within the context of free choice activities, children's opportunities to engage with their teachers are relatively rare. During free choice, teachers have to divide their time between the 18 to 25 children in the classroom; thus, individual children's opportunities for engaging with the teacher are limited.

Another potential explanation for this finding has to do with differences in the ways that teachers interact with children across these various activity settings. During whole group and small group, teachers may have instructional goals for specific content that will be taught. Lessons unfold as teachers communicate information to children and solicit children's responses to assess their understanding, resulting in the potential for rich verbal exchanges. In contrast, during basics/transitions, the primary goal is to move children from one activity to the next, or to accomplish a routine task like clean up or toileting. As such, teacher talk is likely to be dominated by imperatives, directing or requesting children to engage in a desired action, rather than a verbal exchange. Opportunities for verbal exchanges during free choice may also be rare. Some teachers may have philosophical reasons for not engaging with children during free choice, believing that a hands-off approach is the best approach to facilitating children's play. Others may view their role as primarily supervisory, intervening only when absolutely necessary to keep children safe.

Although children's opportunities for experiencing teacher-child talk are relatively rare during free choice and small group, when teacher-child talk does occur during these activity settings, it is more likely to be characterized by high levels of joint attentional engagement. When the analysis sample was restricted to include only observations that involved teacher-child talk, analyses revealed that children were 4 times more likely to be fully engaged with their teachers during free choice than whole group. Children were 3 times more likely to be fully engaged with their teachers during small group than whole group. One possible explanation for these results has to do with teacher-child ratios, which are lower during small group and free choice. Thus teacher-

child interactions during these activity settings are more dyadic in nature. When the teacher is interacting with an individual child or a small group of children, the teacher can more easily follow the child's lead in the topic of conversation. Importantly, following the child's lead helps to foster interest, leading to deeper, extended conversations. Also, in one-on-one or small group conversations, the teacher can allow more time for children's responses, without having to worry about managing the attention of a large group of children.

In summary, the findings of this study suggest that teacher-child interactions which support children's oral language development occur infrequently in many Pre-K classrooms and the prevalence of these interactions differs across activity settings. Individual children are most likely to experience teacher-child interactions that support their oral language development during whole group activity settings. However, conversations occurring within the context of whole group activity settings are characterized by lower levels of teacher-child joint attentional engagement than conversations that occur during small group or free choice.

In interpreting these findings, it is important to acknowledge that we do not know what the optimal amount of teacher talk is and we should not assume that more teacher talk is always better. If quantity of talk was the only thing to consider, then the findings of this study would indicate that more time spent in whole group activity settings would be beneficial for children's language development. However, given that the quantity and quality of teacher talk are important to consider, the findings of this study do not suggest that any one activity setting is optimal for supporting children's language development. Rather, the findings of this study suggest that there is a tradeoff between the quantity and

quality of children's language experiences across Pre-K classroom activity settings. Various activity settings present different opportunities and challenges for supporting children's language development. Importantly, understanding these opportunities and challenges can help teachers to become more intentional in the amount of time they allocate to various activity settings within their daily classroom routine. Moreover, teachers can become better facilitators of children's language development across all activity settings if they learn to first recognize and then skillfully capitalize on opportunities for supporting children's language development when these opportunities arise in any given activity setting.

Limitations

One of the limitations of this study is that the measure of oral language development used captures only one of many facilitative aspects of adult linguistic input. The oral language development code in the Emergent Academics Snapshot is a good measure of children's opportunities for expressive oral language development, capturing instances when teachers were soliciting children's verbal contributions within the context of teacher-child conversations. While this is certainly one aspect of high quality teacher language input, there are many other facilitative aspects of teacher language input that are not captured by this code (e.g., lexical diversity, syntactic complexity, use of decontextualized language, facilitation of extended conversations, etc.).

This study provides a child-level perspective on oral language support in Pre-K classrooms by examining the experiences of randomly selected target children within each classroom sampled for this analysis. This approach has many strengths, including the ability to collect data in a large number of classrooms while learning about individual

children's experiences. One limitation of this approach is that we ultimately do not know what the teacher was doing during periods when the target child was not engaged with the teacher. For example, during free choice activity settings, when the child was not engaged with the teacher, we can only speculate about why this was the case. Was the teacher engaged with another child or was this teacher just unengaged and passive during free choice in general? A teacher-level analysis can help to fill these gaps in our understanding.

CHAPTER V: STUDY 2

Research Questions

The overarching goals of Study 2 are to provide a detailed account of teacher language input and children's opportunities for engagement with their teachers across activity settings in two Pre-K classrooms, and to explore how teachers' pedagogical goals are reflected in the language experiences they provide for children. To accomplish these goals, Study 2 utilizes utterance-level analyses of teacher-child conversations and qualitative analyses of teacher interviews. The following research questions are addressed:

RQ1: What are the characteristics of the language input provided by these two Pre-K teachers across various activity settings?

RQ2: To what extent do children in these two Pre-K classrooms have opportunities for joint engagement with their teachers across various activity settings?

RQ3: How are teachers' pedagogical goals reflected in the language experiences they provide for children?

Method

Study 2 involves micro-level analyses of teacher-child interactions in two Pre-K classrooms. The following section describes the participants, procedures, instruments, and analyses employed in this study.

Participants

Two Pre-K classrooms participated in this study. The first classroom is part of a publicly funded Pre-K program, recruited from a school district included in the LA ExCELS study, which provided the data for Study 1. This classroom will be referred to as "Classroom A" for the remainder of this dissertation. The second classroom was

recruited from a private demonstration elementary school affiliated with a large research university. For the purposes of this dissertation, this classroom will henceforth be referred to as "Classroom B." The following section describes program, child, and teacher characteristics for each participating classroom.

Classroom A. Classroom A is located on an elementary school campus in a low-income neighborhood within a suburban school district in Los Angeles County. As part of a public program, Classroom A is fully funded by the state and offers no-cost services to low-income families who qualify for enrollment based on income eligibility requirements. In terms of program philosophy, the teacher in Classroom A is required by the school district to implement a Pre-K curriculum published by Houghton Mifflin (Houghton Mifflin, n.d.). This curriculum focuses on children's academic school readiness and places a heavy emphasis on explicit instruction of literacy concepts.

At the time of the study, Classroom A provided part-day services; programming began at 8:30 AM and ended at 11:30 AM. The teaching staff included one teacher and two teaching assistants. There were 25 children enrolled in Classroom A, including 15 girls and 10 boys. All the children came from low-income families and a majority of the children were Latino (65%). Among non-Latino children, there were relatively equal numbers of African American, Asian, and Caucasian children, as well as a couple children of mixed-race backgrounds.

The lead teacher in Classroom A was Belinda Navarro[1], a middle-aged Latino woman. The children called her "Ms. Belinda." Ms. Belinda had an AA degree and over 20 years of teaching experience working with young children at the time of the study.

[1] In order to protect the identity of study participants, pseudonyms are used for all teachers and children.

Before becoming the lead teacher in Classroom A, Ms. Belinda had operated a private preschool for 10 years and had been a long-term substitute teacher at a publicly funded infant center for 3 years. At the time of the study, Ms. Belinda had served as the lead teacher in Classroom A for 10 years.

Classroom B. Classroom B is part of a demonstration elementary school, housed within the campus of a large research university that is located in an affluent neighborhood in Los Angeles County. Because of its affiliation with the education department of the university, the demonstration elementary school is designed to be an innovative school for children and a laboratory for teachers and researchers. The demonstration elementary school is funded by a combination of public and private funds and tuition costs are assessed on a sliding scale based on family income. In terms of program philosophy, the Pre-K classrooms at the demonstration school are heavily influenced by the Reggio Emilia approach to early childhood education (Edwards, Gandini, & Forman, 1998), which is based on principles of social constructivism (Vygotsky, 1978).

At the time of the study, Classroom B offered a part-day program which began at 8:30 AM and ended at 11:30 AM. The teaching staff included one teacher and two teaching assistants. Within the whole school population of 440 children, annual family income ranged widely from below $10,000 to $1,000,000 or more. Median annual family income was between $200,000 and $349,000, with over 25% of the children at the school falling within this family income bracket. There were 25 children enrolled in Classroom B; among them, 16 were girls and 9 were boys. Among children in Classroom B, thirteen (52%) were Caucasian, 8 (32%) were mixed-race, 3 (12%) were

African American, and 1 (4%) was Asian.

The lead teacher in Classroom B was Paige Hawkins, a middle-aged Caucasian woman. The children in the classroom referred to her as "Ms. Hawkins." Ms. Hawkins had a BA degree and 20 years of experience as an early childhood teacher at the time of the study. Before becoming the lead teacher in Classroom B, Ms. Hawkins had been an early childhood teacher for 10 years, working in 3 different preschools. At the time of the study, Ms. Hawkins was in her 10th year of teaching in the early childhood program at the demonstration elementary school.

Comparison of Classrooms. These two classrooms were recruited in order to provide a contrast in program type and program philosophy. Another point of contrast is that these two classrooms served populations that varied widely in terms of socioeconomic status. In spite of these differences, there were some important similarities between these two classrooms and teachers that should be noted. First of all, both teachers had 20 years of early childhood teaching experience and 10 or more years experience in their current positions at the time of the study. The long tenures of both of these teachers are not typical in the field of early childhood education, in which the annual average rate of job turnover is 30% (Whitebook & Bellm, 1999). However, these two teachers are representative of other early childhood teachers who have long tenures working in high quality programs that offer relatively high levels of compensation (Whitebook & Sakai, 2003; Whitebook, Sakai, Gerber, & Howes, 2001). Indeed, both programs recruited for this study are regarded as exemplary programs within their respective communities and both teachers had salaries that were on par with elementary school teachers. As such, their salaries far exceed typical wages found in many

community based early education programs.

Another similarity between these programs is that they are both housed within elementary school campuses. Being housed within the same campus does not necessarily guarantee that teachers are implementing practices which facilitate a seamless transition for children from Pre-K to kindergarten (Bailey, Huang, Ospiva, & Beauregard, submitted). However, in the case of the two programs recruited for this study, both Ms. Belinda and Ms. Hawkins had frequent communication and close collaborative relationships with kindergarten teachers. Importantly, their knowledge of what children would experience in kindergarten was influential in shaping their instructional goals and teaching practices.

Procedures

Classroom Observations and Videos. Classroom observations were conducted in May and June of 2011. Each participating classroom was observed for five full program days, from 8:30 AM to 11:30 AM. During the first three days of observation, the primary purpose was for the researcher to become familiar with the daily classroom routine. The researcher recorded field notes, paying close attention to the start and end times for activity settings. The first three days of observation also served to give teachers and children a chance to acclimate to the presence of a researcher in the classroom. On the fourth day of observation, the researcher brought video recording equipment into the classroom to figure out what spots in the classroom would work best for filming and to develop a plan for moving the camera from one location to the next in between activities. Although no actual videotaping occurred on this day, the presence of the camera was intended to give teachers and children an opportunity to acclimate to the presence of the

video equipment. The fifth and final day of observation was used to capture a full program day on video. Before children arrived, a lapel microphone was placed on the teacher. With the aid of the lapel microphone, it was possible to get a high quality recording of teacher talk without needing the camera to be in close proximity to the teacher. While videotaping, the researcher tried to preserve as wide a view as possible, with minimal zooming. Moving the camera was kept to a minimum as well and only done when necessary to follow the teacher.

Videotaping in both classrooms began at the beginning of the program day (8:30 AM) and continued until the last child had been dismissed (11:30 AM), resulting in a total recording time of 3 hours in Classroom A and 2 hours and 30 minutes of recording time in Classroom B. Videotaping in Classroom B was stopped for 30 minutes when the children went to P.E. In Classroom B, 20 to 30 minutes of every day were devoted to activities such as P.E., music, health, or visiting the library; these activities, called "specials," were not led by the classroom teacher. In both classrooms, the daily routine captured on video was similar to what the researcher had observed over the course of the week, in terms of the sequence and duration of activity settings. Table 4 describes the sequence and duration of activity settings videotaped in each classroom.

Analyses in Classroom A focused on *Circle Time* (whole group), *Centers Time* (indoor free choice), *Outside Time* (outdoor free choice), and *Lunch* (meal). In Classroom B, analyses focused on *Connections* (outdoor free choice), *Snack* (meal), *Morning Meeting* (whole group), and *Work Time* (small group).

Teacher Interviews. Teacher interviews were scheduled at the teachers' convenience and were conducted during or within a couple weeks of the 5-day classroom

Table 4

Sequence and Duration of Activity Settings Videotaped in Each Classroom

Start Time	Duration	Name of Activity	Activity Setting
Classroom A			
8:30 AM	20 Minutes	Arrival & Table Activity	Transition
8:50 AM	54 Minutes	Circle Time	Whole Group
9:44 AM	2 Minutes	Transition to Centers	Transition
9:46 AM	30 Minutes	Centers Time	Free Choice
10:16 AM	9 Minutes	Transition to Outside Time	Transition
10:25 AM	21 Minutes	Outside Time	Free Choice
10:46 AM	3 Minutes	Transition to Story Time	Transition
10:49 AM	7 Minutes	Story Time	Whole Group
10:56 AM	4 Minutes	Transition to Lunch	Transition
11:00 AM	17 Minutes	Lunch	Meal
11:17 AM	13 Minutes	Library Time & Dismissal	Transition
Classroom B			
8:30 AM	32 Minutes	Connections	Free Choice
9:02 AM	4 Minutes	Transition to Morning Song	Transition
9:06 AM	3 Minutes	Morning Song	Whole Group
9:09 AM	2 Minutes	Transition to Snack	Transition
9:11 AM	15 Minutes	Snack	Meal
9:26 AM	24 Minutes	Quiet Read	Transition
9:50 AM	22 Minutes	Morning Meeting	Whole Group
10:12 AM	2 Minutes	Transition to Work Time	Transition
10:14 AM	35 Minutes	Work Time	Small Group
10:49 AM	6 Minutes	Transition to P.E.	Transition
10:55 AM	30 Minutes	*P.E.	"Specials"
11:25 AM	2 Minutes	Transition back from P.E.	Transition
11:27 AM	3 Minutes	Dismissal	Transition

Note: *P.E. was not videotaped.

observation period. Interviews were conducted in a private space, either in an office or in the teachers' classroom at a time when children were not present. Interviews with Ms. Belinda (Classroom A) were conducted on the last three days of classroom observation. Interviews were conducted in Ms. Belinda's classroom, after all the children had been picked up by their parents at the end of the program day. The first interview lasted 16 minutes, the second interview lasted 29 minutes, and the third interview lasted 34

minutes. The total interview time with Ms. Belinda was 1 hour and 19 minutes. Two interviews were scheduled with Ms. Hawkins (Classroom B) after classroom observations had concluded. The first interview lasted 62 minutes and the second interview lasted 14 minutes, for a total interview time of 1 hour and 16 minutes. All interviews were transcribed by the author and the accuracy of the transcripts was verified by a second researcher.

Instrumentation

Ecocultural Pre-K Teacher Interview. For the purposes of this study, a semi-structured interview protocol was developed and used to engage the participating Pre-K teachers in conversations about their daily classroom routines. This interview protocol, the Ecocultural Pre-K Teacher Interview, was adapted from the Ecocultural Family Interview (Weisner, Bernheimer, & Coots, 1997).

The Ecocultural Family Interview (EFI) was designed to elicit narratives from parents regarding their daily family routines because asking parents to talk about routines has proven to be a useful way to learn about the wide range of ecological and cultural factors that exert an influence on family life (Weisner, Bernheimer, & Coots, 1997; Weisner, 2002). Rather than interrogating parents directly about their cultural goals, values, and beliefs or about a wide range of ecological resources and constraints, the EFI asks parents to describe what they actually do on a day-to-day basis, which is something that most people can talk about with relative ease. Within the context of these conversations, interviewers listen attentively and ask probing questions to try and understand the parent's meaning and the family's circumstances. In doing so, salient features of the ecocultural niche surrounding family life naturally emerge. The EFI is not

a static instrument. By design, it is meant to be a flexible instrument that can be revised for a wide range of research purposes. Indeed, researchers have adapted the EFI to study numerous aspects of family adaptation in a variety of populations (e.g., Arzubiaga, Rueda, & Monzo, 2002; Axia & Weisner, 2002; Lieber, Chin, Nihira, & Mink, 2001).

The Ecocultural Pre-K Teacher Interview (EPTI), developed for the purposes of this study, is the first application of the EFI to early childhood education settings. The EPTI elicits narratives from Pre-K teachers about their daily classroom routines. The protocol engages teachers through a mix of structured questions and open-ended prompts, all delivered within a conversational format. The conversational nature of the EPTI helps to ensure that teachers express their perspectives openly and freely, using their own words, categories, and emphases as much as possible. The EPTI protocol can be found in Appendix II.

Data Analysis Procedures

Data collected for this study was analyzed in various ways. First, quantitative analysis using a computer-based software program was applied to transcripts of classroom video to describe linguistic features of teacher talk. Second, a coding schema was developed to capture additional aspects of teacher talk that are known to influence children's language development. This coding schema was applied to transcripts of classroom video. Third, each individual child's opportunity for joint engagement with the teacher was coded. Fourth, transcripts of teacher interviews were examined qualitatively in relation to the research questions.

Computerized Language Analysis. Classroom videos were transcribed using the Codes for Human Analysis of Transcripts (CHAT) system, which is available through the

Child Language Data Exchange System (CHILDES; MacWhinney, 2000). In accordance with CHAT conventions, speech segments were divided into utterances. An utterance could be a word, a short phrase, a simple sentence, or a complex sentence with embedded clauses. Self-corrected speech, false starts, and pauses of two seconds or less were treated as one utterance. When there was a pause of more than two seconds in a speech segment, it was treated as two separate utterances. An utterance was never more than one complete sentence long. All videos were transcribed by the author and verified by a second researcher.

Transcripts were analyzed using Child Language ANalysis (CLAN), a suite of computer programs designed specifically to analyze data that has been transcribed using CHAT conventions (MacWhinney, 2000). The following linguistic features of teacher talk were analyzed: (a) amount of teacher talk, (b) rate of speech, (c) lexical diversity, and (d) conversational balance. *Amount of teacher talk* was calculated by counting the total number of utterances and words used by the teacher within a given activity setting. *Rate of speech* was calculated by dividing the total number of utterances or words by the amount of time (in minutes) that had elapsed during the activity setting. *Lexical diversity* was measured in two ways. First, the percentage of sophisticated vocabulary used by the teachers was calculated by dividing the number of "sophisticated" words used by the total number of unique word types used by the teacher within a given activity setting. To identify sophisticated vocabulary, a list of common words was developed and used as a filter. The list of common words included words that are part of an updated version of the Dale-Chall word list (Chall & Dale, 1995). This list is comprised of 3,000 words that teachers judge to be known by most fourth graders. Additionally, the Dale-Chall list was

expanded to include all linguistic forms of the base words (e.g., derivationally inflected forms included +'s, +s, +es, +ies, +d, +ed, +ied, +ing, +r, +est, +ier, +iest), resulting in a list of 7,875 common words. The second measure is *D*, an index of relative lexical diversity based on mathematical modeling (Malvern, Richards, Chipere, & Duran, 2004). This measure was developed to address problems with traditional approaches to calculating lexical diversity (i.e. number of different words, type-token ratio, mean segmental type-token ratio, etc.), which are susceptible to sample size (Malvern, et al., 2004). *Conversational balance* was also measured in two ways. First, the overall ratio of teacher utterances relative to child utterances was calculated. Second, the ratio of the teachers' mean length of turn in utterances (MLTu) to the child's mean length of turn in utterances was calculated.

Coding of Teacher Talk. A coding schema was developed to capture additional details regarding the functions served by teacher talk as well as the prevalence of extended conversations, which are known to facilitate children's language development. This coding schema draws from various studies that have analyzed teacher talk in early childhood classrooms by applying categorical codes at the utterance level (e.g., Dickinson & Porche, 2011; Gest et al., 2006; Dickinson et al., 2008). See Appendix III for a list of all codes with definitions and examples.

Two mutually exclusive codes were used to describe the functions of teacher talk: *Directives* and *Questions*. Directives were utterances that were intended to control a child's behavior. For example, "Let's just clean it up," and "Can you move please?" would be coded as directives. Questions were utterances intended to elicit information from the child. All utterances coded as questions were further coded as either *Closed-*

ended or *Open-ended*. Closed-ended was coded when requests for information were presented in a format that limited the children's choices (e.g., yes/no and multiple-choice questions). For example, "Are there any patterns?" and "Was it big or little?" would be coded as closed-ended questions. Open-ended was coded when requests for information were presented in a format that allowed children to choose any response they deemed appropriate. For example, "How are you feeling?" and "What do you think?" would be coded as open-ended questions. Another code, *Extended Conversation*, was coded for any utterance that was part of an extended conversation. In order to be considered an extended conversation, the teacher had to sustain a single topic of conversation or engage the child in solving a problem over the course of five or more teacher turns. All utterances were coded by the author, who developed the coding definitions. Additionally, 30% of the utterances were coded by a second researcher. The proportion of inter-rater agreements ranged from .81 to .86 for all codes.

Coding of Children's Opportunities for Joint Engagement. Each individual child's opportunity for joint engagement with the teacher was coded by reviewing the classroom video data. For each teacher utterance, each child was coded as *Engaged* if he or she was part of the social interaction involving the teacher. Conversely, if the child was not part of the social interaction involving the teacher, he or she was coded as *Unengaged.* For example, if the teacher was leading an activity that involved all the children in the classroom, every child would be coded as being engaged in the social interaction of the group. If the teacher was interacting with a small group of children, the children in the group would be coded as engaged but the rest of the children in the classroom, who were not involved in the group, would be coded as unengaged. This

measure was not intended to gauge the child's level of engagement with the teacher, but rather to determine whether the child had the opportunity to be engaged with the teacher or not. All utterances were coded by the author. Additionally, 30% of the utterances were coded by a second researcher. The proportion of inter-rater agreement was .87.

Qualitative Analysis of Teacher Interviews. Transcribed teacher interviews were analyzed using an inductive approach (Miles & Huberman, 1994). Analyses involved multiple readings of the entire corpus of transcripts to gain a holistic understanding of the data in relation to the research aims of this study. Specifically, interviews were analyzed for themes that characterized teachers' reflections on their overarching pedagogical goals, as well as their specific instructional goals with respect to particular activity settings. After identifying themes that emerged from the teacher interviews, the next step was to juxtapose teachers' pedagogical goals with observations of their practice, to explore how teachers' goals were reflected in the language experiences they provided for children.

Results

Children's Language Experiences Across Activity Settings

RQ1: What are the characteristics of the language input provided by these two Pre-K teachers across various activity settings?

RQ2: To what extent do children in these two Pre-K classrooms have opportunities for joint engagement with their teachers across various activity settings?

This section presents results for children's language experiences across activity settings. First, results from each classroom are presented. This is organized in the following way: (a) narrative descriptions of the observed activity setting and (b) results from computerized language analyses, coding of teacher talk, and coding of children's

opportunities for joint engagement. Then, the two classrooms are compared based on results from the language analyses and codes for teacher talk and joint engagement.

Classroom A

Circle Time is a teacher-directed whole group activity setting. During Circle Time, all the children sit together on a large rectangular rug, directly in front of the white board in the classroom. Ms. Belinda stands or sits in front of the children, with the white board directly behind her. Every day, Circle Time begins with Ms. Belinda and the children saying the Pledge of Allegiance in unison, followed by a counting activity involving the calendar on the whiteboard. Next, Ms. Belinda asks the children to choose a couple of songs to sing together. After they have finished singing together, Ms. Belinda leads the children in a variety of instructionally focused activities. There are always a variety of language and literacy activities incorporated into Circle Time. Other subjects, such as math, social studies, science, and health/nutrition are also woven into Circle Time, but not on a daily basis. Towards the end of Circle Time, Ms. Belinda will usually incorporate another music and movement activity. At the beginning of the year, Circle Time may only last 10 to 15 minutes. This time gradually lengthens, such that Circle Time lasts 30 to 45 minutes or more at the end of the school year. On the day of videotaping, Circle Time began at 8:50 AM and lasted until 9:44 AM, for a total duration of 53 minutes, 37 seconds.

Results from computerized language analyses, coding of teacher talk, and coding of children's opportunities for joint engagement during Circle Time are presented in Table 5. During Circle Time, every child had the opportunity to be engaged with Ms. Belinda for the entire duration of the whole group activity (100% of utterances). In

comparison to the language input provided during other activity settings, Ms. Belinda's rate of speech was highest during Circle Time, at 108 words per minute and 25 utterances per minute. Ms. Belinda also used the widest range of vocabulary (D = 117.71) and the highest proportion of sophisticated vocabulary (11% of utterances) during Circle Time. Ms. Belinda was more of a dominant conversational partner during Circle Time than during Centers Time or Lunch. On average, she contributed 3.55 utterances for every child utterance and her conversational turns were 2.37 times longer (in utterances) than children's turns. During Circle Time, nearly a quarter of Ms. Belinda's utterances were directives (23% of utterances), second only to the proportion of directives she used during Outside Time. Questions were less prevalent than directives during Circle Time, comprising 16% of Ms. Belinda's utterances. This was less than the proportion of questions used during Centers Time and Lunch. Extended conversations were rare during Circle Time, comprising only 8% of Ms. Belinda's utterances, the lowest proportion of extended conversations observed across all activity settings.

Centers Time is an indoor free choice activity setting. During Centers Time, children are free to choose any activity in the classroom that they would like to engage in, from art/sensory materials, to dramatic play, to building blocks and other manipulatives, to computers, for example. While children engage in various activities of their choosing, Ms. Belinda walks around the classroom, observing and engaging with them. During Centers Time, children also take turns participating in teacher-directed small group activities, led by the 2 teaching assistants. Since Ms. Belinda did not facilitate these small groups, Centers Time was treated as an indoor free choice activity setting in this analysis. The amount of time spent in Centers Time fluctuates depending on the amount

Table 5

Characteristics of Teacher Talk and Children's Opportunities for Joint Engagement in Classroom A

	Circle Time (Whole Group)	Centers Time (Free Choice)	Outside Time (Free Choice)	Lunch (Meal)
Minutes Analyzed	53:37	29:51	20:25	16:28
Amount of Teacher Talk				
Words	5835	2966	1814	1544
Utterances	1364	649	406	329
Rate of Speech				
Words/Min	108	99	89	93
Utterances/Min	25	22	20	19
Lexical Diversity				
D - Optimum Average Value	117.71	98.48	85.29	92.02
% Sophisticated Vocabulary	11%	8%	7%	5%
Conversational Balance				
Teacher-Child Utterance Ratio	3.55	2.77	4.41	2.69
Teacher-Child MLTu Ratio	2.37	2.05	2.63	2.05
Teacher Talk Codes				
Directives	23%	10%	27%	20%
Questions	16%	26%	14%	24%
Closed-ended	10%	18%	10%	19%
Open-ended	6%	8%	4%	5%
Extended Conversation	8%	74%	11%	36%
Children's Opportunities for Engagement				
Total Number of Children	23	23	23	23
Number of Children Engaged				
0% of teacher utterances	0 (0%)	0 (0%)	4 (17%)	0 (0%)
1% - 10%	0 (0%)	11 (48%)	6 (26%)	16 (70%)
11% - 20%	0 (0%)	11 (48%)	4 (17%)	0 (0%)
21% - 30%	0 (0%)	1 (4%)	6 (26%)	0 (0%)
31% - 40%	0 (0%)	0 (0%)	2 (9%)	0 (0%)
41% - 50%	0 (0%)	0 (0%)	0 (0%)	0 (0%)
51% - 60%	0 (0%)	0 (0%)	1 (4%)	7 (30%)
61% - 70%	0 (0%)	0 (0%)	0 (0%)	0 (0%)
71% - 80%	0 (0%)	0 (0%)	0 (0%)	0 (0%)
81% - 90%	0 (0%)	0 (0%)	0 (0%)	0 (0%)
91% - 100%	23 (100%)	0 (0%)	0 (0%)	0 (0%)

of time spent in Circle Time. On the day of videotaping, Centers Time began at 9:46 AM and ended at 10:16 AM, for a total of 29 minutes, 51 seconds.

Results from computerized language analyses, coding of teacher talk, and coding of children's opportunities for joint engagement during Centers Time are presented in Table 5 and Figure 2. During Centers Time, every child had the opportunity to engage with Ms. Belinda, but only for a limited amount of time. Approximately half of the children in the classroom (48%) were engaged with Ms. Belinda for only 1% to 10% of her utterances. The other half of the children in the classroom (48%) had slightly more opportunities for engagement; they were engaged during 11% to 20% of Ms. Belinda's utterances. The language input provided by Ms. Belinda during Centers Time was relatively high in terms of rate of speech (99 words per minute, 22 utterances per minute) and lexical diversity (D = 98.48, 8% sophisticated vocabulary), second only to the language input provided during Circle Time. Conversations during Centers Time included a higher proportion of verbal contributions from children than conversations during Circle Time and Outside Time. On average, Ms. Belinda contributed 2.77 utterances for every child utterance and her conversational turns were 2.05 times longer (in utterances) than children's turns. During Centers Time, directives comprised only 10% of Ms. Belinda's utterances, the lowest proportion observed across all activity settings. In contrast, proportion of questions (26% of utterances) and extended conversations (74% of utterances) were the highest observed across all activity settings.

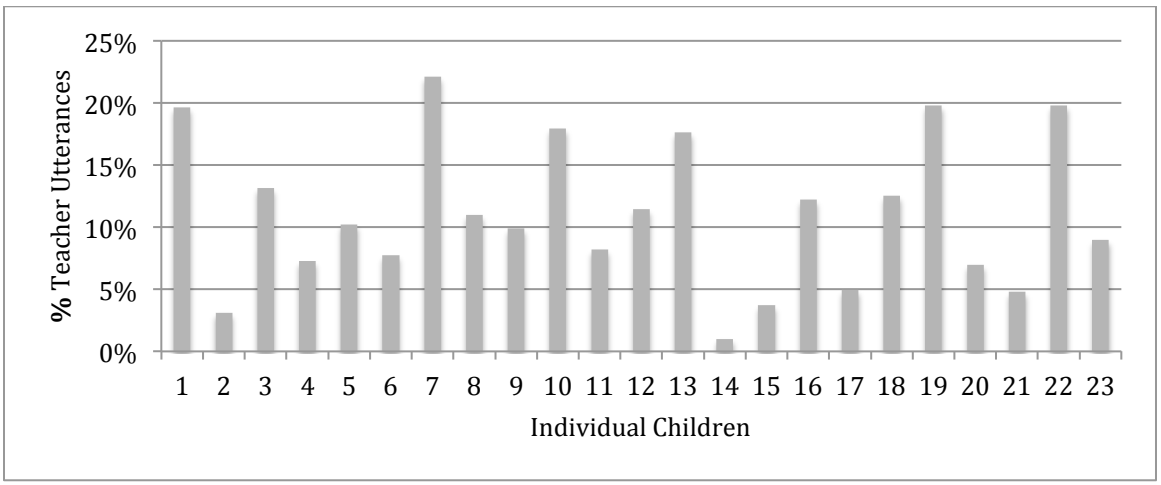

Figure 2. Individual children's opportunities for joint engagement in Classroom A: Centers Time (indoor free choice).

Outside Time is an outdoor free choice activity setting. During Outside Time, the children are free to choose any activity in the outdoor play area that is adjacent to the classroom. This outdoor play area includes a large climbing structure, a track with tricycles, a large field with gross motor equipment (i.e., hoops, balance beam, balls, etc.), and a dramatic play area with a house and a trunk with dress-up clothes. There are also large tables in the outdoor play area, where Ms. Belinda provides various materials (i.e. art, manipulatives, musical instruments, etc.) for the children to use outside. During Outside Time, Ms. Belinda walks around the yard, observing and engaging with the children. On the day of videotaping, Outside Time began at 10:25 AM and ended at 10:46 AM, for a total duration of 20 minutes, 25 seconds.

Results from computerized language analyses, coding of teacher talk, and coding of children's opportunities for joint engagement during Outside Time are presented in Table 5 and Figure 3. During Outside Time, 43% of the children were engaged during 10% of Ms. Belinda's utterances or less. Another 43% were engaged for 11% to 30% of

her utterances. Two children were engaged for 31% to 40% and one child was engaged with Ms. Belinda during 54% of her utterances. The language input provided by Ms. Belinda during Outside Time was relatively low in terms of rate of speech (89 words per minute, 20 utterances per minute) and lexical diversity (*D* = 85.29, 7% sophisticated vocabulary), compared to Circle Time and Centers Time. During Outside Time, Ms. Belinda was a more dominant conversational partner than she was during any other activity setting. On average, Ms. Belinda contributed 4.41 utterances for every child utterance and her conversational turns were 2.63 times longer (in utterances) than children's turns. Directives were more prevalent (27% of utterances) and questions were less prevalent (14% of utterances) during Outside Time than during any other activity setting. Extended conversations were relatively rare (11% of utterances) during Outside Time.

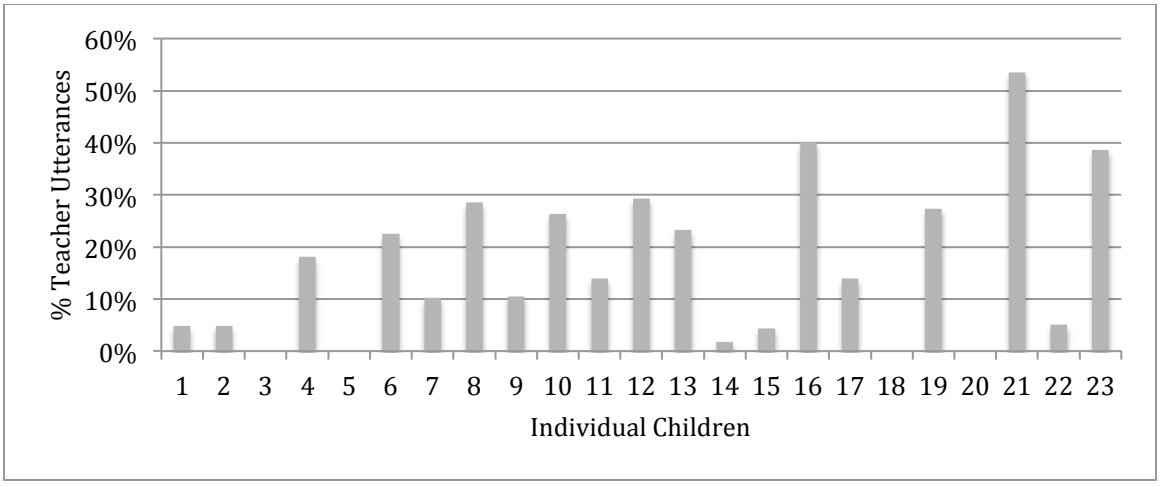

Figure 3. Individual children's opportunities for joint engagement in Classroom A: Outside Time (outdoor free choice).

Lunch is when all the children gather together for a meal in the classroom. Lunch is provided by the school district, so all the children are served the same foods. The children are assigned to sit at three large tables and instructed to wait until all the children have washed their hands and are sitting down to begin eating all together. Each table has one adult and 7 to 9 children. The adults do not eat with the children during Lunch. During Lunch, Ms. Belinda primarily engages with the children at her table. On the day of videotaping, Lunch began at 11:00 AM and lasted until 11:17 AM, for a total time of 16 minutes, 28 seconds.

Results from computerized language analyses, coding of teacher talk, and coding of children's opportunities for joint engagement during Lunch are presented in Table 5 and Figure 4. During Lunch, children's opportunities for engagement with Ms. Belinda varied widely, depending on whether they had been assigned to sit at her table or not. While most of the children in the classroom (70%) were only engaged with Ms. Belinda when she made announcements to the whole class (3% of utterances), the 7 children (30%) who were assigned to sit with Ms. Belinda were engaged with her for an extended period (38% to 60% of utterances). The language input provided by Ms. Belinda during Lunch was relatively low in terms of rate of speech (93 words per minute, 19 utterances per minute) and lexical diversity (D = 92.02, 5% sophisticated vocabulary), compared to Circle Time and Centers Time. Conversations during Lunch included a higher proportion of verbal contributions from children than conversations during Circle Time and Outside Time. On average, Ms. Belinda contributed 2.69 utterances for every child utterance and her conversational turns were 2.05 times longer (in utterances) than children's turns. During Lunch, there was a relatively high prevalence of questions (24% of utterances),

and extended conversations (36% of utterances). During Lunch, use of directives was less prevalent than during Circle Time and Outside Time, but still accounted for 20% of the utterances.

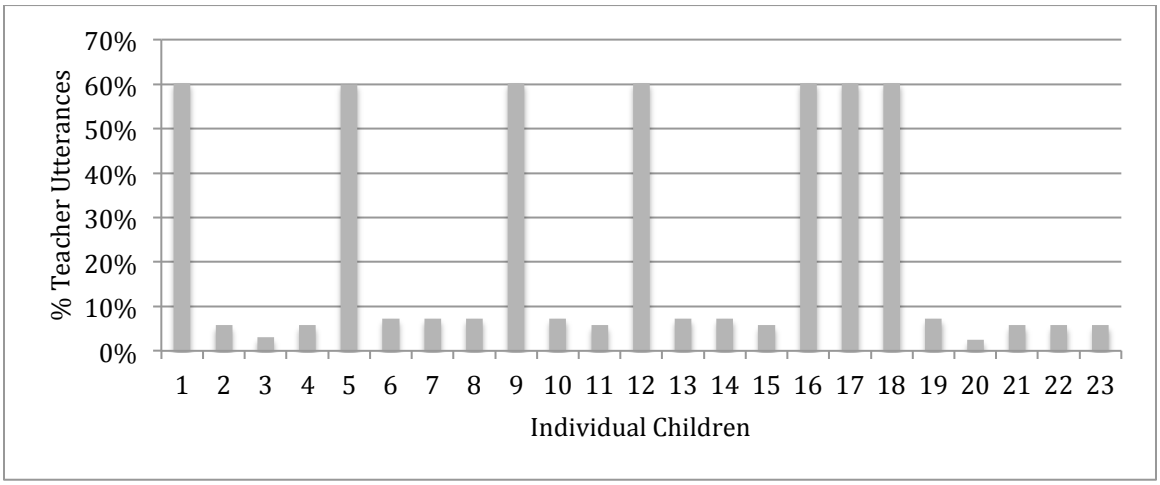

Figure 4. Individual children's opportunities for joint engagement in Classroom A: Lunch (meal).

Classroom B

Connections is an outdoor free choice activity setting. Although children have access to the classroom during this time, children are encouraged to select activities in the large outdoor play area that is adjacent to the classroom. The outdoor play area has various structures and trees that are suitable for climbing, sand and dirt boxes, and gross motor equipment (i.e., bicycles, hoops, balls, jump ropes, etc.). Additionally, art materials and various manipulatives are provided on large tables in the outdoor play area. During Connections, Ms. Hawkins walks around the yard, observing and engaging with children. Since Connections is the first activity setting of the day, Ms. Hawkins also spends time talking to parents who want to check in with her as they arrive. On the day of

videotaping, Connections began at 8:30 AM and lasted until 9:02 AM, for a total of 32 minutes, 37 seconds.

Results from computerized language analyses, coding of teacher talk, and coding of children's opportunities for joint engagement during Connections are presented in Table 6 and Figure 5. During Connections, children's opportunities to engage with Ms. Hawkins varied widely. Six children (26%) did not have any opportunities to engage with Ms. Hawkins. A majority of the children (56%) were engaged during 1% to 20% of her utterances. Four children (17%) were engaged for 41% to 60% of her utterances. Ms. Hawkins' rate of speech (55 words per minute, 10 utterances per minute) and the lexical diversity (D = 88.92, 6% sophisticated vocabulary) of the language input she provided was relatively low during Connections, compared to the language input she provided during Morning Meeting and Work Time. Conversations during Connections included a higher proportion of verbal contributions from children than conversations during Morning Meeting or Work Time. On average, Ms. Hawkins contributed 1.89 utterances for every child utterance and her conversational turns were 1.69 times longer (in utterances) than children's turns. During Connections, Ms. Hawkins adopted an elaborative conversational style characterized by a relatively high prevalence of questions (35% of utterances) and extended conversations (48% of utterances). Questions and extended conversations were more prevalent during Connections than in any other activity setting. Ms. Hawkins also used directives (16% of utterances) during Connections.

Table 6

Characteristics of Teacher Talk and Children's Opportunities for Joint Engagement in Classroom B

	Connections (Free Choice)	Snack (Meal)	Morning Meeting (Whole Group)	Work Time (Small Group)
Minutes Analyzed	32:37	14:30	22:24	35:36
Amount of Teacher Talk				
Words	1790	603	2111	3648
Utterances	315	113	409	749
Rate of Speech				
Words/Min	55	42	94	102
Utterances/Min	10	8	18	21
Lexical Diversity				
D - Optimum Average Value	88.92	90.58	112.83	99.40
Sophisticated Vocabulary	6%	6%	12%	11%
Conversational Balance				
Teacher-Child Utterance Ratio	1.89	2.03	3.21	2.21
Teacher-Child MLTu Ratio	1.69	1.50	2.54	1.96
Teacher Talk Codes				
Directives	16%	9%	17%	15%
Questions	35%	18%	20%	25%
Closed-ended	23%	17%	10%	16%
Open-ended	12%	1%	10%	8%
Extended Conversation	48%	10%	24%	41%
Children's Opportunities for Engagement				
Total Number of Children	23	23	23	23
Number of Children Engaged				
0% of teacher utterances	6 (26%)	0 (0%)	0 (0%)	0 (0%)
1% - 10%	10 (43%)	18 (79%)	0 (0%)	18 (79%)
11% - 20%	3 (13%)	2 (9%)	0 (0%)	0 (0%)
21% - 30%	0 (0%)	0 (0%)	0 (0%)	0 (0%)
31% - 40%	0 (0%)	0 (0%)	0 (0%)	1 (4%)
41% - 50%	2 (9%)	0 (0%)	0 (0%)	4 (17%)
51% - 60%	2 (9%)	1 (4%)	0 (0%)	0 (0%)
61% - 70%	0 (0%)	1 (4%)	0 (0%)	0 (0%)
71% - 80%	0 (0%)	1 (4%)	0 (0%)	0 (0%)
81% - 90%	0 (0%)	0 (0%)	0 (0%)	0 (0%)
91% - 100%	0 (0%)	0 (0%)	23 (100%)	0 (0%)

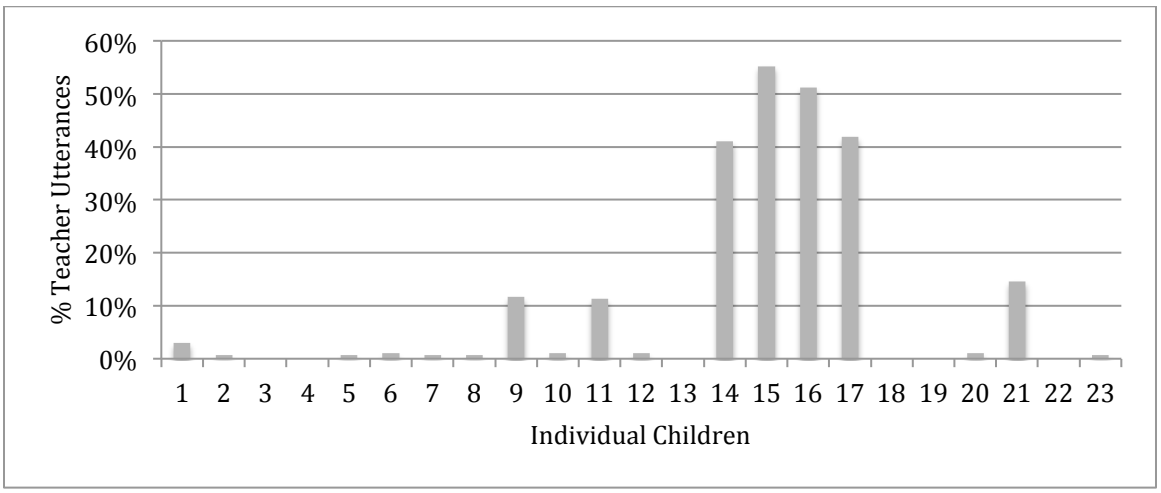

Figure 5. Individual children's opportunities for joint engagement in Classroom B: Connections (outdoor free choice).

Snack is when all the children gather for a meal together. During snack, the children eat whatever food they have brought from home. Ms. Hawkins and the two teacher assistants usually eat during this time as well. Children and adults sit together at several large tables that are located in the outdoor play area, just outside the entrance to the classroom. The children are free to sit anywhere they choose. During Snack, Ms. Hawkins eats her food and primarily engages with children who are seated in close proximity to her. On the day of videotaping, Snack began at 9:11 AM and lasted until 9:26 AM, for a total of 14 minutes, 30 seconds.

Results from computerized language analyses, coding of teacher talk, and coding of children's opportunities for joint engagement during Snack are presented in Table 6 and Figure 6. During Snack, Ms. Hawkins primarily engaged with 3 children who were seated in close proximity to her. These 3 children (12%) were engaged during 51% to 80% of her utterances. Most of the children in the class (79%) were only engaged while Ms. Hawkins was making an announcement to the whole class (4% of utterances). The

language input provided by Ms. Hawkins during snack was characterized by the lowest rates of speech (42 words per minute, 8 utterances per minute) across all activity settings analyzed. Range of vocabulary used (D = 88.92) and proportion of sophisticated vocabulary used (6%) were also relatively low. Conversations during Snack included a higher proportion of verbal contributions from children than conversations during Morning Meeting or Work Time. On average, Ms. Hawkins contributed 2.03 utterances for every child utterance and her conversational turns were 1.50 times longer (in utterances) than children's turns. Directives, questions, and extended conversations occurred less frequently during Snack than during any of the other activity settings analyzed. Questions accounted for 18% of Ms. Hawkins' child-directed utterances. Extended conversations and directives only accounted for 10% and 9% of her utterances, respectively.

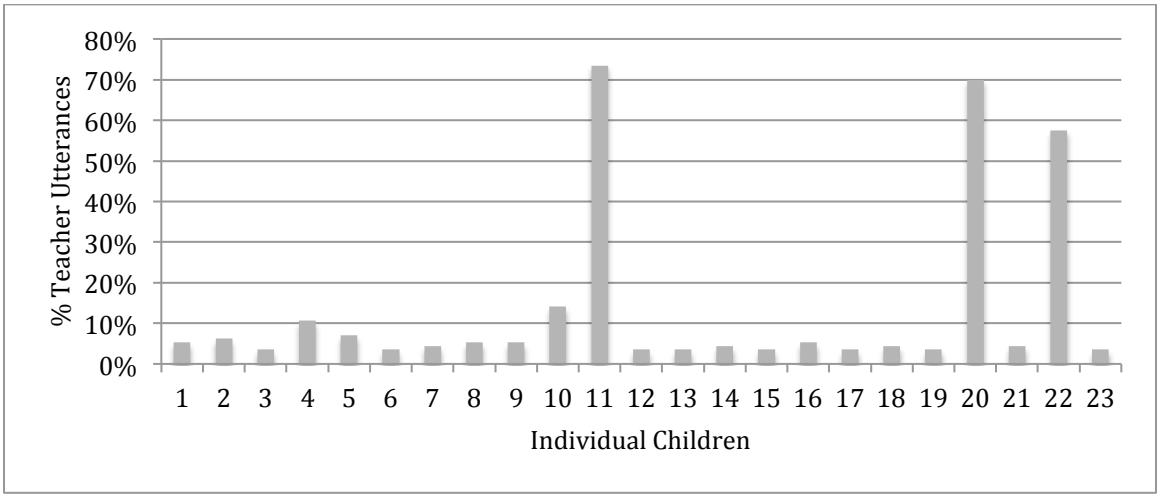

Figure 6. Individual children's opportunities for joint engagement in Classroom B: Snack (meal).

Morning Meeting is a teacher-directed whole group activity setting. During Morning Meeting, all the children sit together on a large rectangular rug directly in front

of the white board in the classroom. Morning Meeting begins with Ms. Hawkins and the children singing a song together. Next, Ms. Hawkins typically leads the children in a literacy or math activity. After the literacy or math activity is finished, Ms. Hawkins may read a book to the children and/or engage the children in a group discussion about ongoing projects that the children are working on. The amount of time spent in Morning Meeting changes from day to day depending on what literacy or math activities are planned and whether or not Ms. Hawkins chooses to read a book and/or engage the children in a discussion about their project work. Typically, Morning Meeting lasts between 15 and 30 minutes. On the day of videotaping, Morning Meeting began at 9:50 AM and lasted until 10:12 AM, for a total of 22 minutes, 24 seconds.

Results from computerized language analyses, coding of teacher talk, and coding of children's opportunities for joint engagement during Morning Meeting are presented in Table 6. During Morning Meeting, all 23 children had the opportunity to be engaged with Ms. Hawkins for the entire duration of the whole group activity setting (100% of utterances). Language input provided during Morning Meeting had higher rates of speech (94 words per minute, 18 utterances per minute) than rates of speech during Connections or Snack. Range of vocabulary used (D = 112.83) and proportion of sophisticated vocabulary used (12% of utterances) were highest during Morning Meeting, in comparison to all other activity settings analyzed. During Morning Meeting, Ms. Hawkins dominated conversations more than she did during other activity settings. On average, Ms. Hawkins contributed 3.21 utterances for every child utterance and her conversational turns were 2.54 times longer (in utterances) than children's conversational turns. During Morning Meeting, directives accounted for 17% of Ms. Hawkins' child-

directed utterances. Questions and extended conversations were more prevalent than directives during Morning Meeting, comprising 20% and 24% of Ms. Hawkins' utterances, respectively.

Work Time is a small group activity setting. During Work Time, Ms. Hawkins works with a small group of children on their ongoing projects. These projects are long-term investigations that evolve from children's interests. The size of the group is variable, but typically falls within the range of 2 to 7 children. During Work Time, Ms. Hawkins engages children in discussions and also takes time to do individual check-ins with each child while he or she is working. Children who are not working with Ms. Hawkins during Work Time are either in another small group working with one of the teaching assistants, or engaging in indoor free choice activities of their own choosing. Since Ms. Hawkins was working with a small group on the day of videotaping, Work Time was considered a small group activity setting for the purposes of this analysis. The amount of time spent in Work Time fluctuates depending on the amount of time spent in Morning Meeting. On the day of videotaping, Work Time began at 10:14 AM and ended at 10:49 AM, for a total of 35 minutes, 36 seconds.

Results from computerized language analyses, coding of teacher talk, and coding of children's opportunities for joint engagement during Work Time are presented in Table 6 and Figure 7. During Work Time, Ms. Hawkins primarily engaged with the 5 children assigned to work with her on a small group activity. These 5 children were engaged during 38% to 50% of her utterances. The 18 remaining children in the classroom (79%) were only engaged during 4% of her utterances, while Ms. Hawkins was making an announcement to the whole class. Language input provided during Work

Time was characterized by the highest rates of speech (102 words per minute, 21 utterances per minute) of any activity setting analyzed. Range of vocabulary used (*D* = 99.40) and proportion of sophisticated vocabulary used (11%) were relatively high during Work Time, second only to Morning Meeting. During Work Time, Ms. Hawkins was a relatively dominant conversational partner, more so than she was during Connections and Snack. On average, Ms. Hawkins contributed 2.21 utterances for every child utterance and her conversational turns were 1.96 times longer (in utterances) than children's conversational turns. During Work Time, the language input provided by Ms. Hawkins was characterized by relatively high proportions of questions (25% of utterances) and extended conversations (41% of utterances), second only to the proportion of questions and extended conversations that occurred during Connections. Additionally, 15% of Ms. Hawkins' child-directed utterances were directives.

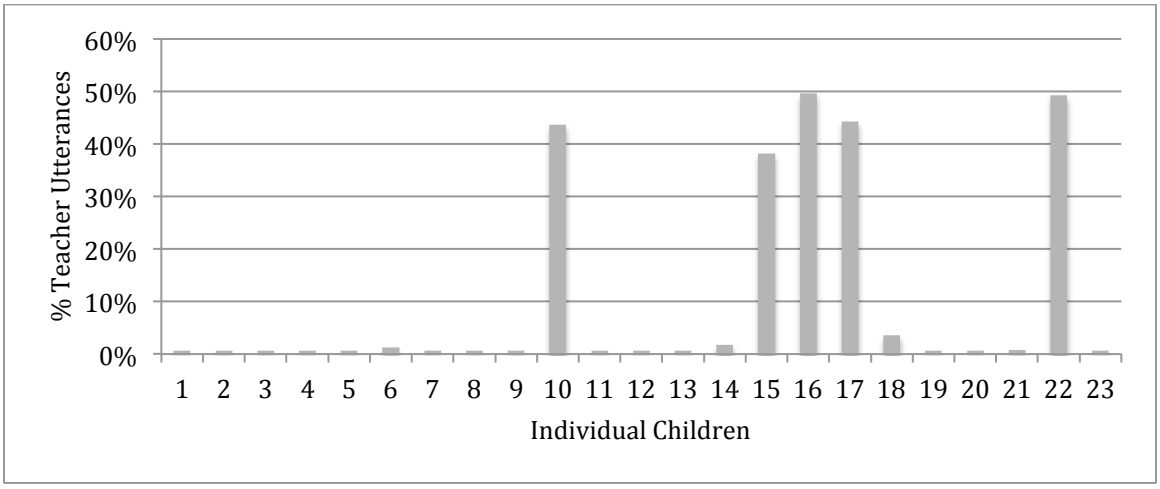

Figure 7. Individual children's opportunities for joint engagement in Classroom B: Work Time (small group).

Comparison of Classrooms

Generally speaking, children's opportunities for joint engagement with their teachers were very similar in Classroom A and Classroom B (see Table 5 and Table 6). However, children in Classroom A did have slightly more opportunities to engage with their teacher. In both classrooms, all children had the opportunity to engage with their teachers for the entire duration of whole group activities (i.e. Circle Time, Morning Meeting). The key difference was the amount of time that children engaged in whole group. In Classroom A, Circle Time lasted 53 minutes, which was more than double the amount of time that children in Classroom B spent in Morning Meeting (22 minutes). In both classrooms, children's opportunities for engagement during non-whole group activity settings were quite limited. For example, during Free choice, Snack, and Work Time in Classroom B, approximately 70% of the children were engaged in only 10% of Ms. Hawkins' utterances or less. Although children in Classroom A had slightly more opportunities to engage with their teacher during non-whole group activity settings than children in Classroom B did, opportunities for engagement were still quite limited.

The language input provided by Ms. Belinda in Classroom A differed from the language input provided by Ms. Hawkins in Classroom B in many ways (see Table 5 and Table 6). Ms. Belinda and Ms. Hawkins differed in their rates of speech. Ms. Belinda exhibited relatively high rates of speech across all activity settings, ranging from 89 to 108 words per minute. In contrast, Ms. Hawkins' rate of speech fluctuated across activity settings, depending on whether the activity setting was more or less teacher directed. During teacher directed activity settings, Ms. Hawkins' exhibited high rates of speech (94 words per minute during Morning Meeting and 102 words per minute during Work

Time). In contrast, her rates of speech were considerably lower during Snack (42 words per minute) and Connections (55 words per minute), which are activity settings that are less teacher directed in nature. In terms of conversational balance, Ms. Belinda was a more dominant conversational partner than Ms. Hawkins was. Teacher-child utterance ratios ranged from 2.69 to 4.41 for Ms. Belinda. These ratios were lower for Ms. Hawkins, ranging from 1.89 to 3.21.

Ms. Belinda and Ms. Hawkins also differed in the extent to which they used directives and questions to address children. Directives were much more prevalent in Classroom A than Classroom B. Directives accounted for 20% or more of Ms. Belinda's utterances across all activity settings except Centers Time. In contrast, the proportion of directives in Ms. Hawkins' child-directed speech never exceeded 17% of her utterances. Use of questions was more prominent in Classroom B, accounting for 18 to 35% of Ms. Hawkins' utterances across all activity settings. Interestingly, the proportion of questions used was higher than the proportion of directives used across all activity settings in Classroom B. A different pattern emerged in Classroom A, where proportion of questions ranged from 14% to 26% of Ms. Belinda's utterances. During Centers Time and Snack, Ms. Belinda used more questions than directives while engaging with children. The opposite was true during Circle Time and Outside Time, when Ms. Belinda used directives more frequently than questions in her interactions with children. The prevalence of extended conversations varied widely across activity settings in both classrooms, ranging from 8% to 74% of Ms. Belinda's utterances in Classroom A and 10% to 48% of Ms. Hawkins' utterances in Classroom B.

The Intersection of Teacher Goals and Practices

RQ3: How are teachers' pedagogical goals reflected in the language experiences they provide for children?

This section delineates Ms. Belinda's and Ms. Hawkins' overarching pedagogical goals as well as their specific instructional goals for each activity setting. Additionally, this section discusses the extent to which teachers' pedagogical goals were reflected in the language experiences they provided for children.

Ms. Belinda's Overarching Pedagogical Goals.

For Ms. Belinda, the overarching goal of Pre-K is to get children ready for Kindergarten. Towards this end, Ms. Belinda's instructional goals focus on academic and social school readiness. To get children ready for kindergarten academically, Ms. Belinda uses published curricula (i.e. Houghton Mifflin Pre-K) and assessment measures (i.e. Desired Results Developmental Profile), selected by the district to align with "what the state feels a Pre-K child should be exposed to before entering Kindergarten." The curriculum covers a wide range of academic content, including literacy, math, science, and health. It also addresses social-emotional skills (Houghton Mifflin, n.d.).

Ms. Belinda places an even greater emphasis on social school readiness. She works closely with the Kindergarten teachers on campus and, based on their feedback, she believes that social school readiness skills are even more important than academic preparedness for helping children with a smooth transition to formal schooling. According to Ms. Belinda:

> They (Kindergarten teachers) love that kids are getting that school experience. They still get kids who have never been in school, that don't know what a line is, that don't know how to sit and listen to a story. I was hearing that from them a lot. … You know the more cognitive information the kids have is great. That's certainly a plus. But I really think what I was hearing from them is, can they come in, do they know what a line is, can they play with other children, can they sit down with other children. Those things are very helpful for them in Kindergarten.

In this quotation, Ms. Belinda outlines some of the social-emotional competencies that she believes will serve her children well as they move up into Kindergarten classrooms. Ms. Belinda wants children to develop the social skills necessary to engage productively with peers, as well as the self regulatory capacities needed to engage appropriately in school routines like lining up and listening to a story. Moreover, Ms. Belinda is proud of the fact that the children in her classroom become "leaders" when they are in Kindergarten classrooms the next year. Ms. Belinda said, "They (Kindergarten teachers) absolutely will say they can see our kids. They can definitely see our kids in their classroom and they use them as leaders at the beginning of the year to help the other ones learn how to use a classroom."

Another overarching instructional goal of Ms. Belinda's is to foster children's oral language development. When asked to talk about her learning goals for children, Ms. Belinda said, "Language. Lots of language. We want to build that vocabulary. We're always trying to put in new words. Keep them expanding on their words." Moreover, Ms. Belinda believes that language is "one of the most treasured things I can give, not just to kids, but to families." As such, she thinks it is important to educate parents on the importance of fostering their children's language development. During the interview, Ms. Belinda explained that she wants parents to understand that "vocabulary is probably the most important gift they can give their children, so talk, talk, talk."

Ms. Belinda's Pedagogical Goals During Circle Time

Circle Time is the part of the day when Ms. Belinda's pedagogical focus on children's academic and social school readiness are most salient. In terms of academic

school readiness, Circle Time is when Ms. Belinda implements the published curriculum, as well as other academically oriented activities. As Ms. Belinda explained:

> Circle Time is when the whole class sits together. It's a teacher-directed lesson. This is definitely when I'm using that curriculum. The most part of the day I'm using the curriculum. We start with the flag. From that we go to the calendar. I like talking about the months and days, but I don't spend a lot of time on it because it's a hard concept for Pre-K. Time and sequence is very hard. It's a great counting activity. There is always a letter focus. It's the 'Letter of the Week' in the curriculum. We name the letter, we go over the capital and the lowercase. The sound of the letter. I put in the writing of it too. We always have a letter focus.

Children's social school readiness is also heavily emphasized during Circle Time. To help the children be successful when they transition to Kindergarten, Ms. Belinda believes it is extremely important for them to learn how to be calm and focused on the teacher during whole group lessons. As she explains:

> I do think these kids need some experience with the structured time because we're full day kindergarten next year. I'm sitting them down, at this point in the year, 20 to 30 minutes. Next year, you know you're sitting down quite a bit, where you have to listen to that teacher. So really at this time, I do want their eyes on me and we go over that. Eyes on teacher, ears listening, body still. This is time that I look at teacher and watch what teacher's doing. Because they have to do that next year. … At Circle Time, as a teacher, I want them to understand what a little structured time is. Sit down and it is time for me to just focus on teacher. I want them to be calm and just look at me and concentrate. … Some schools, some philosophies feel maybe a child shouldn't be sitting down crisscross. If he feels like laying down to look at you, that's okay. It's not my philosophy. I feel if I let them lay down or let them always be playing here, it's a disservice for next year when it becomes a full day in a classroom where they really do have to settle their body down.

Ms. Belinda also thinks about promoting children's language development during Circle Time. She provides opportunities for children to build their expressive language by facilitating group conversations. Conversations may be prompted by a question that she poses to the group, or by a picture that she passes around for the group to look at. Within the context of these conversations, Ms. Belinda intentionally tries to scaffold children's productive language ability. As she explains:

> At the beginning of the year [I say], "I want you to tell me anything you want about what you see on the card." At the beginning of the year, for a lot of them it's just one word.

> Now they're using full sentences, because all through the year [I ask], "Well, can you tell me in a sentence?" And some kids will switch over and if not I'll help them. I'll give them the words of using their sentences. Anything they say about the picture is fine. Not just what they see but maybe what's gonna happen or they can predict something or what just happened. So anything they want to say about that card. Again, promoting language and vocabulary.

Children's Language Experiences During Circle Time

During Circle Time, nearly a quarter of Ms. Belinda's utterances were directives (23% of utterances), second only to the proportion of directives she used during Outside Time. Directives were used for the purposes of focusing children's attention, keeping them calm, and communicating her expectations for their behavior, which reflects Ms. Belinda's pedagogical focus on children's social school readiness skills. Excerpt 1 shows how Ms. Belinda used directives to explicitly teach social school readiness skills at the beginning of Circle Time:

Excerpt 1

Ms. Belinda:	All right.
	Now, I think we need to take a deep breath.
	We need to calm our bodies down.
	Calm our bodies down.
	It's Circle Time.
	Is it play time?
Children:	No.
Ms. Belinda:	No.
	It's not play time.
	I need eyes on teacher, ears listening, and body still.
	Thank you.

In Excerpt 1, Ms. Belinda asks the children to calm down and she reminds the children that she expects them to watch and listen to her attentively, while regulating their body movements. Directives were also used throughout Circle Time to help maintain children's attentional focus. Ms. Belinda often used directives to refocus children's attention while transitioning between activities. For example, Excerpt 2 illustrates how she used directives during a quick transition between a group singing activity and a

literacy activity:

Excerpt 2

Ms. Belinda: That's it.
That's the end of the song.
Criss cross please.
Criss cross.
Criss cross.
Eyes up here.
Eyes up here.
I would like to do…

Ms. Belinda gets the materials for the next activity.

Ms. Belinda: Hickory Pickory!
So we're going to say our name in sy-lla-bles.
Are you ready?
Children: Yes.

Excerpt 2 shows how Ms. Belinda used directives to keep children's attention focused on her during a transition between activities, when children may have been more likely to get distracted. Ms. Belinda also used directives to remind children about her expectations for Circle Time behavior when she felt they were not behaving appropriately. For example, Excerpt 3 shows how Ms. Belinda used directives to regain behavioral control when she felt the children had gotten too excited and were speaking too loudly and out of turn:

Excerpt 3

Ms. Belinda: Now, would you like to go traveling?
Children: Yeah!
Ms. Belinda: Yes.
Let's go traveling.

Children are shouting.

Ms. Belinda: I need you to stop.
I know we're so excited.
We're having…

Children interrupt.

Ms. Belinda: My turn.

My turn.
We're having lots of fun.
But let's remember to use our inside voice.
Let's remember our inside voice.
We don't scream so we can understand each other.

Taken together, Excerpts 1-3 show how Ms. Belinda used directives throughout Circle Time for the purposes of maintaining behavioral and attentional control. Ms. Belinda's frequent use of directives for the purposes focusing and maintaining children's attention reflects her pedagogical focus on getting children socially ready for kindergarten.

Questions were less prevalent than directives during Circle Time, comprising 16% of Ms. Belinda's utterances. This was less than the proportion of questions used during Centers Time and Lunch. Questions were primarily used to assess children's knowledge within the context of instructionally focused activities, which reflects Ms. Belinda's pedagogical focus on children's academic school readiness during Circle Time. For example, Excerpt 4 shows how Ms. Belinda used questions to assess children's knowledge about quantity during a math lesson:

Excerpt 4

Ms. Belinda has a green container, a yellow container, and a bucket of manipulatives. She puts some manipulatives into each bowl.

Ms. Belinda:	All right.
	I have a green and yellow bowl.
	Here we go.
	I have some toys.
	I've got some in here and some in here.
	Which bowl has more?
Children:	Yellow.
Ms. Belinda:	The yellow one definitely has more.
	We can look at it.
	That has more.
	Which bowl has less?
Children:	Green
Ms. Belinda:	The green one has less toys in it.
	Definitely.
	There's a few in here.
	There's more in the yellow container.
	Good!

Ms. Belinda puts the same number of manipulatives in each bowl.

Ms. Belinda:	Ready?
	Which one has more?
Children:	Equal!
Ms. Belinda:	They're equal.
Patricia:	They're the same.
Ms. Belinda:	They're the same.
	So one doesn't have more.
	Is there one that has less?
Children:	No.
Ms. Belinda:	No, because they are …?
Children:	Equal.
Ms. Belinda:	They are equal.
	They are the same.

Excerpt 4 shows how Ms. Belinda used questions during a math lesson to assess children's understanding of quantity and related vocabulary such as *less*, *more,* and *equal.* As the excerpt shows, questions used during Circle Time typically required short, one-word answers and were intended to solicit choral responses from the children.

Ms. Belinda also used questions to facilitate extended conversations with the children during Circle Time, which reflects her pedagogical focus on children's language development. That said, extended conversations were rare during Circle Time, comprising only 8% of Ms. Belinda's utterances, which was the lowest proportion of extended conversations observed across all activity settings. As Excerpt 5 shows, these conversations began with Ms. Belinda posing a question to the group and unfolded as Ms. Belinda gave every child a chance to respond in turn:

Excerpt 5

Ms. Belinda:	Raise your hand if, after summer vacation, you are going to kindergarten.
	Raise your hand, cause we are going to kindergarten in September!
	Now let's think.
	Let's think of things we learned in preschool.
	What did we learn here in preschool so we're ready for kindergarten?

Ms. Belinda calls on children to respond.

Ms. Belinda: Patricia, what did you learn in preschool?

Patricia:	Numbers.
Ms. Belinda:	She learned her numbers. Mattheson?
Mattheson:	We learned how to play with toys.
Ms. Belinda:	We learned how to play with toys. Okay. Rian?
Rian:	We know how to share toys.
Ms. Belinda:	We know how to share toys. We do. Jordyn?
Jordyn:	I know how to read books.
Ms. Belinda:	Oh you know how to read. You look at the pictures and find those words. Very good. Gavin?
Gavin:	We know how to share.
Ms. Belinda:	We know how to share. Margie?

This pattern of conversation continues until all the children have had a chance to respond.

Excerpt 5 illustrates the kind of extended conversations that would happen during Circle Time. These conversations gave all children an opportunity to participate because Ms. Belinda would typically pose a question to the group and then give every child a chance to respond. However, these conversations were lacking in the kind of depth that extended conversations had in other activity settings because Ms. Belinda did not elaborate on children's ideas or ask them to expand on their ideas. Rather, her focus was on affirming and validating children's responses and giving every child a chance to participate in the discussion.

Ms. Belinda's Pedagogical Goals During Centers Time

During Centers Time, Ms. Belinda's pedagogical goals focus on social school readiness and language development. At the beginning of the year, social school readiness is the primary aim. Specifically, Ms. Belinda wants the children in her classroom to develop social-emotional skills like impulse control, self regulation, turn

taking, and conflict resolution, as these skills "empower the kids to take over the room." According to Ms. Belinda:

> It's a very difficult task to actually be in a room with 23 others and use it. To use the flow of the room, get how the room works, get how I take a toy out but I have to return the toy, or I want that toy and another child has it so I have to wait. You know, the problem solving. Ask the child when he's finished, can I have a turn after you. That grows. That grows in the year. At the beginning of the year, you'll have someone that just grabs it right out of another child's hands. So we really have to talk about that. Our hands stay to ourselves. Our hands and feet stay to ourselves and if it's in someone else's hands, we're not allowed to grab it. … If there's a conflict between the kids, I don't want to be the one that's right in the middle of them taking care of everything for them. We teach the kids to tell their friend, "stop." If something happened to you, tell them stop. And eventually as they get a little more comfortable with each other, then it's stop and then it's well tell them what you need. You know, I had that toy first. Or don't push me. Or whatever their need is.

At the end of the year, once the children are well acquainted with the rules of the classroom and conflicts are rare, Ms. Belinda's focus shifts to language development. According to Ms. Belinda, "Now it's more of a language thing. I just want to keep enhancing that language. We're definitely trying to build that up."

Children's Language Experiences During Centers Time

During Centers Time, directives comprised only 10% of Ms. Belinda's utterances, the lowest proportion observed across all activity settings. In contrast, proportion of questions (26% of utterances) and extended conversations (74% of utterances) were the highest observed across all activity settings, reflecting Ms. Belinda's pedagogical focus on children's language development towards the end of the school year, when data for this study was collected. While checking in with children during their self-initiated free choice activities, Ms. Belinda engaged in extended conversations with individual children or small groups of two to four children. As Excerpt 6 shows, Ms. Belinda used a variety of contingent responses to engage children in lengthy extended conversations during Centers Time:

Excerpt 6

Ms. Belinda engages with a group of four children, playing with Legos.

Alvin:	I made a car.
	A flying car!
Ms. Belinda:	A flying car!
	These flying cars are interesting.
	Have you ever seen a car fly?
Alvin:	I'm way up in the sky and I can see my house from here.
Ms. Belinda:	You can see your house from up in the sky?
	Does the house look tiny or big?
Alvin:	Tiny.
Ms. Belinda:	When you're way up there the house is gonna look tiny.
Rian:	Teacher, I'm making the engine.
Ms. Belinda:	You're making the engine?
Rian:	Oh now I'm crashing down because I'm running out of gas.
Ms. Belinda:	It's good you're making the engine because cars need engines to move.
	The motor part.
Charlie:	I build the engine too.
Ms. Belinda:	You built the engine.
	Very good.
Charlie:	Now I got the tires too.
Ms. Belinda:	Now you have tires.
	Are they new tires?
Charlie:	Yeah.
Ms. Belinda:	Brand new tires and engine.
	You're racecars are ready to go!

Excerpt 6 shows how Ms. Belinda used a variety of contingent responses to solicit children's talk about their play. Sometimes her responses would echo what the children said, as a way of simply affirming their verbal contributions to keep the conversation going. Sometimes her responses would probe the children for more information. Importantly, extended conversations during Centers Time helped to scaffold children's prolonged engagement in their chosen activities, as Excerpt 7 further demonstrates:

Excerpt 7

Ms. Belinda engages with four children in the dramatic play area.

Nina:	I have money.
Ms. Belinda:	You have money in your purse.
Angelica:	I have twenty.
Ms. Belinda:	So what are you going to do with all this money?
Angelica:	We're gonna go buy some things.
Ms. Belinda:	What are you going to do with your money?

Jordyn:	I'm gonna buy cookies.
Ms. Belinda:	Cookies.
	So you're going to buy some food.
	What else?
Angelica:	Carrots!
Ms. Belinda:	Carrots.
	I like carrots.
	I still think we're going to have some money left over.
Patricia:	I'm going to make soup for dinner.
Ms. Belinda:	You're going to make soup for dinner!
	I like soup.
	What kind of soup?
	What should we put in our soup?
Jordyn:	Maybe some chili.
	Hot pepper.
Ms. Belinda:	Hot pepper!
	Do you like hot foods?
Jordyn:	No.
Ms. Belinda:	So what items are we going to put inside the soup?
Angelica:	Onions!
Ms. Belinda:	Onions.
	I like onions.
Jordyn:	Fish.
Ms. Belinda:	Fish soup!
	That's a good one!

Excerpt 7 shows how Ms. Belinda used questions and other contingent responses, not only to draw out more child talk, but also as a way to extend children's engagement in the dramatic play. Questions like, "What are you going to do with your money?" and "What should we put in the soup?" scaffolded children's extended engagement while also promoting language.

Ms. Belinda's Pedagogical Goals During Outside Time

During Outside Time, Ms. Belinda's primary focus is to provide children with opportunities for gross motor play, especially since many of the children in her classroom come from neighborhoods where opportunities for outdoor gross motor activity are limited. As she explains:

> I think kids should be running and jumping and doing all kinds of physical activity things, especially these kids who live in a lot of apartments and don't have that back yard type time. They definitely need the outside time because they don't have those backyards or big parks around their houses.

Children's Language Experiences During Outside Time

Directives were more prevalent (27% of utterances) and questions were less prevalent (14% of utterances) during Outside Time than during any other activity setting. During Outside Time, Ms. Belinda primarily used directives to promote children's engagement in gross motor play, reflecting her pedagogical focus on these types of activities. Sometimes, Ms. Belinda would teach children how to use particular pieces of gross motor equipment that they had chosen for themselves, as Excerpt 8 illustrates:

Excerpt 8

During Outside Time, Ms. Belinda teaches a child how to use a particular piece of gross motor equipment that he is trying to use.

Ms. Belinda:	Alvin, can you put it inside?
	Put it inside.
	Put it in the center.
	Now stand up and balance the board.
	Back and forth.
	Try to get the balls to move.
	Push on the other side.
	Back and forth.
	See the balls rolling and spinning?
	See if you can get it inside.
	See if you can get both.
	There it is!
	Both balls inside.
	Yay, Alvin!
	Were the balls moving?
Alvin:	Yes.
Ms. Belinda:	Yes!
Alvin:	It's hard.
Ms. Belinda:	It *is* hard!

In Excerpt 8, Ms. Belinda was instructing a child on how to use a piece of equipment that he had chosen for himself to use. However, there were also instances during Outside Time when Ms. Belinda used directives to facilitate children's engagement in gross motor activities that she selected in order to encourage more challenging gross motor play. Excerpt 9 provides an example of this:

Excerpt 9

Ms. Belinda gathers a group of children and facilitates an activity on the balance beam.

Ms. Belinda: All right, let's see who can go down the balance beam!
Let's start this way.
Go forwards.

Ms. Belinda positions herself in front of one end of the balance beam and asks the children to line up behind her.

Ms. Belinda: Behind me.
Go behind me.
All right.
I'm gonna walk down.
Let's see who can go down.

The children walk down the balance beam, one after the other.

Ms. Belinda: You're fast!
There's Gavin going down!
Jewel: I'm fast.
Ms. Belinda: Are you?
Walk down the balance beam.
You are all fast.
I'm the slow one.
Now let's go sideways.
Do you know sideways?

In Excerpt 9, Ms. Belinda deliberately invites the children to use the balance beam, and she uses directives to facilitate added interest and challenge for the children, telling the children to first try going forwards and then instructing them to go sideways later.

Extended conversations were relatively rare (11% of utterances) during Outside Time because Ms. Belinda did not deliberately seek out opportunities to engage children in conversations, as she did during Centers Time. Rather, as Excerpt 10 illustrates, extended conversations that occurred during Outside Time were initiated by children:

Excerpt 10

During Outside Time, a child engages Ms. Belinda in a conversation while playing with musical instruments.

Margie: Ms. Belinda?
Ms. Belinda: Yes?
Margie: My family signed me up for piano lessons.

Ms. Belinda: For piano lessons?
Wow!
That will be so much fun to learn a musical instrument.
Margie: And my family is gonna sign me up for everything I'm good at playing.
Ms. Belinda: Everything you're good at playing.
Now it takes some time to learn an instrument, right?
Margie: Yeah.
Ms. Belinda: Can't learn it in one day.
Gonna take a long time to learn an instrument.
It will be nice to be able to play the piano.
What other instrument do you think you would like to play?
Margie: The xylophone.
Ms. Belinda: The xylophone.
Great!
What else?
Margie: And the maracas.
Ms. Belinda: The maracas.
We like the maracas in our class.

Ms. Belinda walks around the yard to check in with other children. Later, when she returns to the table with the musical instruments, the same child engages her in conversation again.

Margie: My favorite… My favorite is… My favorite instrument is the piano.
Ms. Belinda: The piano.
The piano is a beautiful instrument.
Margie: I have a piano at home in my room.
Ms. Belinda: Do you?
Is it a big one or is it a smaller toy-sized piano?
Margie: Big-sized piano.
Ms. Belinda: A big-sized piano.

As Excerpt 10 shows, when children initiated conversations with Ms. Belinda during Outside Time, Ms. Belinda responded contingently and appropriately, leading to extended conversations. However, these conversations were relatively rare because Ms. Belinda primarily focused on facilitating children's gross motor play during Outside Time. As such, Ms. Belinda did not deliberately seek out opportunities to engage children in conversation during Outside Time.

Ms. Belinda's Pedagogical Goals During Lunch

Ms. Belinda's primary focus during Lunch is to facilitate children's language development by engaging them in extended conversations. When asked about her goals

during lunch time, Ms. Belinda said, "Language. Language. Language. Wherever the conversation takes us. You know, we're just talking. There's no plan or itinerary for talking with them. It's just back and forth." Moreover, during Lunch, the focus is not only on extended teacher-child conversations, but also on conversations between children. As Ms. Belinda explains, "I like to see them initiate conversation with each other and a lot of them have truly grown in that area. They really do listen to each other."

Ms. Belinda also uses Lunch time to teach children about health and nutrition. Lunch is provided by the program and includes nutritious foods, some of which may be unfamiliar to the children in Ms. Belinda's class. Thus one of Ms. Belinda's goals during Lunch is to expose children to healthy foods they may not have tried at home. When asked about her goals during Lunch, Ms. Belinda said:

> Trying new foods. A lot of kids, at the beginning of the year, [will say] "I don't drink white milk." Well, that's what we have at school. And once they see it and they see their friends and they're getting it each day, most kids are gonna just start eating the foods and trying different stuff.

Beyond exposing children to new foods, Lunch time also provides opportunities to talk about health and nutrition. According to Ms. Belinda:

> We talk a lot about healthy foods. We talk about foods give us vitamins. We talk about does junk food give us vitamins? No. And we relate that to the sugar and the teeth, because that's something we really battle with our kids. They know that a cookie is a treat and you should only get it once in a while and they know that soda should not be drunk every day. No I can't tell you if they're doing it all the time at home, but parents do come back and tell us, "Wow. They turned down soda because they said they're only allowed to have a little bit."

Children's Language Experiences During Lunch

During Lunch, there was a relatively high prevalence of questions (24% of utterances), and extended conversations (36% of utterances), reflecting Ms. Belinda's pedagogical focus on promoting children's language development. Extended conversations that were initiated by Ms. Belinda during Lunch had a similar structure to

the conversations that she initiated during Circle Time. During Lunch, Ms. Belinda initiated conversations by posing a question to the group and giving each child a chance to respond, as Excerpt 11 illustrates:

Excerpt 11

During Lunch, Ms. Belinda initiates a conversation about cheese since the children are eating grilled cheese sandwiches.

Ms. Belinda:	Do you like grilled cheese sandwiches?
Margie:	Yes.
Ms. Belinda:	What else do you like to put cheese on?
	Do you like a lot of different cheeses?
	I like cheese.
Margie:	I like to put it on my hamburger.
Ms. Belinda:	On hamburgers.
	Mmm…
	That's good.
	Where do you like to put yours Mattheson?
	Where do you like to put cheese?
Mattheson:	You could get tiny string cheese and you could put it on crackers.
Ms. Belinda:	Yes.
	String cheese on top of crackers.
	That sounds delicious.
	Jewel?
Jewel:	We could put tomato with cheese.
Ms. Belinda:	Tomato with cheese.
	That's good too.
	Charlie, how do you like your cheese?
	Where do you like to put cheese?
Charlie:	I don't know.
Ms. Belinda:	You don't know?
	Where do you like to put cheese?
	What other food items do you like to out cheese on?
Charlie:	Graham crackers.
Ms. Belinda:	Graham crackers and cheese.
	Sounds yummy.
	Who likes to put cheese on their pizza?

Although Excerpt 11 shows how teacher-initiated conversations during Lunch were similar to Circle Time conversations in some respects, it also illustrates how conversations in these two activity settings were different. During Lunch, Ms. Belinda was able to be slightly more elaborative in her responses than she was during Circle Time. Another point of contrast between Lunch time conversations and Circle Time

conversations is that Lunch time conversations were also initiated by children, but child-initiated conversations never occurred during Circle Time. Excerpt 12 provides an example of a child-initiated conversation that occurred during Lunch:

Excerpt 12

Patricia:	When I start going to kindergarten, all of my neighbors are coming to camp with me in my backyard.
Ms. Belinda:	Really?
Angelica:	We're going to make s'mores with chocolate and graham cracker.
Ms. Belinda:	You're going to make s'mores and you're going to go camping.
Patricia:	Yeah. Those are my favorite.
Margie:	I don't know how to make s'mores.
Ms. Belinda:	Well it's graham crackers and marshmallows and a little piece of…?
Patricia:	Chocolate.
Ms. Belinda:	And then you melt it together.
	You make like a sandwich.
	You squeeze it.
	You put the two graham crackers together.
Patricia:	And then you eat it!
Ms. Belinda:	Take a bite!
Patricia:	It's so good.
Ms. Belinda:	It's delicious.

Excerpt 12 shows how the structure of child-initiated conversations during Lunch was somewhat similar to conversations that occurred during Centers Time. During child-initiated conversations, Ms. Belinda tended to follow the child's lead and respond in semantically contingent ways, rather than systematically probing each child for a response, as she did when she initiated topics of conversation.

During Lunch, use of directives was less prevalent than during Circle Time and Outside Time, but still accounted for 20% of the utterances. During Lunch, Ms. Belinda used directives to remind children of her expectations for their behavior during Lunch and to keep children progressing along with their meals in a timely manner. Excerpt 13 shows how Ms. Belinda used directives to remind children of her expectations for their behavior during Lunch time:

Excerpt 13

At the beginning of Lunch, Ms. Belinda reminds children of her expectations for their behavior.

Ms. Belinda: Now we are at lunch.
Is it a play time?
Children: No.
Ms. Belinda: No.
It's not a play time.
Let's put on our low voices.
Our quieter voices.
Okay?
Let's settle down.
Let's settle down.

Later on, during the meal, some of the children start counting. Ms. Belinda reminds them that their focus should be on eating during Lunch.

Children: Thirty-one, thirty-two, thirty-three …
Ms. Belinda: It's eating time right now.
Let's eat.
Let's keep eating our grilled cheese sandwich.

In the first part of Excerpt 13, Ms. Belinda's reminds children that Lunch is a time when she expects them to be calm and to use quiet voices. In the second part of Excerpt 13, Ms. Belinda reminds the children that Lunch is a time when their primary focus should be on eating. Moreover, Ms. Belinda uses directives throughout Lunch time to keep children focused on the task of eating, as shown in Excerpt 14:

Excerpt 14

At the beginning of Lunch, Ms. Belinda tells the children to get started with their meals.

Ms. Belinda: Let's get started with our milk.
With our milk.
Get started with our milk.
Open the straws and put them in.
Jordyn: I opened the straw.
Ms. Belinda: Okay.
Put it inside the milk container.

After a few minutes have passed, Ms. Belinda continues to check in to make sure children are progressing along in their meals.

Ms. Belinda: It's time to start eating.
Let's get our napkins out.
Let's put the spoon on top of your peaches.

> Does anybody want their salads open?
> Would you like some salad dressing?
> Everybody has their straw in their milk and our napkins open?

Excerpt 14 shows that Ms. Belinda is concerned about making sure that children are progressing through their meals in a timely manner. This is likely due to the fact that dismissal happens after Lunch and Ms. Belinda wants to make sure all children have finished eating and are ready to go when their parents arrive to pick them up.

Ms. Hawkins' Overarching Pedagogical Goals

For Ms. Hawkins, one of the overarching goals of Pre-K is to foster children's social-emotional development, as she expresses in the following quotation:

> In early childhood, there is so much social stuff going on. Just being able to talk to each other, being able to relate to each other or solve a problem is so much of their day. Being able to do that is such an important part of the curriculum.

As this quotation suggests, Ms. Hawkins believes that it is important for children to learn social skills that will help them to communicate effectively with others, engage productively with peers, and negotiate conflicts when they arise.

Another one of Ms. Hawkins' overarching goals is to shape children's dispositions towards learning, which she believes are more important than academic knowledge and skills at this young age. As the following quotation suggests, Ms. Hawkins thinks that a focus on "hard core" or "explicit" academics is not necessary during Pre-K:

> For me, Pre-K is not about academics at all. I just have to say that out. It's about social-emotional development and exploring the world around them. Wonder. A sense of wonder. And thinking. Wondering what they're thinking about and fostering that. Woven into that is stories which foster writing and reading and drawing pictures and all that kind of stuff, so that's where the academics is, but not hard core academics at all. Not explicit academics. I do not think it's important in Pre-K. In fact, I'm almost on the fence with K.

As this quotation shows, Ms. Hawkins is more concerned about fostering children's dispositions towards learning than she is about academics. As such, she seeks to promote children's curiosity, sense of wonder, and critical thinking in her teaching.

Ms. Hawkins' Pedagogical Goals During Connections

Connections is an outdoor free choice activity setting and, as such, it is meant to provide children with opportunities for gross motor play. According to Ms. Hawkins, "Most of them are running around and chasing each other." However, more importantly, as the name of this activity suggests, this activity setting is about making connections or building relationships. During Connections, Ms. Hawkins' primary focus is children's social-emotional development. Specifically, Ms. Hawkins tries to facilitate children's prosocial behavior and foster peer friendships. Consider the following quotation, in which Ms. Hawkins explains her thought process while observing children during Connections:

> If they're chasing anybody, see if it's kind chasing or if it's picking on each other. Who's being excluded? Is there anybody being excluded? That kind of thing. That is what all that Connection time is sort of for. Watching what's going on on the yard, seeing who's being kind and who's not. And then having particular meetings with kids that need to be talked to.

Connections is also the part of the day when Ms. Hawkins can have "meetings with kids that need to be talked to." These meetings are meant to help children resolve problematic social issues. In the following quotation, Ms. Hawkins describes one of these meetings:

> I had to pull a group to talk about something called a "friendship threat." A friendship threat is when you threaten someone not to be their friend because they do something or they don't do something. So we did some role play and it was really interesting. I gave them the language of what that means and said it's perfectly okay to say when a friend says that, "That's a friendship threat. I'm going to tell the teacher."

Children's Language Experiences During Connections

During Connections, Ms. Hawkins adopted an elaborative conversational style

characterized by a relatively high prevalence of questions (35% of utterances) and extended conversations (48% of utterances). Questions and extended conversations were more prevalent during Connections than in any other activity setting. Excerpt 15 demonstrates how Ms. Hawkins used a mix of questions and other contingent responses to facilitate extended conversations during Connections:

Excerpt 15

During Connections, Ms. Hawkins gathers four children to talk about a problematic social dynamic that has been occurring within the group.

Ms. Hawkins:	What was hurting your feelings, Amelia?
Amelia:	Petra's mean face at me..
Ms. Hawkins:	Ahh…It hurt your feelings that there was a face being made.
	Well you know what I'm also thinking?
	You said you were feeling excluded.
Amelia:	Yeah.
Ms. Hawkins:	And you know here in Classroom B we don't exclude at all.
	Right?
	And we're kind and caring.
Children:	[nodding]
Ms. Hawkins:	Okay.
	So how can we make it so we're not excluding our friends?
	What can we do?
	Gigi, what do you think?
Gigi:	Say sorry.
Ms. Hawkins:	But saying sorry is just saying sorry.
	What can we do?
	What can we do differently?
Gigi:	Like maybe a hug.
	Or maybe a kiss.
Ms. Hawkins:	Oh we don't kiss because we don't want to spread germs.
	But I love hugging.
Amelia:	We solved the problem at snack time, remember Petra?
Ms. Hawkins:	What was the problem?
	What did you solve?
	I love hearing about solving problems.
Amelia:	Well, Gigi was sitting next to me.
	And then they were fighting.
	And then Gigi scooted over so Petra could sit next to me.
Ms. Hawkins:	So that was being kind and caring, right Gigi?
	Letting Petra come and join you?
Gigi:	Yeah.

As Excerpt 15 shows, Ms. Hawkins facilitated lengthy conversations with children during Connections by using a variety of questions and prompts. These conversations tended to

focus on problem solving skills, often with respect to social issues, reflecting Ms. Hawkins' pedagogical focus on promoting children's social-emotional development during Connections. In particular, these conversations reflected Ms. Hawkins' pedagogical focus on fostering children's prosocial development and peer relationships.

Ms. Hawkins also used directives (16% of utterances) during Connections. During Connections, directives were primarily used for the purposes of promoting engagement between children, reflecting Ms. Hawkins' pedagogical focus on fostering peer relationships as illustrated by Excerpt 16.

Excerpt 16

Ms. Hawkins is playing handball with a child. After a couple minutes, she helps the child to find a peer to play with her.

Ms. Hawkins:	I have to go look at the yard again, okay?
	You can ask a friend to come and play with you.
	Let's go find a friend to play with, that might want to play handball.
	Go ask your friend right over there.
	Come on!
	Veronica!
Petra:	She has ice.
Ms. Hawkins:	That's okay.
	Veronica, Petra wants to ask you something.
Petra:	Can you play handball with me?
Veronica:	Um…
Ms. Hawkins:	I was just playing, but I have to walk around the yard.
	You want to play with her for a little bit?
Veronica:	Sure.
Ms. Hawkins:	Yeah?
	Go ahead!

Ms. Hawkins' Pedagogical Goals During Snack

During Snack, Ms. Hawkins eats with the children and engages in conversations with them. They often talk about what they are eating. Other topics of conversation are initiated by Ms. Hawkins or by the children as well. Within the context of these

conversations, Ms. Hawkins tends to take more of a passive role, allowing children to direct the conversations, while she focuses on "listen[ing] to what they're talking about."

Children's Language Experiences During Snack

Given that Ms. Hawkins' pedagogical focus during Snack is to "listen to what [children] are talking about," it is not surprising that directives, questions, and extended conversations occurred less frequently during Snack than during any of the other activity settings analyzed. Questions accounted for 18% of Ms. Hawkins' child-directed utterances. Extended conversations and directives only accounted for 10% and 9% of her utterances, respectively. During Snack, Ms. Hawkins primarily engaged with children in brief conversations that did not last for five teacher turns or more. Excerpt 17 provides some examples of brief conversations that occurred during Snack:

Excerpt 17

During Snack, Ms. Hawkins talks to a child about his food.

Theo:	I got pasta.
Ms. Hawkins:	It looks like lasagna to me.
	It looks delicious.
	You're gonna need a fork for that.
	You have one?
	Oh you have a spoon, honey.
Theo:	I'm going to save it for lunch.
Ms. Hawkins:	Save it for lunch?
	That's probably a good idea.

Later, Ms. Hawkins sees a child bump into something.

Ms. Hawkins:	Oh!
	Are you okay, Mason?
	Ouch, ouch, ouch, ouch, ouch!
Mason:	I already got hurt while I was playing basketball.
Ms. Hawkins:	Oh yeah?
	Did you have a fall?
Mason:	I fell while I was trying to get the ball.
	I slipped on the corner of the sandbox.
Ms. Hawkins:	Ouch, ouch, ouch, ouch.
Mason:	And I was diving.
Ms. Hawkins:	That can happen when you're diving for a ball next to a sandbox.

The brevity of these discussions suggests that Ms. Hawkins was not focused on facilitating extended conversations with children during Snack. Rather, she was more focused on eating her snack while observing and listening to children.

Ms. Hawkins' Pedagogical Goals During Morning Meeting

Although Ms. Hawkins does not emphasize academics in her teaching, Morning Meeting is when Ms. Hawkins will incorporate "a little literacy lesson or a math lesson or science lesson." As Ms. Hawkins explains, "The math might be let's look at numbers or look at patterns in numbers" and "We do letters and talk about what words start with those letters and do a list on the board." Within the context of these whole group instructional activities, Ms. Hawkins' primary pedagogical focus is on soliciting children's ideas and promoting critical thinking skills. As she explains, "Big group is more of a questioning thing," and "If it's a whole group, it's more about critical thinking."

During Morning Meeting, Ms. Hawkins also wants children to learn from each other. Since Morning Meeting is a time when all the children are gathered together in one place, she considers it a great time to facilitate conversations that will bring children into contact with each other's ideas, which she views as a valuable learning opportunity. When Ms. Hawkins was asked about her goals during Morning Meeting, she said:

> Whole group I do it because I want other kids' ideas. I want them to start to build off of other kids' ideas and listen to other kids' ideas. A lot of kids might not know what one kid does and I know that kid does. That kind of thing.

Children's Language Experiences During Morning Meeting

During Morning Meeting, directives accounted for 17% of Ms. Hawkins' child-directed utterances. Ms. Hawkins primarily used directives to promote children's

engagement in the group activity. Sometimes, this involved correcting unwanted behaviors, as illustrated by Excerpt 18:

Excerpt 18

During Morning Meeting, Ms. Hawkins leads the children in a counting activity. A couple children are purposely counting faster than the rest of the group. Ms. Hawkins asks them to stop.

Ms. Hawkins: That's not helpful.
Not helpful.
Stay with us.

Later, during a group discussion, Ms. Hawkins notices that two children are standing at the edge of the circle and not paying attention.

Ms. Hawkins: Penny, right now it's Cory's turn to share.
Have a seat.
Have a seat.
Harmony, have a seat.
Join our group okay?

Excerpt 18 shows how Ms. Hawkins used directives to correct children's behavior when they were disruptive or disengaged. In contrast to Ms. Belinda, who used directives during Circle Time to remind children to be calm and pay attention to her, Ms. Hawkins used directives to tell children to be part of the group. Ms. Hawkins' directives also served to orient children's attention towards the subject matter. For example, in Excerpt 19, Ms. Hawkins asks children to move so that they can get a better view of the white board, not so they pay more attention to her:

Excerpt 19

During Morning Meeting, Ms. Hawkins leads the children in a math activity. After she has written some numbers on the board and the activity is about to begin, she asks particular children, who are on the fringes of participation, to move in closer to the white board.

Ms. Hawkins: Zoe, find a space where you can see okay?
Carrie, can I have you move in please?
Nathan, can I have you move in because I really need your thinking?
Harmony and Penny, need you in here.

As Excerpt 19 illustrates, Ms. Hawkins used directives to promote children's engagement with the subject matter. Her directives served the purpose of orienting children towards the group and towards the subject matter that was being presented.

Questions and extended conversations were more prevalent than directives during Morning Meeting, comprising 20% and 24% of Ms. Hawkins' utterances, respectively. Ms. Hawkins' use of questions and extended conversations during Morning Meeting reflects her pedagogical focus on promoting children's critical thinking skills. As Excerpt 20 illustrates, Ms. Hawkins used questions during instruction to solicit children's ideas and facilitate critical thinking:

Excerpt 20

During Morning Meeting, Ms. Hawkins leads the children in a math activity. She has written some numbers on the board and she wants children to identify patterns.

Ms. Hawkins: So what do we notice about these patterns?
What do we notice?
Are there any patterns?
Do you see any patterns?
Hmm…

Children raise their hands to be called on. Ms. Hawkins calls on a child to respond.

Ms. Hawkins: Emma, what do you see?
Emma: One, one, one.
Ms. Hawkins: She notices one, one, one.

Ms. Hawkins then asks the child to make a prediction about what number will come next in the pattern.

Ms. Hawkins: So what do you think will be right there?
What do you think?
One, one, one…
What do you think that one might be?
Clark: One.
Ms. Hawkins: You think so?
Emma: Yes.
Ms. Hawkins: Let's try it.
We can check it out later.
Thank you.
Nice pattern!
Okay what other patterns?

In contrast to the questions that Ms. Belinda asked during Circle Time, which were predominantly known-answer questions designed to test children's knowledge, Ms. Hawkins' questions solicited children's ideas and were designed to promote children's thinking and problem solving skills. In addition to using questions to facilitate math instruction, as shown in Excerpt 20, Ms. Hawkins used questions to facilitate extended group conversations during Morning Meeting. During the second half of Morning Meeting, Ms. Hawkins asked a few children to talk about their ongoing work projects, so the rest of the class could learn from them, reflecting her pedagogical focus on providing opportunities for children to learn from their peers. Excerpt 21 shows how Ms. Hawkins facilitated an extended conversation about a child's work by using a variety of contingent responses:

Excerpt 21

During Morning Meeting, Ms. Hawkins facilitates a group discussion. A few children are given an opportunity to share their ongoing work projects with the rest of the group. The children are sharing their designs for bird houses.

Ms. Hawkins:	Come on over Theo.
	Theo has a great one.
	Okay, tell us what the bottom part is.
Theo:	Those are the place to eat.
Ms. Hawkins:	It's the place to eat.
	Love it.
	So maybe they have like a little ramp where they can eat?
	I love the shape.
	Look at the shape of that one.
Theo:	Those are the crows.
Ms. Hawkins:	The crows.
	Ahh…
	Now, Theo, where do they get into the house?
	Show me the openings.
	Where are the openings?
Theo:	Right here.
	That's the doors.
Ms. Hawkins:	Okay.
	So there are three doors.
	Any questions for Theo?
Veronica:	How do the babies come in and how do the Mommies come in?

	How do they get to the top?
Ms. Hawkins:	How do they get in the top door?
Theo:	That one?
Veronica:	Yeah.
Theo:	They fly up there.
Veronica:	But what about the babies?
Ms. Hawkins:	Do babies fly yet?
Theo:	They don't fly when they're babies.
Ms. Hawkins:	Right.
	They're born inside, right?
Theo:	Yeah.
	There's the nest.

Excerpt 21 shows how Ms. Hawkins used a variety of contingent responses to facilitate extended conversations about children's work during Morning Meeting. Sometimes her comments and questions modeled curiosity and encouraged children to elaborate on their explanations. Other times, Ms. Hawkins used questions or prompts to scaffold conversations between children.

Ms. Hawkins' Pedagogical Goals During Work Time

Ms. Hawkins uses Work Time as an opportunity to engage children in deeper conversations. Since the project work that children engage in during Work Time evolves from children's interests, Ms. Hawkins expects children to be more engaged during Work Time than during whole group activities. According to Ms. Hawkins:

> Deeper conversations with smaller groups. You know those small groups are formed by their interests. What they want to be in and what they want to do. If it's in your context, then you'll remember it and it's exciting for you. More kids can be focused in and actually listening.

Furthermore, Work Time provides opportunities for Ms. Hawkins to check in with children one on one so she can scaffold their learning in ways that are tailored to each individual child. As Ms. Hawkins explains, "What's important is that I can give them individual time to sit down and talk about their interest and what they're doing."

Children's Language Experiences During Work Time

During Work Time, the language input provided by Ms. Hawkins was characterized by relatively high proportions of questions (25% of utterances) and extended conversations (41% of utterances), second only to the proportion of questions and extended conversations that occurred during Connections. Additionally, 15% of Ms. Hawkins' child-directed utterances were directives. The majority of Work Time was devoted to individual check-ins between Ms. Hawkins and each of the children in the group, reflecting her pedagogical belief in the importance of creating opportunities for individualized learning. During these individual check-ins, Ms. Hawkins used directives and questions to facilitate extended conversations, as shown in Excerpt 22:

Excerpt 22

During Work Time, Ms. Hawkins facilitates extended conversations while checking in with individual children about their work. The children are working on designing bird houses.

Ms. Hawkins:	Okay Jimmy, come on over.
	Let's look.
	Where's the door?
Jimmy:	Here.
Ms. Hawkins:	Okay so you know what I want you to do?
Jimmy:	There's the hole.
Ms. Hawkins:	There's the hole for him to go in, right?
Jimmy:	Mmhm.
Ms. Hawkins:	Let's label that hole.
	What sound do you hear?
	/h/ /h/ /h/ [makes the "h" sound] hole.
	What do you think it starts with?
Jimmy:	Um… O?
Ms. Hawkins:	Great!
	Put an O.
	And what does it end with?
	What sounds do you hear?
	Hole.
Jimmy:	Is there a C?
Ms. Hawkins:	No.
	That would be a /c/ /c/ /c/ sound.
	Hole.
	What letter makes the /l/ sound?
	Like Lawrence?
Jimmy:	L?
Ms. Hawkins:	Great!
	Is this the roof of it?
Jimmy:	Yes.

Ms. Hawkins:	What would that start with?
	Roof.
	That /r/ sound.
Jimmy:	R?
Ms. Hawkins:	Yeah.
	Do you know what an R looks like?
Jimmy:	Yeah.
Ms. Hawkins:	Okay.
	Roof.
	What's the last sound you hear?
Jimmy:	F.
Ms. Hawkins:	Yes.
	So you've got your roof.
	You've got your door.
	I think it's great.
	What colors is it going to be, do you think?
Jimmy:	This part red.
	This is blue.
Ms. Hawkins:	Let's write those here.
	Red and blue so we know what colors you think they might be.

In this excerpt, Ms. Hawkins solicits the child's ideas about his birdhouse design while also assessing his phonemic awareness and alphabetic knowledge. Excerpt 22 shows how individual check-ins during Work Time provided opportunities for Ms. Hawkins to have extended conversations with each child. Importantly, within the context of these conversations, Ms. Hawkins used questions and directives to formatively assess children's knowledge in ways that were individually tailored to each child's needs.

Discussion

This study provides a detailed account of teacher language input and individual children's opportunities for joint engagement with their teachers across activity settings in two Pre-K classrooms. Coding of children's opportunities for joint engagement revealed differences in children' opportunities for engagement across activity settings and computerized language analyses and coding of teacher talk revealed both stark contrasts and subtle differences in the language input that teachers provided across activity settings in both classrooms. Moreover, analyses of teacher interviews led to a deeper

understanding of how teachers' pedagogical goals were reflected in the language experiences they provided for children.

Children's Language Experiences in Classroom A. In Classroom A, children's opportunities for engagement with Ms. Belinda were highest during Circle Time, and relatively low across all other activity settings. During Circle Time, a whole group activity setting, all the children in the classroom had the opportunity to be engaged. During Centers Time and Outside Time, both of which are free choice activity settings, Ms. Belinda divided her time between children as she observed and engaged with them in their self-selected activities. During Lunch, the children seated at Ms. Belinda's table had the opportunity to engage with her, but the rest of the children in the classroom did not.

The language input that Ms. Belinda provided varied across activity settings, depending on whether she adopted more of an elaborative conversational style or was more didactic in her child-directed speech. Ms. Belinda adopted more of an elaborative conversational style during Centers Time and Lunch. During these activity settings, the language input she provided was characterized by more conversational balance and a higher prevalence of questions and extended conversations. In contrast, Ms. Belinda was more didactic during Circle Time and Outside Time. During these activity settings, she used more directives and solicited fewer verbal contributions from children.

Ms. Belinda's Pedagogical Goals and Practices. Ms. Belinda's pedagogical goals were reflected in the language experiences she provided for children. During Circle Time, one of Ms. Belinda's primary goals is to help children gain the social school readiness skills they need for Kindergarten. As such, she used directives frequently for

the purposes of behavior management, to help children remain calm, with their attention focused on her. Another one of Ms. Belinda's goals during Circle Time is to introduce a wide range of academic content, especially literacy. Thus, questions were frequently used within the context of academic instruction. The directive style that Ms. Belinda adopted during Circle Time is perhaps an unintended consequence of using the published curriculum, which prescribes specific instructional activities for teachers to implement. Although facilitating children's language development is one of Ms. Belinda's primary overarching pedagogical goals, the task of getting through all the content prescribed by the published curriculum leaves little room for improvisation within the context of Circle Time. Indeed, extended conversations accounted for only 8% of all of Ms. Belinda's utterances during Circle Time. In contrast, during both Centers Time and Lunch, Ms. Belinda has the flexibility to be much more intentional in her facilitation of children's language development. During these activity settings, she was able to adopt a more elaborative conversational style, with greater use of questions to solicit children's verbal contributions, leading to more extended conversations. During Outside Time, Ms. Belinda's primary goal was to facilitate children's opportunities for gross-motor play. As such, she used directives to engage children in a variety of gross-motor activities.

Children's Language Experiences in Classroom B. In Classroom B, children's opportunities for engagement with Ms. Hawkins were highest during Morning Meeting, and relatively low across all other activity settings. Since Morning Meeting is a whole group activity setting, all the children in the classroom had the opportunity to be engaged. During Connections, a free choice activity setting, Ms. Hawkins spent the majority of her time facilitating a small group discussion with four children and the rest of the time

checking in with other children and parents. During Snack, Ms. Hawkins primarily engaged with three children who were seated with her at the same table. During Work Time, Ms. Hawkins spent the majority of her time engaging with the five children who had been assigned to work with her.

The language input that Ms. Hawkins provided varied across activity settings. Extended conversations, directives, and questions were all relatively infrequent during Snack compared to other activity settings. Directives accounted for a higher proportion of utterances and questions accounted for a lower proportion of utterances during Morning Meeting than during Connections or Work Time. Extended Conversations were also less prevalent during Morning Meeting than during Connections or Work Time. Ms. Hawkins' conversational style was similar during Connections and Work Time. During these activity settings, Ms. Hawkins' used questions to promote extended conversations focused on problem solving and critical thinking.

Ms. Hawkins' Pedagogical Goals and Practices. Ms. Hawkins' pedagogical goals were reflected in the language experiences she provided for children. During Snack, Ms. Hawkins' goal was to listen to children's conversations, which explains the passive role that she took during conversations that occurred during this activity setting. During Work Time, Ms. Hawkins' goal was to engage in deeper conversations with children, particularly while checking in with them one-on-one about their work. Accordingly, questions and extended conversations were highly prevalent during Work Time. Questions and extended conversations were even more prevalent during Connections, because Ms. Hawkins intentionally uses Connections time to engage children in group discussions when problematic social issues arise. This use of Connections time reflects

Ms. Hawkins' pedagogical goal of fostering children's prosocial behavior and facilitating peer relationships. During Morning Meeting, Ms. Hawkins uses a relatively high proportion of directives, in order to help manage children's behavior and attention within the whole group setting. Questions and extended conversations are even more prevalent during Morning Meeting because Ms. Hawkins' primary goal during whole group activities is to solicit children's ideas and foster children's critical thinking skills.

Pre-K to Kindergarten Transition. One of the similarities between Classroom A and Classroom B is that both classrooms are housed within elementary school campuses and Ms. Belinda and Ms. Hawkins both collaborate with the kindergarten teachers. As such, they both are familiar with the kindergarten classroom contexts that their students will be entering in the coming year and they can plan accordingly to help the children have a more seamless transition to kindergarten. The difference between Classroom A and Classroom B is that the kindergarten classrooms where the children will be going are vastly different. Ms. Belinda knows that the children in her classroom will be entering full day kindergarten classrooms where they will need to attend to their teacher for long periods of time during whole group activity settings. She knows that in order to be successful in kindergarten, she needs to equip the children in her classroom with the self regulation skills that will help them to attend to their kindergarten teachers for long periods of time without becoming distracted. As such, Ms. Belinda purposely increases the amount of time spent in whole group such that the amount of time in this activity setting is typically 30-45 minutes a day by the end of the year. She also adopts a highly directive style and makes her expectations for children's behavior explicit. In contrast, Ms. Hawkins knows that the kindergarten classrooms at the demonstration elementary

school are structured in ways that are not vastly different from the daily classroom routines they are experiencing in her classroom at the Pre-K level. Thus, getting children ready for kindergarten is not as much of a concern for Ms. Hawkins than it is for Ms. Belinda because Ms. Hawkins knows that there is already remarkable alignment between the two settings.

Children's Language Abilities. Although children's language were not the focus of this analysis, it is important to consider how children's language abilities may have impacted the kind of language experiences provided by their teachers. The children in Classroom A were all from low-income families and there is a large body of literature which has found that children from disadvantaged backgrounds lag behind their more affluent peers in terms of their language abilities at kindergarten entry (e.g., Lee & Burkham, 2002). Given the student population that Ms. Belinda was working with, it makes sense that Ms. Belinda explicitly mentioned that facilitating children's language development is one of her overarching pedagogical goals, while Ms. Hawkins did not. Moreover, although the sophistication of children's language was not analyzed in this dissertation, the transcripts nevertheless provide a glimpse of how children's language abilities differed in the two classrooms. For example, consider the following excerpt from Classroom A:

Excerpt 23

During Centers Time, Ms. Belinda engages with a group of children in the dramatic play area.

Nina:	I have baby.
Ms. Belinda:	You have what, Nina?
Nina:	Baby.
Ms. Belinda:	You have a baby.
	What is your baby doing?
	So what's your baby eating?
	What does baby eat?

Nina: Baby.
Ms. Belinda: Baby eats food.
What kind of food.
Nina: Cheerio.
Ms. Belinda: Cheerios?
Does your baby sister eat Cheerios or is she too little still?
Nina: She eats this.
Nina holds up a bowl.
Ms. Belinda: She eats that?
Food from a bowl?
Does she have cereal?
Baby cereal?

In Excerpt 23, Nina uses mostly one word responses to communicate with Ms. Belinda. Ms. Belinda models more sophisticated language use throughout this conversation. For example, when Nina says, "Baby," Ms. Belinda replies, "You have a baby." Ms. Belinda also introduces more sophisticated vocabulary that Nina can use to express her ideas. For example, when Nina says, "She eats this," Ms. Belinda clarifies her point and capitalizes on the opportunity to build Nina's vocabulary. Ms. Belinda says, "Does she have cereal? Baby cereal?" In contrast, consider the child talk exhibited in the following excerpt from Classroom B:

Excerpt 24

During Morning Meeting, Ms. Hawkins gives a child an opportunity to talk about an ongoing work project with the rest of the group. The child is talking about a design for a birdhouse that she has drawn.

Ms. Hawkins: Okay, tell us about it.
Haley: Okay.
This is the kitchen.
This is the Mom and this is the brother and sister.
They're twins, but they're babies right now.
And this is the Mom and this is the Mom and this is the kitchen and this is the Mom and Dad's room.
Ms. Hawkins: Any questions?
Because I have a question.
Carrie: I have a question!
Haley: Carrie.
Carrie: Um, is there a way for them to get out of the house?
Ms. Hawkins: Ahhh…
Haley: Yes.
Carrie: Where?
Haley: They go through the strings and then they live right there.

Ms. Hawkins:	I think Carrie wants to know where the hole is to get inside the house. Is there a hole to get inside?
Haley:	Yeah. You go through here. You climb and then go in the house, but then go back.
Ms. Hawkins:	I have a comment. It's not really a question. What I notice is that she has more than one room. She has a kitchen and there is another room. So maybe your bird houses want more than one room.

In contrast to the one-word responses that Nina used in Excerpt 23, Haley's and Carrie's talk is considerably more sophisticated. They use full sentences for a variety of language functions, including questioning, explaining, and describing. Ms. Hawkins' verbal contributions to the conversation served to keep the conversation going. For example, when Haley misunderstood Carrie's question, Ms. Hawkins stepped in to clarify what Carrie was asking. This excerpt also shows how Ms. Hawkins was more concerned with soliciting children's ideas and modeling curiosity than she was with modeling more sophisticated language use for the children.

Limitations

The descriptive findings that are reported in this study help to shed light on differences in children's language experiences across activity settings in two Pre-K classrooms. These findings could only have been revealed through the fine-grained analytic approach that was undertaken in this study. However, since this study included only a limited sample of two Pre-K classrooms and a narrow window of data collection, caution must be taken in interpreting the results. Importantly, the findings of this study are not representative of Pre-K classrooms in general. Teacher and classroom quality vary widely across Pre-K programs. As such, children's language experiences in other

Pre-K programs may be very different from the patterns of teacher talk and child engagement revealed in this study.

CHAPTER VI: CONCLUSION

Integrative Summary

The early childhood years prior to formal schooling are a critical time for supporting children's oral language development. A large body of research has examined children's language development in home and early education contexts and identified the features of adult language input and adult-child social interaction that help to facilitate children's oral language development (e.g. Dickinson & Tabors, 2001; Gallaway & Richards, 1994). We know that children's oral language development is supported when sensitive, responsive adults engage them in extended conversations using rich language (e.g., Dickinson & Porche, 2011; Tamis-LeMonda, Bornstein, & Baumwell, 2001), yet research examining children's language experiences in early learning settings has found that these kinds of interactions occur infrequently in most Pre-K classrooms (Dickinson, McCabe, & Clark-Chiarelli, 2004; Justice, Mashburn, Hamre, & Pianta, 2008). As growing numbers of children continue to enroll in Pre-K programs before Kindergarten, it is becoming increasingly important to close the gap between what we know and what we do to support young children's language development in early learning programs.

Several key gaps in the current literature are addressed by this dissertation. First of all, we know that adults can facilitate children's language development by providing rich language input and promoting high levels of joint attentional engagement, but we do not know the extent to which these facilitative aspects of input and interaction co-occur across various activity settings in Pre-K classrooms. Second, based on existing literature, it is clear that the quantity and quality of teacher-child interactions varies across activity settings in early childhood classrooms. However, we currently have an incomplete

picture of classroom life because studies tend to adopt either a teacher-level or child-level approach to analysis. A combination of teacher- and child-level analyses can afford a more nuanced view of potential tradeoffs in the quality of children's language experiences across various activity settings. Third, more research is needed to explore the relationship between teachers' pedagogical goals and variation in children's language experiences across activity settings in Pre-K classrooms.

This dissertation involved two studies. Study 1 employed quantitative secondary analysis of a large corpus of time-sampled observations in Pre-K classrooms. Study 2 entailed case studies of two Pre-K classrooms, and involved micro-level analyses of videotaped teacher-child interactions and teacher interviews. Taken together, findings from the two studies collectively suggest that:

1. Teacher-child interactions that support children's oral language development occur infrequently in many Pre-K classrooms.

2. Support for children's oral language development varies as a function of activity setting and involves tradeoffs between the quantity and quality of children's language experiences.

3. Nuanced features of teacher talk vary in subtle ways across activity settings and between classrooms in ways that are likely to be consequential for children's language learning.

4. Teachers' pedagogical goals and their conceptualizations of learning and language development differed across activity settings. More research elucidating teachers' perspectives can lead to a deeper understanding of why teacher talk varies across activity settings.

Study 1 showed that teacher-child interactions, which support children's oral language development, occur infrequently in many Pre-K classrooms. Of the 5,925 time-sampled observations that were analyzed in Study 1, only 273 (5%) involved teacher-child interactions that provided high support for children's oral language development.

Study 1 also found that children are most likely to experience conversations with their teachers during whole group activity settings, but the tradeoff is that these conversations are characterized by lower levels of joint engagement with their teachers than conversations that happen during free choice or small group activity settings. Although lower teacher-child ratios during free choice and small group activity settings facilitate higher levels of joint attentional engagement and are therefore ideal activity settings for teachers to engage children in rich, extended conversations, the reality in Pre-K classrooms is that children's opportunities to engage with their teachers during free choice and small group are rare.

Study 2 employed micro-level analyses of teacher-child conversations across activity settings in two Pre-K classrooms and served not only to corroborate the findings of Study 1, but also to unpack the findings further. Study 2 confirmed that children's opportunities for engagement with their teachers are most likely to occur during whole group activity settings and relatively rare across all other activity settings. Study 2 also afforded an opportunity to look closely at the fine-grained details of teacher-child talk, helping to pave the way towards a more nuanced understanding of how children's oral language development is differentially supported across various activity settings. Study 2 examined patterns of teacher talk in two Pre-K classrooms and found that features of teacher language input (i.e. rate of speech, conversational balance, use of directives, use of questions, and prevalence of extended conversations) varied by teacher and across activity settings. Study 2 also examined teachers' pedagogical goals and found that these goals were reflected in the language experiences that teachers provided for children.

Future Research Directions

The findings of this dissertation suggest several possible avenues of future research. First, future studies can address some of the limitations of this dissertation. To address the limitations of Study 1, future studies can collect time-sampled observational data of children's language experiences using a variety of codes that capture multiple features of teacher language input that may be consequential for children's learning. Additionally, combining time-sampling measures with rating scales that assess the global quality of teacher-child interactions and the overall quality of the language environment can help to yield a more comprehensive picture of what children are experiencing in classrooms. To address the limitations of Study 2, future studies can investigate whether variations in patterns of teacher talk revealed within the two classrooms studied are applicable within a larger set of Pre-K programs.

Another avenue of research to pursue involves continued investigation of ecocultural influences on children's language experiences in Pre-K classrooms. Study 2 of this dissertation focused on identifying teachers' pedagogical goals, but this is only one of many potentially influential ecocultural factors to consider. Ecocultural theory suggests that other aspects of activity settings, such as task demands, cultural scripts and norms, and personnel present, can be analyzed to reveal additional sources of ecocultural influence. Revealing these sources of ecocultural influence will require more research that focuses on elucidating teachers' perspectives. This dissertation demonstrates that asking teachers to explain their daily routines and really trying to understand their perspectives can yield a wealth of new and important information. This information could

be used to devise innovative approaches to professional development that are more connected to the everyday classroom lives of early childhood teachers.

This two-part study utilized multiple methods to provide both a macro- and micro-level view of children's language experiences across activity settings in Pre-K classrooms. Study 1 identified overall patterns in children's language experiences that are generalizable to other Pre-K programs, while Study 2 revealed nuances in patterns of teacher talk that could only have been revealed through fine-grained analyses in a small sample of classrooms. Utilizing both approaches afforded a more complete picture of children's experiences in Pre-K classrooms. More research involving mixed methods approaches can help to advance the field by continuing to integrate findings that are generalizable with findings that are grounded in the every day details of classroom life.

Implications for Practice

The findings of this dissertation suggest that teacher-child interactions that support children's oral language development occur infrequently in many Pre-K classrooms. One implication of this finding is that teachers could benefit from learning more about what comprises high quality support for children's oral language development. In early childhood classrooms, teachers talk to children all day long, but are they aware of when their talk is more or less beneficial for children's oral language development? In-service training and professional development can be designed to help teachers gain a deeper understanding of how nuanced features of their child-directed talk are influential in shaping children's language development. This knowledge would help teachers to become more intentional about how they engage and talk with children.

The findings of this dissertation also suggest that support for children's oral language development varies as a function of activity setting and involves tradeoffs between the quantity and quality of children's language experiences. Children are most likely to experience teacher-child conversations during whole group activity settings, but levels of teacher-child joint engagement tend to be lower during whole group. Furthermore, the language input provided during whole group may be more directive and less elaborative in some classrooms, resulting in fewer opportunities for extended conversations. During small group and free choice activity settings, levels of teacher-child joint engagement tend to be higher and teachers may have an easier time facilitating rich, extended conversations within these activity settings. However, given the reality of teacher-child ratios in Pre-K programs, children's opportunities for engaging with their teachers during small group and free choice are rare.

Recognizing these tradeoffs can help teachers to become more intentional in the amount of time they allocate to various activity settings within their daily classroom routines. Furthermore, a nuanced understanding of these tradeoffs can help teachers to think more critically about their pedagogical goals within each activity setting. For example, although higher teacher-child ratios during whole group present a challenge, teachers can also recognize that whole group provides unique opportunities for bringing children into contact with each other's ideas. This understanding can lead to the facilitation of rich extended group conversations that focus on soliciting children's ideas during whole group. This example shows how pedagogical goals can be aligned with activity settings in ways that capitalize on opportunities for language development while minimizing the challenges that exist within particular activity settings.

APPENDIX I

Emergent Academics Snapshot Observation Coding Categories and Definitions

Coding Categories	Definition
Activity Setting	
Whole Group	Child is engaged with the whole group in a teacher-initiated activity. Activities can include stories, songs, calendar instruction, discussions, book reading, or demonstrations. The child's focus is on the teacher. This may include structured PE activities on the playground.
Small Group	Child is engaged in small group activities that are teacher organized. Teacher organized means that the teacher decides what children are to be doing and assigns which children participate, even if the teacher is not participating in the group. These can include group art projects, writing stories, collective building, cooking projects, small group instruction, science experiments, structured PE activities, etc. May be coded when all children in the class are doing the same thing, but under the direction of teachers in smaller groupings.
Free Choice	Child is engaged in free choice activities. During this time children are able to select what and where they would like to play or learn. Activities can include individual art projects, blocks, pretend area, puzzles, reading, puppets, computers, science areas, etc. The key here is that children have chosen their activities. It does not matter if the activity they have chosen is individual or in a small group. It does not matter if the activity is with or without the teacher.
Meals	Child is engaged in eating breakfast, lunch, or snacks, or is enjoying food that the class cooked during a cooking project.
Basics	Child is engaged in toileting, standing in line, clean-up time, wait time between activities, waiting for materials to be passed out, transitional activities (i.e. moving out of whole group into the next activity).
Child Engagement	
Oral Language Development	Child is involved in an activity or an interaction where a teacher is taking action to draw communication from the children to build expressive language or is actively listening to children speak, by allowing them to complete their thoughts. The teacher may be: asking children questions; helping children expand on their thoughts, express feelings, or resolve conflict; involved in verbal social interaction with the children, asking them about their lives or their activities; helping children learn or practice new vocabulary. Oral Language Development is not merely giving instructions, nor is it coded when children are merely reciting or repeating words after the teacher.
Teacher-Child Social Integration	
Not Engaged	Child is not engaged in social interaction with the teacher.
Minimally Integrated	Child is on the fringes of interacting with the teacher. Child's behavior and/or presence is intermittently acknowledged, sometimes in an off-hand way. There is evidence of mutual awareness and no sense that the child is being excluded, but also no sense that he/she is an integral part of the interaction.
Fully Integrated	Child is clearly part of the social action or exchange with the teacher and there is clear evidence that the child is important for the continuation of the interaction. The child and teacher may be engaged in conversation, an affectionate exchange, or playing together as a dyad or part of a larger group.

APPENDIX II

ECOCULTURAL PRE-K TEACHER INTERVIEW

TEACHER EDUCATION AND BACKGROUND

I want to know more about your path to becoming an ECE teacher.
How did you become an ECE teacher?
Can you tell me about your educational background and training?
How many years have you been teaching the age group you are working with now?

DAILY CLASSROOM SCHEDULE/ROUTINE

Next I want to talk about your daily classroom schedule/routine.
Can you write down your daily classroom schedule/routine?

I want to really understand what is happening and what you're thinking about during each of these activities that make up your daily schedule/routine.
Can you elaborate on what happens during _____?
What's going through your mind during _____? What are your goals?

Some thing that fascinates me as a researcher is how daily classroom schedules/routines can vary widely from one program to the next. Some children are in classrooms where most of their time is spent in free choice activities. Some children are in classrooms where they spend most of their time in whole group activities. Your classroom offers a balance of different activity settings.
Can you talk about what is important about each of these different activity settings?
Prompt for information about Free Choice, Whole Group, Small Group

Now I feel like I have a good sense of what happens during each of these activities. For the next few questions, I would like you to reflect on your daily classroom schedule/routine as a whole.
Who determines the daily classroom schedule? How is it determined?
What are some of the things you think about when you are creating the daily classroom schedule?
If you could revise the schedule, what would you keep the same and what would you change?

TEACHING PHILOSOPHY

Next I want to talk about your teaching philosophy. There are lots of opinions about what young children should learn during the Pre-K/Kindergarten years. I'm curious to hear what you think.
What do you want the children in your classroom to learn?

There are also many ideas out there about how young children learn and how to teach them.
How do you think children learn best and how do you, as a teacher, facilitate their learning?

APPENDIX III

Teacher Talk Coding – Definitions and Examples

Teacher Talk Codes	Definition and Examples
DIRECTIVES (D)	*Intended to control the child's behavior or gain the child's attention. Can be in the form of an imperative or a question.* Examples: • "Let's just clean it up." • "Can you move please?" • "Find a space where you can see." • "Stand up okay?" • "I think we need to calm down." • "Be a helper." *Additional Notes: a) Directives and Questions are mutually exclusive codes. If both codes apply (e.g. "Stand up and tell us about your drawing."), the utterance should be coded as a Question.
QUESTIONS (Q)	*Intended to elicit information from the child. Can be in the form of a question or request. Additionally coded as:* *CLOSED-ENDED QUESTION (CQ)* *if the child is limited to yes/no or forced choice responses* Examples: • "Right?" • "Do you want to go now?" • "Are there any patterns?" • "Was it big or little?" *OPEN-ENDED QUESTION (OQ)* *if the child is free to respond in any way* Examples: • "How are you feeling?" • "What do you think?" • "Tell us about that." • "The opposite of big is…?" *Additional Notes: b) Directives and Questions are mutually exclusive codes. If both codes apply (e.g. "Stand up and tell us about your drawing."), the utterance should be coded as a Question. c) Do NOT include questions when the teacher is asking the child to repeat what he/she said because the teacher did not hear it clearly.

EXTENDED CONVERSATION (EC)	*Teacher attempted to deepen a single topic or scaffold the child in solving a problem over the course of five or more turns. Conversations can be with one or multiple children.* <u>Example:</u> • Child: "When I was at my weekend I saw bluebirds." • Teacher: "Did you see it? • Child: "Yes." • Teacher: "Where did you see them?" • Teacher: "You were out in the desert weren't you?" • Child: "Uh, yeah." • Child: "I saw a bluebird at the desert." • Teacher: "Did your bluebird have a brown belly or was it all blue?" • Child: "All blue." • Teacher: "Totally blue." • Child: "Yeah." • Teacher: "Where should our bus go?" • Child1: "A party!" • Teacher: "Where else?" • Child2: "Dinosaur museum!" • Teacher: "A museum." • Child3: "Doctor." • Teacher: "A doctor." • Child4: "The zoo." • Teacher: "The zoo."

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