EXPLORING THE LANGUAGE GUIDANCE IN "THE CREATIVE CURRICULUM FOR PRESCHOOL": AN ANALYSIS OF THE WRITTEN CURRICULUM AND TEACHERS' DESCRIBED ENACTMENT

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This dissertation is dedicated to my son, Cameron Charles Gibbs. Being your mom is one of the greatest joys of my life. Thank you for helping me to see that I can truly have it all. I love you.

long-distance relationship, moved into our Charlestown home, welcomed Mookie into our lives, got married , became parents to Cameron, and embarked on the journey of settling into our new home. What a whirlwind it has been! I am forever grateful for his unwavering love and support. Onto new adventures!

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CHAPTER 1

Introduction

Early childhood teachers' language practices have a profound influence on children's oral language and reading development throughout the early years of schooling (Bowers & Vasilyeva, 2011; Cervetti et al., 2020; Dickinson & Porche, 2011; Justice et al., 2018). Specific language practices, such as fostering meaningful conversations, modeling complex language (i.e., grammar, vocabulary), and explaining new vocabulary, play a particularly influential role in shaping young children's language outcomes (e.g., Dickinson et al., 2014; Justice et al., 2018). However, empirical research reveals that these kinds of language practices are often underutilized in early childhood classrooms (Cabell et al., 2013; Dickinson & Porche, 2011; Wright & Neuman, 2014), with didactic and directive teacher talk dominating (Bratsch-Hines et al., 2019; Sawyer et al., 2018). As a result, children receive limited exposure to enriching conversations and receive little explicit or implicit vocabulary instruction from teachers (Rojas et al., 2020; Cabell et al., 2015; Pelatti et al., 2014; Phillips et al., 2018; Wright & Neuman, 2014). Therefore, there is a stark contrast between the types of language practices that are supportive for students' development and teachers' consistent use of these practices within pre-K classrooms. Addressing this disparity presents a complex challenge for teachers and researchers alike.

One potential solution is the use of published curricula, a strategy widely embraced by reformers, policymakers, and school districts to shape instructional practice (Brown, 2009; Jenkins & Duncan, 2017). Curricular materials convey information about which kinds of instructional practices are supportive for children's learning by using embedded (at times, scripted) guidance. Despite calls pushing for the use of research-based curricula in ECE settings (National Association for the Education of Young Children [NAEYC], 2019; U.S.

Department of Health and Human Services [DHHS], 2010), little research has examined their implementation. Existing research focuses exclusively on the effects of different curricula on children's learning outcomes (Preschool Curriculum Evaluation Research Consortium [PCER], 2008; Jenkins et al., 2019) or teachers' fidelity to prescribed, often supplemental, curricula (Hamre et al., 2010; Neuman & Danielson, 2021; Piasta et al., 2015; Zucker et al., 2021).

Consequently, current research overlooks the nuanced ways in which early childhood teachers interpret and adapt curriculum materials to their classroom context beyond a strict adherence lens (Brown, 2009; File et al., 2012). This type of inquiry is paramount as curriculum materials are not "static tools" with one fixed meaning; rather, teachers are sensemakers who actively "adapt, invent and transform [the written curriculum] as they confront the realities of classroom life," (Shulman, 1990, p. vii; Yoon, 2013). Therefore, exploring preschool teachers' perspectives on and use of written curriculum can provide valuable insights into the influences driving their implementation of curricular language guidance, thereby bridging the gap between theory and practice in early childhood education.

This dissertation investigates the language guidance presented in The Creative Curriculum (6th Ed.) (Teaching Strategies, 2016), a widely used Pre-K curriculum, using a combination of content analysis and semi-structured interviews. The study is guided by two primary research questions:

1. What types of teacher talk are provided within The Creative Curriculum to promote children's language development?

2. How do teachers interpret and respond to the language guidance provided in The Creative Curriculum?

The content analysis describes the types of embedded language guidance in the written curriculum and analyzes the implicit messaging teachers receive regarding the classroom language environment. This analysis will reveal the extent to which teachers have access to high-quality instructional support for their language use. In addition, the study investigates

teachers' perceptions of their enacted curriculum, exploring how they interpret and adapt the suggested language guidance to support their students' language learning needs. This component of the inquiry provides insight into preschool teachers' pedagogical decision-making. The findings of this study have important implications for the development of responsive professional learning experiences and the design and implementation of early childhood language curricula.

2.3 Dissertation Overview

The dissertation is divided into six chapters. The first chapter outlines the goals of this study and provides the research questions that guided this inquiry; I also highlight how this inquiry fills an important gap in the field by investigating the language guidance in a popular pre-K curriculum, The Creative Curriculum (CC) (6th ed.). In Chapter 2, I discuss the key theoretical perspectives that informed the study design and analysis. I also review key literature on the early childhood classroom language environment and preschool teachers' sensemaking practices. Chapter 3 provides a detailed overview of the research methods used for both components of this study (i.e., content analysis, teacher interviews). I detail the curriculum materials analyzed for the content analysis and describe the four participants, their sites, and the protocols for the two teacher interviews (the primary data source). For both the content analysis and teacher interview components, I describe the coding processes used and the analytic methods employed to answer each research sub-question. The chapter concludes with a discussion of the study's methodological limitations.

The next two chapters present the findings of each component of the Inquiry; each chapter also ends with a short discussion. In Chapter 4, I present the findings from the content analysis of the two CC studies, detailing the types of talk, purposes of talk and levels of explicitness present in the language guidance. I also discuss the interaction between the language guidance and several classroom activity settings and detail which aspects of the

curriculum attend to linguistic diversity. In Chapter 5, I present the findings from the analysis of the teacher interviews. I describe teachers' overall perspectives about and approaches to engaging with the curriculum, highlighting the role that various influences play in shaping teachers' curricular enactment. Finally, Chapter 6 presents an overarching discussion of the study's findings, focusing on implications of this inquiry for designing curriculum and teacher learning opportunities.

CHAPTER 2

Theoretical Framework & Literature Review

This section describes several theoretical perspectives that influenced the study's design, focusing on those related to teacher-child interaction and teachers' pedagogical sensemaking.

2.1 Teacher-Child Language Interactions

Two major theories of child development, heavily utilized within research on the classroom language environment, are bioecological systems theory (Bronfenbrenner & Morris, 2007; Bronfenbrenner, 1979) and social-interactionists theories of development (Vygotsky, 1978) (e.g. Hamre et al., 2010; Langeloo et al., 2020; Pelatti et al., 2014; Sawyer et al., 2018). Bioecological systems theory posits that children are situated in "a nested set of systems," which shape their (linguistic) experiences (Hoff, 2006, p. 56). These systems range from more distal (macro-level structures such as the school community and linguistic ideologies) to more proximal (micro-level structures, such as teacher and peer interactions), with each level influencing children's language development. This theory suggests that teachers act as the "primary engine of development" by creating the necessary conditions for communication and language learning in the classroom (Bronfenbrenner & Morris, 1998, p. 996).

Another popular theoretical framework used within classroom language environment research is the social-interactionist theory of language learning, rooted in Vygotsky's (1978) sociocultural theory of development. Similar to Bronfenbrenner's (1979) bioecological theory, social-interactionist theories of language highlight how interactions with more knowledgeable others, such as teachers, drive children's language learning. Under this theoretical model,

interactions with teachers offer children opportunities to "hear and practice new linguistic structures with a more skilled [speaker] in a meaningful context" (Gosse et al., 2014, p. 112). Notably, both theories stress the transactional nature of language interactions with children playing an active role in the language learning process (e.g. Justice et al., 2013).

While these theories offer valuable insight into teacher-child interactions in the classroom, they overlook specific aspects of the context (i.e., place, individuals) that shape the classroom language environment. In fact, scholars who rely solely on the work of Vygotsky (1978) and Bronfenbrenner & Morris (1998, 2007) have been criticized for their narrow focus on the individual child, neglecting the centrality of group dynamics in classroom settings (Anderson et al., 2013).

For instance, Halliday's work (1978) in systemic functional linguistics suggests that language and context mutually constitute one another. He describes three dimensions of the environment (field, tenor, mode) that influence interactions in a given space. Field refers to the content of the interaction (i.e., what), tenor to the actors involved (e.g., teacher, specific children) and mode to the medium of the interaction (e.g., spoken, written, gesture). Halliday suggests that specific speech communities, such as classrooms, develop ways of interacting and communicating (in regards to field, tenor, and mode) that become solidified across time. Therefore, the classroom language environment should also be viewed as a particular social and cultural practice.

Together, these theories of language learning provide guidance for the design of this study. First, teachers play a critical role in shaping children's opportunities for language development through responsive scaffolding. Second, while interactions may appear similar across classrooms, each classroom language environment is a distinct speech community; teachers' language use likely varies based on both the activity setting and the particular students in the classroom. Therefore, this study examines the scaffolds for language provided to teachers in the curricular guidance and considers how specific influences (i.e., related to

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students, teachers, school systems, etc.) shape teachers' perception and implementation of the curricular guidance.

2.2 Teachers as Sensemakers

This study aligns with sociocultural theories of teacher practice and, therefore, views teachers as "knowledgeable and reflective professionals who make reasoned and ethical decisions in the service of their students" (Cochran-Smith et al., 2016, p. 444). Decision-making and judgment are central to teaching, as teachers constantly synthesize theory and knowledge with the "gritty particularities of situated practice" (Shulman, 1998, p. 519). These theories highlight the pivotal role that teachers' sensemaking plays in their observable practices. Research into teachers' sensemaking also suggests that teachers have vastly different underlying reasons for using a particular practice, despite observational research that would suggest otherwise (e.g., Horn, 2005; Schachter et al., 2021). As such, describing and revealing teachers' sensemaking about their practice is equally as important as documenting their actions in the classroom.

2.2.1 Sensemaking about Curriculum

One of the most central aspects of teachers' work, and pedagogical sensemaking, is their interaction with the curriculum. Curriculum materials intend to "convey rich ideas and dynamic practices" through written guidance (Brown, 2009, p. 22); however, the implementation of this guidance relies heavily on teacher interpretation. Brown (2009) advances the idea that there is a bidirectional teacher-tool relationship, asserting that " curriculum artifacts, through their affordances and constraints, influence teachers, and…teachers, through their perceptions and decisions, mobilize curriculum artifacts" in ways that suit their needs (p. 23). Scholars that adopt an interpretive view of curriculum use argue that we must look beyond the *written* curriculum's guidance to explore the *enacted* curriculum, or how teachers translate what is written into day-to-day instruction (Remillard, 2005; Yoon, 2013). This view foregrounds teacher

agency, suggesting that teachers actively adapt and modify the curriculum as they consider its utility in their own settings (Ben-Peretz, 2010; Clandinin & Connelly, 1996; Remillard, 2005; Yoon, 2013).

Teacher sensemaking about the curriculum is undoubtedly shaped by a variety of influences, including local ones (e.g. student characteristics, student interests, district mandates), personal ones (e.g., beliefs, knowledge), and professional ones (e.g., self-efficacy, teaching experiences) (Brown, 2009; Garrity & Wishard Guerra, 2015; Remillard, 2005). Teachers, therefore, simultaneously balance multiple (sometimes, conflicting) influences as they strive to support children's learning.

Therefore, these theories suggest that an exploration into curriculum use should take into account both what the written curriculum says and how teachers interpret and enact the curriculum. In this study, I investigate the features of the written language guidance of the *Creative Curriculum*. In addition, I explore the ways in which teachers perceive and plan for the curricular guidance in their daily practice (i.e., planned curriculum, perceived enacted curriculum, "visions of enactment").

2.3 Literature Review

This review touches on several bodies of relevant literature that are central to the study rationale and design. First, I document the field's current understanding of the early childhood classroom language environment, detailing the types of language practices considered to be "high-quality." Next, I review literature that discusses the kinds of influences that inform teachers' language practices. I also document the literature that explores early childhood educators' curriculum use. Lastly, I review the small, but emerging, literature base on early childhood teachers' sensemaking practices.

2.3.1 Features of the Classroom Language Environment

Recognizing the lasting influence that early environments have on children's language outcomes, many researchers have sought to document early childhood educators' linguistic practices. Emerging from this research is a consensus that teachers employ a range of language practices, which exist on a continuum from low to high quality (e.g., Justice et al., 2018). The quality of a language move is determined by the extent to which it provides children with opportunities to either use language with others or build new knowledge of language. Some common examples of lower-quality strategies include giving directions, asking close-ended questions, repeating children's speech verbatim and providing general praise (Chen & Kim, 2014; Sawyer et al., 2018; Turnbull et al., 2009). These types of behaviors hinder children's ability to engage in back-and-forth conversation and provide limited examples of mature language use.

Higher-quality language moves are typically classified as one of three types of behaviors, those that: a) facilitate communication, b) model advanced language or c) build vocabulary (Cabell et al., 2015; Justice et al, 2018). Communication-facilitation and language-developing moves are both described as facets of teachers' linguistic responsivity, or their ability to respond to young children's emerging language needs in warm and age-appropriate ways. Teachers' linguistic responsivity behaviors (communication-facilitation, language-developing) are associated with children's language growth across the preschool year, indicating the powerful potential of these kinds of teacher talk (Cabell et al., 2015; Girolametto & Weitzman, 2002; Barnes et al., 2017).

Communication-facilitation moves, such as asking open-ended questions or building on children's comments, engage children in prolonged back-and-forth conversations and build children's conceptual knowledge (Dickinson et al., 2014; Girolametto & Weitzman, 2002; Justice et al., 2018). Language-developing behaviors, on the other hand, provide models of adult language. Extensions and expansions are commonly described as examples of high-quality

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language-developing moves, where adults respond to children's utterances with a more complex linguistic form, either in regards to syntax (i.e., extensions, recasts) or semantics (i.e., expansions) (Cabell et al., 2015; Justice et al., 2018; Piasta et al., 2012; Wasik et al., 2006). In addition, teachers' use of rare vocabulary or complex syntax, often through narrating their own thoughts (i.e., self-talk) or children's actions (i.e., parallel talk) are also classified as language-developing behaviors (Ascetta et al., 2019; Dickinson & Porsche, 2011; Justice et al., 2018; Justice et al., 2006).

The third commonly-discussed "high-quality" language move is teachers' support for vocabulary development through both explicit instruction and incidental exposure. Research suggests that explicitly defining and discussing new words in child-friendly language positively impacts children's vocabulary outcomes (Beck & McKeown, 2007; Neuman & Wright, 2014; Wasik et al., 2016). In addition, providing contextual support for word learning through the use of gesture, images, or tone and providing repeated exposures to the word across different classroom contexts are also considered to be highly supportive of vocabulary learning (Grifenhagen et al., 2017; Neuman & Wright, 2014; Snell et al., 2015; Wasik & Hindman, 2020). Certain instructional contexts, such as shared book reading or guided play, and pedagogical approaches, such as using thematic units, are also identified as ideal ways to support vocabulary learning (Neuman et al., 2011; Pollard-Durodola et al., 2011; Toub et al., 2018; Wasik et al. 2016; Wasik & Hindman, 2020; Zucker et al., 2012).

Discussions of teachers' classroom language use also extends beyond the types of language moves to attend to the underlying purpose of their language practices. The underlying purposes of teachers' talk vary in their effectiveness for children's language development, with talk that models or elicits complex thinking being particularly beneficial (Barnes et al., 2017; Rowe, 2013; Zucker et al., 2010). Talk that aligns with these purposes has been labeled several ways in the literature including conceptual language (Barnes et al., 2017), decontextualized talk (Gest et al., 2006; Rowe, 2013), inferential language (Tompkins et al., 2013; Zucker et al., 2010)

or cognitively-challenging talk (Massey et al., 2008). While their definitions differ slightly, these language moves collectively function to build knowledge of sophisticated concepts and require a level of abstraction. For instance, conceptual language moves include discussing abstract ideas (e.g.;, scientific/mathematical concepts, hypothetical ideas) or making connections to the world, (Barnes et al., 2017; Hindman et al., 2022). On the other hand, decontextualized language moves discuss ideas/topics that are removed from the immediate setting, including describing past experiences, discussing future happenings or engaging in pretend play (Rowe, 2013). Conceptual language, characterized by its abstract and decontextualized nature, contrasts with more literal forms of talk, such as recall, labeling, or describing, which are tied to the immediate context and have shown mixed impacts on students' language development (e.g., Hindman et al., 2008; van Kleeck, 2008; Zucker et al., 2012).

2.3.2 Influences on Teachers' Language Practices

Teachers' classroom language use is shaped by a variety of influences. The following section describes how student-related and setting-related influences inform teachers' language practices.

2.3.2.1 Linguistic Diversity

Children's experiences in early childhood classrooms often differ based on their linguistic background (Langeloo et al., 2020; Pelatti et al., 2014; Rojas et al., 2020). For instance, teachers tend to use less complex talk, such as using simple sentences, using nonverbals, and employing highly contextualized speech, when interacting with multilingual learners (MLLs) in comparison to their monolingual peers (Gámez, 2015; Langeloo et al., 2020; Rojas, 2021). While this approach may provide an initial advantage by accommodating MLL students' existing levels of English proficiency, sustained reliance on these practices, at the expense oof employing higher-quality ones, may ultimately stifle children's language development.

In addition, multilingual learners have unique linguistic needs, particularly because they are learning the academic and social features of English concurrently, that teachers must consider (Cummins, 2000). Research acknowledges that teachers' use of high-quality language practices for monolinguals are also effective for multilingual (MLL) children. These practices include supplementing talk with environmental cues (i.e., gestures, visuals, props), modeling complex language (i.e., sophisticated syntax) and providing substantial opportunities to practice speaking in varied contexts (Gámez et al., 2017; Bowers & Vasilyeva, 2011; Rojas et al., 2020; Wasik & Hindman, 2023). Moreover, research also advocates for using supplemental strategies tailored to the unique linguistic needs of MLLs (Buysse et al., 2014; Castro et al., 2011; Franco et al., 2019), including encouraging children to use their first language and incorporating children's home language into conversations and instruction whenever feasible (Gámez et al., 2017; Figueras-Daniel & Li, 2021; Castro et al., 2011; Castro et al., 2017; Miller, 2017).

2.3.2.2 Activity Settings

Activity settings also influence teachers' classroom language practices. Existing research, albeit limited, has explored the intersection between different classroom activity settings and teachers' language practices (e.g., Chen & de Groot Kim, 2014; Cabell et al., 2013; Dickinson et al., 2008; Dickinson et al., 2014; Goble & Pianta, 2017). Some studies compare teachers' language practices across a few activity settings, including mealtime, free play (i.e., centers), circle time, small group instruction, large group instruction (e.g., circle time) and shared book reading (Chen & de Groot Kim, 2014; Dickinson et al., 2014; Dickinson & Porche, 2011; Gest et al., 2006). Other studies have investigated a single activity setting, providing insight into the teachers' general language patterns during meal times (Barnes et al. 2020), circle time (Bustamante et al., 2018), small group creative activities (Cabell et al., 2013; Tompkins et al., 2013), and small group instructional activities (Durden & Dangel, 2008).

Collectively, this research suggests that activity settings motivate distinct patterns of language use (Cabell et al., 2013; Dickinson et al., 2014; Dwyer & Harbaugh, 2020). For

instance, shared book reading is one of the most linguistically-rich times of the preschool day, characterized by teachers' use of sophisticated vocabulary and complex syntax, often influenced by the read-aloud texts themselves (Cabell et al., 2013; Dickinson et al., 2014; Dwyer & Harbaugh, 2020; Noble et al., 2018). Teachers also frequently employ open-ended questions and extratextual talk (i.e., elaborating on the text's meaning through self-talk or informational comments), during book reading sessions (Barnes et al., 2017; Dickinson et al., 2014; Deshmukh et al., 2022; Massey et al., 2008; McGee & Schickendanz, 2007).

In contrast, large group time, such as circle time or morning meeting, prioritizes academic instruction and uses strict routines, resulting in highly teacher-initiated interactions (Bratsch-Hines et al., 2019; Bustamante et al., 2018). Consequently, teachers often pose more closed-ended questions during these sessions, limiting opportunities for students to engage in conceptually-rich discussions (Bustamante et al., 2018). However, Dickinson and colleagues (2014) found that, when teachers used thematic units, large group instruction included more rich vocabulary and discussion of disciplinary content, indicating that curriculum structure may influence teacher talk in this setting.

Similarly, language practices in small group settings vary widely and are heavily influenced by the activity's instructional focus (Dickinson et al., 2014; Hadley et al., 2022). For example, Dickinson and colleagues (2014) found that small group instruction tended to prioritize academic skills instruction (e.g., phonological awareness, letter naming), yielding little conceptual talk or diverse vocabulary use. Likewise, Cabell and colleagues (2015) observed that teachers engaged in minimal back-and-forth conversation and rarely used conceptual talk during a creative-focused small group activity.

The research on teachers' language practices during choice time, albeit limited, reveals large variation across teachers. Collectively, however, teachers demonstrate limited engagement with children during choice time, missing valuable opportunities for language development (Chien et al., 2010; Goble & Pianta, 2017; Early et al., 2010). Teachers often ask

closed-ended questions and rarely engage children in back-and-forth conversation (Meacham et al., 2014; Early et al., 2010). However, some research suggests that teachers' talk during choice time is more linguistically-rich during activities that prioritize scientific or mathematical concepts (i.e., playing with blocks, examining materials) (Cabell et al., 2015; Chaparro-Moreno et al., 2023). This finding underscores how discipline-specific content areas necessitate the use of academic language, including greater conceptual talk and sophisticated vocabulary use (Barnes et al., 2016).

Another activity context in preschool classrooms that is underexplored in the research is transitions, or the periods between other instructional activities. Despite constituting a significant portion of the preschool day, transitions are rarely used for explicitly supporting students' language development (Early et al., 2010; Ryan et al., 2021; Vitiello et al., 2012). While there is a high presence of spontaneous child-initiated talk during this time, evidence of teacher-child conversations during transitions is minimal (Grifenhagen et al., 2017; Ryan et al., 2021).

Overall, this body of research suggests that teachers' language practices vary based on a variety of influences, including students' linguistic backgrounds and the classroom activity setting. However, it remains unclear how teachers attend to linguistic diversity or activity contexts in their planning and curricular enactment. This dissertation takes a qualitative approach to exploring this topic, interviewing teachers to explore their pedagogical sensemaking regarding their classroom language use.

2.3.3 Investigations of Curriculum Use

Research exploring the early childhood classroom language environment predominately adopts an implementation perspective to explain teachers' curriculum use (Remillard, 2005; for examples, see Hamre et al., 2010; Neuman & Danielson, 2021; Piasta et al., 2015). This perspective posits a "straightforward and top-down relationship between teachers and the curriculum materials," resulting in studies that measure teachers' fidelity to the curriculum (Li &

Harfitt, 2017, p. 405). These studies often find that while teachers may adhere to a given language-focused curriculum with fidelity (i.e., following the curriculum components), they struggle to implement the curriculum with integrity, failing to apply promoted linguistic strategies with consistency (Dickinson, 2011; Hamre et al., 2010; Neuman & Danielson, 2021); this is especially evident for linguistic strategies that require extensive scaffolding and are less amenable to scripting, such as providing responsive feedback to open-ended questions (Neuman & Danielson, 2021; Zucker et al., 2012; Zucker et al., 2021). Research investigating curriculum use with teachers in other settings (non-ECE) reveals that teachers do not implement the curriculum exactly as written; instead, teachers tend to adapt and modify curriculum in response to the dynamic needs of their classrooms (Brown, 2009; Parsons et al., 2018; Troyer, 2019).

2.3.3.1 ECE Teachers' Sensemaking about Language

Overall, there is limited empirical work exploring early childhood teachers' pedagogical sensemaking (Cherrington & Loveridge, 2014; Friesen & Butera, 2012), with even less research specifically describing teachers' sensemaking around their language practices (for exceptions, see Dwyer & Schachter, 2020; Schacter, 2017; Schachter et al., 2021). This research utilizes stimulated recall interviews with videos of teachers' own language and literacy practice to help tap into teachers' "knowledge-in-use" (e.g., instructional goals, theories of children's language/literacy learning). Schachter (2017) defines 'knowledge-in-use" as teachers' pedagogical reasoning, describing it as the process of "us[ing] various sources of knowledge to make choices about their actions and practices" during instruction (p. 97).

This body of work suggests that Pre-K teachers' pedagogical decisions around language use in the classroom are informed by various influences. First, teachers' pedagogical reasoning around language is strongly motivated by multiple instructional goals, both literacy and non-literacy related (i.e., socio-emotional), within a single instructional moment (Schachter, 2017; Schachter et al., 2021). Additionally, ECE teachers draw on their understanding of students'

individual needs, including those related to their linguistic background and perceived linguistic proficiency, to guide their in-the-moment decision making processes (Dwyer & Schachter, 2020; Schachter, 2017; Schachter et al., 2021). Additionally, teachers' professional and personal histories serve as valuable resources, as they integrate past lessons learned as educators and as students into their instructional practices (Schachter, 2017). Moreover, teachers navigate broader contextual influences, including instructional mandates (i.e., routines, curriculum), as they strive to align curriculum guidance with their own instructional goals (Schachter, 2017). This body of work provides initial insight into the important sources of knowledge and experience that ECE teachers draw on during sensemaking episodes. In alignment with this emerging understanding, this dissertation adopts an interpretive view of curriculum, underscoring the importance of teachers' sensemaking processes during curricular enactment.

CHAPTER 3

Methods

The purpose of this study is twofold: 1) to identify the embedded messages around high-quality teacher talk presented in a comprehensive Pre-K curriculum, *The Creative Curriculum*, and 2) to explore teachers' perceptions and described enactment of the language guidance provided within *The Creative Curriculum*. While curriculum ideally acts as a lever to improve the quality of the classroom language environment, very little research has described the guidance around teacher language use within widely-used curricula (see Wright & Neuman, 2013). In addition, explorations into early childhood teachers' sensemaking practices, which strongly influence the subsequent enacted curriculum, are sparse (e.g., Dwyer & Schachter, 2020, Schachter, 2017, Schachter et al., 2021). Therefore, this study extends this body of research by investigating the intersection between early childhood curriculum guidance and ECE teachers' related sensemaking practices. I address the following research questions through content analysis and in-depth teacher interviews:

1) What kinds of teacher talk are provided within *The Creative Curriculum* to promote children's language development?

2) How do teachers interpret and respond to the curriculum's language guidance?

This study has implications for the development of curriculum and provision of teacher learning opportunities that are more responsive to early childhood teachers' existing sensemaking about language in the classroom. In the following section, I provide a detailed account of the data collection methods and analytic approach for this project.

3.1 Data Collection

Data collection for the teacher interviews and content analysis occurred concurrently; at times, the data collection processes influenced one another. For instance, results of the demographic teacher surveys influenced the selection process of curriculum artifacts for the content analysis. In addition, initial coding of Creative Curriculum artifacts implicitly influenced the kinds of probing questions asked during the teacher interviews. In the following sections, I detail the data collection and analysis methods for each project component.

3.1.1 Data Collection: Content Analysis

This section details the data collection methods for the content analysis of two Creative Curriculum units.

3.1.1.1 Description of The Creative Curriculum

The Creative Curriculum is a comprehensive, semi-scripted curriculum aimed at supporting preschool children's learning across various developmental domains, including academic (mathematics, literacy, oral language), physical and socio-emotional ones (Dodge et al., 2012). The Creative Curriculum (CC) is widely-used within early childhood settings. An investigation into curriculum adoption within a nationally representative sample found that 32% of state-funded Pre-K programs and 55% of Head Start programs used Creative Curriculum as their primary curriculum (Jenkins & Duncan, 2017). Data from the most recent review of curriculum use within Head Start classrooms aligns with this finding, with 69% of centers using CC as their primary curriculum (US Department of Health and Human Services, 2017). Therefore, Creative Curriculum's popularity makes it an ideal choice for analysis, as many early child educators in the United States receive information about supporting children's language development through this curriculum.

Creative Curriculum is built on developmental theories put forth by several renowned early childhood scholars, including Vygotsky, Piaget, Erikson and Maslow (Michael-Luna &

Heimer, 2012). As such, the CC supports a child-centered approach to learning, prioritizing children's discovery and play; teachers play a key role in scaffolding children's understandings of the world, serving as facilitators of children's learning.

The CC is designed around *studies*, which are "hands-on, project-based investigations of topics that are relevant to children's everyday experience(s)" (Teaching Strategies, 2016, p. 9). Some CC study topics are Balls, Buildings, Trees, Signs, Clothes, Simple Machines and Pets. Studies last from 4-7 weeks. Each study centers around a set of "investigations" or driving questions intended to spark children's curiosity and exploration of the study topic (e.g., "how do people make clothes?"; "where do we get our clothes?"). The various activity settings, including large group meeting, small group instruction, choice time, and shared book reading, each address the "investigation" subject with varying degrees of intentionality. Appendix A provides a detailed description of the different study materials and gives insight into how an investigation unfolds across one instructional day.

The CC uses a structured daily routine. Each day begins with a large group meeting designed to support classroom community building and introduce the topic of the day (i.e., "investigation"). Teachers also lead small group instructional activities, which vary in their objective and teacher-directedness. Some common small group activities include introducing materials related to the study (e.g., exploring leaves, sorting clothing by size) or practicing an academic skill (e.g., rhyming, counting, naming letters). In addition, teachers lead at least one whole group read aloud per day. A significant portion of the day is spent in choice time, where children visit different "interest areas" (i.e., centers) in the classroom, including Dramatic Play, Sand and Water, Discovery, and Blocks. A typical day ends with a closing large-group reflection activity.

Teachers are given a variety of materials to support their curriculum implementation, including foundational booklets that provide an overview of CC, "help[ing] teachers build their professional knowledge about best practice" and highlighting the theoretical basis of the

curriculum's design (Dodge et al., 2014, p. xviii). In addition, the CC provides materials to support daily instruction, including Teaching Guides (TG), Intentional Teaching Cards (ITC), Mighty Minutes Cards (MMC) and Book Discussion Cards (BDC). These resources provide language guidance for implementing large group instruction, small group instruction, choice time, shared book reading and transitions. Appendix A provides detailed information on each curriculum material, describing the material's overall purpose and level of attention to the study topic; it also includes examples of each material type.

3.1.1.2 Artifact Selection

The content analysis examined curriculum artifacts from two "studies" (i.e., units). A district literacy coach helped guide study selection. To achieve maximum variation sampling, she suggested choosing studies that differed in their thematic focus (e.g., science-oriented vs. social world-oriented) and their potential for standalone use (i.e., minimal need for additional materials). (Guest et al., 2013). Based on information gathered from participating teachers about their previously-taught units, the Clothes study and the Trees study were selected for analysis, as all teachers were familiar with these units. Selection of specific artifacts were guided by the Teaching Guides for each study. All text in the Teaching Guides and any referenced linked materials (e.g., Intentional Teaching cards, Book Discussion cards, Mighty Minutes cards) were analyzed. Any read aloud trade books were not included; however, read aloud lesson plans for specific trade book texts were included (e.g., Book Discussion cards).

The Teaching Guides (TG) were the primary curriculum artifact. Each TG begins with an overall introduction and rationale for the study topic. Daily lesson plans follow. Each lesson plan describes what to do within each activity setting (Large Group, Choice time, Read-Aloud, Small Group, Mighty Minutes, and Large-Group Roundup) using bulleted text that gives teachers activity directions and lesson scripts. All TG lessons for the Clothes study (n= 35) and the Trees study (n= 35) were coded for this inquiry.

TGs also indicated what other supplemental materials (Intentional Teaching Card, Book Discussion Card, Mighty Minutes Card) to use throughout the day; these supplemental materials were also included in the content analysis. Intentional Teaching Cards (ITCs) give guidance for small group instruction with each lesson targeting a particular developmental domain (e.g., literacy, mathematics, cognitive, etc.). In total, there were 67 ITCs used in this analysis. Mighty Minutes Cards (MMCs) give guidance on conducting interactive whole group activities during activity transitions (e.g., short songs, games, nursery rhymes). In total, 50 MMCs were selected. Book Discussion Cards (BDCs) support teachers' read aloud instruction. Each book discussion card contains lessons to support children's reading comprehension across three successive readings of the same text. In total, 24 BDCs were referenced in the Trees and Clothes TGs, and therefore, selected for analysis.

3.1.2 Data Collection: Teacher Perspectives

In this section, I describe the data collection procedures used for the teacher interview component of the project. The semi-structured interviews were conducted over several weeks in the late spring of 2022. Prior to the interviews, teachers completed a brief demographic survey. The data collection timeline and analysis process are detailed in Appendix B.

3.1.2.1 Site and Participant Description

Teachers were considered for this study based on their employment as pre-K teachers at "early learning centers" (ELCs) in a public school district in the Southeastern United States. All of the district's Pre-K classrooms use *The Creative Curriculum* (6th ed.) (Teaching Strategies, 2016). Four teachers who worked at two of the district's four ELCs, Hogar Limón ELC and Jones ELC, were selected for this study. The two ELCs were chosen as focal sites due to their contrasting size, student demographics, and location history.

Hogar Limón is the smallest ELC with four pre-K classrooms. It is located within a local community center that does extensive outreach (i.e., English classes, legal services, parenting

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workshops) with the city's growing immigrant populations. Hogar Limón is also the most linguistically diverse ELC, with many students speaking Spanish or Arabic as their first language; however, depending on the year, "up to eight languages can be represented in the [school]" (District website). During the 2021-2022 school year (i.e., year of data collection), a little less than half of the students identified as Latino (48%), 27% identified as Black, and 22% identified as White.

In contrast, Jones ELC is one of the largest centers in the district, housing eleven general education pre-K classrooms. Jones ELC is located in a neighborhood that was historically Black. However, the school is located in one of the most rapidly gentrifying areas of the city, shifting the center's enrollment in recent years, with increasing numbers of White families (28%) and decreasing numbers of Black families (47%) (District website). Additionally, the school has a sizable portion of students who come from "economically-disadvantaged" (term used by the district) backgrounds (35%) (District website).

Teachers were purposively sampled based on two dimensions: their years of lead Pre-K teaching experience and their views about the relative importance of oral language development in their daily practice (Lincoln & Guba, 1985), based on the hypothesis that each of these factors play a role in their curricular engagement. The four teachers were recruited for the study through the researcher's existing relationship with district literacy coaches and ELC teachers. See Table 3.1 for more information about each participant. At Hogar Limón ELC, the literacy coach suggested emailing all four of the school's teachers to gauge potential interest. Two teachers, Ms. Simone and Ms. Denise, responded with an interest to participate. At Jones ELC, one teacher, Ms. Rebecca, was considered for the project because of an existing relationship from a prior, unrelated research project. With the approval of the school principal, Ms. Rebecca provided the researcher with the contact information of a first-year teacher, Ms. Gabrielle, who expressed interest in the study during a joint planning meeting. All teachers were formally

recruited for the study via email, which described the purpose and participation requirements for the study.

Table 3.1

Focal Teacher Summary

Name	School Site	Years Teaching Pre-K	Race*	Child Development Priorities
Ms. Denise	Hogar Limón	2	African-American	● Literacy ● Oral Language ● Socio-emotional
Ms. Gabrielle	Jones	1	African-American	● Art ● Cognitive ● Socio-emotional
Ms. Rebecca	Jones	23	White	● Literacy ● Mathematics ● Socio-emotional
Ms. Simone	Hogar Limón	11	African-American	● Literacy ● Oral Language ● Socio-emotional

Note. All names are pseudonyms chosen by ChatGPT to align with participants' real names. Child development priorities were taken from the teacher survey, where teachers selected three aspects of child development that are most important to their practice and philosophy as an educator; teachers were given ten skills taken from the CC objectives to choose from.

3.1.2.2 Teacher Survey

Prior to the first interview, teachers completed a short REDCap survey which asked about several aspects of their professional activities: a) professional history and philosophy, b) use of different CC materials (i.e., frequency), and c) typical planning practices (see Appendix C for the demographic survey). Information about teachers' demographics and professional histories were used to confirm teachers' eligibility for the study. Specific information gathered about teachers' professional activities was utilized during subsequent interviews, when relevant (i.e., "you mentioned receiving extensive professional development on The Creative Curriculum.

Can you tell me more about how these focused on children's language development?"). In addition, teachers' engagement with different curriculum components (i.e., foundational materials, units of study booklets, book discussion cards) helped to confirm the selection of materials used for the content analysis. Teachers' answers also informed the selection of curriculum elicitation artifacts for both interviews (i.e., which unit of study to draw from).

3.1.2.3 Teacher Interviews

Two in-depth semi-structured teacher interviews were conducted for this inquiry (Brinkmann & Kvale, 2016; Spradley, 1979). All interviews lasted approximately one hour and took place over Zoom. Interviews were video-recorded and subsequently transcribed in Rev. Following each interview, I wrote theoretical memos to capture my emerging thoughts and questions. The interviews were guided by phenomenological principles, with "an interest in understanding the lived experiences of [Pre-K teachers] and the meaning they make of [their] experience[s]" (Seidman, 2013, p. 9). However, as Byrne (2004) cautioned, these interviews provided "indirect representations" of teachers' experiences as they are remembered rather than direct evidence of their practice (as cited in Silverman, 2006, p. 117).

Interviews combined artifact elicitation, open-ended questions, and follow-up probes to gain an understanding of teachers' sensemaking around classroom language use. Artifact elicitation techniques have been described as particularly useful for discussing topics that are more tacit in nature (Barton, 2015). Language, in comparison to other classroom practices, is highly routinized and, consequently, enacted without much conscious awareness (Ahearn, 2016; Hindman & Wasik, 2017; Lee, 2007). Therefore, artifact elicitation used materials as a scaffold for enhancing teachers' discussions about their practice, aiming to help teachers "articulate [their] ideas in deeper and more complex ways" (Barton, 2015, p. 281).

Open-ended interview prompts provided space for teachers to wrestle with their own classroom experiences, focusing intentionally on their language use (Jiménez & Orozco, 2021).

Questions that specifically asked "why" were avoided, as participants often have difficulty providing concrete justification for their behaviors (Spradley, 1979). An interview protocol matrix, which maps the connection between research questions and interview probes is located in Appendix D (Castilla-Montoya, 2016). Follow-up probes were used to clarify teacher comments and gain more nuanced understandings (Brinkmann & Kvale, 2016).

3.1.2.3.1 Interview 1

The primary purpose of the first interview was to explore teachers' general perspectives on the curriculum, approaches to planning, and perceived opportunities for language support. The interview also featured two artifact elicitation activities. A detailed protocol can be found in Appendix D.

At the beginning of Interview 1, participants engaged in a structured artifact elicitation activity (i.e., Objective Mapping) via the online platform, Mural (see Appendix D). The Mural workspace allowed for the researcher and the teacher to simultaneously engage with the artifacts. As the participants responded to interview questions, I supplemented their talk by engaging with the more technical aspects of the platform, including adding text boxes, inserting digital post-it notes, drawing lines, and dragging/dropping items. While teachers were given the option to take on these technical aspects themselves, all participants declined to do so. At the start of the activity, participants were presented a side-by-side image of the CC language objectives and two artifacts from the CC Trees study (e.g., Teaching Guide lesson plan, Book Discussion card). To begin, teachers were asked about which language objectives they attended to on a day-to-day basis. The interviewer probed about when (i.e., activity settings) and in what ways (i.e., types of talk) teachers supported particular language objectives. Next, teachers were asked to elaborate on how particular times of the day are more or less conducive to supporting children's language growth by indicating the alignment between CC objectives and aspects of the daily lesson spread (e.g., "social language, definitely Objectives 10A and 10B are really great during center time and read-alouds for turn and talk"). Following the Objective

Mapping Activity, the participant and researcher engaged in a semi-structured conversation around a set of curricular materials (e.g., "At a Glance" weekly overview, "Web of Investigations" introduction, daily lesson spread) from the selected unit of study (Trees).

3.1.2.3.2 Interview 2

In contrast to the first interview which targeted teachers' general use of the Creative Curriculum, the second interview focused more intentionally on teachers' language practices and engagement with the curriculum guidance. Questions and probes targeted teachers' curricular adaptations, their attention to activity context (e.g., choice time, large group), and their consideration of various student characteristics (e.g., linguistic diversity, personality) during teaching. A detailed protocol can be found in Appendix D.

The interview began with a hybrid card sorting activity, the Teacher Talk Sort, on Mural (see Appendix D). Card sorting is particularly useful for understanding how participants organize complex concepts, improving their recall and depth of thinking (Conrad & Tucker, 2019). As such, card sorting a useful tool for discussing topics that are tacit in nature, such as language use (Ahearn, 2016; Lee, 2007). Teachers were provided with a link to a Mural workspace, which had 17 examples of "teacher talk" on digital post-its. The teacher talk examples were drawn directly from the Creative Curriculum foundational materials booklets (e.g., Interest Areas, Literacy and Foundational Materials). For certain language practices that are well-discussed in the literature but not discussed as extensively in the foundational material booklets (e.g., varied supports for vocabulary, expansions), teacher talk examples were taken from relevant empirical articles (Neuman & Wright, 2015; Wasik et al., 2006).

Teachers were asked to sort the language practices into categories; the number of categories was left up to the teacher's discretion. Teachers were not given specific guidance about how to sort the practices in order to surface their own thinking about the saliency of different language practices. As teachers talked through their thinking, I dragged the digital post-it notes into columns and added category headings, as provided by the participants. Following

the card sort activity, teachers were asked to describe the talk categories they created, discussing how often and in what contexts they typically use such kinds of talk. The interview also intentionally addressed how teachers adapted the Creative Curriculum lesson plans for their classroom context.

3.2 Data Analysis Methods: Content Analysis

All qualitative data, including transcripts of interviews and digital artifacts, were uploaded to Dedoose for analysis. In the following section, I describe how the analysis unfolded, focusing on each research question in isolation (see Table 2 for additional details about data analysis).

3.2.1 Content Analysis Coding

Directed content analysis, a type of qualitative content analysis that builds deductive coding schemes from existing theory and research findings, was the primary approach used to analyze the curriculum materials (Hsieh & Shannon, 2005). This type of content analysis "reveal[s] the subtle messages embedded" within a text (DeJulio et al., 2021, p. 27); this inquiry aimed to reveal the various messages Creative Curriculum sends to teachers about which kinds of talk are high-quality.

All curriculum materials were scanned and uploaded into the Dedoose software. The content analysis coding used two different coding approaches: semi-deductive coding, and inductive grounded coding. Each type of coding occurred at the excerpt-level. Excerpts were created by highlighting "instances of talk," or sections of guidance that were clustered together. "Instances of talk," were naturally created by the curriculum through the use of bullet points and bolded text and often contained several sentences (see Appendix A for a visual of what constitutes an excerpt). Excerpts were created at the level of "instances of talk" rather than at the sentence level because the curriculum is visually designed to be read at the bullet-level,

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Table 3.2

Description of Data Sources, Research Sub-Questions and Procedures Guiding Analysis

Research Question	Data Sources	Analysis Sub-Questions	Analysis Procedure
What kinds of language supports are provided within the Creative Curriculum to promote children's language growth?	● Teaching Guide lessons (70) ● Mighty Minutes Cards (MMC) (50) ● Book Discussion Cards (BDC) (24) ● Intentional Teaching Cards (ITC) (67)	1a) What types of guidance does CC promote? 1b) How explicit is the guidance for teacher language? 1c) How does the guidance vary across activity settings? 1d) How does the guidance attend to linguistic diversity?	Content analysis (1a, 1b, 1c): ● Pilot coding with initial set of a priori codes ● Added other relevant codes and refined categories (open coding; axial coding) ● Applied final codebook to full dataset ● Second coder (IRR) Descriptive analysis (1d): ● Inductively generated a set of initial codes ● Refined categories (axial coding) ● Applied final codebook to full dataset
How do teachers interpret and respond to the Creative Curriculum's guidance for language during planning and enactment?	● Interview 1 transcript (4) ● Interview 2 transcript (4) ● Sorting Activity screengrab (4)	2a) How do teachers describe and understand the role of different classroom language practices? 2b) How do teachers engage with the CC guidance in their typical enacted practice? 2c) What influences shape the ways in which teachers engage with the CC guidance?	Narrative Analysis of Teacher Talk Sort (RQ2a): ● Compared similarities and differences between participant responses ● Created a narrative summary of the findings Interpretive Analysis (RQ2a, RQ2b, RQ2c): ● Inductively generated a set of initial codes guided by sub-questions ● Refined and expanded categories (axial coding) ● Finalized codebook and applied codes to all data ● Systematic check by second coder

guiding teachers' interpretations of the curriculum. In addition, this coding approach allowed for an investigation into how the curriculum guidance combines different kinds of language support within an instructional moment. Curriculum text that documented procedures but did not guide teachers' language use were excluded (e.g., "observe the children making bubbles"; "repeat the game with the group").

The second type of coding used to analyze the CC materials could be labeled as "semi-deductive." The coding was primarily deductive in that the initial coding scheme was extensively informed by the literature on the classroom language environment, as discussed in Chapter 2; however, throughout the coding process, I remained open to revising and adjusting the coding scheme based on categories that emerged from the data (Lincoln & Guba, 1985). The initial coding scheme had five categories: a) *level of explicitness*, b) *attention to linguistic diversity*, c) *curriculum section*, d) *talk structure* and e) *talk type*. See Appendix E, Table E1, for a final codebook that includes definitions, examples, and frequency counts.

The coding scheme took direction from other content analyses of early childhood curriculum (e.g., Gerde et al., 2019; Skibbe et al., 2016), coding for the *explicitness* of the teacher guidance (i.e., not, moderately, very) and the *attention to linguistic diversity*. Each excerpt was also coded for the *curriculum section* (i.e., question of the day, choice time, call-out box) and type of *talk structure* promoted (i.e., peer talk, individual sharing). The four aforementioned categories were mutually exclusive in that only one code was given for a single excerpt. In contrast, one excerpt could be coded in multiple ways for the final category, *talk type*. The *talk type* a priori codes stemmed from the literature base documenting higher- and lower- quality teacher language practices, as discussed in Chapter 2 (e.g., Justice et al., 2018; Turnbull et al., 2009; Wasik et al., 2016); some preliminary codes included *closed-ended question, open-ended question, expansion* and *extension*.

The second coding approach was inductive whereby coding categories emerged directly from the data (Strauss & Corbin, 1998; Miles et al., 2019). This coding method addressed the

talk purpose, giving greater detail about the specific function of the language guidance within a particular excerpt (e.g., *build knowledge of vocabulary*, *structure classroom activity*). Some a priori codes were initially created based on different purposes of talk referenced within the introductory materials of the Creative Curriculum (e.g., *encourage observation*, *pose a challenge*). However, the majority of codes were generated and later refined using the constant comparative method as I analyzed the data (Strauss & Corbin, 1998).

To begin, I conducted an initial round of coding (i.e., pilot coding) using a preliminary codebook on a purposively selected portion of the total data set. This data set included five TG lesson plans, two BDCs, two ITCs, and two MMCs. The initial round of coding surfaced two coding issues. First, call-out box excerpts could not be coded in the same manner as other "instances of talk." Call-out boxes often contained important general information for supporting children's language learning but were missing information for several categories of the coding scheme (e.g. *talk type*, *talk purpose*). As such, I made the decision to code call-out boxes only with the relevant codes (*curriculum section, attention to linguistic diversity*), choosing to analyze this set of the data differently. The coding procedure for the call-out boxes will be detailed in a subsequent section. Second, coding revealed that *talk structure* was an unnecessary code, due to its redundancy with the *curriculum section* codes. *Curriculum sections* align to particular activity settings which have existing and consistent *talk structure* patterns (i.e., small group instruction occurs in a small group setting, large group instruction occurs in a whole group setting, choice time occurs one-on-one or in a small group setting). In addition, it was often difficult to figure out the *talk structure* for guidance that was less explicit in nature. As such, this coding category was eliminated from the codebook.

The pilot coding process produced a codebook with 113 total codes across five overarching categories. After establishing an initial codebook, I conducted several rounds of axial coding to organize the initial codes into related categories (Strauss & Corbin, 1998). For example, within *talk type*, several codes described vocabulary supports including using props,

using visuals, adjusting tone, and defining the word, to name a few. These sub-categories, or child nodes, were collapsed into a larger subordinate category, or parent node, called *vocabulary-building talk*. However, upon subsequent rounds of axial coding and theoretical memo writing, it became apparent that *vocabulary-building talk* was really a *talk purpose* rather than a *talk type.* Subsequently, all codes labeled as *vocabulary-building talk* were re-coded to one of three parent nodes (*teaching comment, closed-ended question, open-ended question)* based on the talk type used to promote vocabulary learning.

A final draft codebook with category definitions and examples was generated. Discussions between the primary researcher and a second coder helped further clarify operational definitions in the codebook, especially for the inductively coded category, *talk purpose*. Through these discussions, it became apparent that using the codebook categories from the teacher interview analysis could help streamline the content analysis codebook. Notably, the final sub-codes used for *talk purpose* were strongly influenced by the ways in which teachers discussed the functions of their language use in vivo, yielding new and unexpected ways to categorize the purposes of teacher talk. Further axial coding occurred, collapsing child nodes (e.g., *explaining, defining*) into higher-level subordinate categories, or parent nodes (e.g., *generative thinking*).

The final draft codebook included five overarching coding categories with 20 parent codes and 43 child codes (see Appendix E, Table E1 for a full description of the codebook). A final round of coding was conducted on the full data set using the new codebook (211 materials, 1800 excerpts). To safeguard dependability, a second coder, trained by the researcher on the codebook, coded 10% of the data (Lincoln & Guba, 1985). Selected excerpts mirrored the proportions of each material type in the total data set (i.e., more ITCs, fewer BDCs). The goal was for interrater reliability to be above 80% to ensure that the coding was done in a systematic way across coders. Following this adaptation of the codebook, the final overall agreement between coders was 86.1%.

3.2.2. Call-Out Box Coding

A smaller, secondary content analysis was conducted focusing specifically on the call-out box excerpts found within the Creative Curriculum (CC). Call-out boxes were visually highlighted within the CC material, often distinguished by a shaded box and accompanied by titles such as "English-language Learners" or "Including All Children." For selection, call-out boxes needed to specifically focus on teachers' language practices or children's language development. The process of excerpt selection mirrored that of the primary content analysis, wherein bullet points were used to delineate "instances of talk." The final data set contained 173 call-out box excerpts.

I initially began with the final codebook from the primary content analysis, eliminating codes that were not applicable to the call-out box data set, including all of the *talk purpose* codes and most of the *talk type* codes. Throughout the initial coding, new codes were added that aligned closely with the curriculum wording (e.g. "speak slowly and clearly," "model correct pronunciation," "discuss cognates"). Following the open coding process, I engaged in axial coding, establishing and renaming larger categories to align with emerging themes. The final codebook included three top-level categories (*curriculum section*, *specific population*, and *type of additional support)*. The *curriculum section* category and the *specific population* category were used to catalog the data, delineating where in the curriculum the call-out box was located and which type of learner was described in the guidance.

The final top-level category, *type of additional support,* required more interpretive coding. The type of additional support category included six parent codes: *environmental supports, listening comprehension supports*, *model mature language use, scaffold verbal participation*, *use modeling talk,* and *vocabulary supports*. These codes were not mutually exclusive, meaning that a given excerpt ("instance of talk") could be coded with multiple types of additional support child codes, as indicated in the following example: "Simplify questions by offering answer choices, e.g. 'Did I take away the ball or the shoe?' Provide ample time for the child to process

the question and respond" (*listening comprehension supports- wait time; scaffold verbal participation- closed-ended question)*. Across these six parent categories, there were 26 child codes. A detailed description of the codebook can be found in Appendix E, Table E2. After the final codebook was established, the entire data set was re-coded, ensuring that each excerpt received at least one code for each of the three top-level categories.

3.2.3 Analyzing the Content Analysis Codes

The primary research question addressed by the content analysis is: "What kinds of language supports are provided within the Creative Curriculum to promote children's language growth?" The content analysis used a hybrid approach, incorporating interpretive techniques from the coding process with quantitative techniques (i.e., counts) during analysis (Drisko & Maschi, 2016).

In total, 1800 excerpts were coded for this project; however, the final data set used for addressing questions RQ1a, RQ1b, and RQ1c include 1546 of those excerpts, after excerpts not related to the research questions of interest were eliminated. For example, excerpts that provided general directions to teachers rather than directions for their language use were eliminated (n=81); these excerpts often stemmed from areas of the Teaching Guide guidance that discussed prepping for choice time, reflecting on the day's activities, or planning for future lessons. As noted earlier, call-out boxes could not be coded in the same manner as other excerpts; as such, these excerpts (n=173) were moved to a separate data set and used for answering RQ1d. In the sections that follow, I detail the analytic process for each sub-research question, which address different components of the primary research question.

3.2.3.1 RQ1a: What types of guidance does CC promote?

In order to address RQ1a, I examined which kinds of teacher talk, including talk types and talk purposes, were promoted across the CC guidance. To determine how often a particular type of talk occurred within the curriculum, I computed its relative frequency by dividing the

instances of that specific talk type (e.g., modeling talk, open-ended questions) by the total number of codes for the broader coding category (e.g., talk type). For instance, to determine the prevalence of closed-ended questions, I divided the total occurrences of closed-ended question codes (n=383) by the overall number of talk type codes (n=1818). This number, when multiplied by 100, gave the percentage of this particular type of talk within the curriculum guidance. I opted for this analytic approach over using total excerpts (n=1547) as the denominator to accommodate instances (n=272) where multiple types of talk were present in a single excerpt. To understand how talk type codes were combined within a single excerpt, I used a code co-occurrence matrix function; the matrix tabulates the number of instances where two codes are applied to the same excerpt. This feature allowed me to examine how often different talk type codes (e.g., teaching comment and closed-ended question) were referenced in the same instance of talk. The analysis of "talk purpose" codes followed the same analytic approach outlined above, focusing on the frequency of each talk purpose code (n=1905) and exploring instances where multiple talk purpose codes (n= 358) were present in the curriculum.

A separate detailed analysis of the relationship between talk type and talk purpose codes was also conducted. This analysis sought to understand how different talk types served unique purposes within the curriculum. To conduct this analysis, I again used the code co-occurrence matrix function in Dedoose. The code co-occurrence matrices illustrated the number of times a specific talk type code (e.g., open-ended question) was coded in conjunction with a specific talk purpose code (e.g., to guide ways of thinking). To provide evidence of how a specific talk type was used for different purposes, I divided the number of code co-occurrences of a given talk type/talk purpose pairing (i.e., closed-ended question X guide thinking, closed-ended question X scaffold learning) by the total number of excerpts coded for the specific talk type (e.g., closed-ended questions). This was repeated for each combination of talk type and talk purpose.

3.2.3.2 RQ1b: How explicit is the guidance for teacher language use?

In order to address RQ1b, I examined the relative frequency of "explicitness" codes (i.e., not explicit, moderately explicit, very explicit) within the coded curricula. In contrast to the talk type and talk purpose coding scheme, explicitness codes were only coded once for each excerpt. Therefore, total excerpts (n=1547) was used as the denominator for calculating the relative frequency of explicitness codes. For example, to determine the percentage of guidance coded as "moderately explicit," I divided the number of excerpts coded as very explicit (n=1030) by the total number of excerpts (n=1547) and multiplied that number by 100.

3.2.3.3 RQ1c: How does the guidance vary across five ECE activity settings: choice time, large group instruction, shared book reading, small group instruction and transitions?

The goal of RQ1c was to illustrate the ways in which the Creative Curriculum guidance differed across activity settings. Levels of explicitness, types of talk, and purposes of talk were all explored as part of this analysis. Five activity settings (choice time, large group instruction, shared book reading, small group instruction, transitions) were chosen for this investigation, as each of these settings plays a foundational role in the early childhood classroom.

Each activity setting aligned with a specific analyzed material or portion of a material. Choice time and large group settings directly corresponded to sections labeled with the same names in the CC Teaching Guide. The transitions setting was based on the Mighty Minutes Cards. The small group setting combined data from two CC materials— the Intentional Teaching Cards and the small group section of the Teaching Guide—both categorized as "small group" in the final dataset. Similarly, shared book reading comprised data from two CC materials— the Book Discussion Cards and the Read Aloud section of the Teaching Guide— each coded as "book reading" in the final dataset.

To illustrate the distinct features of each activity context, I analyzed each setting separately using Dedoose's code co-occurrence matrix feature. Notably, some settings, such as choice time (n=80), had significantly fewer excerpts than others, like small group instruction

(n=652). Focusing on individual activity settings helped mitigate the impact of excerpt disparities on the data analysis. To determine the level of explicitness for an activity setting, I divided the code co-occurrence of an explicitness code and activity setting code (e.g., very explicit X book reading) by the total number of excerpts for that activity setting. To investigate the prevalence of talk types in an activity setting, I divided the code co-occurrence of a talk type code and activity setting code (e.g., closed-ended question X book reading) by the total number of talk type codes for a given setting. The denominator for this analysis is different than for levels of explicitness because talk type codes can occur more than once in a single excerpt. The analysis of how talk purpose varied by activity setting followed the same analytic procedure as the talk type analysis.

In order to understand the functions of talk within each activity setting at a more nuanced level, a sub-analysis was conducted. For instance, the larger purpose code, guiding ways of thinking, was referenced frequently across settings. However, guiding ways of thinking was comprised of five sub-codes, including generative thinking, literal thinking, imaginative thinking, sensory thinking and socio-emotional thinking, which likely differed in their presence across activity setting. Code co-occurrence numbers were gathered for the sub-codes (child nodes) for each top-level talk purpose code (i.e., structure classroom activity setting, guide thinking, build knowledge). By analyzing the code co-occurrence between sub-codes and activity settings, a more detailed picture emerged about how CC intended for teachers to utilize a particular setting. Further narrative descriptions about sub-codes were created by exploring the child nodes of the sub-codes; for example, *generative thinking* had three sub-codes (making personal connections, comparing/contrasting, explaining thinking), which all ask children to construct new thoughts about a topic but in qualitatively different ways. This micro-analysis gives a more nuanced view about how different activity settings function in the early childhood classroom setting.

3.2.3.4 RQ1d: How does the guidance attend to linguistic diversity?

The final sub-question aimed to investigate how the Creative Curriculum facilitated the language development of linguistically diverse learners. For this analysis, I utilized a separate data set, comprised of 173 excerpts taken from shaded "call-out boxes" in the Teaching Guides and Intentional Teaching Cards. Initially, I also planned to incorporate other excerpts from the primary content analysis data set that were coded as *attention to linguistic diversity*; however, all excerpts coded in this way were already encompassed within the call-out box data set.

To understand which specific populations were targeted within the CC call-out boxes, I examined the frequency of the *multilingual learner* and *SPED* codes within the data set. For all other sub-questions related to RQ1d, I utilized the code co-occurrence function in Dedoose. This process involved exploring the relationship between the *special population* code and the pertinent code(s) of interest. For example, to determine which components of CC encouraged modifications for linguistic diversity, I looked at the relationship between the *special population* code and the sub-codes within the broader *curriculum section* category (e.g., ITC, TG-Large Group, etc.). Similarly, to examine the prevalence of different kinds of recommended supports, I looked at the intersection between the *special population* code and the sub-codes within the *types of additional supports* category; percentage of excerpts recommending a given support type were ascertained by dividing the frequency of the sub-code (e.g., *modeling mature language use, vocabulary support*s) by the total number of excerpts coded as *special population* (n=133). For a more granular understanding of the specific teacher moves embedded within a *type of additional support* parent code (e.g., *vocabulary supports*), I looked at the frequency of each child code (e.g., *L1 Supports, multimodal supports)*. In conclusion, the RQ1d analysis uncovered the relationship between linguistically diverse learners and the recommended modifications, as evidenced within the call-out boxes, offering insight into the curriculum's attempts at differentiation.

3.3 Data Analysis Methods: Teacher Interview

The second research question (i.e., how do teachers interpret and respond to the curriculum's guidance for language during planning and enactment?) was guided by three-sub questions, each addressing a different facet of teachers' relationship with the curriculum's language guidance:

RQ2a) How do teachers articulate and interpret the role of various classroom language practices?

RQ2b) How do teachers engage with the CC guidance in their typical instruction?

RQ2c) What kinds of influences shape teachers' engagement with and adoption of the CC guidance in their teaching practice?

In order to address these questions, I relied on two sources of data: the teacher interview transcripts (n=8) and a digital artifact from the Teacher Talk Sort activity (n=4). In the following section, I describe the methods used to code and analyze these two sources of data, with specific attention given to the approach used for each sub-research question.

3.3.1 Teacher Talk Sort Artifact Analysis

A thorough reading of the teacher interviews revealed the importance of the Teacher Talk Sort in explaining how teachers perceive and organize classroom language practices. This artifact elicitation activity involved teachers sorting 17 examples of ECE classroom language practices into categories that reflected their own thought processes (see Appendix D). In order to analyze the data from the teacher talk sort screengrabs, I labeled each digital post-it note, representing a different example of teacher talk, with a number from 1-17. Next, I transformed the digital screen grabs into tables with the participants' in vivo category headings and the accompanying numbers of talk examples underneath (e.g., "simple statements" as a heading with 2, 3 listed within the area underneath). I then visually compared the data across the teachers, looking for instances of similar sorting patterns; for example, all of the teachers sorted

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talk example 2, "that's a pretty picture!," and talk example 3, "put the book in your cubby," into a stand-alone category.

I also looked for instances where teachers diverged in their sorting patterns. For example, I looked at differences in the numbers of categories that teachers created to organize the teacher talk examples (range: 5-8). In addition, I looked for which talk examples had the greatest variation in how teachers described them; for instance, across teachers, "how are these two blocks the same?" was categorized as a closed-ended question, a descriptive question, and a higher-level thinking question, illustrating the variation in teachers' perceived understandings. Throughout this process, I created analytic memos detailing the similarities, differences, and overarching patterns that I noticed. These analytic memos informed a narrative synthesis of teachers' existing understandings about language, as evidenced from their talk sorts.

3.3.2 Coding of the Teacher Interviews

All teacher interview audio files were uploaded to Rev, an automated transcription service, for transcription. After receiving the automated transcripts, I reviewed each document line-by-line to check for errors. All transcripts were then uploaded into the Dedoose software for coding.

Embracing the principles of grounded theory, I conducted iterative phases of inductive coding, refining codes throughout the process to establish a comprehensive code book. This method was chosen in order to capture not only the explicit information teachers discussed, but also the underlying perspectives and attitudes that might be inferred from the teachers' talk (Strauss & Corbin, 1998). Before starting the teacher interview coding process, I read each interview and simultaneously compiled theoretical memos documenting initial hunches about emerging themes. For instance, I noted how different influencing factors were surfacing across all of the interviews, including children's linguistic background, prompting me to consider the

role of classroom demographics in shaping teachers' language practices and curriculum use. This process allowed me to reacquaint myself with the interview data and consider ways of capturing teachers' thoughts.

To begin, I conducted an initial round of open coding. Following the advice of Miles and colleagues (2020), I created excerpts by chunking "monothematic [units] of sentences or full paragraphs," ending an excerpt when teachers moved onto a separate topic of discussion (p. 74); at times, excerpts were naturally segmented by the interviewer's probes, clarifications or additional questioning. As such, excerpts could vary dramatically in length, from a single line to several lines (range: 1-17).

Throughout the initial coding, I engaged in negative case analysis, remaining open to adjusting the coding scheme to account for evidence that did not align with the initial grounded categories I had established (Kidder, 1981 as cited in Lincoln & Guba, 1985; Smagorinsky, 2008). The open coding process resulted in 242 codes across 318 excerpts. Some open codes were in vivo, reflecting exact teacher talk (e.g., *"knowing your kids"; "being realistic"; "taking a back seat"*), while others were more interpretive, describing linguistic concepts (e.g., *modeling talk, praise)*, processes of engagement (e.g., *supplementing activity*, *scaling back*), or evaluations of the curriculum (e.g., *not helpful, too vague).* Additional codes marked teachers' discussions of particular curriculum components (e.g.,. *intentional teaching card)* or classroom activity settings (e.g., *book reading).*

After establishing an initial codebook, I removed overarching categories and related sub-codes that were not pertinent to the inquiry at hand, such as such as *language objectives, study integration,* and *planning logistics*, by comparing the relevance of the codes to the research sub-questions; this process resulted in a set of 211 open codes. I then conducted several rounds of axial coding to organize the 211 open codes into categories (Strauss & Corbin, 1998). A detailed example of how this worked for one set of open codes follows. '*Knowing your kids,' 'importance of differentiation,'* and *'importance of gathering assessment data'* all described the

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importance of differentiating instruction based on student data; therefore, they were all combined into one grandchild code, *data-driven instruction.* Two grandchild codes, *data-driven differentiation* and *objective-driven instruction,* were combined into one child code: *ECE as academic,* capturing teachers' beliefs about the role that academics play in the early childhood landscape. This child code, *ECE as academic*, fell under the parent code, *teacher-related influences*, that was in the *Influences* top-level category.

The process of categorizing and collapsing codes produced a final codebook containing 90 total codes across five overarching categories: 1) *activity setting*, 2) *curriculum material*, 3) *interaction with guidance,* 4) *influences* and 5) *language practice*. Across the five overarching categories, there were 25 parent codes and 60 related child and grandchild codes. A final detailed codebook with category definitions and examples can be found in Appendix E, Table E3. Three of the overarching categories (*activity setting, curriculum material, language practice)* were less interpretive as the relationship between the code and teacher's talk was quite transparent. *Activity setting* cataloged instances where teachers specifically discussed a classroom activity setting (i.e., *choice time, read aloud)* while *curriculum material* documented instances where teachers discussed a specific material type, either spontaneously or within an artifact elicitation event (i.e., *Book Discussion Card, Choice Time prompts). Language practice* denoted teachers' discussions of particular language moves, such as asking a *closed-ended question* or engaging in *procedural talk.* Similar to the coding scheme used for the content analysis, the purposes of particular language practices were also coded in this section (i.e., *build knowledge, scaffold learning).* The fourth overarching category, *interactions with guidance,* captured teachers' opinions about and engagement with the curriculum guidance, including how often they used a particular type of guidance in their practice (*frequency of use)* and their varying approaches to engaging with the guidance (*scale back, adapt but use, supplement).* The last overarching category, *influences,* was similarly inductive and highlighted factors that teachers raised, either implicitly or explicitly, as informing their language practice and/or

curricular engagement (*child-related influence: language background, teacher-related influence: personal philosophy, systems-level influence)*. I conducted a final round of coding on the full data set (318 excerpts) using this codebook.

Throughout the development of the coding scheme, I sought analytical guidance from an academic advisor and two peers specializing in early childhood education. This collaboration enhanced credibility and helped maintain interpretive integrity (Lincoln & Guba, 1985). In line with interpretivist and constructivist approaches to analysis, I did not incorporate a formal second coder. Instead, to safeguard dependability, a peer debriefer engaged in a process of so-called "systematic checking" (Smagorinsky, 2008); she scrutinized how applied codes aligned with the operational definitions in the codebook, providing detailed notes about areas of agreement and her potential concerns. The systematic checking process included a review of 100 interview excerpts accompanied by their applied codes. This process fostered critical reflections on the coding process; while the debriefer expressed strong overall agreement with my initial coding (only 19% of excerpts had notes expressing concern), her assessment did surface a persistent issue with my coding of one participant's interview data. A reflective conversation revealed how I conservatively applied codes to this participant's data, as they consistently provided wavering remarks and contradictions in their talk. Consequently, I re-examined and re-coded that participant's data with meticulous adherence to the codebook's definitions.

3.3.3 Analytic Approach: Teacher Interviews

To analyze the teacher interview data, I used two complementary analytic approaches: 1) a category-frequency approach and 2) a teacher-contribution approach. A dual approach was required given the nature of the dataset as excerpts varied substantially in their length (range=1-17 lines). Therefore, comparing raw frequencies of codes only provided partial insight into the importance of a given category or theme for the group of teachers; while comparing

frequency codes does provide some insight into an idea's relative importance (i.e., teachers continued to raise this topic in conversation and did so relatively more often than this other topic), it does not reliably indicate how much conversation (i.e., time) or by how many participants a given topic was discussed.

The category-frequency approach gave the raw frequency with which a given code (e.g., *supplementing*) or category (e.g., *engagement with the curriculum*) was mentioned by participants across the dataset. For instance, across the entire dataset, *scaling back* was mentioned in relatively fewer excerpts (n=15), than *supplementing* (n=52). This approach allowed me to compare the frequency with which a particular idea was entered into the conversation by the group of teachers.

In contrast, the teacher-contribution approach highlighted how many of the four teachers mentioned a particular code *at least once* across their interviews, disregarding how many overall times the code was discussed. Using the same comparison as used previously, *scaling back* was mentioned by three teachers while *modifying* was mentioned by all four teachers. Therefore, the teacher-contribution approach gave insight into how widely held a given idea was across the participating teachers.

3.3.3.1 RQ2a: How do teachers articulate and interpret the role of various classroom language practices?

To answer this sub-question, I combined evidence from the Teacher Talk sort narrative memo and several teacher-contribution analyses. In order to explain teachers' conceptualizations of how the type and purpose of teacher talk differed across setting, I created two co-occurrence matrices: one that highlighted the interaction between activity setting, talk type, and talk purpose and another that highlighted the interaction between curriculum material, talk type, and talk purpose. Looking at each activity setting and associated curriculum material in isolation (i.e., read aloud and BDC) using a teacher-contribution analysis, I looked at which language practices and purposes were mentioned by the majority of the teachers. This

analytical choice helped reveal how widespread particular ideas about context-specific language practices are within this group of teachers.

3.3.3.2 RQ2b: How do teachers engage with the CC guidance in their typical instruction?

First, to understand teachers' general responses to the curriculum, I used a teacher-contribution analysis to look at the *responses to guidance* codes, determining what types of opinions were held by all teachers. Next, to understand the approaches teachers took when enacting the curriculum, I used a teacher-contribution analysis on the *engagement with guidance* child codes to illustrate which engagement techniques were utilized by all or most teachers during their practice. To provide insight into which engagement practices were most commonly mentioned by the group, I relied on a category-frequency approach, comparing the frequencies of each *engagement with guidance* child code (i.e., modify, supplement, etc.).

3.3.3.3 RQ2c: What kinds of influences shape teachers' engagement with and adoption of the CC guidance in their teaching practice?

A teacher-contribution analysis of the *influences* codes was used to determine which influences were mentioned by all of the participating teachers. In addition, theoretical memos hinted that teachers appeared to prioritize different sets of influences in the discussions of their practice. To trace down this working hypothesis, I analyzed each participants' *influences* codes in isolation. I used a category-frequency analysis to determine which codes received relatively more mentions than others for that individual teacher. This served as an indication of how important an influence appeared to be in teachers' visions of their practice, with more mentions indicating that it at least held some importance for that individual teacher. Once I established a set of influences that appeared particularly important for that individual teacher, I used a teacher-contribution analysis to see how many teachers also mentioned that specific influence in their interviews. This approach helped to highlight whether or not particular influences were salient for only one teacher, rather than salient for multiple teachers in the group.

3.4 Limitations

While the methods and analysis plan employed for this inquiry are strong, it is crucial to acknowledge and address certain limitations of the research design. In regards to the content analysis, excerpt selection was limited to guidance that influenced teachers' language use. This approach restricts our ability to compare the relative frequency of language guidance with other forms of guidance present in the curriculum (i.e., procedural guidance, non-language guidance). Consequently, the ratio of language guidance to other types of guidance within the curriculum is not clear. In addition, while two studies were selected (Trees, Clothes) to ensure maximum variation sampling, there may be slight differences in guidance between more newly-released CC studies not targeted in this inquiry (e.g., Cameras, Gardening) and older CC studies. For example, one teacher noted that the shared reading lesson guidance is fairly sparse in some of the newer studies.

Regarding the teacher interview component of the project, artifact elicitation activities introduced certain limitations. While artifact elicitation makes tacit practices more explicit, it also complicates our ability to determine the origin of teachers' ideas about language. For instance, it raises questions about whether teachers already held certain ideas about classroom language use (e.g., context-specificity, varied purposes) or if these ideas were shaped by the artifacts under discussion. Moreover, the time spent and interaction with different artifacts inherently shaped teachers' discussions about language. For example, general questions about the utilization of choice time led to extensive discussions about teachers' language practices in this setting, with less attention given to the CC choice time prompts. In contrast, teachers looked at a BDC artifact when discussing their book reading practice; this resulted in extensive conversations about their modifications and use of this curriculum material, but less discussion about their shared reading practices, more generally.

Furthermore, this inquiry exclusively relied on teachers' narratives about their curriculum enactment rather than direct observation of their practices, complicating our understanding of

teachers' actual curriculum implementation. Future research could explore the relationship

between teachers' visions of enactment and their actual classroom practices; integrating

observations alongside teachers' reflections could offer a more detailed insight into their

pedagogical sensemaking and decision-making processes related to language.

CHAPTER 4

Findings of the Creative Curriculum Content Analysis

This chapter addresses the findings of the content analysis of two Creative Curriculum studies (e.g., Trees, Clothes). The chapter first addresses three broad features of the curricular guidance: explicitness, talk type and talk purpose. Next, the interaction between five key activity settings (choice time, large group instruction, shared book reading, small group instruction, transitions) and the three aforementioned categories will be discussed. Lastly, the chapter discusses the ways in which the curricular guidance attends to linguistic diversity. The chapter concludes with a discussion section which connects these results to the existing literature and highlights important implications for the field.


4.1 Explicitness

Creative Curriculum provides fairly explicit guidance for teachers regarding their language use throughout the day. Results revealed that 67% of the coded talk instances were "very explicit," providing detailed scripts of suggested teacher talk (e.g., "Before you read, show the cover and tell children the name of the book. Say 'If the monkeys came back, I wonder if that means they first went away.'"). Approximately a third of the guidance was categorized as "moderately explicit," offering specific ideas about *what* to talk about (i.e., topic of talk) but providing less clarity on the types of linguistic moves that would encourage engagement in the topic (e.g., "Discuss the process of sorting light- and dark-colored clothing before washing them. Invite children to sort using the baskets in the dramatic play area"). Several common phrases reflecting this pattern include "invite children," "encourage children," "talk about," and "discuss." It was very rare (3.8% of coded instances) for the curricular guidance within the five activity settings to be categorized as "not explicit." Guidance that was coded as "not explicit" provided

very general topics for teachers' talk but lacked details about the activity at hand, as evidenced in the following examples: "talk to children about their artwork" or "recall yesterday's visit." As these examples illustrate, "not explicit" talk was not tied to the study topic, a specific lesson objective or the materials being used. Therefore, Creative Curriculum's guidance for teacher talk within the five analyzed activity settings is relatively explicit, often providing teachers with specific talk topics or suggested scripts.

4.2 Talk Types

The curriculum did not overly emphasize any single language move, as indicated in Figure 4.1. Looking across the analyzed curriculum components, open-ended questions (27%), closed-ended questions (21%) and teaching comments (20%) emerged as the most prominent talk types (see Table 4.1 for description of talk type codes).

Figure 4.1

Frequency of Talk Types Across CC Guidance
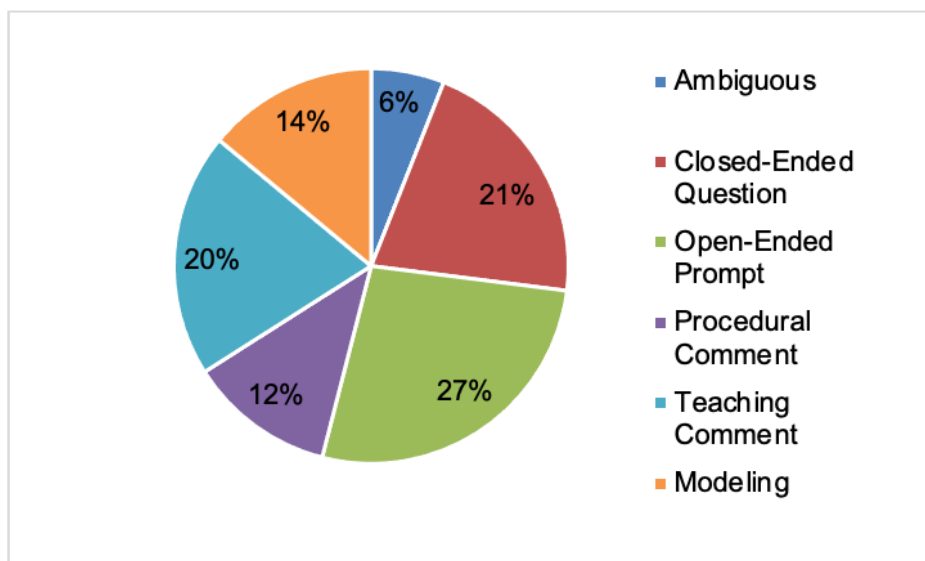
Table 4.1

Main Types of Teacher Talk in the Creative Curriculum Guidance

Parent Code	Definition	Example(s)
Ambiguous	No specific language move can be determined; multiple possibilities about how to engage students are possible and left up to teacher's discretion.	● Talk to them as they experiment with the wood and sandpaper. ● Encourage children to explain what characters are thinking and feeling
Closed-Ended Question	Question with a limited set of acceptable responses (i.e., one or two); may be structured as forced choice, yes/no, or have only one correct answer.	● Display two items from a tree. Ask, "what smells best to you?" ● "Are there more or fewer than 10 sticks in the guessing jar?"
Modeling Talk	Comment that provides a model of mature language use by narrating actions (self-talk, parallel talk) or responding in ways that add more grammatical or syntactic complexity (extension, expansion).	● "Watch how I put the red strip over the blue one. Now I'll lift the next blue one to go under it." ● Ana, what does this outline look to you? Yes, it's a pair of scissors."
Open-Ended Question	Question or prompt that has several possible answers.	● "What might happen if the animals didn't help carry the seeds away?" ● "In what way are some of these items the same?"
Procedural Comment	Statement that directs classroom happenings, including giving directions, explaining an activity, or setting expectations for behavior.	● Remind the children to hold their drums in a resting position until everyone is ready. ● "Today, I need your help to plant a tree of our own!"
Teaching Comment	Statement that shares information and does not expect a response from children; statement is often about academic content or topics.	● "Remember that trees are living things. Once the tree gets cut down, the wood becomes nonliving." ● "This shape has five corners. It sounds like a pyramid."

Note. Table 4.1 provides operational definitions of the talk type parent codes. See Appendix E, Table E1 for more detailed description of child codes (e.g., narration, extension) and additional examples from the curricular guidance.

In some excerpts (i.e., bulleted "instances of talk") (17%), multiple talk types were coded simultaneously. The following example drawn from an intentional teaching card (ITC) illustrates how modeling talk (e.g., narration, expansion) was often combined with a closed-ended question: "We need to find matching shoes (*procedural comment)*. You found a red sneaker and a black sneaker (*modeling- narration)*. Do they match (*closed-ended question)*? No you're right, they do not match (*modeling- extension)*."

Another commonly used combination of talk types was the use of modeling talk with open-ended questions, as illustrated in this example from a book discussion card (BDC): "How does thunder make you feel (*open-ended question)*? Alex says he feels excited when he hears thunder outside (*modeling- extension)*". A less common, but still prominent combination, was teachers' use of instructional comments followed by a closed-ended question, as illustrated in the following excerpt: "T is the first letter in Tomas and tomatoes (*teaching comment)*. What sound does T make (*closed-ended question)*?" Therefore, Creative Curriculum encourages teachers to flexibly use a variety of language moves to support children's learning and engagement.

4.3 Talk Purpose

The Creative Curriculum guidance also implicitly encouraged teachers to use talk for different purposes. The final coding scheme revealed that teacher talk served five key functions, to: 1) build knowledge, 2) check for understanding, 3) guide or model thinking, 4) scaffold learning or 5) structure classroom activity (see Table 4.2 for descriptions of each code). As Figure 4.2 illustrates, teachers were most often encouraged to utilize language to help guide children's thinking (41%) or build their knowledge of various topics (28%).

Table 4.2

Main Purposes of Teacher Talk in the Creative Curriculum Guidance

Parent Code	Definition	Child Codes	Example(s)
Build knowledge	Teacher talk gives information in order to build children's knowledge of a particular topic	- academic skills knowledge - conceptual knowledge - story knowledge - vocabulary knowledge	"I think this boy and his father are different from other townspeople. What do you think?" "Tree starts with the /tr/ sounds. We use the letters t and r to write these sounds."
Check understanding	Teacher talk aims to gather information about children's level of understanding about a given topic or lesson objective	- by applying background knowledge - by assessing basic skills	"Is this goldfish living? Is this table alive?" - Ask the children to figure out how many are left each time
Guide ways of thinking	Teacher talk encourages children to engage in different kinds of thinking, ranging from more literal to more conceptual	- generative thinking - imaginative thinking - inferential thinking - literal thinking - sensory thinking - socioemotional thinking	- What do you think the grouchy ladybug would have done if the whale hadn't given it a big slap?" - Ask: "how does the wood change when you rub the sandpaper back and forth on it?"
Scaffold learning	Teacher talk intentionally adjusts the lesson's progression to support children's understanding	- activate background knowledge - encourage questioning - pose a challenge	- If they need help, ask: "What kind of clothes do you wear when you come to school? Play at home? Go someplace special?" "How can we add to this pattern?"
Structure classroom activity	Teacher talk is used to organize the happenings of the classroom	- direct behavior - prepare for activity	"I'm going to read a poem. Close your eyes while I read" - Remind children about the site visit.

Note. Table 4.2 provides operational definitions of the talk purpose parent codes. See Appendix E, Table E1 for more detailed description of child codes (e.g., generative thinking, imaginative thinking) and additional examples from the curricular guidan

Figure 4.2

Frequency of Talk Purpose Codes across CC Guidance
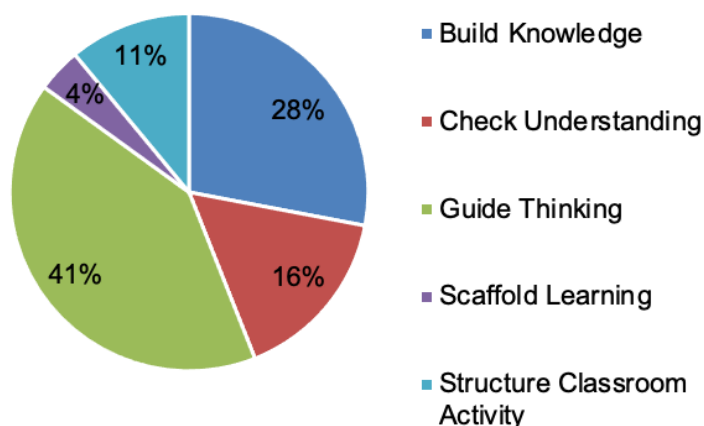
A transparent relationship existed between some talk types and their intended

purpose(s). As Table 4.3 illustrates, procedural comments, teaching comments, and open-

ended questions were all strongly linked to a specific talk purpose. For example, procedural

comments, such as "tell the children to freeze when the music stops," were almost always

intended to structure classroom activity, while teaching comments were primarily used to build

students' knowledge of a particular topic or skill (e.g., "Explain 'bad weather can hurt or damage

trees' [*build knowledge- content; vocabulary*]).

Open-ended questions also had a predictable function, primarily serving to elicit specific

kinds of thinking from children (e.g., Ask "how does the wood change when you rub the

sandpaper back and forth?" [*guide thinking- sensory thinking; generative thinking*]; Ask "why do

animals live in trees?"[*guide thinking- generative thinking*]). On the other hand, closed-ended

questions and modeling talk moves were used for a broader range of purposes. A thorough

analysis of the data highlighted the significant role of activity setting in shaping the relationship

between talk type and its intended purpose, a topic further explored in the subsequent section.

Table 4.3

Total and Relative Frequency of Talk Type and Talk Purpose Code Combinations

Talk Type	Talk Purpose				
	Build knowledge	Check understanding	Guide thinking	Scaffold learning	Structure activity
Ambiguous Comment	28 (.01)	8 (.00)	64 (.03)	2 (.00)	2 (.00)
Procedural	22 (.01)	7 (.00)	45 (.02)	4 (.00)	187 (.08)
Teaching Elicitations	308 (.14)	30 (.01)	97 (.04)	2 (.00)	9 (.00)
Closed-ended	54 (.02)	250 (.11)	155 (.07)	11 (.00)	11 (.00)
Open-ended	72 (.03)	24 (.01)	441 (.20)	56 (.03)	6 (.00)
Modeling	111 (.05)	80 (.04)	110 (.05)	17 (.01)	15 (.00)

Note. Each cell indicates the number of excerpts coded with both codes of interest. However, the number listed next to each frequency count in parentheses depict the proportion of total codes, rather than the proportion of total coded excerpts, as one excerpt could receive multiple codes.

Similar to the talk type codes reviewed previously, talk purpose codes were often coded simultaneously within a given excerpt (21% of coded excerpts). For instance, efforts to build students' knowledge were commonly combined with checking for students' understanding, as evidenced in the following excerpt: "Zachary's barn is five blocks tall [*build knowledge-academic skills*]. Which is taller, the tower or the barn? [*check for student understanding*]*."* Another frequent combination was talk designed to build students' knowledge with talk intended to guide their thinking (e.g., "I wonder how Little Red Riding Hood's mother will feel when she hears about her daughter's adventures [*build knowledge- story knowledge; guide thinking-socioemotional thinking*]. Do you think she will let Little Red Riding Hood walk in the woods by herself again?" [*guide thinking- imaginative thinking*]).

Therefore, the content analysis revealed that the guidance implicitly encouraged teachers to use talk for different purposes. At times, talk functions aligned closely with particular

kinds of talk. However, certain talk types, such as closed-ended questions and modeling talk, served diverse purposes based on the activity context.

4.4 Role of Activity Setting

A more detailed analysis of the data revealed a relationship between activity setting and the language fostered by the curriculum. Each activity setting corresponds to related CC materials (see Appendix A for additional details about curriculum materials). In order to illuminate differences across activity contexts, the codes of interest were examined for each setting independently. Table 4.4 provides insight into the relationship between activity setting and talk type by highlighting the frequency of each talk type code within each activity setting; Similarly, Table 4.5 shows the relationship between activity settings and talk purpose. Last, Table 4.6 presents information regarding the level of explicitness of the curricular guidance within each activity setting.

Table 4.4

Total and Relative Frequency of Talk Type Codes Within Key Activity Settings

	Book Reading	Choice Time	Large Group	Small Group	Transitions
Ambiguous Comment	32 (.09)	17 (.21)	16 (.06)	26 (.04)	2 (.02)
Procedural	11 (.03)	10 (.13)	40 (.15)	91 (.14)	28 (.25)
Teaching Elicitation	94 (.26)	8 (.10)	87 (.33)	170 (.26)	19 (.16)
Closed-ended	43 (.12)	2 (.02)	27 (.10)	163 (.25)	40 (.35)
Open-ended	140 (.39)	32 (.40)	85 (.32)	124 (.19)	25 (.22)
Modeling	43 (.12)	10 (.13)	8 (.03)	150 (.23)	0 (.00)

Note. Numbers listed in parentheses indicate the proportion of talk type codes in each individual setting, rather than the proportion of total talk types codes across settings.

Table 4.5

Total and Relative Frequency of Talk Purpose Codes within Key Activity Settings

	Book Reading	Choice Time	Large Group	Small Group	Transitions
Build knowledge	148 (.41)	14 (.17)	93 (.35)	156 (.24)	21 (.18)
Check understanding	14 (.04)	2 (.02)	16 (.06)	156 (.24)	30 (.26)
Guide thinking	187 (.52)	56 (.70)	93 (.35)	222 (.34)	35 (.31)
Scaffold learning	7 (.02)	0 (.00)	37 (.14)	13 (.02)	6 (.05)
Structure activity	4 (.01)	8 (.10)	26 (.10)	105 (.16)	22 (.19)

Note. Numbers listed in parentheses indicate the proportion of talk purpose codes in each individual setting, rather than the proportion of total talk purpose codes across settings.

Table 4.6

Explicitness of Guidance Within Key Activity Settings

	Total Excerpts *n*	Not Explicit	Moderately Explicit	Very Explicit
Book Reading	360	6%	38%	56%
Choice Time	80	9%	58%	34%
Large Group	265	6%	53%	40%
Small Group	652	2%	19%	78%
Transitions	114	0%	57%	43%

Note. Percentages reflect the proportion of level of explicitness codes within each individual setting, rather than the proportion of total excerpts across settings.

4.4.1 Book Reading

The book reading context was analyzed using excerpts from the Book Discussion cards (BDC) and the "read-aloud" section of the Teaching Guide lessons. The guidance for book

reading primarily focuses on specific trade book texts, related, at least tangentially, to the study topic (e.g., *Caps for Sale, The Grouchy Ladybug)*. In addition, the BDC guidance includes detailed text-based questions and text-based vocabulary words. In total, 360 excerpts were coded across the two units analyzed, with 219 of the excerpts stemming from the BDCs and 141 from the Teaching Guide lessons. Overall, the book reading guidance was very explicit (84%), with codes for "moderately explicit" and "not explicit" only occurring 11% and 5% of the time, respectively.

Examinations of talk type revealed that open-ended prompts (39%) and teaching comments (26%) were the most frequent type of talk promoted within the book reading setting, accounting for approximately two-thirds of the guidance in this setting. Closed-ended prompts and modeling talk were also prevalent, accounting for 22% of the total guidance. Analyses of talk purpose revealed that read-aloud was primarily used to build students' knowledge (41%) or guide their thinking (52%). A detailed analysis of the talk purpose codes revealed that efforts to build knowledge (n=148) were almost always in support of students' story comprehension (66%) or vocabulary development (32%). The following excerpt illustrates how the guidance encouraged teachers to use self-narration (i.e., modeling) to support students' story comprehension: "The people in town were scared of Abiyoyo. They ran away when they saw him" [build knowledge- story knowledge]. Guidance intended to build vocabulary knowledge often stemmed from excerpts repeated within each BDC, highlighting the importance of discussing vocabulary words during book reading (e.g., "Expand vocabulary by pointing to pictures, using gestures to dramatize and describing: ukulele, magician…" [*build knowledge- vocabulary knowledge*]).

In addition, guidance designed to guide students' thinking patterns (n= 187) tended to either support: a) literal thinking (27%), encouraging simple recall (e.g., "what happened to the mitten when the animals crawled inside?" [*guide thinking- literal thinking*]), b) inferential thinking (27%), including predicting a character's actions or inferring plot points, or c) generative thinking

(15%), often asking children to explain story events or connect the story to their own experiences (e.g., "How do her friends try to help her? Tell us about a time you helped a friend who was in trouble" [*guide thinking- generative thinking*]).

Notably, there were some differences in the prevalence of different talk types and purposes depending on if it was the first, second or third reading of the text. Examinations into how talk type differed across readings revealed that teaching comments were more prevalent in the first two readings (n=52) than the third reading (n=4). In addition, while open-ended questions were present across all readings, they were most prominent in the second reading (n=44), compared to the first (n=19) and third readings (n=23). Closed-ended questions were seen in both the second reading (n=9) and third reading (n=16). Consequently, the first two readings focused more explicitly on building children's knowledge of the story and related vocabulary than the third reading; in contrast, the third reading tended to support children's literal thinking through story retelling.

Therefore, the book reading setting was very explicit, characterized by the use of open-ended prompts and teaching comments to support children's development of story comprehension, vocabulary, and higher-order thinking skills.

4.4.2 Choice Time

The choice time setting was analyzed using excerpts taken from the "choice time" section of the teaching guide. Choice time guidance provided general guidance for teachers about how to engage children within different choice time activity centers (e.g., Art, Dramatic Play, Blocks); at times, teachers were given explicit guidance for a specific activity setting (i.e., "talk about artwork").

In total, 80 excerpts were coded across the two studies, with only 34% of the guidance coded as explicit. More commonly, the guidance was "moderately explicit" (55%), as evidenced by the following excerpt: "invite children to look closely at the leaves and rubbings." In regards to

talk type, open-ended prompts were common (40%). In addition, due to the prominence of "moderately explicit" guidance, ambiguous prompts were also common, leaving the type of talk up to teacher discretion. For example, the following guidance was marked as ambiguous: "talk with children about their artwork." Given this guidance, teachers could choose to use an open-ended prompt (i.e., "tell me about your drawing"), a comment (i.e., "make sure to label the parts of your tree") or a closed-ended question (i.e., "what colors did you use for your tree?") to accomplish the objective.

In regards to talk purpose, choice time guidance was often used to encourage certain kinds of students' thinking (70%). Sensory thinking, describing, observing or exploring physical materials, and generative thinking, explaining a phenomenon or creating comparisons between objects or ideas, were both frequently promoted within the choice time guidance. The following excerpt illustrates both of these functions: "Ask questions that invite them to describe their [art]work and explain the processes they used to create it. Say, for example, "I see several thin, wiggly lines in your painting. How did you make those?"[*guide thinking- generative thinking, sensory thinking*]. Therefore, while the guidance for choice time lacked explicitness, it also prioritized developing children's sensory and generative thinking through the use of open-ended prompts.

4.4.3 Large Group Instruction

The large group activity setting was analyzed from data gathered from the "large group" section of the teaching guide. This section includes several components: an opening routine, a welcome activity (e.g., song, movement, game), and a discussion/shared writing activity. The discussion/shared writing activity is the main component of the large group instructional setting, serving as the primary vehicle for learning about the study topic.

Across the two units, 265 excerpts were coded with 40% being marked as "very explicit" and 52% as "moderately explicit." Large group guidance was highly variable with teaching

comments (33%), open-ended prompts (32%) and procedural comments (15%) all occurring

frequently in the lesson plans. Similarly, the purpose of teacher talk during large group

instruction also varied widely. Teaching comments were often used to build students' knowledge

(35%) of concepts and vocabulary, as evidenced in the following example: "Show a picture of a

loom from *The Quinceañera.* Explain that a loom is similar to crocheting or knitting because it

weaves threads to make cloth" (*teaching comment* [*building knowledge- vocabulary; content]*).

Talk during large group instruction also served to scaffold children's learning (14%)*,* by

intentionally activating students' background knowledge, as seen in the following example:

"Think about firefighters. What clothes do they wear?" (*open-ended question [scaffold learning;*

guide thinking-sensory thinking]). Lastly, talk during large group instruction was also designed to

guide children's thinking (35%). Guidance supported children's sensory thinking, encouraging

description and observation (as indicated in the previous example), literal thinking (e.g.,

recalling previously learned information), and their generative thinking (e.g. asking questions).

Therefore, guidance during the large group setting was quite varied in terms of explicitness, talk

type and talk purpose.

4.4.4 Small Group Instruction

The small group setting was analyzed using excerpts from two sources: the "small

group" section of the teaching guide and the Intentional Teaching cards (ITC). ITCs are small

group lessons targeting children's literacy, mathematics, socio-emotional, language, or physical

development. The ITCs have three components: activity directions (i.e., "What to Do"),

suggestions for general modifications (i.e., "Additional Ideas") and guidance for differentiation

by skill level (i.e., "Teaching Sequence").

The small group instruction setting had, by far, the greatest number of coded excerpts

(n=652) of the analyzed curriculum materials, indicating the level of detailed guidance within this

activity setting. Small group guidance was marked by heavy scripting, with 78% of the excerpts

being coded as "very explicit." Similar to the large group guidance, the small group guidance varied widely in the promoted types of teacher talk. Teaching comments (26%), closed-ended questions (25%), modeling (23%), and open-ended questions (20%), were all present at relatively high numbers. The purpose of teacher talk during this time was also varied. Guiding children's thinking (34%), particularly their sensory thinking (e.g., descriptions and observations) and literal thinking (e.g., recall) was quite common. In addition, teacher talk was used to build students' knowledge (24%) and check their understanding of basic academic skills (e.g. letter knowledge, counting) (24%), as evidenced in the following example: "What letter did you choose? Is it an uppercase or lowercase letter? What sounds does it make?" (*closed-ended question* [*check understanding*]). Therefore, the small group instructional setting was marked by heavily scripted guidance that varied significantly in both type and function.

4.4.5 Transitions

Guidance for transitions was analyzed using excerpts from the Mighty Minutes Cards (MMCs). MMCs are short, interactive whole group activities that simultaneously target a specific learning objective (e.g., mathematics, literacy, cognitive, etc.). Across the two units of study, 50 MMCs were coded. A majority of the guidance in the MMCs was not selected for coding because it was very procedural in nature, providing information to direct teachers' behavior, but not their language use (e.g., "repeat the game with other children"; "create other movements for the children to explore, besides jumping").

Across the two studies, 114 excerpts were coded with 43% of these excerpts coded as "very explicit" and 57% marked as "moderately explicit." An examination of talk type revealed that the transition guidance included a high prevalence of procedural talk (26%), closed-ended questions (35%) and open-ended questions (22%). In addition, the purpose of teachers' talk during transitions was varied. Guiding children's thinking, including their sensory thinking (e.g., describing objects) and their literal thinking (e.g., labeling objects) was a fairly common purpose

of teachers' talk during transitions (31%). In addition, talk was frequently used to check for students' understanding (26%), particularly in regards to their knowledge of basic academic skills (e.g., letter sounds, numerals) Relatedly, teachers' guidance also served to build students' knowledge of these academic concepts and of vocabulary, often embedding words in the context of the interactive activity (e.g., "Simon says touch something smaller than you, something taller than you, something fuzzy…"). In addition, teachers' talk also served to structure classroom activity (19%), by giving directions (e.g., "listen carefully to the clues I'm going to give you and try to figure out what I'm thinking") or explicitly directing students' behavior (e.g., "ask the child to repeat your claps"). Therefore, the guidance for transitions tended to be moderately explicit and varied in both type talk and talk purpose.

4.5 Attention to Supporting Students with Diverse Linguistic Needs

Explicit attention to linguistic diversity was only present in one area of the curriculum: shaded call-out boxes within the Teaching Guides and the ITCs. Within the call-out boxes focused on language development (n=173), the majority attended to linguistic diversity (n=133, 76.8%), providing guidance for supporting the needs of multilingual learners (MLLs; n=126) or students with specific learning needs (e.g., those with communicative devices, listening comprehension difficulties; n=6). Results of the secondary content analysis also revealed that modifications for linguistic diversity occurred most commonly in the ITCs (84.9%) with some presence in the large group, choice time, and read aloud sections of the TG (n=20).

The call-out box guidance promoted the use of six supplemental supports for language learning (see Figure 4.3). Predominant among this guidance were supports designed to scaffold learner's verbal participation in the classroom (33%) and build their vocabulary (28%). The former category gave ways for teachers to empower less vocal speakers in English to actively participate in classroom discourse, advocating for providing significant wait time (n=10) and asking closed-ended questions (n=8) (see Figure 4.4). Notably, a repeated suggestion

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advocated for allowing and encouraging students to use their first language (n=27), as indicated in the following phrase: 'When English-language learners ask you to name an object in English, ask them to tell you its name in their first languages" (*scaffold verbal participation- encourage L1 use).*

Figure 4.3

*Types of Additional Supports in Call-Out Box Guidance*
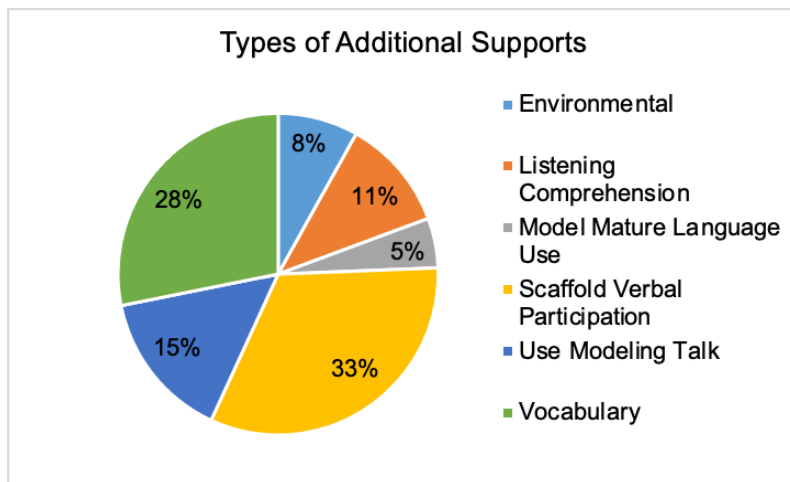
Figure 4.4

Frequency of Scaffolding Verbal Participation Supports in Call-Out Box Guidance
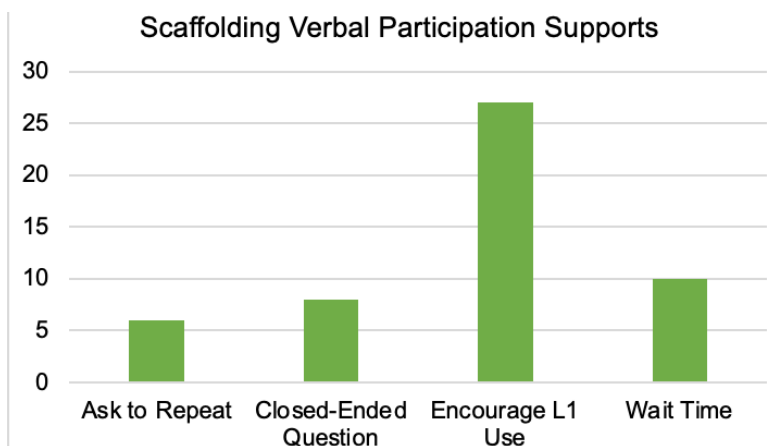
Regarding supports for vocabulary learning (see Figure 4.5), the curriculum call-out boxes encouraged using multimodal supports (n=45), such as gestures, props, and visuals, as evidenced in the following example: "Show pictures or point to objects that illustrate or explain unfamiliar words" (*vocabulary-gestures, visual, prop).* In addition, using children's first language knowledge (i.e., cognates, L1 words) was also commonly introduced as a way to support children's English vocabulary learning (n=13).

A third type of support encouraged teachers to use modeling talk (15%), including self-talk or parallel-talk to support the needs of linguistically diverse learners (e.g. "Explain your actions in real time and/or explain what other children are doing to increase vocabulary and comprehension"). Less prominent supports in the guidance included providing environmental supports (8%; e.g., materials in student's first language, intentionally pairing students with different language skills), providing listen comprehension supports (11%; e.g., speaking slowly, simplify speech) and modeling mature language use (5%).

Figure 4.5

Frequency of Vocabulary Supports in Call-Out Box Guidance
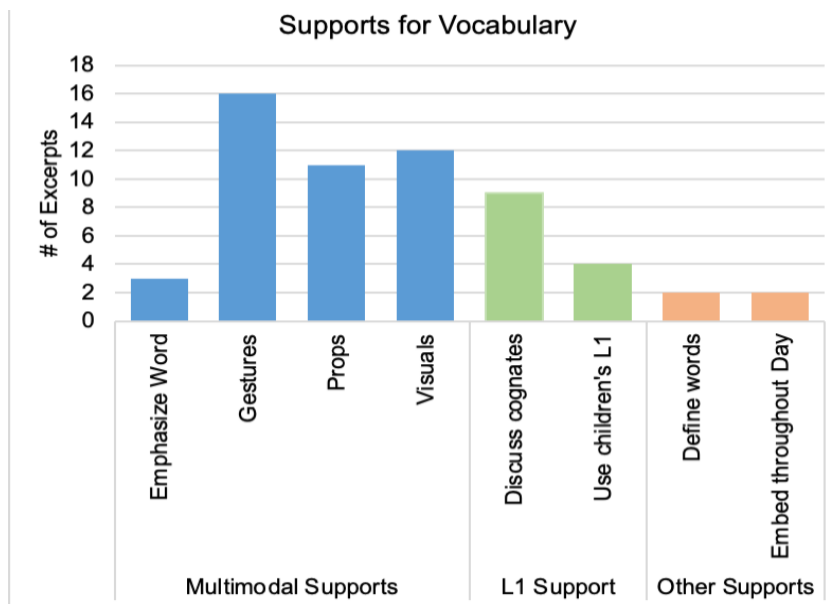
In conclusion, while explicit attention to linguistic diversity was largely confined to shaded call-out boxes within the Teaching Guides and the ITCs, these components demonstrated Creative Curriculum's commitment to addressing the needs of multilingual learners and students with specific learning requirements.

4.6 Discussion

Creative Curriculum embeds several different "higher-quality" language practices, including asking open-ended questions, discussing conceptual topics and introducing new vocabulary, within the various curriculum materials. Open-ended questions were prominent across all five activity settings analyzed, aligning with Creative Curriculum's pedagogical approach to learning, where teachers serve as facilitators of children's thinking and discovery. Talk designed to build children's knowledge of conceptual topics was also prominent in the large group setting; relatedly, talk that encouraged thinking that was more conceptual in nature (i.e., decontextualized, hypothetical), was present in the book reading guidance. Finally, the CC guidance focused on building children's vocabulary in both the large group and book reading contexts. This guidance stressed the importance of multimodal supports for learning, encouraging the use of child-friendly definitions, visual supports (e.g., props, book illustrations), and dramatization (e.g., tone) simultaneously.

Supporting teachers' use of these kinds of strategies is important as studies routinely find that the aforementioned language practices are rarely implemented, despite their significant role in supporting children's emergent language skills (Barnes et al., 2017; Deshmukh et al., 2019; Wright & Neuman, 2013, 2014). Embedding diverse talk strategies into the curriculum may help teachers grasp the different ways language can be used across the school day to foster young children's learning. Notably, the structure of the CC guidance (i.e., bullet points with multiple lines of text) highlighted the ways in which different types of talk, such as a teaching comment and an open-ended question, might be flexibly combined in a given

instructional moment. Ideally, the curriculum encourages teachers to more readily incorporate responsive linguistic practices into their instructional repertoires.

Modeling talk (e.g., expansions, extensions, narration) was also prominent in the curriculum at high numbers, particularly during small-group instruction. The strong presence of modeling talk within the curriculum was surprising as this type of talk is inherently responsive to children's initiations, making it less amenable to scripting. However, developing ways to embed modeling talk within the curricular guidance is important as observational research shows it is used relatively infrequently despite its positive influence on children's vocabulary development (Barnes et al., 2017; Piasta et al., 2012). To this end, Creative Curriculum introduced modeling talk into the curriculum by scripting examples of hypothetical teacher-child interactions (see Appendix A for examples). This structure allows teachers to envision how different kinds of modeling talk, such as expansions, extensions and narration, might occur within various classroom interactions.

Strategies typically cited as less supportive for children's language learning, such as closed-ended questions and procedural comments, (Chen & de Groot Kim, 2014; Sawyer et al., 2018; Turnbull et al., 2009) were also commonly embedded in the curriculum, particularly during small and large group instruction. While these practices do little to elicit extensive conversational interaction or guide complex thinking, results of the content analysis revealed that closed-ended questions and procedural comments served unique functions in structuring classroom practice and gauging students' progress on targeted learning objectives (Hindman et al., 2019; Rojas et al., 2021). Within the Creative Curriculum, closed-ended questions were often included to help teachers gain an understanding of children's knowledge of more basic academic skills (e.g. letter knowledge, recall, counting, labeling), areas measured within the Creative Curriculum's corresponding assessment system [GOLD]. Research also suggests that closed-ended questions might also act as an important linguistic scaffold for children whose language skills are still emerging (Hindman et al., 2019; Zucker et al., 2020); as part of small

group instruction within the Teaching Sequence component of the ITCs, closed-ended questions seemed to function in this very way, encouraging teachers to combine closed-ended questions with comments and modeling talk to scaffold children towards deeper understanding. As such, closed-ended questions are still an important tool within teachers' language practice repertoire, despite their inability to produce extensive back-and-forth interaction.

4.6.1 Language Guidance Across Settings

A second key finding of the content analysis was that the curriculum implicitly advocated for using different kinds of talk across the five analyzed activity settings: book reading, choice time, large group instruction, small group instruction, and transitions. This discovery is in alignment with prior observational research which consistently demonstrates systematic variations in the types of discourse children are exposed to throughout a typical school day (Cabell et al., 2013; Dickinson et al., 2014; Duncan et al., 2020).

4.6.1.1 Book Reading

Guidance in the book reading setting was very explicit, providing teachers with detailed scripts and repetitive routines for each lesson. Field-supported best practices including explaining new vocabulary using multimodal supports (e.g., props, gestures, child-friendly definitions), fostering reading comprehension through think-alouds (i.e., self-narration) and asking open-ended text-based questions were all present in the book reading setting at high numbers (Snell et al., 2015; Hadley et al., 2022; McGee & Schickedanz, 2007; Schickedanz & Collins, 2013). Notably, the practices embedded in CC differ from those seen in observational research of early childhood classrooms where the use of open-ended questions and vocabulary talk during book reading events is sparse, despite showing relatively more prominence in this setting than in others throughout the school day (Cabell et al., 2013; Dwyer & Harbaugh, 2020; Gest et al., 2006; Kook & Greenfield, 2021; Hindman et al., 2012; Dickinson et al., 2014; Hadley et al., 2022). Consequently, the Creative Curriculum aims to positively influence early childhood

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teachers' book reading practices by aligning more closely with the practices endorsed as high-quality by the early childhood field.

4.6.1.2 Choice Time

Among the settings analyzed, choice time exhibited comparatively lower levels of explicitness, resulting in ambiguity about the nature of teacher talk during this activity. This ambiguity is problematic, yet unsurprising, as research has repeatedly suggested that free choice centers are an underutilized setting for language learning, as guided play is quite challenging for many teachers to implement (Fuligni et al., 2012; Hadley & Newman, 2023; Weisberg et al., 2013). When explicit curricular guidance was provided, teachers were told to encourage children to engage with different materials, including study-related objects (e.g., branches, leaves, fabrics) and center-related materials (e.g., paint, blocks, dolls). Guidance also supported the use of open-ended questions to support children's sensory (i.e., describing, observing) and generative thinking (i.e., explaining), during their play. This set of practices aligns with a form of guided play, called "play-enhanced investigations," which intentionally utilizes free choice centers to build on topics explored during large group instruction (Hadley & Newman, 2023; Helm & Katz, 2016). Therefore, while there was some intention by the Creative Curriculum to help teachers engage in guided play during choice time through the use of open-ended questions, the relative lack of explicit guidance overall during this activity setting is unlikely to support teachers in listening and responding to children in ways that create sustained conversations.

4.6.1.3 Large Group

The guidance for large group instruction varied widely in explicitness, talk type and talk purpose. The guidance encouraged teachers to use teaching comments for building children's knowledge of study topics and vocabulary as well as employing procedural comments to structure the various activities conducted; these patterns of talk align with some findings from observational research that suggests that while large group time is highly routinized

(Bustamante et al., 2018; Bratsch-Hines et al., 2019), it also serves as a setting for discussing conceptual topics, especially in classrooms with theme-based curriculum (Dickinson et al., 2014). However, in contrast with previous research which indicates a high prominence of closed-ended questions (Bustamante et al., 2018), the CC guidance encourages teachers to prioritize open-ended questions during large group instruction. Open-ended questions were used to scaffold children's learning about the study topic, drawing heavily on their previous experiences. The relative prevalence of open-ended questions aligns with Creative Curriculum's pedagogical philosophy, highlighting the role that children's curiosity and discovery play in their learning. Therefore, large group instruction was primarily utilized to build children's understanding of the study topic, combining various types of teacher talk to accomplish this goal.

4.6.1.4 Small Group

Similar to the book reading setting, the small group setting was marked by heavy scripting. Teachers were encouraged to use a wide range of language practices throughout small groups including teaching comments, open-ended questions, modeling talk and closed-ended questions. Examinations of the functions of teacher talk in this setting illustrated that small group instruction was used for developing academic skills. Teacher talk was often used to build children's understanding of these rudimentary skills (e.g., counting, letter knowledge) or gauge their progress on discrete learning objectives. This pattern of talk mirrors findings from observational research which suggest that closed-ended questions and didactic skills instruction dominate the small group instructional setting (Dickinson et al., 2014; Barnes et al., 2016; Hadley et al., 2022, 2023; Farran et al., 2017). While CC did also promote the use of open-ended questions during small group instruction, the function of open-ended questions tended to support children's literal thinking, such as recall or labeling, rather than more complex thinking, such as inferencing or explaining. Questions that rely on children's literal thinking are,

unfortunately, unlikely to support extensive back-and-forth conversations, a key driver of children's language outcomes (Duncan et al., 2020).

One unique component of the small group instructional guidance was the high prevalence of modeling talk, despite the inherent difficulty of scripting this type of discourse. Creative Curriculum's effort to authentically script ways to expand children's utterances or narrate their actions aligns with calls for better utilizing settings that have more opportunity for individualized engagement (Barnes et al., 2017). Therefore, the guidance during small group instruction prioritized the development and assessment of children's basic academic skills, resulting in limited back-and-forth teacher-child interactions.

4.6.1.5 Transitions

The guidance for transition time was highly varied in regards to explicitness, talk type and talk purpose. Notably, procedural talk and various forms of elicitation, including closed-ended and open-ended questions, were prevalent in the Mighty Minute Card (MMC) guidance. These types of talk served diverse purposes, such as guiding children's thinking, checking for understanding, building academic and vocabulary knowledge, and structuring classroom activities. On the one hand, these results are promising, as transitions are typically viewed as lost instructional time and devoid of interaction, despite being a significant portion of the preschool day (Early et al., 2010; Dwyer & Harbaugh, 2020; Ryan et al., 2021). The guidance in the MMCs challenges this notion by providing engaging activities to fill this time. At the same time, despite recent recommendations from researchers to utilize informal classroom times, such as mealtimes and routines, to foster responsive interactions with students (Ryan et al., 2019; Grifenhagen et al., 2017), the guidance in transitions did not encourage back-and-forth conversations, instead focusing on procedural talk and asking closed-ended questions.

4.6.1.6 Connection Across Settings

While the content analysis results illustrate how the curriculum advocated for using different patterns of language within each activity setting, it does not investigate the specific

content of teachers' talk. Understanding the content of teachers' talk, and how it is carried (and built upon) across settings, is crucial for building our understanding of how teachers facilitate children's development of conceptual and vocabulary knowledge. Research exploring vocabulary development in early childhood settings suggests that teachers' repeated discussion and use of vocabulary words throughout the day (and in different contexts) have powerful impacts on children's vocabulary learning (Hadley et al., 2022; Snell et al., 2015; Wasik & Hindman, 2020; Wasik & Hindman, 2023). Preliminary investigations of the content analysis results suggest that there is insufficient support for teachers to sustain talk about concepts or vocabulary across settings as efforts to build children's knowledge of the study concept and of related vocabulary were only targeted during two areas of the day: large group instruction and shared book reading. These results are unexpected, given the thematic structure and philosophy of the Creative Curriculum. However, these initial results suggest that the daily guidance may not clearly articulate how to foster synergy across contexts and lessons in regards to learning conceptual topics or new vocabulary. Future research should examine the ways in which particular concepts, and related conceptual and vocabulary knowledge, are built over time in both the written and enacted curriculum.

4.6.2 Explicitness

Another key finding of the content analysis was that the level of explicitness of the curricular guidance varied by activity setting. Book reading and small group instruction were marked by heavy explicitness, with the associated curricular materials providing very detailed scripts for teacher talk. In contrast, the guidance in large group instruction and choice time varied, often providing teachers with ideas about what to talk about but giving little support for what high-quality teacher talk might sound like. The difference in explicitness across settings has several important implications.

First, differences in explicitness inherently afford different opportunities for teacher agency. When using *The Creative Curriculum*, teachers are given more instructional freedom during large group instruction and choice time than during book reading or small group instruction. While this flexibility is undoubtedly useful by giving teachers the ability to adjust their practice to fit their students' needs, it may also lead to less-than-ideal practice in reality. A lack of explicit guidance during activity settings used to communicate information about new vocabulary or complex concepts, such as large group instruction, may result in reduced academic rigor, little informational depth or simply inaccurate explanations. Notably, some of the CC studies not targeted by this particular inquiry (e.g., simple machines, water, wheels) require teachers to have substantial scientific knowledge about the study focus in order to effectively engage with children about the topic in depth. Therefore, having less explicit guidance might result in children receiving only surface-level knowledge about the topic (Gerde et al., 2018), limiting their conceptual and vocabulary development, two competencies that are important for children's later academic success (Dickinson & Porche, 2011; Gerde & Powell, 2009; Connor et al., 2006).

Second, differences in explicitness might incorrectly signal that certain activity settings are less important than others. It comes as no surprise that the book reading setting was one of the most explicit times of the day, as a plethora of research has studied the positive effects of interactive read-aloud on children's vocabulary and early literacy development (Mol et al., 2009, Wasik et al., 2016). Small group instruction was also highly scripted, providing clear guidance for differentiating instruction to support learners of varying skill levels. Unfortunately, both book reading and small group instruction are very small components of the instructional day (Early et al., 2010). Choice time and transitions, which each take up a significant position of the day in most preschool classrooms (between 20-35%; Early et al., 2010; Chien et al., 2010; Fuligni et al., 2012), were scripted less often within the curriculum.

One potential repercussion is that teachers may not see the benefits of these other settings for supporting children's language development. Unfortunately, research suggests that this may already be a belief held by many early childhood teachers, with teacher-led settings, such as large group instruction and small-group instruction, viewed as sites of academic learning, and child-led settings, such as choice time, considered as less appropriate times for academic instruction (Cabell et al., 2013; Early et al., 2010). Combatting this notion is critical as guided playful learning, such as acting out stories, playing games and engaging in block play, can be as beneficial for children's learning as traditional teacher-directed instruction (Hadley & Newman, 2022, Toub et al., 2018; Skene et al., 2022). Giving teachers additional scaffolding and scripting, similar to the guidance in ITC cards for small group instruction, could be beneficial for helping teachers maximize the potential for learning in the choice time setting, as engaging children effectively during guided play is often quite challenging for teachers (Hadley & Newman, 2022).

However, heavily scripting instructions for teachers might also have unintended negative consequences. First, following scripts to the tee may actually reduce back-and-forth conversation, a major predictor of young children's language growth (Duncan et al., 2020; Justice et al., 2018). As early childhood teachers know, how children respond to teachers' talk clearly cannot be scripted and is often unexpected. Therefore, teachers may struggle to adhere to rigid scripts during the dynamic happenings of classroom life. Consequently, teachers may need to deviate from the script to cater to their students' level of understanding, adjusting their language and approach accordingly. It is important, then, to gain understanding about how teachers perceive the utility of explicit scripted guidance for their language practice (Hindman & Wasik, 2023).

4.6.3 Attention to Differentiation

Another key finding from the content analysis was that the Creative Curriculum offers recommendations for supporting the language development of linguistically diverse learners. Notably, however, these suggestions are confined to a small portion of the overall curricular guidance (ITCs) and heavily prioritizes multilingual learners, over children with special education needs.

Many of the suggested approaches found in the call-out box excerpts mirror established best practices in the early childhood field for supporting children's language learning. Some of these strategies advocate for practices shown to be supportive for all children's language development, such as modeling sophisticated language use (i.e.,., correct pronunciation, complex syntax, sophisticated vocabulary), engaging responsively to children's utterances (i.e., expansions, extensions), and providing multimodal supports to aid language learning (i.e., gestures, visuals) (Bowers & Vasilyeva, 2011; Gámez & Levine, 2013; Rojas et al. 2021). In contrast, some of the recommended language supports are specifically supportive of the linguistic needs of multilingual learners, including capitalizing on their first language knowledge (i.e., using L1, encouraging L1 use, incorporating L1 materials) and adjusting questioning techniques to scaffold their participation in classroom discourse, such as asking closed-ended questions (Gamez et al., 2017; Castro et al., 2011; Castro et al., 2017; Deshmukh et al., 2019).

The explicit attention to linguistic diversity within specific segments of the curriculum (i.e., call-out boxes) is a promising start for promoting differentiated language instruction within curricular materials. However, the Creative Curriculum could benefit from expanding this guidance to more areas of the curriculum. The heavy attention to linguistic diversity within the Intentional Teaching Cards implicitly suggests that differentiation for linguistically diverse learners should be prioritized in small group settings. While differentiation may certainly be easier in instructional settings with fewer children, whole group settings can and should also be sites for differentiated instruction. In fact, many strategies recommended within the call-out

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boxes in small group settings, including using multimodal supports and engaging in modeling talk, benefit the language needs of all learners and require only minor shifts in teachers' practices within the book reading and large group instructional settings.

Lastly, while the call-out box approach is certainly promising in theory, it remains an open question in regards to how often teachers read and incorporate this guidance into their enactment of the curriculum. One concern is that teachers may simply view the guidance as supplemental and, therefore, fail to read it. This may have dangerous consequences for the language development of diverse learners, who need additional linguistic support to simultaneously acquire and use English in the preschool setting.

4.6.4 Conclusion

The content analysis of the Creative Curriculum provides valuable insights into the embedded messaging that teachers receive about the kinds of language practices and activity settings that best support young children's language development. First, the curriculum adeptly demonstrates the need for diverse language approaches, advocating for their flexible combination across the classroom day. Second, the CC implicitly suggests that different activity settings necessitate unique patterns of teacher talk, requiring different balances of open-ended questions, closed-ended questions, modeling talk, procedural talk and teacher comments.

Despite these important insights about the written curriculum, it is important to delve deeper into how early childhood teachers using the CC perceive and respond to the guidance in their teaching (i.e., how they enact the curriculum). For instance, the varying levels of explicit guidance within the curriculum prompt questions about teacher agency across the different activity settings. In addition, understanding how teachers' existing conceptualizations about their language practices intersect with the proposed guidance is critical. The following chapter explores these topics through interpretive analysis of a set of semi-structured teacher interviews.

CHAPTER 5

Findings of the Teacher Interviews

This chapter addresses the findings of the teacher interviews, describing various facets of four teachers' perceptions and engagement with the Creative Curriculum's language guidance. Before exploring how teachers enacted the curricular guidance, the chapter briefly addresses teachers' existing ideas about classroom language practices, highlighting the ways in which teachers incorporate different types and purposes of talk into their daily routines. Next, the chapter addresses teachers' general responses to the Creative Curriculum and details the diverse ways in which teachers interacted with and subsequently implemented the curricular guidance (referencing, supplementing, scaling back, modifying). The chapter also discusses how certain influences, including those related to students, teachers themselves, and external structures, informed teachers' described curricular enactment. Additionally, the chapter provides individual teacher profiles which detail the role that specific influences played in shaping teachers' practice. The chapter concludes with a discussion of the findings, drawing connections to the existing literature.

5.1 Teachers' Articulation of Classroom Language Practices

Across their interviews, teachers articulated the presence, purpose and activity context of many different language practices with varying degrees of explicitness. When prompted with examples of teacher talk, both in the Teacher Talk Sort and in other curriculum artifacts, teachers adeptly categorized and labeled common classroom language practices, referring to closed-ended questions, open-ended questions, modeling talk and teacher statements throughout their discussions. However, teachers' descriptions of the language practices varied in precision. For example, while all teachers categorized the phrase, "put the book in your

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cubby," as a statement, two teachers (Rebecca and Denise) provided a more technical term, directive. In contrast, Gabrielle used more colloquial terms, saying it's "just a statement…I'm just acknowledging them."

Teachers' contrasting descriptions were evident throughout their discussions. For example, Rebecca consistently employed technical terms, derived from observational assessments, such as the Classroom Assessment Scoring System [CLASS] (Pianta, et al., 2008), in her descriptions of language including self-talk, parallel talk, and "sportscasting." Similarly, Denise referenced the role that her teacher preparation courses played in providing her with more precise terms for labeling her existing language practices. In contrast, Gabrielle and Simone tended to use more informal language and rarely cited past learning experiences when discussing their language use.

Teachers' descriptions of language use often centered on the purpose of their talk; for example, Gabrielle noted how certain open-ended questions, like "is there something you could do to make the rock float?", were designed to help "kids to critically think" and solve problems (i.e., "want students to show me a solution"). Similarly, others noted how open-ended questions were used to promote "higher-level thinking" (Simone) and "leave room for discussion" (Denise), recognizing their role in eliciting child talk. Describing talk purpose was not limited to open-ended questions; for instance, Rebecca asserted that closed-ended questions, while not ideal for promoting conversation, helped her check students' progress toward mastering academic objectives, stating "I ask right and wrong answer questions… because sometimes you just have to know, what number is this?" In addition, Simone noted that she used narration for two purposes, to simply describe classroom happenings (i.e., narrating children's actions- parallel talk) or to "model [to children] how to get your thought process moving" (i.e., narrating her own thinking- self-talk). Collectively, these examples revealed that teachers could both clearly articulate and justify the use of varied classroom language practices.

5.1.1 Describing Language Use Across Activity Settings

Teachers discussed how their language use and related curriculum engagement varied across the activity settings in the classroom. However, it's crucial to acknowledge that the structure of the interviews influenced how teachers talked about these settings; as such, certain settings like choice time were discussed more frequently compared to others like book reading. As a result, the findings of this study have limitations in terms of their breadth and reliability. In the following section, I delve into how teachers collectively described their language use within four activity settings: choice time, large group instruction, shared book reading, and small group instruction.

5.1.1.1 Choice Time

When discussing the choice time setting, all teachers emphasized the use of open-ended questions and narration techniques. Three of the four teachers described the instrumental role that open-ended questions played in promoting back-and-forth conversations, a key objective of choice time. In fact, these three teachers described choice time as an ideal context for relationship-building. For instance, Simone discussed using choice time to "try to increase [my] personal connections" with students, viewing relationship-building as a foundation for enhancing their language skills. Three of the four teachers also discussed how using open-ended questions helped promote children's generative thinking (e.g., explaining, making connections) and imaginative thinking (e.g., considering hypothetical situations, engaging in pretend play). Denise's statement, "if they're building something, [I want] to really hear their imagination, what they're thinking while they're building. I want them to think about why they did something or why they chose something," exemplifies this dual purpose.

Lastly, three of the four teachers discussed implicitly supporting children's vocabulary development during this time, stating how they tried to "push their vocabulary," more generally (Simone, Denise), or imbue study-related vocabulary words into their play (i.e., using sturdy during block play- Rebecca).

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5.1.1.2 Large Group Instruction

All teachers referenced the prominent role that teaching comments played in their large group instruction. Three teachers described how large group instruction was intended to enhance children's knowledge of content and vocabulary, with comments playing a prominent role in supporting this goal. However, large group instruction was not entirely didactic; three of the four teachers also described using open-ended questions, often provided by the curriculum, to facilitate conversations about the study topic (i.e., "how should we care for our tree?"). All four teachers also described efforts to promote student thinking during large group instruction, with teachers referencing different types in their discussions, including encouraging observation (i.e., sensory thinking), recalling previous learning (i.e., literal thinking), and making connections to the topic at hand (i.e., generative thinking).

5.1.1.3 Small Group Instruction

Teachers referenced a wide variety of language practices when discussing their small group instruction, including closed-ended questions, procedural comments, modeling talk, and open-ended questions. First, all teachers heavily emphasized the use of closed-ended questions during small group instruction, referencing their role in scaffolding children's learning and checking for their understanding of both the task at hand (i.e., "what are we going to do first?"), and the lesson objective (e.g., letter naming, rhyming, counting). In addition, procedural talk was prevalent, with three teachers describing how clearly articulating the directions and purpose of the activity was crucial for ensuring the success of a small group lesson.

Three of the four teachers also discussed using self-talk, a form of narration (i.e., modeling talk), and open-ended questions during their small group lessons. Three of the four teachers also referenced the role that exploring materials and manipulatives played in many small group lessons; subsequently, language was used to promote children's sensory thinking skills, encouraging their ability to observe, explore, and describe the world around them.

5.1.1.4 Shared Book Reading

As noted previously, teachers' discussion of their language practices during shared book reading were relatively limited. However, teachers unanimously described the role that questioning played in their read aloud lessons, with two teachers specifically referencing open-ended questions. In addition, three teachers described building vocabulary as a key purpose of the book reading setting, combining definitions and nonverbal supports to aid children's word learning.

In conclusion, teachers demonstrated a nuanced understanding of language use across different activity settings, showcasing their intentional and flexible use of language to support children's language learning.

5.2 Response to the Creative Curriculum Guidance

All teachers exhibited a mix of opinions about CC's effectiveness in facilitating language development, with predominantly more positive views than negative ones. The teachers collectively acknowledged and appreciated the array of supportive materials integrated into the curriculum's guidance, such as scripts, call-out boxes, and differentiated instructions in the Intentional Teaching Cards (ITCs). Denise, for instance, labeled the curriculum, overall, as "very helpful," and Rebecca considered it "a good starting point" for her teaching. Simone and Gabrielle found the embedded prompts "excellent" and "somewhat helpful" but emphasized the need for balancing the guidance with the demands of the activity setting or her students' needs. These statements collectively suggest that teachers generally perceived the curricular guidance in a positive light, viewing it as a helpful tool for guiding their classroom practice.

Notably, teachers' opinions appeared, in part, intertwined with their professional histories. Simone, an experienced teacher with over a decade of early childhood teaching experience, returned to the classroom seven years ago after a lengthy hiatus. She noted a considerable evolution in the early childhood landscape during her absence, highlighting the

incorporation of a formalized curriculum as a notable positive change. Simone perceived the Creative Curriculum as a valuable asset, recalling how "tickled" she felt upon receiving a structured curriculum. She underscored its significance, remarking, "Once you begin your career having to create every single part, [the Creative Curriculum] is a gift; that's exactly what it is." Her positive assessment of the curriculum stemmed from its role in alleviating the extensive independent lesson planning that had characterized her prior teaching experiences.

In contrast, Gabrielle, a first-year teacher, had a less favorable stance toward the curriculum. She recalled her introduction to the Creative Curriculum as lacking in detail and coherence, stating:

> It wasn't really detailed on what to do or where to find things…I always struggled with trying to figure out how to make it flow within the schedule and [finding] what the kids needed, so it was definitely confusing and [I had] a lot of frustration with it.

Gabrielle's perspective, relatively negative compared to the other participating teachers, partly emerged from her status as a novice educator, grappling simultaneously with the complexities of delivering high-quality instruction and navigating a novel curriculum. Rebecca, the most experienced participating teacher, echoed Gabrielle's sentiments, reiterating how overwhelming the Creative Curriculum is for many early career teachers in her school.

5.3 Engaging with the Creative Curriculum Guidance

Teachers resoundingly rejected the notion that the curriculum should be followed with strict fidelity, instead perceiving the curricular guidance as a modifiable framework for their practice. As Simone shared: "I always looked at it as guidance, not like you had to do it to fidelity." Consequently, teachers engaged with the curriculum's proposed guidance in four key ways: 1) referencing, 2) supplementing, 3) scaling back and 4) modifying.

5.3.1 Referencing

All teachers discussed referencing, or glancing at guidance prior to instruction, as one method of engaging with the curriculum. This approach to using the curriculum was commonly mentioned in regards to the guidance in Teaching Sequence component of the Intentional Teaching Card (ITCs) and the Book Discussion Cards (BDCs). The ITC Teaching Sequence provides teachers with differentiated scripts and potential activity modifications based on children's skill level on a particular learning objective; colors are used to indicate different levels of proficiency (i.e., yellow= still developing, purple= mastered). However, the teachers collectively noted that they infrequently consulted these during their instruction; instead, the four teachers discussed using the Teaching Sequence to guide their small group planning, considering ways to modify their practice (e.g., "I use the color bands just so I know, okay, Susie is on green. So what's the next level for Susie? How can I move her to blue?"- Rebecca), and group students in advance of the lesson. In addition, two teachers expressed challenges with the practicality of using the Book Discussion Card (BDC) guidance during shared reading lessons (e.g., "it will be really, really hard to be like 'okay, this is exactly what I say when I get to [this specific] part'"- Simone). Therefore, teachers described glancing at certain materials before instruction or purposefully incorporating them into planning as one method of engaging with the curriculum.

5.3.2 Supplementing

All teachers described the need to supplement the curricular guidance to best support students' language learning. The four teachers discussed incorporating additional visual supports, such as pictures, videos, gestures and live demonstrations, alongside the proposed guidance. For instance, Rebecca recalled:

> The word sturdy means absolutely nothing to someone who's never heard it. So, definitely, I have added things to my whole group for those vocabulary [words]. For

example, I have rows and rows of plastic solo cups and we may build them in a pyramid or use our blocks from our block center, [showing how it] has to be sturdy on the bottom in order for it to not fall over.

Rebecca highlights a perceived gap in the curriculum, noticed by all of the participating teachers, where vocabulary learning was centrally promoted but not necessarily adequately supported.

Beyond visuals, all four teachers also discussed bolstering the guidance with other activities, including songs, movement, hands-on exploration and science experiments. These activities prioritized children's active participation in the learning process, rejecting more didactic learning approaches. Denise succinctly justified her approach stating, "you can't stand and lecture to a three or four-year-old." Teachers noted how certain components of the curriculum guidance, particularly the large group discussion prompts, consistently required this type of modification. Therefore, teachers sought to bridge perceived gaps in the curriculum by prioritizing interactive learning experiences they viewed as more conducive to young children's learning.

5.3.3 Scaling Back

While all teachers emphasized the need for supplementing the curriculum, three of the four teachers also detailed instances where scaling back the prescribed guidance was essential for supporting children's learning. Overwhelmingly, these teachers remarked that the Book Discussion Card (BDC) guidance required adaptation, describing it as overwhelming; for example, Rebecca and Simone each described it simply as "a lot." For one, two teachers discussed the issue of time constraints, lamenting that the extensive BDC guidance felt unattainable to enact given the time available for shared reading in their daily schedule. They found this to be especially problematic when they were supposed to ask questions that were intended to foster discussion.

Moreover, these three teachers expressed concern regarding the volume of vocabulary words (approximately 8 to 12) that they were expected to explicitly address during shared book reading lessons, calling the task "unrealistic." In order to make the BDC vocabulary teaching more manageable, Rebecca noted that she scaled back her explicit vocabulary support to a set of three to five words. She justified her approach by emphasizing the contextual relevance of certain vocabulary words, stating: "some of [the BDC] vocabulary [don't] always add meaning to the story." She explained that she did not pause specifically on every listed word before or during reading, deciding to align her approach more closely with contextual significance of a word rather than by the prescribed list. Therefore, three of the four teachers strategically scaled back the prescribed guidance, particularly for the BDCs, highlighting their deliberate efforts to tailor instruction to accommodate their own needs.

5.3.4 Modifying

Rejecting the need to follow the Creative Curriculum's guidance line-by-line, all teachers described navigating the curriculum guidance by selectively choosing pieces to implement. Overall, modifying (i.e., making slight adjustments to the guidance) was the most frequently described approach, mentioned in over half of the examined excerpts (n=52; 57%). Gabrielle, for example, described how the curriculum became more manageable, and less frustrating, when she modified the guidance by "pinpoint[ing] what [she] truly needed from it… instead of trying to implement everything," a task she deemed "unrealistic." Denise echoed this sentiment when discussing her approach to small group instruction; she described honing in on the part she perceived as most important- the targeted learning objective, giving less attention to the suggested materials or specific scripts provided in the Intentional Teaching Card guidance. Similarly, Rebecca discussed focusing her attention on the study-related vocabulary during large group discussions, but adapting the definitions by "using [the word] in my own sentence or my own sort of structure." She added that doing so felt more natural for her than using a script.

Teachers also discussed that, in order to be responsive to student talk, modifying the proposed guidance was necessary. This was especially apparent during choice time; as Rebecca noted, "[I] let go of their suggestions in favor of building relationships with students," focusing on naturally-occurring conversations rather than targeting study-related topics of conversation as the guidance implicitly suggests. Three of the four teachers also described adapting the guidance during large group instruction and shared book reading to respond to student input. As Denise described:

> Sometimes the students will lead you in a different direction…from what is listed [in the guidance]. Sometimes, especially if it's a good conversation, you don't want to redirect them back to this script, you want them to be very organic, and have a conversation about whatever the topic is.

Denise exemplifies the idea that diverging from scripted guidance often yields more productive discussions, particularly when stemming from students' own contributions. In summary, teachers consistently modified the curriculum guidance, selecting components they perceived as essential and adapting others to respond to students' input.

5.4 Influences on Teachers' Described Curricular Enactment

Teachers' patterns of curriculum engagement were shaped, both implicitly and explicitly, by a variety of influences. While teachers referenced five different sets of influences, a teacher-contribution analysis of the data revealed that only three sets of influences (student-related, teacher-related, and systems-related) guided all four teachers' language practice. In addition, a category-frequency analysis illustrated that specific combinations of influences were more or less significant for individual teachers. In the following paragraphs, I describe the set of influences mentioned by all participants; next, I present individual teacher profiles, illustrating the ways that distinct influences shaped each of their language use and described curricular enactment.

5.4.1 Student-Related Influences

Teachers repeatedly asserted how certain student characteristics, notably their language proficiency and developmental needs, shaped their classroom language practice and adaptations of the Creative Curriculum.

All teachers referenced students' language background as a key driver of their language practices; teachers specifically described attending to the needs of multilingual learners (MLLs) and children with different linguistic proficiency levels (i.e., "advanced," "struggling") in their teaching. Adding nonverbal supports, including gestures, body language, pictures, and props, was often cited as a critical instructional practice for supporting these students. For instance, Rebecca emphasized the need for additional supports, stating: "there has to be something more. What gesture can I use? What body language can I use to introduce this new word? Or what visual prompt, or whatever do I have that can support this learning?" Rebecca's critique of the CC guidance, and the perceived lack of supplemental supports, was echoed by all of the other teachers.

In addition to employing nonverbal supports, teachers also described tailoring the complexity of their talk to align with their students' perceived language proficiency. One approach involved simplifying the scripted guidance to enhance comprehensibility. Gabrielle, for example, described "breaking down" book discussion questions in-the-moment, in response to student confusion around the scripted wording or discussion topic. Similarly, Denise shared how she transformed guidance featuring open-ended questions to be more concrete, stating: 'if [my multilingual learners] can't answer the question, I will give them two choices and they will choose between the two." This approach illustrates how simplification, in this case creating concrete, closed-ended questions, offered a linguistic scaffold for the verbal participation of MLLs. Conversely, teachers (n=2) also addressed the needs of students with advanced language skills by adding more conceptual details and complex vocabulary into their speech.

Therefore, teachers' curriculum adaptations were often guided by their commitment to supporting the diverse linguistic needs of their students.

In addition, three of the four teachers noted how students' developmental needs factored into their decisions. These teachers stressed the importance of highly engaging instruction when teaching young children. For instance, in describing how she would instruct novice teachers to use the Creative Curriculum, Denise highlighted the importance of incorporating multisensory approaches, stating: "we're talking about three and four-year-olds…make sure that you're incorporating music or movement or something that's active for them to do." Rebecca echoed this idea, saying: "you've got to balance sitting down with music and movement. You've got to have either something for them to touch or something for them to do." Taken together, these quotes reiterate the idea that children developmentally require active engagement in order to learn. Teachers also mentioned how other child characteristics, such as their emotional needs, learning style, academic data and existing background knowledge shaped their language practices, but these child-related influences were not mentioned by all teachers or with as much relative frequency, overall.

5.4.2 Systems-Related Influences

Teachers also described the impact of external influences, such as scheduling limitations and other curriculum requirements, on their language practices. The challenge of adhering to the CC guidance within limited time frames, especially for large group discussions and shared book reading, was a common concern among the teachers. As such, three of the four teachers described feeling the need to "cram," "push through," or "cut short" the proposed guidance, leaving them dissatisfied with the rigor or responsiveness of their instruction. As Simone lamented, "[the school] adds new things into our schedule [all of the time]. That becomes a hardship, to really expand your conversations with the children." Simone highlights a frustration felt by other teachers, where scheduling constraints limited teachers' ability to use

what they perceived as best practice, including implementing the curriculum in linguistically responsive ways.

Three of the four teachers also discussed balancing additional school curriculum requirements with the demands of the Creative Curriculum. For example, the teachers at Hogar Limón ELC (Denise, Simone), were required to submit their own book reading lesson plans, despite having detailed guidance available in the BDCs. Similarly, Gabrielle noted how Jones ELC prioritized implicit vocabulary instruction through teacher-student conversations, versus the Creative Curriculum's approach which, from her perspective, highlighted more explicit vocabulary teaching. She responded to this tension by scaling back her explicit vocabulary teaching during large group discussions and shared book reading in favor of incorporating vocabulary words in the context of conversations. In summary, the challenges posed by external forces, particularly scheduling limitations and differences in school-based language learning approaches, influenced teachers' ability to enact the curriculum as intended or desired.

5.4.3 Teacher-Related Influences

Teachers also highlighted how various aspects of their professional lives—such as past learning experiences, teaching style, and teaching beliefs—shaped their approaches to curriculum and instruction. All teachers described how professional learning experiences including coaching, coursework, mentorship, and professional development (PD) sessions, helped them become more reflective and assured in their language practices. The teachers collectively noted that these learning experiences forced them to ask questions about their language use, including the complexity of their talk, the responsiveness of their conversations and their approaches to vocabulary instruction. For instance, in describing her efforts to ask more open-ended questions, Simone remarked on how coaching and PD sessions shaped her internal dialogue. She said, "[I] will find [myself] making more simple statements [like] 'I really do like your picture.' And I'll hear it now, and I'll make myself go to the questions, [like] 'well, what

colors did you use? Why did you draw that?" She added, "It takes time to build upon [the learnings], but if you take it in, those are the clues that just hit you in the back of your brain." Her quote reveals how professional learning experiences taught her to adjust her language in-the-moment.

Three of the four teachers also described how more personal aspects of teaching, such as their teaching style and personality, shaped their instructional decision-making. Rebecca, for instance, rejected scripted guidance, stating: "that's just not my teaching style. I want to put things in my own words so that I can be engaged and then I can remember how and what I'm saying to students." Simone echoed this sentiment, stating that: "I never took it as, well, [the CC guidance] didn't tell me to say this and this, so I won't…I've never been that person." Simone highlights how her decision to supplement the curriculum aligns with her teaching style. Both Rebecca and Simone had a strong sense of their teaching style and philosophy, allowing them to simultaneously prioritize their personal practice and the CC guidance.

Lastly, beliefs about early childhood education (ECE) significantly shaped all teachers' language instruction in the classroom. Teachers strongly held and referenced both of the following beliefs in the discussion of their practice: 1) ECE is (and should be) academic, and 2) ECE learning should be fun, engaging, and child-led. On the one hand, teachers expressed the belief that ECE is academic, emphasizing the increasing importance of data-driven practices in pre-K classrooms. Rebecca acknowledged the shift in the nature of ECE across her years of teaching, stating: "our school is very data-driven in pre-K now, it's been a necessity to sort of switch my way of thinking… it's just become a requirement of the job." All of the teachers echoed this idea, highlighting the role of student data, including more formal documentation (e.g., Creative Curriculum's GOLD Assessment) and more informal ones (e.g.," knowing your kids"-Gabrielle; "just being with your children everyday"-Denise), in informing their instructional decisions. Differentiation emerged as a key aspect of the academic focus of ECE, with teachers underscoring its importance particularly during small group instruction. Differentiation

manifested itself in teachers' discussions about how they consider students' language proficiency when grouping students (both homogeneously and heterogeneously), selecting language objectives, or tailoring their one-on-one conversations. Therefore, teachers integrated language data into their practice, actively seeking information to drive differentiated approaches to utilizing the Creative Curriculum guidance.

At the same time, teachers embraced the belief that learning in early childhood should be fun, engaging and child-led, influencing their language practices and approach to using the curricular guidance. As reiterated previously, teachers stressed using hands-on activities to engage children in learning about complex concepts; Simone stated that particularly for teaching abstract concepts, "you want to give them something to see or something to touch. [Otherwise] it's too hard for them to grasp or recall in the future." Not only did the teachers stress the role of engaging activities in promoting deeper learning, they also stressed how certain activities, such as using manipulatives, acting out stories, playing games, and conducting science experiments, increased student motivation, subsequently fostering a more conducive environment for language learning.

In addition, teachers stressed the importance of child-led learning, with the teacher "lead[ing] it in an indirect way" (Simone) or serving as a "facilitator" of the learning (Rebecca); this belief was discussed prominently when describing their role in the choice time setting. Discussing her goals during choice time, Denise said she tries to: "comment on what they're doing, to try to engage them in a conversation without coming to them just asking question, after question, after question." Gabrielle echoed this approach, stating that: "I let them lead it. I'm just there to join, laugh, play and maybe to [ask] one of those critically [*sic*] thinking [questions]." These quotes illustrate how teachers prioritized natural conversations and student-initiated activities over following the prescribed CC guidance, particularly during choice time.

In conclusion, the interplay between the teachers' belief in academic rigor and the importance of child-led, engaging practices shaped their language instruction.

5.5 Teacher Profiles: Understanding Diverse Influences on Practice

While the analysis of teacher interviews uncovered key influences that shaped all of the teachers' practice, a category-centered analysis, looking at the frequency of particular codes, revealed how certain influences held greater importance for individual teachers. In the following section, I present short profiles of each teacher, providing more information about their background and highlighting the unique combination of influences that emerged as salient for informing their language use and curricular enactment.

5.5.1 Denise

Denise entered the education sector in her early 50s, spending the initial two years as a paraprofessional at Hogar Limón under the guidance of an experienced ECE educator, Jasmine. Denise assumed a lead teacher role two years ago after completing her teaching degree. Denise expressed the invaluable role that Jasmine's mentorship played in shaping her practice, sharing:

> I just loved working with her and I learned so much from her…so I try to emulate a little bit of what she was doing. I have a long way to go to get to where she is. But it helped me to have that guidance beforehand.

In interviews, Denise stood out for her straightforward style, often responding to clarifying or probing questions, with simple answers (e.g. right, exactly, I do). Despite providing less explicit justification for her practices than her peers, two elements emerged as being particularly significant for her language use: objective-driven instruction and students' language background. Denise praised the curricular guidance for its attention to supporting diverse learning objectives; consequently, she chose to closely adhere to the curricular guidance during small group instruction and shared book reading, two of the more explicitly scripted times of the day.

Additionally, Denise emphasized attending to students' language needs, considering their linguistic background or assessment data, in her instruction. For example, she recalled one way she differentiated her linguistic approach, stating:

> I try to expand all of the students' vocabulary. But I will say, my ELL students, I do it more so with them. Well, I can't say I do it more with them. I think I label things more with them than I do with my other students…it's more so trying to help them with language acquisition, as opposed to the other kids, where I'm trying to extend their language, expand their vocabulary.

As such, Denise consistently considered the intersection between children's language proficiency and the language practices she employed. This increased attention to children's language proficiency is likely influenced by the fact that Denise works at a school with a high percentage of MLLs. Denise also noted that she is currently undergoing an ELL certification and she specifically seeks out district-based PD opportunities that focus on the needs of MLLs.

5.5.2 Gabrielle

Gabrielle is a first-year teacher who is concurrently pursuing a Master's degree in Education Policy. In contrast to her peers, her references to professional learning experiences appeared to complicate rather than clarify her understanding of the classroom language environment. For instance, in describing her approach to questioning, she struggled to define the term, *tier question*, from her undergraduate coursework, stating, "tier questions are anything like, 'what, how, who, what, what do you think?' So [they] kind of fall in both categories…they're a basic set of questions. But it's also different because you're pushing them to think more critically." As this example illustrates, Gabrielle was actively attempting to internalize her previous learnings while building her repertoire of high-quality language practices. This process was further complicated by scheduling constraints and her perceptions about students' limited background knowledge. Gabrielle grappled with adhering to curriculum guidance within limited

time frames, a process she repeatedly labeled as "unrealistic," while also spending extra effort to "break down" concepts and question prompts for her often "confused" students.

In response, Gabrielle relied on her personal teaching beliefs to drive her instructional decision-making, emphasizing that learning should be fun and engaging. Across each activity setting, she mentioned adapting the curriculum's approach to include more play. For instance, she recalled turning large and small group instructional activities into games and incorporating dramatic retelling into shared reading, stating it "makes it just so much more fun than asking the same questions." In essence, Gabrielle's instructional approach was heavily shaped by her status as a new teacher, actively working to incorporate her own beliefs about best practice with various other influences.

5.5.3 Rebecca

Rebecca is a career early childhood teacher who recently received her Doctorate of Education (EdD) and has been recognized as her school's Teacher of the Year numerous times throughout her career. Rebecca's self-described commitment to "lifelong learn[ing]" significantly shapes her practice; as she articulates, "even at my age, I'm still trying to learn how to be even better than I was 20 years ago." Her learning journey is strongly influenced by her performance on external early childhood teacher assessment tools, such as the Classroom Assessment Scoring System (CLASS; Pianta, et al., 2008) and the Teaching Pyramid Observation Tool (TPOT; Hemmeter, Fox, & Snyder, 2014). Not only did these assessments provide her with technical vocabulary for describing her practice, she also relied on them to help structure her personal goals for language use in the classroom, noting "I'm cognizant of my self-talk and parallel-talk. That's a goal for me just based on my data." In contrast to her peers who discuss personal teaching goals in more abstract terms, Rebecca relies on the assessment tools as tangible evidence, continually reflecting on her progress towards those goals during and after instruction.

In addition, Rebecca was the only teacher to describe how the curriculum philosophy shaped her approach to using language in the classroom. She stated that:

> the philosophy is [to] learn through purposeful play, it's exploration. It's me. I have a lot of the heavy lifting to do in Creative Curriculum, which is to extend the questions, to ask the questions… It requires a lot of work on behalf of the teacher.

Rebecca adeptly described, in multiple instances, how exploration and guided questioning are key foundations of the curriculum. As such, she discussed how she modified and adapted the curriculum by keeping these goals and intents at the forefront of her mind.

In addition, Rebecca expressed a strong interest in supporting children's social-emotional learning, a goal she attributes to her participation in a previous teacher learning experience, The Pyramid Model (Fox et al., 2003). Describing her approach to supporting language learning throughout the day, Rebecca stated: "I'm making sure that I've had a conversation with every child throughout the day that has nothing to do with academic or cognitive demands. So that's how I build a relationship. That's important to me." This quote exemplifies, not only the role that attending to children's social-emotional needs plays in her practice, but also how her personal goals strongly shape how she navigates approaching classroom instruction. In summary, Rebecca's discussion of her language practice exemplifies how an interplay of influences, including teacher assessment data, teacher learning experiences, personal goals and the curriculum philosophy, shaped her language instruction.

5.5.4 Simone

Simone's career journey is unique; after teaching preschool for five years, she left the classroom to pursue a career in the justice system. Six years ago, after more than a decade away, she returned to the classroom to resume her teaching career; since then, she has been recognized by both her peers, administrators, and the district for her exemplary teaching, receiving multiple school-based Teacher of the Year awards.

Simone closely attended to the match between her language practices, students'
language background, students' emotional needs, and the time of year during her teaching.
Discussing the intersection of three of these components, Simone stated:

> I think [my use of certain language practices] progresses as the year goes on. With us
> having a large number of ELL students, sometimes I start off with simple statements,
> like, "put the book in your cubby," because I can use a lot of visualization to help them
> connect my words to what the meaning is…. [but] you start adding more vocabulary as
> the time progresses.

In this example, Simone highlights how children's linguistic needs shift across the school year,
and she, therefore, adapts her practices to address this need.

In addition, Simone's attention to students' emotional needs distinctly differed from her
peers. While other teachers responded to students' emotional responses in their instruction
(e.g., confused, frustrated), Simone described foregrounding children's emotional well-being
when considering her instructional approach. For example, when asked about the curricular
guidance for choice time, Simone stated: "I always make sure I go over to [students who
struggled earlier in the day] and play with them a little bit, to really engage them … and just
watch how well they handle their emotions." Her response illustrated how she overrode the
curricular guidance in order to prioritize supporting children's emotional needs. In addition,
Simone noted that peer-to-peer learning was a key objective of her practice, as she saw its
power for simultaneously supporting children's language and socio-emotional learning.

5.5.5 Summary

The profiles of the four teachers presented in this section reveal how unique
combinations of influnces impacted their language practices and described curricular
enactment. While certain sets of influences were important in some capacity to all educators

(student-related, teacher-related, systems-related), different combinations of influences were more salient for particular teachers, and shaped their practice accordingly.

5.6 Discussion

The four participating teachers clearly articulated and described different types and purposes for their language use. They referred to both "higher-quality" practices, such as open-ended questions and modeling talk, and "lower-quality" practices such as simple statements and closed-ended questions, throughout their discussions. In addition, the teachers consistently emphasized the purpose of their talk when discussing their classroom language practices. For instance, teachers described how certain types of talk elicited conversation (e.g., open-ended questions), probed student understanding (e.g. closed-ended questions), or enhanced students' conceptual or vocabulary knowledge (e.g., teacher comments). Collectively, the results indicate that these four teachers had a comprehensive understanding of the classroom language environment, developed over time through their teaching and more formalized professional learning experiences. Nevertheless, teachers varied in the terms they used to describe their language practices, with some teachers using more precise, technical vocabulary (e.g., directive, self-talk, modeling). While this finding has implications for developing approaches that encourage teachers to collectively discuss their language practices with clarity and consistency (Ball & Cohen, 1999; Grossman & Dean, 2019; Schachter et al., 2021), it is less valuable for making judgements about teachers' instructional expertise (Horn & Kane, 2019; Schachter et al., 2016).

In addition, teachers described how their language practices differed in type and purpose across different activity settings in the classroom. Notably, teachers' descriptions of their language practice during three settings (large group instruction, small group instruction, shared reading) closely mirrored the Creative Curriculum guidance. For instance, teachers described the importance of building knowledge of content and vocabulary through open-ended

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questions and teaching comments in large group instruction, all of which were primary types and purposes of the large group guidance. Similarly, within the small group instructional setting, teachers prioritized academic skills instruction, employing various types of talk to scaffold children's learning and check their understanding on diverse learning objectives—reflecting components prominent in the highly-explicit small group guidance. Regarding book reading, another highly explicit component of the curriculum, teachers discussed prioritizing children's vocabulary development through both verbal and nonverbal approaches, aligning with the one of the central tenets of the BDC guidance.

Unlike the aforementioned settings, teachers' descriptions of their choice time practices differed more substantially from those promoted within the CC guidance. This deviation from the promoted guidance is somewhat expected given the relative absence of scripted choice time guidance. Consequently, teachers prioritized relationship-building during choice time, evidenced by their focus on using open-ended questions to engage children in conversation. Additionally, teachers frequently described employing narration during choice time, a practice that is challenging to script, and therefore, largely absent from the curricular guidance.

These findings suggest that teachers' ideas about language use are likely influenced, at least partially, by the curriculum guidance. However, teachers' own perspectives about language use emerged more prominently during less explicitly scripted times of the day. This finding offers crucial initial insights into the ways in which the written curriculum shapes the enacted curriculum. The results suggest that the Creative Curriculum may be a promising lever for helping to improve the classroom language environment, by supporting teachers' use of high-quality language practices that are typically infrequently observed during pre-K classroom instruction (Barnes et al., 2017; Deshmukh et al., 2019; Wright & Neuman, 2013). However, additional research examining teachers' actual enacted practices, rather than their descriptions of their typical enactment, are necessary to build upon this initial finding.

5.6.1 Teachers' Curriculum Adaptations: Description and Potential Consequences

Teachers viewed the written curriculum as a guide for their practice but rejected the idea that the guidance should be followed with strict fidelity. Instead, they described four primary approaches to engaging with the curricular guidance: referencing, supplementing, scaling back, and modifying it according to their perceived needs. These approaches align with enactment perspectives of curriculum use, suggesting that adaptations for one's unique context are a common, expected response when using universal curriculum (Ben-Peretz, 1990; Ball & Cohen, 1996; Remillard, 2005; Sherin & Drake, 2009). These teachers' adaptations mirrored those seen in other studies of curricular enactment, both in the early childhood population (Neugebauer et al., 2017; Neugebauer et al., 2023) and in teaching, broadly (Sherin & Drake, 2009; Troyer, 2019). Notably, however, researchers caution that the productivity of teachers' adaptations vary, with some serving to enhance the written curriculum while others act as potentially "lethal mutations," compromising the curriculum's intent (Brown & Campione, 1996, Troyer 2019).

While this inquiry cannot assess specific, in-the-moment curriculum adaptations, it does illustrate general patterns regarding teachers' approaches to curriculum enactment. Notably, teachers' approaches differed across curriculum materials, with more supplementation occurring with less explicit materials (i.e., large group guidance) and more scaling back or referencing occurring with more explicit materials (i.e., Book Discussion Cards, Intentional Teaching Cards). For example, teachers consistently adapted the large group guidance by supplementing with nonverbal support or activities that promoted active student engagement, as a way to enhance students' learning of study content and vocabulary. In contrast, teachers tended to scale back the guidance in more heavily-scripted curriculum materials, such as limiting the number of targeted vocabulary words and open-ended questions during book reading. Similarly, referencing, or examining materials prior to instruction, was common in teachers' use of the Book Discussion Cards and Intentional Teaching Cards. In contrast to the engagement practices described above, teachers' use of modifying was present across all of the examined

curriculum materials. Their decisions to modify were often guided by their desire to be responsive to student talk– a practice they viewed as crucial for supporting relationship-building and language learning.

One important consideration is that teachers' described adaptation practices varied in their perceived productivity. Specifically, teachers' supplementation practices tended to enhance the existing curricular guidance. Other adaptations, however, unintentionally compromised the curriculum's integrity by omitting lesson components that were key for producing the curriculum's intended outcome. Teachers' engagement with the BDC is an example of a less productive curriculum adaptation. The Creative Curriculum BDC guidance is heavily research-based, incorporating several components central to the shared book reading literature, including explicit vocabulary instruction, scaffolded questioning, and repeated readings (McGee & Schickedanz, 2007; Mol et al., 2009; Wasik et al., 2016). Teachers' decisions to scale back the guidance, by reducing the number of taught words and asking fewer text-based questions, or omitting the scripted guidance altogether in favor of their own book reading approach likely diminished the instructional potential of their book reading lessons. For instance, exposing children to fewer vocabulary words has consequences for their vocabulary development (Biemiller & Boote, 2006; Neuman & Wright, 2014). Similarly, scaling back text-based questions may unintentionally hinder children's higher-level thinking, as the three-read model of the BDCs intentionally scaffolds children's development of more complex thinking across readings (McGee & Schickedanz, 2007; van Kleeck, 2008). While these consequences are conjectures, additional research evaluating the productivity of teachers' adaptations of the Creative Curriculum may be useful for considering the design of both curriculum and the provision of teacher learning opportunities.

Taken together, the results illustrate that adapting the curriculum was a ubiquitous practice for these teachers as they worked to enact the written curriculum. In short, their agency was not hindered by the curriculum guidance. In contrast, they asserted their agency by flexibly

adapting the curriculum guidance by referencing, supplementing, modifying and scaling back. However, it is important to note that teachers' described enacted curriculum varied in its productivity, either bolstering or compromising the written curriculum's intent.

5.6.2 Influences on Teachers' Curriculum Enactment and Language Use

The analysis of the teacher interviews revealed how a complex web of influences informed teachers' language practices. These findings resonate with existing research on enacted curriculum, which suggest that various influences play a role in teachers' pedagogical sensemaking and subsequent curricular enactment (Biesta et al., 2015; Dwyer & Schachter, 2020; Dwyer et al., 2023; Remillard, 2005). As reported by the teachers in this study, three sets of influences—student-related, teacher-related, and systems-related elements– contributed to the nuanced ways in which they all enacted the curriculum's language guidance to suit their specific contexts.

Teachers universally acknowledged the impact of student characteristics, including their language proficiency and developmental needs, on their language practices. These findings align with the limited body of research that examines preschool teachers' sensemaking; these studies suggest that preschool teachers "[think] deeply about the children with whom they [are] working when making decisions" about their classroom language practices (Dwyer & Schachter, 2020, p. 193). The teachers in this study emphasized the importance of considering the needs of students with varying language backgrounds when enacting the curriculum's language guidance, often supplementing with nonverbal supports and adapting the complexity of their talk accordingly. Some teachers specifically emphasized the unique needs of multilingual learners, a promising finding given the research that suggests that MLLs need unique instructional supports, as they attempt to simultaneously acquire English and bolster their existing language skills (Castro et al., 2011; Franco et al., 2019 Figueras-Daniel & Li, 2021). Additionally, developmental needs played a role in teachers' enactment practices, as teachers attempted to

incorporate strategies that centered students' active engagement in the learning process. This finding mirrors findings on ECE teachers' beliefs about learning which suggest that they tend to view engagement as a necessary precursor for young children's learning (Flynn & Schachter, 2017; Schachter, 2017).

External forces, such as scheduling constraints and other curriculum requirements, also exerted an influence on teachers' language practices. The challenge of adhering to curriculum guidance within limited time frames and the need to balance additional school curriculum requirements affected the rigor and responsiveness of their instruction. Teachers' attention to external influences is not surprising, as research on preschool teachers' sensemaking consistently emphasizes the constraining role that external forces exert on teachers' agency (Schachter, 2017; Zucker et al., 2021).

In addition, various aspects of teachers' professional lives, including past professional learning experiences, personal practice, and teaching beliefs, shaped their approaches to curriculum and instruction. Professional learning experiences played a crucial role in refining their language practices, encouraging teachers to reflect and critically assess the complexity and responsiveness of their talk. A previous study exploring early childhood teachers' pedagogical reasoning about young children's learning also found that teachers frequently referenced the role of previous educational experiences in shaping their ideas about teaching (Schachter, 2017). Several teacher beliefs also appeared to strongly shape teachers' language use in the classroom, with teachers balancing competing beliefs about academic rigor and the importance of child-led, engaging practices. This tension echoes that of the early childhood landscape where moves to increase traditional facets of academic learning compete with long-standing philosophical beliefs about developmentally-appropriate practice (Bassok et al., 2016; Markowitz & Ansari, 2020; Nicolopoulou, 2010).

While teachers demonstrated some consistency in regards to specific kinds of influences that shaped their language use and curricular enactment, teachers also expressed how certain

influences exerted unique or greater importance for their own practice in contrast to their peers. These results suggest that while teachers may share similar language practice patterns, they likely have different underlying reasons supporting their instructional decision-making (e.g. Horn, 2005; Schachter, 2017; Schachter et al., 2021). These differences in teachers' underlying influences have important implications for teacher learning, suggesting that surfacing and attending to these influences during professional learning experiences is critical.

In sum, these four teachers did not simply implement the curriculum as written. While teachers were strongly guided by the written curriculum, they also transformed it by referencing, supplementing, modifying and scaling back the guidance, to create their own enacted curriculum. Teachers described, both implicitly and explicitly, how a host of influences contributed to these decisions. Discussions about the implications of these findings for the design of curriculum development and the provision of teacher learning will be discussed in the next chapter.

CHAPTER 6

Discussion and Implications

In this dissertation, I analyzed two iterations of the Creative Curriculum language guidance: the written curriculum and (teachers' descriptions of) the enacted curriculum. In Chapter 4, I presented findings of the content analysis of the Creative Curriculum's language guidance, focusing on how the written curriculum conveys the significance of various types and purposes of talk throughout the preschool day. In Chapter 5, I examined teachers' perspectives about the Creative Curriculum, giving particular attention to how they transformed the written curriculum to suit their particular contexts. This approach highlighted the different influences that contributed to teachers' language practices and the resulting enacted curriculum as described in teachers' interviews. After Chapters 4 and 5, I provided a summary of the findings from each component, drawing connections between the results and the broader field. This chapter extends those reflections by offering a comprehensive discussion of the study's overall findings. The primary objective of this discussion is to examine the study's implications for curriculum design and the enhancement of teacher professional development opportunities aimed at fostering more supportive classroom language environments.

6.1 Curriculum Can Have A Powerful Impact

The findings of this study emphasize the curriculum's potential for impacting the quality of the early childhood classroom language environment (Jenkins & Duncan, 2017; Nguyen et al., 2019; Weiland et al., 2018). The content analysis illustrated that the Creative Curriculum provides a solid framework for supporting the use of various types of talk in the classroom setting, such as asking open-ended questions, engaging in modeling talk, and defining sophisticated vocabulary. In addition, the guidance promotes the idea that different language

moves can be used within various activity settings in the classroom to accomplish unique goals.

Moreover, insights from the teacher interviews indicated that there was a strong alignment

between teachers' pre-existing ideas about language learning and the curricular guidance.

These results indicate that these teachers have internalized ideas about language use that are

widely advocated for within the early childhood field; these perceptions may stem from the

curriculum itself or through other teacher learning mechanisms, such as professional

development or coursework.

6.2 But, Curriculum Alone is Insufficient

Many higher-quality language practices rely on teachers' ability to be linguistically

responsive to students (e.g., expansions, extensions, asking follow-up questions, simplifying

questions); these practices, however, are difficult to embed into the written curriculum. Despite

this, the Creative Curriculum *does* make efforts to insert linguistically responsive practices into

the curricular guidance. First, the Intentional Teaching Cards provide scripts of hypothetical

teacher-child interactions within the Teaching Sequence, featuring various types of responsive

talk practices (e.g., extensions, narration, follow-up questions). The CC guidance also strongly

encourages the use of open-ended questions across different activity settings, a practice

designed to elicit meaningful talk from children. Lastly, the curriculum introduces some general

principles for engaging in linguistically responsive ways within the call-out box guidance (e.g.,

use wait time); however, this guidance is fairly limited in scope and fails to provide concrete

examples of how to use the practices in authentic settings (e.g., scripts).

While embedding prompts and scripts that support linguistic responsivity might cue

teachers to use these practices more often, the guidance is likely not a comprehensive solution

for supporting teachers' consistent use of linguistically responsive strategies in their daily

practice. As research suggests, asking open-ended questions or engaging in modeling talk is

only the first step in creating meaningful back-and-forth interactions (e.g., Zucker et al., 2020).

Unfortunately, encouraging teachers to ask open-ended questions is much easier than supporting them in effectively following up on or responding to the initial question (Hindman et al., 2019; Barnes et al., 2017; Piasta et al., 2015; Zucker et al., 2021; Wasik et al., 2022). Preschool teachers often respond to open-ended questions with low-quality feedback, such as giving praise, following up with a closed-ended question, or abruptly moving on with the lesson (Barnes et al., 2017; Hindman et al., 2019). Similarly, preschool teachers struggle to modify their language in-the-moment in response to students' responses, such as by simplifying a question or providing meaningful expansions to students' talk (Zucker et al., 2021). The aforementioned struggles cannot be solved by giving more concrete guidance, as the written curriculum cannot account for teachers' unique classroom contexts, including the spontaneity and unexpected nature of children's responses. Therefore, while the Creative Curriculum makes meaningful attempts to promote responsive interactions, it falls short in addressing the complexities of authentic classroom interactions.

Second, teachers rarely, if ever, implement the curriculum exactly as written (Brown, 2009; Shulman, 1990). As the teachers in this inquiry illustrated, regardless of explicit scripting, teachers exert their agency during moments of curriculum enactment, adapting the guidance to suit their needs by supplementing, modifying, scaling back and referencing. These results suggest that teachers may need additional support to help teachers navigate the process of curricular enactment.

6.3 Implications for Practice

Although the Creative Curriculum strives to foster high-quality language environments, the effectiveness of the language guidance in supporting teachers' practice is inherently limited for the aforementioned reasons. To combat these limitations, curriculum developers should expect and encourage modification as an inherent part of curriculum implementation. Curriculum developers might consider ways to intentionally embed supports that help teachers

tailor the guidance to their own classroom contexts. One potential approach is to insert more educative elements into the curriculum, giving specific insight into the pedagogical intentions of different curriculum components (Davis & Kracjik, 2005; Neuman & Dwyer, 2011; Neuman et al., 2015; Troyer, 2019;). For instance, an educative call-out box that explains the benefits of explicitly teaching a large volume of text-specific vocabulary during shared reading might help teachers reconsider the kinds of curricular adaptations they make in this activity setting. Another suggestion for curriculum developers would be to embed additional support for differentiation throughout the curriculum; as the content analysis findings illustrated, most of the attention to differentiation stemmed from call-out boxes in the small group instructional materials. However, students' language background strongly influenced these four teachers' practices across all of the settings discussed. As such, additional call-out boxes providing concrete guidance about ways to scaffold their language use to support the needs of more or less proficient learners could be a useful support (e.g., modified questions, embedded nonverbal supports). Therefore, educative elements might encourage teachers to engage in adaptations that both suit their context but also help to maintain the curriculum's integrity (Davis & Kracjik, 2006; Neuman & Dwyer, 2011; Troyer, 2019).

In addition, teachers should also receive supplemental learning opportunities, such as coaching, professional learning communities (PLCs), or professional development sessions (PD), alongside curriculum (Davis & Krajcik, 2006; Darling-Hammond et al., 2011). Crucially, these opportunities should allow teachers to reflect on their current language practices, center their pedagogical sensemaking (and curricular enactment), and encourage experimentation as teachers' integrate new approaches to using the curriculum in their own classroom contexts (e.g., Darling-Hammond & McLaughlin, 2011; Desimone, 2009; Hindman & Wasik, 2023; Schachter et al., 2021). As the findings of the teacher interviews illustrated, curricular enactment is a process of active sensemaking. Highlighting and surfacing the sensemaking process is, therefore, important for improving teachers' language use in the classroom. This notion is

reinforced by existing research, which emphasizes that understanding teachers' current classroom practices, including the underlying values and related motivating influences, is essential for designing effective teacher learning opportunities (e.g., Dickinson et al., 2011; Hadley et al., 2022; Hindman & Wasik, 2023; Schachter et al., 2021).

The teacher interview analysis also highlighted how various influences drive teachers' language practices and inform the resulting enacted curriculum; teacher learning opportunities that make these influences more visible might support teachers in several ways. First, teachers may be able to more clearly describe their pedagogical decision-making processes, giving them greater agency in later instructional moments (e.g., Brown, 2009; Parsons et al., 2018). For instance, Simone gave brief insight into this idea when she noted how learnings from PD sessions helped her actively reflect on her talk in the moment, resulting in her decision to use more higher-level questioning in lieu of more literal questioning.

In addition, revealing which influences are most central to teachers' decision-making can help coaches to tailor their support for teachers by aligning their approaches with teachers' existing sensemaking practices. For instance, Rebecca's pedagogical sensemaking was closely tied to assessments of her practice; as such, coaching sessions that target and discuss this component might be more fruitful in shaping her subsequent practice. In contrast, Gabrielle's curricular adaptations were strongly guided by external influences, such as scheduling constraints; coaching sessions that help Gabrielle navigate the logistical aspects of curriculum implementation might be a more effective approach for changing her practice.

This study's findings also suggest that teacher learning opportunities need to provide space for teachers to reflect on and critique the productivity of their curriculum adaptations. Brown (2009) calls this teachers' pedagogical design capacity, or their ability to "create deliberate, productive designs that help accomplish their instructional goals" (p. 29). His work suggests that professional development should foreground experiences that help teachers consider ways to customize and adapt curriculum materials to suit their instructional

goals. As this study illustrated, not all of teachers' adaptations were aligned with the curriculum's objectives or with the features of a high-quality classroom language environment, despite stemming from authentic motivating influences. Therefore, developing learning opportunities that encourage teachers to unpack the ways in which adaptations they make impact their students' learning is an important step in improving teachers' language practices.

Understanding what these professional learning experiences might look like in authentic settings is an open question, as the early childhood field is still grappling with the best ways to support ECE teachers' reflection and pedagogical sensemaking (e.g., Hindman & Wasik, 2023; Dwyer et al., 2023). Given the tacit and embedded nature of language use (Ahearn, 2016; Lee, 2007), using authentic artifacts to surface teachers' sensemaking about language seems to be a sensible starting point. Options such as analyzing videos of classroom instruction (their own and others) or discussing different curriculum components (as done in this project's interviews) might be useful avenue to explore (Hindman & Wasik, 2023; Mathers, 2021; Van Es et al., 2014). In addition, giving opportunities for teachers to collectively engage in sensemaking is also a productive approach (Horn & Kane, 2019; Datnow et al., 2023). Collective sensemaking opportunities, through PLC structures or group coaching, could help teachers to engage in shared dialogue that allows them to not only discuss ideas about language use in the classroom, but also engage in discussions about the classroom dynamics that affect their curriculum implementation, such as students, curriculum, and external forces (Horn & Kane, 2019; Datnow et al., 2023). These kinds of learning structures help teachers to focus on their own problems of practice, rather than those introduced by external sources (i.e., professional development creators) (Henrick et al., 2017; Lefstein et al., 2020).

In conclusion, while the early childhood field continues to seek the most effective methods to support early childhood education (ECE) teachers' reflection and pedagogical sensemaking processes, utilizing authentic artifacts and fostering opportunities for collective

sensemaking represent promising avenues for enhancing professional learning experiences in teachers' own classroom settings.

6.4 Limitations & Future Directions

This study provides valuable insights about the Creative Curriculum, highlighting aspects of the written curriculum and providing insight into the enacted curriculum as described by teachers. However, there are several limitations of this study that warrant consideration and point towards directions for future research.

First, the relatively small sample size used for this study limits our ability to explore teachers' pedagogical sensemaking about language on a broader scale. In addition, the teachers in this study were afforded unique opportunities for professional learning, as they worked in ECE-only settings with an in-school coach. Expanding this exploration to other populations of teachers might unveil potential teacher profiles; these profiles could help tailor professional development experiences and mitigate the need for highly individualized approaches.

Another limitation of this study is the lack of observational data, limiting our understanding of teachers' in-the-moment curricular enactment. Instead, this study explored teachers' visions of enactment, or discussions about their typical approaches to implementing the curriculum. Given the fact that curriculum enactment requires in-the-moment decision-making (Remillard, 2005; Yoon, 2013), observational data could help illustrate the improvisational aspect of teachers' language use. Observational data could also allow for examinations into the productivity of teachers' curricular adaptations. Future research that combines real-time observations with discussions of teachers' pedagogical sensemaking could also explore the nuanced ways in which teachers navigate curriculum implementation. These dynamic approaches could help expand our emerging understandings about ECE teachers'

decision-making, informing the development of new curricula and teacher learning opportunities that are more responsive to teachers' existing sensemaking.

In summary, while this study contributes important insights about the interaction between teachers' language practices and a popular pre-K curriculum, there remains a need for further research to address the identified limitations. Such endeavors hold promise for further informing the development of teacher learning opportunities and curriculum language guidance that support young children's language development.

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Appendix A

Description and Examples of Creative Curriculum Materials

This appendix describes each of the curriculum materials used as artifacts in the content analysis. The appendix also provides an example of how instruction unfolds across a typical day, highlighting the ways in which the study topic is addressed in each curriculum material and related activity setting. Samples of each curriculum material taken from the Trees study are provided.

Teaching Guides (TG)

The Teaching Guides were the primary curriculum artifact used for this project. Each TG begins with an overall introduction and rationale for the study topic. Following the introductory materials, a full-page spread titled "At a Glance" is given for each week, outlining the activities for each day. Daily lesson plans follow. Each lesson plan gives a breakdown of what to do within each activity setting (Large Group, Choice time, Read-Aloud, Small Group, Mighty Minutes, and Large-Group Roundup) with bulleted text providing both directions and lesson scripts. All TG lessons for the Clothes study (n= 35) and the Trees study (n= 35) were coded for this inquiry. TGs also indicated what other supplemental materials (Intentional Teaching Card, Book Discussion Card, Mighty Minutes Card).

Large Group Guidance

The Large Group section of the TG is broken down into several components, including an opening routine, a short interactive activity (e.g., music, movement, game, read aloud), and a large group discussion/shared writing activity. The large group discussion/shared writing is given the most attention in the Teaching Guide. The Large Group Discussion/Shared Writing component engages children in a discussion about the study topic and often focuses on explicitly teaching study-related vocabulary (located in the top left corner of the TG) or giving conceptual information about the study topic.

Choice Time Guidance

Choice time guidance tends to provide general guidance for engaging with children during different choice time activity centers (e.g., Art, Dramatic Play, Blocks). However, a few lessons provide teachers with talk to utilize within a specific activity setting (i.e., talk about artwork). The choice time guidance varies in its explicit attention to the study topic. The guidance is often not study-specific (e.g. "help children find information in books by looking at the pictures"; "invite them to talk about their collages); instead, the focus on the study topic depends on the provision of study-related materials (e.g., books about trees, tree-related collage materials such as leaves and sticks) and teachers' ability to connect children's choice time play to concepts in the study. For instance, teachers may choose to describe children's collages by discussing the materials used (e.g., red leaves, rough sticks), but choose not to focus on how the materials reflect broader concepts about the study topic (e.g., trees leaves change colors across seasons, different kinds of trees have different kinds of leaves, etc.).

Intentional Teaching Cards (ITC)

ITCs were selected for analysis based on their reference in the Teaching Guide lessons (e.g., "Use Intentional Teaching Card LL31. Follow the guidance on the card"). The ITCs provide guidance for small group instruction within the TG, supporting children's learning in one of the developmental domains targeted by the CC (e.g., literacy, mathematics, socio-emotional, cognitive, physical development, etc.). The Intentional Teaching cards (ITC) have three major components: activity directions (i.e., "What to Do"), suggestions for general modifications (i.e., "Additional Ideas") and guidance for differentiation by skill level (i.e., "Teaching Sequence"). Two of the ITC sections were coded for the primary content analysis (What to Do, Teaching Sequence). The "What to Do" section provides step-by-step directions and scripts for conducting the activity. The "Additional Ideas" section is a call-out box that provides general guidance on how to modify the activity to support learners with diverse needs including children with learning disabilities and multilingual learners (e.g. "give all children time to express

themselves"). This section was not analyzed for this question; however, this section was addressed for question RQ1D (see "attention to differentiation" section).

The "Teaching Sequence" provides teachers with ideas about how to differentiate their instruction based on children's skill level. Each color band aligns to the assessment system utilized by Creative Curriculum called GOLD. Within each color band, there are sample directions for adjusting the challenge of the activity. Consider the following example for observational drawing: the directions for "yellow" (the lowest level) tell teachers to ask children to "focus on a small part of the object. Talk about what you see and ask questions to prompt him to talk about what he sees," while the directions for "purple" (the latest/highest level) encourages children to "look at the object from a different perspective" and encourages teachers to "ask questions that prompt her to describe new observations." As this example illustrates, the ITC Teaching Sequence gives teachers explicit support for modifying the activity based on children's skill level, including changing the scope of the activity (i.e., how much of the object to attend to) and adjusting their talk to meet children at their level (i.e., modeling talk vs. asking questions).

The Intentional Teaching Cards are not specifically designed for a particular study; instead, they spiral throughout the year and are used across studies. As such, connections to the study topic remain at the surface level with vague suggestions to incorporate study-related materials. For instance, teachers may use study-related manipulatives for counting or use study-related materials for exploring patterns; however, these materials are simply there to help address the small group objective. As such, conceptual knowledge is rarely a priority during this curriculum material.

Mighty Minutes Cards (MMC)

Mighty Minutes cards are embedded within the daily lesson plans to increase student learning during transition time. Consequently, teachers are given leeway about when to use MMCs throughout the day. Similar to the ITCs, each MMC is linked to a specific CC objective. However, MMCs differ from ITCs as they are a whole class activity rather than a small group

activity. In addition, they are intended to be implemented in a short timeframe, often featuring interactive songs, games, or rhymes. The Mighty Minutes cards do not give any attention to the study topic. Instead, they are heavily objective-driven and focus on short, engaging activities that can be accomplished during transitions.

Book Discussion Cards (BDC)

Book Discussion Cards support teachers' whole-class read aloud practices. Book Discussion Cards are predicated on a three-read model, giving ideas about supporting children's understanding throughout three readings of the same text (First Reading, Second Reading, Third Reading). BDCs include guidance for explicit vocabulary instruction, text-based questioning, and extratextual commenting. Each reading has a slightly different focus with the First Reading drawing children's attention to the story plot through teacher modeling (i.e., think-alouds) and literal questioning. The Second Reading focuses on supporting inferencing and recalling important text points and the Third Reading focuses on supporting students' retelling skills. Guidance for teaching vocabulary also differs across the three readings with earlier readings focusing on more explicit instruction of new vocabulary (e.g. providing definitions, using gestures) than later readings (e.g. "expand vocabulary"). In total, 24 BDCs were referenced in the Trees and Clothes TGs, and therefore, selected for analysis.

The Book Discussion Cards are usually related to the study topic but each text differs in how closely it is aligned to the driving question. For instance, the book *Henny Penny* used during the Trees unit is an example of a very loosely-related text. While the story begins with an acorn falling on Henny Penny's head, the opportunity for building conceptual knowledge about trees, especially in relation to the driving question: "what foods comes from trees?" is very limited. In addition, the guidance for the reading of *Henny Penny* focuses on the story's plot, not on building children's conceptual knowledge of trees. Other texts in the unit are more aligned with the trees unit; particularly, the BDC lessons for nonfiction texts (while less common than fiction texts) exhibit greater attention to building children's content knowledge. Therefore, the

BDC lessons are almost always related to the study topic in some way; however, building children's content knowledge of the topic is not the priority. Instead, the lessons seem to focus on text-based vocabulary and building student's comprehension of the story's plot.

Curriculum Guidance Across One Day in the Trees Study

The following examples from the curriculum show the different curriculum materials used across one day in a classroom using Creative Curriculum. Within each material, I have used orange boxes to indicate examples of excerpts. I have also used purple triangles to indicate areas where there is an explicit reference to the study topic; these indicate a potential area where building conceptual knowledge may be an instructional objective.

Figure A1

At A Glance Weekly Spread Artifact

Note. The At A Glance gives a broad overview of the week's lessons. It also shows each day's Question of the Day.

Figure A2

Teaching Guide (TG) Artifact

Note. The TG Daily Lesson spread breaks down the day's activities by setting. The TG provides specific information for Large Group

instruction and Choice Time. It also provides details about other supplemental materials (MMCs, ITCs, BDCs) that should be used.

Figure A3

Mighty Minutes Artifacts

Figure A4

Book Discussion Card (BDC) Artifact: Second Reading of "Henny Penny"

Henny Penny

❷ Second Read-Aloud

Before Reading

Recall the characters and the problem.

"We're going to read *Henny Penny* again. You may remember that Henny Penny is a foolish hen who always worries. One day something falls on her head, and it worries her a lot. What falls on her head? What does that make her think and do? What happens when she and her friends meet Foxy Loxy?"

While Reading

Expand vocabulary using more verbal explanations:

acorn, fluttered, distressed

Reinforce some previously introduced words by pointing to pictures and dramatizing:

cluster, shortcut, feast

Comment on and ask follow-up questions about the other characters.

• "Why do you think Ducky Lucky and Turkey Lurkey follow Henny Penny, even though they know that she worries about everything and sometimes has silly, foolish thoughts about those things?"

• "I think Goosey Loosey, Cocky Locky, Ducky Lucky, and Turkey Lurkey are just as silly and foolish as Henny Penny for believing that the sky is falling."

• "I think Foxy Loxy's plan for getting Henny Penny and her friends to his den is very smart and clever. How do you think he knows it will work?"

After Reading

Invite explanations, wonder aloud, and ask follow-up questions.

• "Why do you think Henny Penny's friends believe her even though they knew she sometimes worries for no reason?"

• "Why do Henny Penny and her friends follow Foxy Loxy? Do you think Foxy Loxy knew he could trick Henny Penny and her friends into following him? Why do you think they trusted him?"

• "I wonder why Foxy Loxy didn't seem worried that the sky was falling. Why do you think he knew that it wasn't true?"

Figure A5

Intentional Teaching Card Artifact (LL31-Front Side)

I Went Shopping

LL31
Music and Movement

Objective 17
Demonstrates knowledge
of print and its uses

Related Objectives: 3, 8, 9, 11, 12, 14,
16, 23, 30

What You Do

Materials: five or six pieces of print found in a grocery store, e.g., empty product containers or labels; grocery bag

1. Invite the children to join you in exploring items from the grocery store. Recite the following rhyme:

   I went shopping; now I'm back.
   Can you help unpack the sack?

2. Now invite the children to clap a pattern as you say the rhyme again:

   "Pat your legs, clap your hands, pat your legs, clap your hands."

3. After the rhyme, take one item from the grocery bag and ask the children to identify the label by thinking about the words, symbols, or colors. Sweep your finger under the words as you read the label.

4. Talk about the print, calling attention to the words, letters, and letter features. Help the children make connections to what they already know.

   "Do you use *Crest* toothpaste? What kind do you like best?"

   "Crystal, how is your name like the word *Crest*? They begin the same, don't they? They both have an uppercase (capital) *C* and a lowercase *r*."

5. Continue until all the children have had a turn to talk about a label, repeating the rhyme each time. Encourage the children's attempts with positive reinforcement.

   "Wow, Miguel! You found two big *M*'s on your box!"

6. Invite the children to bring print that they can read to school.

   "Think about words that you see at home and can read. If you want, you may bring them to school and share them with the rest of the class."

Including All Children

- Include products and labels that are familiar to the children from their homes.**

- Enlarge the environmental print. Use black marker to outline letters and numbers, or use fluorescent markers to highlight the print.

- Laminate the labels twice to make them easier to pick up.

- When English-language learners ask you to name an object in English, ask them to tell you its name in their home languages.**

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Figure A6

Intentional Teaching Card Artifact (LL31-Back Side)

Teaching Sequence

YELLOW	Show the child familiar environmental print and invite him to identify the product.	
	"Shane, do you know what was in this yellow box? Yes, it was a box of Cheerios®. Here is the word *Cheerios*. What do you see in this picture?"	
GREEN	Invite discussion about unfamiliar print by talking about descriptors, e.g., colors or pictures.	
	"Elena, let's look at this can and see if we can figure out what's inside. Does the can have any pictures on it that would help us figure out the words?"	
GREEN	Point to a familiar word on a label and ask the child to identify it.	
BLUE	"I know that this box is familiar to you because your grandmother packs it in your lunch every day. Can you read this word to me? Yes, it's *raisins*."	
BLUE	Invite the child to identify which letters on the label are uppercase and which are lowercase.	
PURPLE	"Let's look at the letters on this label. Do you see any big, uppercase letters?"	
PURPLE	Ask the child to point to individual words on environmental print and read them.	
	"What words can you read on this label? Can you point to them as you read them?"	

Questions to Guide Your Observations

- Was the child able to recognize, name, and read the environmental print?
- Did the child know where to start reading and the direction to follow?
- What letters did the child recognize?
- Did the child recall and associate the print with his own experiences?
- Did the child listen to others and take turns in the group?

Related LearningGames®

- "Letters in My Name"; "Noticing Words"

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Figure A7

Intentional Teaching Card Artifact (LL25-Front Side)

What's for Snack?

What You Do

Materials: food product labels, large paper or tagboard, marker, recipe cards or charts

Create a snack menu using food product labels and food preparation pictures, e.g., "Today's snack is cereal and apple juice."

For foods that children will prepare, make picture and word recipes using labels from products or hand-drawn pictures, e.g., labels from cereal, pretzel, and raisin packages for a trail mix recipe.

1. **Read the snack menu with the children, sweeping your fingers under the words. If the children will be preparing a snack independently, also read the recipe and procedure for preparing the snack.**

"Let's look at the snack menu and see what we're having today. This says, 'Today's snack is trail mix and apple juice.' We'll make that by mixing together cereal, fruit, and pretzels."

2. **Call attention to similarities in words or letters.**

"We will be having crackers, cheese, and apples for snack. *Crackers* and *cheese* both begin with the letter *C*."

3. **Explain that the menu, recipe, and ingredients will be in the Cooking area for children to use when they prepare a snack.**

"When you make your snack, it is important to have the recipe next to the ingredients and measuring tools. That way everything you need will be in one place."

LL25

Cooking

Objective 17
Demonstrates knowledge of print and its uses
b. Uses print concepts

Related Objectives: 3a, 7a, 8b, 9a, 11b, 12b, 16b

Additional Ideas

Create a system for children to record whether they had a snack. Write *Yes* on one can and *No* on another. Write each child's name on a large craft stick. Staple, or glue, a small photo of each child to the top of a stick. At the beginning of each day, place all the sticks in the *No* can.

English-Language Learners

- Invite English-language learners' family members to help the children follow the recipes while speaking his or her first language.

- Include items with environmental print in children's first languages.

Including All Children

- Record each part of the snack menu or recipe into a child's communication device.

- Make sure that each child can reach the snack ingredients.

- Stabilize mixing bowls using a nonslip material to make mixing easier.

- Outline logos on the labels with dark or fluorescent markers.

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Figure A8

Intentional Teaching Card Artifact (LL25-Back Side)

Teaching Sequence

YELLOW	**Point out familiar food labels on the snack chart. Give the child a chance to recognize a product.**	
	"Cameron, do you see on the chart a label from a food that you like to eat? You are pointing to the label that has a picture of pretzels. Do you like pretzels?"	
GREEN	**Discuss the snack menu to help the child become familiar with all print and labels.**	
	"Let's look at the words and labels on the snack chart. You might recognize some of the labels. I'll read the words to you as we go along."	
GREEN	**While reading the snack menu, point to a familiar word, and ask the child to identify it.**	
BLUE	"Can you tell me what this word is? I know you like to eat this for snack. Yes, it says *pears*. You saw the picture, and you noticed that the word starts with a *p*."	
BLUE	**Invite the child to find words as you read the snack chart.**	
PURPLE	"Would you like to follow along with your finger as I read? Show me where we should start reading. That's right. We start reading at the top, on the left side."	
PURPLE	**Review the snack menu with the child. Invite him to read individual words and to sweep a finger under the print while he reads.**	
	"Timothy, what words would you like to read on the snack chart? Yes, the word at the top says *snack!*"	

Questions to Guide Your Observations

- Did the child follow along as you read the text? (17b)
- How did the child work with others to prepare the snack? (3a)
- How did the child demonstrate knowledge of letter sounds? (16b)

Figure A9

Additional Book Discussion Card Artfiacts: First and Third Reading of Henny Penny

Appendix B

Data Collection and Analysis Timeline

Time	Project Phase	Tasks Completed	
		Semi-Structured Interview Component	**Content Analysis Component**
March-May 2022	Teacher Recruitment	• Established initial contact with prospective teachers through existing contacts in the district • Participants completed teacher survey	• Skimmed Creative Curriculum physical materials given to district teachers • Selected final set of curricular artifacts (influenced by survey results)
May- June 2022	Data Collection	• Interview 1 • Interview 2 • Teacher planning artifacts received	• Pilot coding of a set of CC artifacts: Book Discussion Cards (3), Intentional Teaching Cards (5), Teaching Guide lessons (5), Mighty Minutes cards (5) • Initial codebook established
June- August 2022	Analysis: Phase 1	• Transcription of teacher interviews • Methodological/theoretical field notes written	• Axial coding • Created separate data set for secondary data analysis (RQ1d) • RQ1a, RQ1b, RQ1c: ○ Draft of final codebook developed ○ Adjusted names within final codebook to align with categories emerging from teacher interviews (e.g., talk purpose codes) • Second coder coded 10% of content analysis data
January- May 2023	Analysis: Phase 2	• Selected relevant portions of teacher interviews for analysis • Open coding of teacher interviews; initial codebook developed • Axial coding and draft of final codebook developed • Entire data set coded • Second coder reviewed 20% of coded data. Discussions revealed gaps in the coding process. Codebook adjusted accordingly. • Re-coding of data set to match final codebook • Themes gathered and summarized	• Ran frequency and code co-occurrence analyses for relevant questions in Dedoose (RQ1a, RQ1b, RQ1c) • Secondary content analysis (RQ1d): ○ Draft of final codebook ○ Coded entire data set
May- December 2023	Analysis Phase 3	• Write up of findings	• Ran frequency and code co-occurrence analyses for relevant questions in Dedoose (RQ1d) • Write up of findings

Appendix C

Teacher Survey

1) First Name

_____

Demographics & Professional Development

2) How many years have you been teaching?

_____

3) How many years have you been teaching Pre-K?

_____

4) How many years have you used Creative Curriculum?

_____

5) Have you used other primary curriculum besides Creative Curriculum when teaching Pre-K students (i.e. supplemental curriculum like Heggerty or Second Steps do not need to be included)? If so, please list which ones.

_____

6) Describe the kinds and amount of professional development (including coaching) you have received about Creative Curriculum. Be specific about your experiences this past year.

_____

7) Describe the professional development (including coaching) you have received on children's language development.

_____

How often do you refer to the following resources in your teaching and planning?

8) "The Foundations" Guide
- ○ Daily
- ○ Weekly
- ○ Monthly
- ○ Once a year
- ○ Never

9) "Interest Areas" Guide
- ○ Daily
- ○ Weekly
- ○ Monthly
- ○ Once a year
- ○ Never

10) "Literacy" Guide
- ○ Daily
- ○ Weekly
- ○ Monthly
- ○ Once a year
- ○ Never

11) Intentional Teaching Cards

- ○ Daily
- ○ Weekly
- ○ Monthly
- ○ Once a year
- ○ Never

12) Units of Study Books (i.e. Balls, Trees, etc.)

- ○ Daily
- ○ Weekly
- ○ Monthly
- ○ Once a year
- ○ Never

13) "Objectives for Development and Learning" Guide

- ○ Daily
- ○ Weekly
- ○ Monthly
- ○ Once a year
- ○ Never

14) Book Discussion Cards

- ○ Daily
- ○ Weekly
- ○ Monthly
- ○ Once a year
- ○ Never

Your Planning Practices

15) Creative Curriculum has many different components. Please note which components you have a personal classroom copy of. If you are unsure, do not mark as yes.

- ☐ "The Foundation" Guide
- ☐ "Interest Areas" Guide
- ☐ "Literacy" Guide
- ☐ "Mathematics" Guide
- ☐ "Objectives for Development and Learning" Book
- ☐ Units of Study (i.e. Balls, Trees, Clothing)
- ☐ Children's Book Collection
- ☐ Book Discussion Cards
- ☐ Mighty Minutes
- ☐ Intentional Teaching Cards

16) How do you typically plan for a unit?

- ○ by myself
- ○ with my paraprofessional
- ○ with other colleagues at my school
- ○ with my coach
- ○ during a PD session
- ○ other

17) Do you have documents that help you plan? If so, what are they? Would you be willing to share these with the research team?

_____

Your experiences with Creative Curriculum

18) Please choose the CC units you have taught this year (or in the past few years):

- ☐ Balls
- ☐ Trees
- ☐ Buildings
- ☐ Clothing
- ☐ Reuse, Recycle
- ☐ Exercise
- ☐ Signs
- ☐ Roads
- ☐ Gardening
- ☐ Pets

19) What has been your favorite CC unit to teach? Explain why.

_____

Appendix D

Teacher Interview Materials

Table D1.

Interview Protocol Matrix

RQ 2: How do teachers interpret and respond to the Creative Curriculum's guidance for language during planning and enactment?					
	Background Information (history, general planning practices, holistic perspectives)	2a) How do teachers describe and explain their use of the provided guidance?	2b) How do teachers conceptualize the relationship between unit components/activities, curriculum objectives, and children's developing language skills?	2c) In what ways do teachers consider aspects of their classroom context when planning and enacting CC?	2d) In what ways do teachers describe adapting CC units to support children's language growth?
Interview 1: Q1 How would you describe CC to teachers who are not familiar with it?	X				
Interview 1: Q2 Cc is based around a theme.... Does this affect the way you plan for the unit?	X		X		X
Interview 1: Objective Mapping Activity		X	X		X
Interview 1: Q3 How would/do you use this portion of the curriculum when planning for the unit?	X	X	X		

	Background Information (history, general planning practices, holistic perspectives)	2a) How do teachers describe and explain their use of the provided guidance?	2b) How do teachers conceptualize the relationship between unit components/activities, curriculum objectives, and children's developing language skills?	2c) In what ways do teachers consider aspects of their classroom context when planning and enacting CC?	2d) In what ways do teachers describe adapting CC units to support children's language growth?
RQ 2: How do teachers interpret and respond to the Creative Curriculum's guidance for language during planning and enactment?					
Interview 1: Q4 Can you talk aloud about …daily lesson plan?	X	X	X	X (potentially)	
Interview 1: Q5 Curriculum often provides us with way more …		X	X	X (potentially)	X
Interview 2: Teacher Talk Sorting Activity		X	X		
Interview 2: Q1 If a new teacher was observing you during your choice time …what might they expect to see?			X	X	
Interview 2: Q2 Some people say that the guidance in certain aspects of the curriculum …What do you think?		X	X		
Interview 2: Q3 Do you think the curriculum does a good job of considering the language needs of your students?		X		X	X

Interview 1 Protocol

Thank you again for meeting with me today! As you know, my goal as a researcher is to understand how teachers use Creative Curriculum in their classroom on a day-to-day, unit-to-unit basis. I'm particularly interested in how teachers think about supporting children's language skills using the Creative Curriculum. As a reminder, this interview is not intended for me to analyze if you stick to the CC with "fidelity." Rather, I'm interested in how expert teachers actually use the different curricular material at their disposal when planning and interacting with students.

1. How would you describe Creative Curriculum to teachers who are not familiar with it?

2. As you noted, Creative Curriculum is based around a theme, like trees or buildings or clothes which seem to unfold with more complexity across the weeks. Does this affect the way you plan for the unit?
   ○ Thinking about the Buildings unit, are there ever "sticking points" for students that can get confusing? How do you address these?
   ○ Shown on screen:
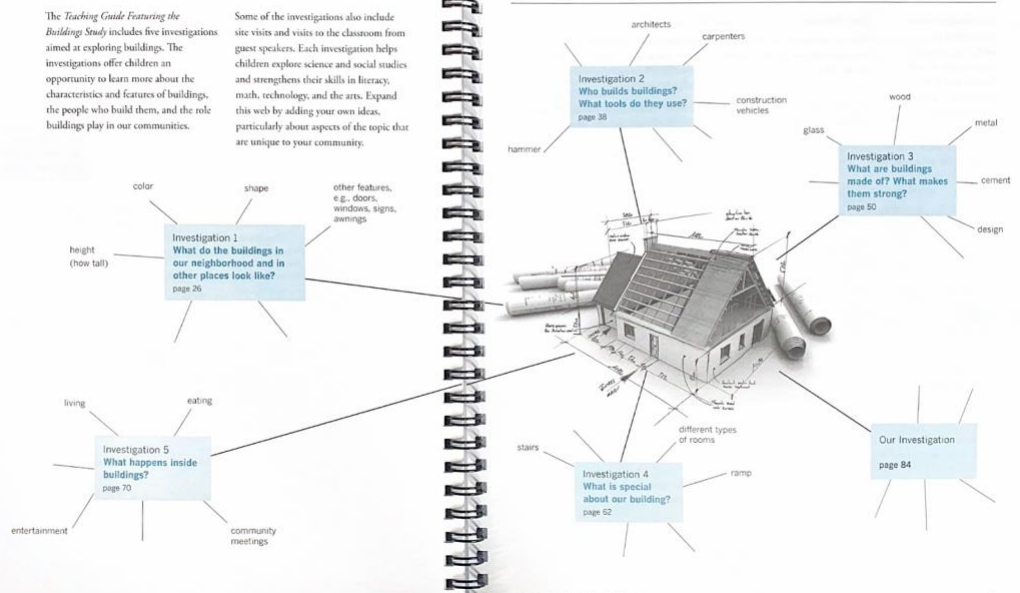
3. **Objective Mapping Activity** (see below)

   ○ Guiding Questions:
      i. Which of the objectives do you most closely attend to in your daily interactions?
      ii. What times of the day do you find to be most fruitful for supporting certain language objectives?
      iii. Can you tell me where you see certain language objectives mapping onto the guidance presented in the CC unit?

4. Let's look at the overview of Week 1 of Investigation 1…. How would/do you use this portion of the curriculum when planning for the unit?

- ○ Probe about Question of the Day (if not discussed). Seems to have the most specific guidance here- but not always referenced in the daily lesson plans. How do you tend to use Question of the Day in your classroom? Do you see this time of the day as helping build students' language skills or some other skills?
- ○ How do you see the connection between different times of the day?
- ○ Shown on screen:

5. Let's look at some daily lesson plans together. Imagine you were looking at this for planning… Can you talk aloud about your typical thoughts as you would read through a daily lesson plan?
    - ○ Probe for attention to language learning, specifically
    - ○ Shown on screen:

Day 2 | Investigation 3

What are buildings made of?
What makes them strong?

Vocabulary
English: foundation, building inspector
Spanish: cimientos, inspector(a) de edificios

Large Group	Opening Routine	

Large Group — Opening Routine
- Sing a welcome song and talk about who's here.

Game: Walk Around the Shapes
- Use Mighty Minutes 52, "Walk Around the Shapes." Follow the guidance on the card.

Discussion and Shared Writing: Preparing for the Site Visit
- Review the question of the day.
- Pass around some photos of neighborhood buildings that you took during the first investigation.
- Invite children to describe what each building looks like and what it is made of.
- Pass around the building materials from the question of the day.
- Ask, "Can you tell what materials were used to make the buildings in the pictures? Were any of these materials used?"
- Record children's responses.
- Explain, "After today's walk around the neighborhood, we can check our predictions to see whether we were right."

- Introduce the idea of building inspection. Explain, "Sometimes buildings have problems. It is the building inspector's job to make sure that a building stays strong and safe. On today's walk, let's see whether we can identify things a building inspector would check."
- See Intentional Teaching Card LL45, "Observational Drawing."

During the walk, help children identify and name building materials, such as asphalt or roofing shingles. Point out problems if the children don't notice them easily, such as peeling paint and broken windows.

Before transitioning to interest areas, talk about the collection of building samples, such as carpet or tiles, in the Toys and Games area, and how children may use them. Show children the materials that you gathered on the basis of the suggestions they made during yesterday's large-group roundup. Add the materials to an appropriate interest area. Explain, "You may use these materials to construct buildings and test how strong they are."

The Buildings Study Investigating the Topic

Choice Time
As you interact with children in the interest areas, make time to
- Talk with children about the building samples in the Toys and Games area.
- Use rich vocabulary to describe the materials' textures, styles, and designs; e.g., say, "This carpet feels silky," or "This tile has a plaid pattern."

Read-Aloud
Read Building a House.
- **Before you read,** ask, "What do you remember about this book?"
- **As you read,** add details to the text on each page and use vocabulary terms, such as foundation, to expand on the information in the book. Say, for example, "The cement mixer pours the cement. This will be the foundation for the building. The foundation provides a strong support to build on."
- **After you read,** look through the pages of the book with the children. Talk about and list the variety of materials used to construct the building.

Small Group
Option 1: What Can We Build Together?
- Review Intentional Teaching Card SE25, "What Can We Build Together?" Follow the guidance on the card.

Option 2: What Can We Build Together? Construction Sounds
- Review Intentional Teaching Card SE25, "What Can We Build Together?"
- Provide a variety of building materials. Follow the guidance on the card.

Mighty Minutes™
- Use Mighty Minutes 19, "I Spy With My Little Eye." Try the shape variation on the back of the card.

Large-Group Roundup
- Recall the day's events.
- Talk about what children discovered during today's site visit.
- Record their ideas.
- Invite children to show their observational drawings.

6. As we all know, curriculum often provides us with WAY more than we are able to do in a given day/week or unit. Do you find yourself giving more attention to certain aspects of the lesson plans than others?
   a. Which pieces do you "let go" of more frequently?
   b. Which do you prioritize?
   c. How would you instruct a teacher new to the curriculum about making these types of choices

Interview 1- Objective Mapping Activity

Note. Image shows the entire workspace. Different aspects can be zoomed in on.

Interview 2 Protocol

Thank you again for meeting with me today! As you know from our first interview, my goal as a researcher is to understand how teachers use Creative Curriculum in their classroom on a day-to-day, unit-to-unit basis. I'm particularly interested in how teachers think about supporting children's language skills using the Creative Curriculum. As a reminder, this interview is not intended for me to analyze if you stick to the CC with "fidelity." Rather, I'm interested in how expert teachers actually use the different curricular material at their disposal when planning and interacting with students.

Sorting Activity (see below):
Using Mural, ask the teacher to sort the prompts into chunks they believe fit together.
- Can you tell me about how you sorted these?
- Which of these prompts do you use most often/sometimes/not often at all?
- Where would you use them, potentially, in the Buildings unit?

1. If a new teacher was observing you during your choice time during Investigation/Week 2 of the Building study, what might they expect to see?

- How might you help them understand the different behaviors you engage in?
- Where do you typically go first during centers ("needy" centers, student needs, pre-planned, etc.)?
- Probe for:
  - Connection between unit focus and centers (are centers adapted to match curriculum?)
  - What types of language might you use when you…. (planned vs. spur of the moment)
- Shown on screen:

2. Some people say that the guidance in certain aspects of the curriculum around what teachers should say are too vague, while others feel that it's too specific to actually follow during a lesson. And I've heard lots of views in between. What do you think?
   - Do you think your perspective changes based on the activity context (i.e., choice time vs. read-aloud vs. large group)?
   - For example, how would you compare the guidance presented for choice time to read aloud time? I see Choice Time says "talk to students about….". Could you describe what this means to you? What would it look like in the blocks center during this time? What about the dramatic play center?
   - Probe more about read aloud time & small groups (not given enough attention during V1)
   - Shown on screen:

3. Curriculum is clearly designed for mass use, so that teachers all over the country can use it effectively. Do you think the curriculum does a good job of considering the language needs of your students? How so?
   - Probe for language learning:
     - What types of language supports do you think your students need most?
     - Clearly not all children in your classroom are at the same level of language ability. Do you have to make specific choices to adapt the curriculum for certain students? Can you explain this…
     - Have you ever experienced a conflict between what you think is best for your students' language development and what the curriculum is suggesting? Can you tell me about it?

Interview 2- Teacher Talk Sort

Tall buildings are a challenge to build because it is hard to make them sturdy so they won't fall down	I can make the Pingpong ball move fast when I blow hard into the straw.	You used four rectangles to make a big square.	I bet Sonya would like to come to the party. Look, she's trying on a dress right now.
Put the book in your cubby.	Can you tell me about your collage?	That's a pretty picture, Sara!	It looks like you are making some delicious food. What are you cooking?
What do you think will happen next in the story?	Let's put the curved block *drag finger across top of block* on the very top of your tower!	What will happen if you keep adding blocks to you tower?	The little boy in the book has a baby brother, just like you do, Tasheen!
What does the sand feel like?	I wonder what happens when you add water to the sand.	Is there something you could do to make the rock float?	How are these two blocks the same?
What color is this block?			

Appendix E

Codebooks for Content Analyses and Teacher Interviews

Table E1

Final Codebook for Primary Content Analysis

Top-Level Category: Curriculum Section				
Parent Code	**Child Code(s)**	**Definition**	**Example**	**Excerpts (n)**
Book Reading	Book Discussion Card	Excerpt is located within Read Aloud section of the Teaching Guide (TG) or in a Book Discussion Card (BDC)		219
	Read Aloud (TG)			141
Choice Time		Excerpt is located within Choice Time section of the Teaching Guide		80
Large Group		Excerpt is located within Large Group section of the Teaching Guide		324
Mighty Minutes Card		Excerpt is located in Mighty Minutes Card (MMC)		114
Other Section	Call-Out Box	Excerpt is located in a call-out box in the Teaching Guide or ITC.		84
	Question of the Day	Excerpt refers to the "Question of the Day" from the At a Glance spread		79
Small Group Instruction	Intentional Teaching Card (ITC)	Excerpt is located within Small Group section of the Teaching Guide (TG) or in an Intentional Teaching Card (ITC)		610
	Small Group (TG)			42

Top-Level Category: Level of Explicitness				
Parent Code	**Child Code(s)**	**Definition**	**Example**	**Excerpts (n)**
Moderately Explicit		Guidance provides specificity about what to do but does not provide scripts or examples. At times, but rarely, provides a justification for teacher practice	• Talk about the different kinds of instruments that are made from wood. • Explaining what you or children are doing while you or they are doing it helps English-language learners engage in the activity and increase their vocabulary and comprehension.	457
Not Explicit		Guidance provides a general suggestion but does not provide specific details about the topic or approach for accomplishing the suggestion.	• Talk to children about their artwork • Expand vocabulary: insist, stinger	59
Very Explicit		Guidance gives scripts or examples of teacher talk	• "Which soap will make the best bubbles?" • "Calvin says the flowers on our playground are living. Do they need food and water to grow?"	1030
Top-Level Category: Attention to Linguistic Diversity				
Parent Code	**Child Code(s)**	**Definition**	**Example**	**Excerpts (n)**
Attention Given		Reference to linguistic diversity is made. May explicitly name English Language Learners or other languages besides English.	• To include children who are not yet speaking much English in a discussion, hold up pictures of things one might see in a tree.	97
No Attention Given		No reference is made to supporting students with diverse linguistic needs	• Anything not coded as attention given	1703

Top-Level Category: Talk Type				
Parent Code	**Child Code(s)**	**Definition**	**Example(s)**	**Excerpts (n)**
Ambiguous		A specific talk type cannot be determined from the prompt. Prompts often include words like "talk about," "discuss," "invite children to," "help children to," or "encourage children to". Multiple possibilities about how to engage students are, therefore, possible and up to teacher's discretion.	● Talk to them as they experiment with the wood and sandpaper. ● Encourage children to explain what characters are thinking and feeling	106
Elicitation	Closed-ended question	Asks questions with limited possible or acceptable responses. Questions may use forced choice, require yes/no responses, or have only one correct answer.	● Display two items from a tree. Ask, "what smells best to you?" ● "Are there more or fewer than 10 sticks in the guessing jar?"	383
	Open-ended prompt	Asks questions or provides prompts that have multiple possible answers and, therefore, elicit child thinking.	● 'What might happen if the animals didn't help carry the seeds away?' ● "In what way are some of these items the same?"	492
Modeling Talk	Narrating self	References instances where the teacher intentionally describes what he or she is thinking, seeing, hearing, touching or doing. This may be referred to by teachers as "self'-'talk."	● Model the questioning process for the children. For example, show them a few different kinds of pinecones and wonder aloud whether they all came from the same tree. ● "Watch how I put the red strip over the blue one. Now I'll lift the next blue one to go under it."	76
	Narrating child's actions	Teacher describes aloud what a child is doing. This may be referred to as "parallel talk"	● Comment on what you see: "I see you are setting up a sandwich shop like the one in our neighborhood" ● "You found a leaf with five points. Can you find another leaf with five points?"	122

Modeling Talk	Responsive talk	Teacher uses an extension, expansion or repetition in response to a child comment. Expansions extend child's utterances by adding new contextual information while extensions extend child's utterances by adding correct grammatical information (e.g., words, syntax). Often occurs in scripts of hypothetical teacher talk; due to the hypothetical nature of the talk, differentiating between the different types of responsive talk is difficult.	● "Ana, what does this outline look to you? Yes, it's a pair of scissors." ● "Which pile has the most books? Yes, this pile is tall so it might have more. Let's count together and find out."	73
Comment	Procedural comment	Teacher comments that direct procedures or routines in the classroom. This includes giving directions, explaining/prepping for an activity or setting expectations for behavior.	● Remind the children to hold their drums in a resting position until everyone is ready. ● "Today, I need your help to plant a tree of our own!"	215
	Teaching comment	Teacher comments about academic content or topics. Teacher talk does not necessitate or expect a child response.	● "Remember that trees are living things. Once the tree gets cut down, the wood becomes nonliving." ● "This shape has five corners. It sounds like a pyramid."	357

Top-Level Category: Purpose of Talk				
Parent Code	**Child Code(s)**	**Definition**	**Example(s)**	**Excerpts (n)**
Build knowledge	Conceptual knowledge	Aims to build new knowledge of concepts, often around the study topic.	● "Tress grow from seeds. They are very small. They grow taller every year, just as we do" ● Talk about the kinds of animals that make homes in trees.	116
	Story knowledge	Aims to support students' knowledge and understanding of story structure or content.	● As you read, pause occasionally to point out the details in the illustrations. ● "I think this boy and his father are different from other townspeople. What do you think?"	154
	Vocabulary knowledge	Aims to support knowledge of new vocabulary words. Supports vary including multimodal supports (props, visuals), questioning, and defining.	● Talk about the parts of the tree as you plant it (e.g., the trunk, roots and crown). ● "Does this look like a tree that stays green all year? Is it an evergreen tree?"	124
	Academic skills knowledge	Aims to build knowledge of basic academic skills, such as rhyming, letter knowledge, or counting.	● "Tree starts with the /tr/ sounds. We use the letters t and r to write these sounds." ● "Martin is pointing to the stripes on our flag- red, white, red, white, red, white. That's a pattern!"	151
Check understanding	Apply background knowledge	Seeks to assess children's ability to apply their background knowledge	● "Is this goldfish living? Is this table alive?'	30
	Test basic skills	Seeks to understand children's skill level on academic objectives, primarily in literacy and mathematics.	● Ask the children to figure out how many are left each time	260
Guide/ /encourage thinking pattern	Generative thinking	Teacher encourages children to (or models how to) generate/construct new ideas about a topic by explaining, making connections, or comparing/contrasting. This type of thinking requires children to have a justification of their thinking (at least mentally) which may or may not be expressed aloud. Child nodes: encourage explanations, encourage talk about past, encourage	● Ask: "how does the wood change when you rub the sandpaper back and forth on it?" ● After you read, compare children's photos or drawings of tree to the picture of the trees in the book. Talk about similarities and differences (e.g., "Marcus's tree has flowers like this magnolia tree").	156

Top-Level Category: Purpose of Talk				
Parent Code	**Child Code(s)**	**Definition**	**Example(s)**	**Excerpts (n)**
		comparing/contrasting, making personal connections		
	Imaginative thinking	Teachers encourages children to think in ways that are less bound by the immediate context (i.e., in decontextualized ways). Thoughts often encourage creativity or hypothetical thinking. Child nodes: encourage abstract/hypothetical thinking, encourage future thinking, encourage pretend play, spark creativity	• Ask children to imagine seeing something in a tree. Prompt their ideas with the following refrain: "[Gracie, Gracie], what do you see? I see a [monkey] in my tree." • "What do you think the grouchy ladybug would have done if the whale hadn't given it a big slap?"	81
	Inferential thinking	Teacher encourages children to apply knowledge to a new situation by making inferences, predicting, or considering future events Child nodes: encourage inferencing, encourage prediction, encourage future thinking	• Show a picture of a damaged tree. Ask "What do you think happened to this tree?" • After you read, check children's predictions and discuss their ideas.	134
	Literal thinking	Encourages "lower-level" concrete thinking that requires children to recall, label or make choices (often bound ones). May also include teachers modeling this type of thinking as well. Child nodes: encourage classifying/labeling, encourage recall, making concrete choices	• Show picture of a tree. Ask "Have you ever seen a tree like this?" • Offer two choices of food. Ask: "which food tastes best?"	215

Guide/encourage thinking patterns	Sensory thinking	Encourages engagement with physical objects in their environment by encouraging children to describe, observe, or explore. May also include teachers modeling this type of thinking. Child nodes: encourage description, encourage material use, encourage observation, encourage hands-on exploration	● Invite children explore the collection of wooden objects in the classroom. ● Describe the item and the clue it provides. For example, you might say: "This leaf has some holes in it. That is a clue that something might be living in our tree- something that eats leaves."	273
	Socio-emotional thinking	Support children's socio'-emotional development by encouraging students to think about thoughts/feelings of themselves or others. May often include modeling this type of thinking by the teacher.	● "What do you think. It was like for Charlie to walk through the woods? How do you think he felt?" ● Prompt the children to talk about a time they felt the same way the character feels.	38
Scaffold learning	Activate background knowledge	Purposefully highlights children's existing knowledge on a topic	● If they need help, ask: "What kind of clothes do you wear when you come to school? Play at home? Go someplace special?" ● Ask: "what are some other living things?"	41
	Encourage questioning	Models or invites questioning as a way to build knowledge of an unfamiliar concept	● Ask: "what would you like to ask our visitor tomorrow?" ● Encourage children to ask questions and listen to the answer.	25
	Pose challenge	Poses a challenge or suggests a next step to help guide children's learning of a particular concept	● "How can we add to this pattern?" ● "You made all the straight uppercase letters. Let's think about what lowercase letters you can make."	14
Structure classroom activity	Direct behavior	Talk is aimed to manage or direct children's behaviors	● Invite children to tally the wooden items ● "I'm going to read a poem. Close your eyes while I read. Think about the words I'm reading. Try to imagine what I'm describing"	92
	Prepare children for activity	Talk is designed to prepare children about what is coming in an activity or how to engage in the activity at hand.	● Remind children about the site visit. ● "This is how we make a stitch. Once we pull the yarn through the hole, push the toothpick underneath again and sew. The next paper the way I sewed mine."	125

Table E2

Final Codebook for Secondary Content Call-Out Box Analysis

Top-Level Category: Curriculum Section				
Parent Code	**Child Code(s)**	**Operational Definition**	**Example**	**Excerpts (n)**
Choice Time		Excerpt is located within Choice Time section of the Teaching Guide		8
Intentional Teaching Card		Excerpt is located in an Intentional Teaching Card		113
Large Group		Excerpt is located within Large Group section of the Teaching Guide		9
Read Aloud		Excerpt is located within the Read Aloud section of the Teaching Guide		4

Top-Level Category: Specific Population				
Parent Code	**Child Code(s)**	**Operational Definition**	**Example**	**Excerpts (n)**
Multilingual Learners (MLL)		Excerpt references students whose first language is not English. This may be noted by the category heading in the curriculum material (e.g. English-language Learners). This may also be indicated through terms within the excerpt such as "first language" "home language" or "English learners."	• Explaining what you or children are doing while you or they are doing it helps English-language learners engage in the activity and increase their vocabulary and comprehension.	127
Special Education (SPED)		Excerpt references students who have specific learning needs in producing or comprehending language. This often was in the "Including All Children" section and often noted through terms such as "communicative device," or "children whose listening comprehension need extra support."	• "Record each part of the recipe into the student's communicative device"	6

Top-Level Category: Type of Additional Support				
Parent Code	**Child Code(s)**	**Operational Definition**	**Example**	**Excerpts (n)**
Environmental Supports	Ample Opportunities	Guidance discusses providing children with varied and plentiful opportunities to participate	● If children are beginning to speak in sentences, give them plenty of opportunities to talk	5
	Intentional Grouping	Guidance discusses grouping students in heterogenous groups to support their language development (i.e., English-speaking with ELL)	● Encourage English-language learners to partner with more proficient English speakers to retell the story together.	8
	Use of L1 Materials	Guidance addresses using materials in children's L1 (i.e., texts) as a precursor to or additional support during instruction	● Read the book first in children's first languages if possible	2
Listening Comprehension Supports	Simplify language	Guidance suggests that teachers use simplified language, such as easier vocabulary, shorter sentences, and less complex syntax	● When needed, use short sentences with simple vocabulary	10
	Speak slowly and clearly	The guidance explicitly uses the term "speak slowly and clearly"	● Speak slowly and clearly, using gestures to clarify concepts such as smaller than and shorter than	8
Model Mature Language Use		Guidance reminds teachers to act as models of high-quality language, focusing on using correct pronunciation and correct grammar.	● Be sure to model the correct use of English, but do not correct their grammar	8
Scaffold Verbal Participation	Ask to Repeat	Guidance tells teachers to have children participate by repeating back what the teacher has said	● Ask children to repeat a simple phrase you have said and modeled. For example, when weaving molding dough, say, "I am weaving the molding dough. Tell your friend, 'I am weaving the molding dough'"	6
	Closed-Ended Question	Guidance tells teachers to ask closed-ended questions to increase children's participation. Grandchild codes: choral response, forced choice, nonverbal response	● Include answer options in the phrasing of a question. For example, ask, "Do you thank your shoe is longer or shorter than Della's?"	8
	Encourage L1 Use	Guidance reminds teachers to encourage children to use their first language during conversation	● When English-language learners ask you to name an object in English, ask them to tell you its name in their first languages	27

Top-Level Category: Type of Additional Support				
Parent Code	**Child Code(s)**	**Operational Definition**	**Example**	**Excerpts (n)**
Use Modeling Talk	Wait Time	Guidance reminds teachers to give ample wait time to allow children to respond to questions	● Give all children time to express themselves	10
	Narrate (child or teachers' actions)	Teacher either describes aloud what a child is doing or what they are doing. These may be referred to as "parallel talk" or "self-talk" Grandchild codes: narrate child's actions, narrate self	● Explain your actions in real time and/or explain what other children are doing to increase vocabulary and comprehension.	23
	Responsive talk	Guidance urges teachers to expand or extend children's utterances. Expansions extend child's utterances by adding new contextual information while extensions extend child's utterances by adding correct grammatical information (e.g., words, syntax). Grandchild codes: expansion, extension	● Confirm their comprehension and model language for talking about the items. For example, say. "Yes, we need a small chair to act out the story."	6
Vocabulary Supports	Other Supports	Collapsed codes for defining words, and embedding vocabulary throughout the day.	● "Explain slang, idioms and figures of speech that appear in children's books" ● "Use the new word as often as possible in this way"	3
	L1 Supports	Guidance encourages teachers to use children's L1 to support their learning of English. Grandchild Codes: discuss cognates, use children's L1	● "Invite English language learners to share the names of ingredients in their first language. Point out when words sound similar in the first language and in English.	13
	Multimodal Supports	Guidance encourages teachers to support vocabulary learning by using multiple verbal and nonverbal supports. Grandchild codes: emphasize word, gestures, prop, visual	● "Show pictures or point to objects that illustrate or explain unfamiliar words"	45

Table E3

Final Codebook for Teacher Interviews

Top-Level Category: Activity Setting			
Parent Code	**Operational Definition**	**Example**	**Excerpts (n)**
Across Contexts	Teachers references multiple times of the day simultaneously (e.g. "in large group and small group time"). May also include phrases such as , "all day" or "all of the time."		7
Choice Time	Teacher references free choice time (i.e., centers) either explicitly or implicitly when discussing a particular artifact.		29
Large Group Instruction	Teacher references large group instruction (i.e., circle time, morning meeting, large group discussion/shared writing time) either explicitly or implicitly when discussing a particular artifact.		9
Non-Instructional Time	Teacher references non-instructional times of the day, such as lunch, recess, specials or transitions, either explicitly or implicitly when discussing a particular artifact.		7
Read Aloud	Teacher references shared reading, either explicitly or implicitly when discussing a particular artifact.		15
Small Group Instruction	Teacher references small group instruction, either explicitly or implicitly when discussing a particular artifact.		25

Top-Level Category: Curriculum Material				
Parent Code	**Child Code(s)**	**Operational Definition**	**Example**	**Excerpts (n)**
Book Discussion Card		Discussion revolves around the Book Discussion cards (BDC) (during artifact elicitation or spontaneously by teacher)		18
Choice Time Prompts		Discussion revolves around the Choice Time prompts (during artifact elicitation or spontaneously by teacher)		7
Intentional Teaching Card	Instructional Guidance	Discussion revolves around the prompts on the Intentional Teaching cards		36
	Supplemental Features	Discussion revolves around the supplemental features of the ITCs including the call-out boxes and the Teaching Sequence color band guidance Grandchild codes: color bands (11), call-out boxes (5)		
Large Group Prompts		Discussion revolves around the Large Group guidance (during artifact elicitation or spontaneously by teacher)		24
Question of the Day		Discussion revolves around the Question of the Day		6

Top-Level Category: Interaction with Guidance				
Parent Code	**Child Code(s)**	**Operational Definition**	**Example**	**Excerpts (n)**
Response to Guidance	Less Positive Opinion	Teachers' opinions are more negative than positive (i.e., not helpful, vague, confusing, redundant) or waffle	● "Yes [it helps], but only to a certain point… it can be very limit[ing]." ● "I don't think they do a terrible job. I think it's all there. But I do think, when I was brand new to it I remember feeling overwhelmed.'	16
	Overarching Opinion: View as a Guide	Teachers describe using the curriculum as a frame for their practice, but do not view it as a script that must be adhered to	● "Looking more specifically at the intentional teaching cards and the questions, I look mostly at the color bands but I don't necessarily follow the script"	24
	Positive Opinion	Teacher exhibit positive responses to the curriculum (e.g., helpful, easy to use, good reminder)	● "In general, I think it's really good." ● "[Call-out boxes] are really helpful"	19
Engagement with Guidance	Modify	Teachers describe using the guidance in the curriculum, but modifying it to accommodate their needs Grandchild codes: for student input (11), materials used (6), selectively follow (17), use own language (21)	● "When they write the script, I consider those to be examples of how to push a child further within that intentional teaching card. I would not use the exact script just because you don't know what children you have." ● "I think the best way to understand [the curriculum] was to pinpoint what I truly needed from it, and so instead of trying to implement everything, what were the key things that I liked? So a lot of the times I used a lot of the small group activities because those were very helpful."	51
	Reference	Teachers describe solely referring to the curriculum guidance prior to instruction (i.e., "glance at," for planning)	● "And I think that when you look at these, it will be really, really hard to be like, "Okay, this is exactly what I say when I get to the part about the boy's daddy always making things disappear." But when you read these before you have your read aloud, or that weekend before, it does, in the back of your mind, help prep."	13

	Scale Back	Teachers describe paring down components of the guidance to support their needs. Grandchild codes: adjust pace (9), adjust scope (7)	● 'I don't do all of [the suggested vocabulary words]. I'm just going to be honest, I may not do all of them in a single book" ● "I would pick and choose. Because you see all those bullet points? For small groups, we only have 15 minutes. I possibly can't do all of that in 15 minutes so I would have to figure out somehow to make it a shorter version to fit in with the 15 minutes"	15
	Supplement	Teacher describes adding to the suggested guidance in order to fit their needs Grandchild Codes: add visual/activity (23), expand beyond setting (5), introduce background knowledge (3)	● "If you use more visuals to support that language, it works, so how tall were you when you were a baby, you would have to have a visual, and you would have to use a lot, a lot of modeling" ● "I know they have the two vocabulary words listed but those aren't the only ones that we will use that day… So throughout the day, either myself or the co-teacher is using those words throughout the day"	32
Frequency of Use	Very Often At Times Rarely	Teacher makes explicit reference to how often they use specific curriculum materials	● "I use intentional teaching cards every day" ● "I do [use the guidance] for the read aloud. Especially when they recommend reading the book ... Well, I don't know if it's a recommendation or a mandatory [=mandate]. But reading the book three times, we always do those"	9

Top Level Category: Influences				
Parent Code	**Child Code(s)**	**Operational Definition**	**Example**	**Excerpts (n)**
Child-Related	Background Knowledge	Refers to children's existing background knowledge of a topic	● "I'm going to first find out what my students know before I teach. Maybe they already know what a trunk is, so I want to concentrate more on crown and nutrients than I do on roots and trunk. I want to know what they know."	11
	Developmental Level	Refers to aspects related to children's developmental level Grandchild codes: age (8), attention span (2)	● 'With this particular one, you have to keep in mind, we're talking about three and four-year-olds. And you can't stand and lecture to three and a four-year-old. It has to be movement."	9
	Dynamic Needs	Teacher describes child factors that influence practice but vary on a given day or based on a lesson. Grandchild codes: emotional needs (9), student interest (4)	● "Or sometimes you may just have a kid that's just not having the best day. And you'll just have to finish your rotations. And then you go back to that specific kid." ● "I think it depends on your class interests that year and in that moment"	13
	Language Background	References to children's language background/proficiency are made. Grandchild codes: dual language status (16), language proficiency (26)	● "So if I have a friend who is really just deeply struggling with English, I'll put them in different groups. And then I always will try to put a friend who is just advanced with language and make them [unintelligible]."	36
	Other Characteristics	Teacher describes how their practice is influenced by other child factors not described by other codes Grandchild codes: learning style (2), personality (4), skill level: not language (2)	● "Are they visual learners? Are they auditory learners? Can they just hear you talk? What is their attention span? Because then that's really going to determine how long you need to focus on each point"	9

Top Level Category: Influences

Parent Code	Child Code(s)		Operational Definition	Example	Excerpts (n)
Curriculum-Related			Refers to how the philosophy or goals of the curriculum influence practice (i.e., open-ended, exploratory)	• "The point of the Creative Curriculum, when it comes to language, is that you are guiding and extending language, and providing new vocabulary… I do think in itself it is very open-ended. So I have to teach it as open-ended"	6
Instruction-Related	Activity Setting		Teacher references how instructional features, including the study focus (e.g. topic, content area), study scope (how instruction unfolds over time throughout a unit or through spiraling) or activity setting, influence their instruction	• "I'm not going to say I don't [use closed-ended questions], because I do. Mostly with... I would say maybe in math, because that's most likely when there is a wrong and a right answer." • "I think the reading cards are really, really good, because it helps you learn how to be able to focus on different parts of the story, and how to build upon it each time you read"	9
	Content Area				
	Instructional Scope				
Teacher-Related	Teacher Beliefs	ECE as Academic	The belief that early childhood education is an academic endeavor. There is a focus on differentiated learning, objectives, and collecting data on children's academic progress. Grandchild codes: objective-driven, data-driven instruction	• "Now, as the year progresses, you get way more data that you could be more specific, like, well, I know green is Sarah, Johnny and Billy, but I always go off of what I see and what I've been watching throughout. That's the best way, but I have to use my data too, to perform."	26
		Learning Should Be Fun, Engaging, Child-Led	The belief that learning should be fun, engaging, and primarily child-led. Teachers reject lecturing with and focus on hands-on, exploratory, playful learning approaches. Grandchild codes: child-led, playful learning, hands-on learning	• "I would also use besides demonstration, like active things. They would get the opportunity to try it, so some active participation too. But no, I don't think I ever just stand in front of them and tell them something. There's always something I have to put to go with it."	30
		Power of Peer Learning	Belief that peers are extremely important and powerful in supporting one another's learning. Therefore, teachers intentionally	• "And the friends start just picking up on all of that language. I'm one of those people I believe in that, children learn more from each other than what they can learn from me."	14

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Top Level Category: Influences				
Parent Code	**Child Code(s)**	**Operational Definition**	**Example**	**Excerpts (n)**
		encourage children to engage with one another.		
	Relationship Building as Central	Opinions reflect the belief that building relationships with children is paramount for children to learn successfully (i.e., it serves as a foundation).	● "I'm making sure that I've hit those points and had a conversation with every child throughout the day that has nothing to do with academic or cognitive demands. So that's how I build a relationship. That's important to me."	11
	Experience	Teachers refer to how repeated experiences (with teaching or curriculum exposure) influences their practice Grandchild codes: exp: curriculum, exp: teaching	● "And one thing I have learned, and I learned quickly my first or second year back in teaching, to just tell the children, "I don't know." And then I start getting them to think, "But how could we find out?"	10
Teacher-Related	Personal Practice	Teacher makes reference to how their personal practice, including their teaching goals (short- or long-term), teaching style, teaching philosophy or personality, influence their classroom choices Grandchild codes: practice goal, teacher personality, teaching style/philosophy	● "because that's really the main purpose of teaching, to me. Period, it is to get them to understand the lesson, but apply it in your life, because your life will not be lived inside of a school building" ● 'I have worked to intentionally pull back a little bit to ask more open-ended questions and put a turn and talk into every single day that we have…Next year, I'll work harder on have a goal of doing it during small group and doing a turn and talk about what you learned."	25
	Teacher Learning	Teacher references different teacher learning experiences in connection with their instructional practices or enactment with the curriculum Grandchild codes: coursework, coaching, mentorship, professional development session	● "[my coach] would come in and see how the kids interact. And a big part of that was language and how they were talking to me and how I was talking to them, the vocabulary, the dialogue. One thing I had to keep getting reminded was that when I used big words, I had to explain it, because I was just so used to just talking the way I talk" ● "when I took my ELL course, certification course this year, it really made me look at [my vocabulary use]"	19

Top Level Category: Influences				
Parent Code	**Child Code(s)**	**Operational Definition**	**Example**	**Excerpts (n)**
Time of Year		References to different times of the year are made, with the insinuation given that practices are influenced by what stage of the year it is (e.g., beginning of year, later in the year).	● "So you start adding more vocabulary as the year progresses"	9

Top Level Category: Language Use				
Parent Code	**Child Code(s)**	**Operational Definition**	**Example**	**Excerpts (n)**
Frequency of Use	At Times	Refers to the consistency/frequency of a particular language move within teacher's practice (often=very frequently, at times= with some frequency/dependent on certain factors, rarely= with little to no frequency)	● "The directive ones are the ones I use the least; it's more so for classroom management, throughout the day that's mostly when I use the directives"	5
	Often		● "I will say I give directions quite a bit."	9
	Rarely		● "I really find myself [asking for] a lot of comparisons. It's very... I feel like very rare."	3
Purpose of Talk	Build knowledge	Language move is intended to build new knowledge in a variety of areas, such as conceptual topics, stories or vocabulary.	● I'm going to use colored water and straw and have them suck up with their finger to show how it moves up a straw. Then, we're going to put that down and say, "What did we learn from that?" That is how a tree might drink or get its nutrients. I might put it in child-friendly statements such as when you take your objectives and put them in I can statements, sometimes you have to put it in child-friendly language and then add that vocabulary word to it or add more to it.	23
	Check/probe for understanding	Language move is intended to check or probe students' understanding of a topic (i.e., letter awareness, number awareness, knowledge of content) or their existing background knowledge.	● So now how [on reading three] can I check for comprehension? I want you to tell me the story and you'll give me the details ● That's a generic, yes or no question. You're looking for an answer. It's not really a…It's like, what color is the block?	14

Top Level Category: Language Use					
Parent Code	**Child Code(s)**		**Operational Definition**	**Examples**	**Excerpts (n)**
Purpose of Talk	Guide thinking	"Higher-level thinking"	Teacher makes reference to "higher-level" thinking or "critical thinking skills" in a general sense	- And I'm like, "does anyone know what they think a trunk may be of a tree?" That gives them time to think. That's that critical thinking. - I think it's not a bad thing to use the words [complex vocabulary], because my English children, they need to start developing a higher level of thinking as well	15
		Generative thinking	Teacher encourage children to (or models how to) generate/construct new thoughts about a topic, including explaining, making connections, giving opinions and making comparisons This type of thinking requires a justification (at least mentally) and may or may not be expressed aloud. Grandchild codes: gen: compare/contrast (2), gen: make connection (14), gen: explaining (5)	- Those are your higher level [questions], they're trying to make children make those connections. But instead of just making connections, they're [also] trying to figure it out on their own. - It's like, not only are you saying the statement, you're referencing it to something that they're either familiar with or relatable with.	21
		Imaginative Thinking	Teachers encourages children to think in ways that are less bound by the immediate context. There are demands for creativity or abstraction, including hypothetical thinking.	Especially during choice time, if they're building something, to really hear their imagination, what they're thinking while they're building.	5
		Inferential Thinking	Teacher encourages children to apply knowledge to a new situation by making inferences, predicting, or thinking about future happenings	I would say, "Well, how are we going to make a prediction?" And I'm like, "Can anyone tell me what a prediction is?" They'll be like, "It's a guess." I'm like, "Yes. So can anyone give me a prediction of what the trunk may be like? What is it and where is it?"	7
		Sensory Thinking	Encourages children to look, describe or physically engage with objects in their environment. May also include teachers modeling this type of thinking.	So I'm not saying, oh, that looks like a pretty picture. I'm asking them to describe something, or you extend their language or descriptions	17

Top Level Category: Language Use				
Parent Code	**Child Code(s)**		**Operational Definition**	**Examples**	**Excerpts (n)**

Parent Code	Child Code(s)		Operational Definition	Examples	Excerpts (n)
Purpose of Talk			Grandchild codes: sen: describe (9), sen: explore (7), sen: observe (4)	● And then after that you would ask them, "What did you see? What did it look to you? How do you think it became that way?"	
		Socio-emotional Thinking	Teacher supports children's socioemotional development by encouraging thinking about feelings or perspectives.	● And that last one (statement 17) I think is in building relationships category. Again, it's like a social emotional prompt to me, to help build socio-emotional skills.	5
	Scaffold learning		Teacher helps scaffold children's learning of the topic at hand by intentionally guiding their learning experiences. Some common phrases include "breaking it down" or "guide learning." Scaffolding includes attempts to active children's background knowledge, manage the progression of instruction (e.g., successive questioning), and suggesting a successive step (e.g., challenge, encourage further exploration/discussion)	● I'm going to first find out what my students know before I teach. Maybe they already know what a trunk is, so I want to concentrate more on crown and nutrients than I do on roots and trunk. I want to know what they know. We're going to do some shared writing about that. ● "Oh, Taylor, I see you drew. Can you tell me about your picture?" "Well I drew my mom." "Oh, that's your mom "Oh, well you know what? I see your mom. Can your mom hear you when you're talking to her?" And like, "Yeah." "But how does she hear you?" "With ears." "I don't see your mom's ears." So then they will go back and draw ears.	30
	Structure classroom activities		Teacher discusses using language to support the organization of the classroom (i.e., procedural talk). Some purposes might include managing behavior or providing objectives to students.	● We're going to go over our small group rules, and then in child friendly terms, I'm going to say, "I'm going to create patterns today. Let me stand up and see if you can guess my patterns."	9
	Support relationship building		Language move is intended to help build student-teacher relationships Grandchild codes: acknowledge student (5), "build relationship" (9)	● You call on a few kids and if they get the answer right, you're like, "Oh yes, kiss your brain. Yes. This is what a trunk is."	18

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Type of Talk					
	Communication-Facilitation Talk		Closed-Ended Question	Teacher describe asking questions that have closed-ended structures (forced choice, yes no) or that have one correct response.	• That's a generic, yes or no question. You're looking for an answer. It's not really a… It's like, what color is the block?	16
			Ask question	Teacher refers to asking questions, in a general sense. They does not specify whether they are open'-'ended or close'-'ended. Teacher also does not give an example (which would allow coder to determine the type of question described).	• I have a lot of the heavy lifting to do in creative curriculum, which is to extend the questions, to ask the questions, to know what they're saying so that I can give them something back. It requires a lot of work on behalf of the teacher.	17
			Engage in conversation	Makes general and vague references to talking with children and having conversations. Teacher does not describe any specific moves, such as open-ended questions.	• I always think also about engaging in conversation because you can always tell which children are not really talking much when school starts.	43
			Open-ended question	Teacher describes asking questions that are not designed to have one particular answer. Teacher may explicitly describe questions as open'-'ended or refer to "higher'-'level" or "cognitively challenging" questions. Teachers may also give examples of sample questions that the coder might determine are open-ended.	• [That category] are the ones I try to use the most, especially the open-ended ones. • I have worked to intentionally pull back a little bit to ask more open-ended questions and put a turn and talk into every single day that we have. It's usually those turn and talks can be through whole group or usually in read-alouds where I pose an open-ended question and they can talk to each other.	42
	Modeling Talk		Responsivity Move	Teacher describes expanding, extending, or repeating back a child's talk. Expansions extend child's utterances by adding new contextual information (Cabell et al., 2015) while extensions extend child's utterances by adding	• A lot of times my ELLs, if they do that, I'm super happy for them, but I'll repeat that, what they said, to let them know I heard them	5

Type of Talk					
				correct grammatical information (words, syntax).	
		Narration-Child	Teacher describes narrating what a child is doing while they are doing it. May also be referred to as "parallel talk" or "sportscasting"	• I think we have to put goals based on, and I think that was in my goals. To increase my parallel and self-talk. So I consider it to be like I'm a sportscaster and I narrate everything they do. And I narrate everything I do to increase language	7
		Narration-Self	References to talk where the teacher intentionally describes what he or she is thinking, seeing, hearing, touching or doing. Modeling, in this sense, refers to teachers' talk rather than demonstrations. This may be referred to by teachers as "self'-'talk." Demonstrations intended to model how to do something would be coded as "adding a visual." However, if talk is referenced alongside a demonstration then this code would be appropriate.	• I would use those comments throughout the day, especially during choice time and our small groups, because it helps them develop their descriptive language. I can't always ask them to describe if I don't model how to describe it.	25
		Simplify language	Teacher describes simplifying their talk to match their perception of a child's language proficiency (e.g., less rich vocabulary, shorter sentences)	• It might be a question: "would you like to make something for yourself to wear?" It almost would be like a two or three-parter. "Would you like to make something for yourself to wear or for someone else?" And then they say for themselves. "Oh, would you like to make a shirt or pants?"	5
	Nonverbal Support		Describes using actions, gestures, and visuals (props, pictures) alongside talk

Grandchild: nonverbal: action (9), nonverbal: visual (17) | • The visual support is huge. It's so huge that I just normally carried on throughout the year because some, they still feel like they need it when they don't. But a lot of visuals. | 19 |

Type of Talk	Procedural Comment	Talk that supports the functional routines of the classroom is discussed. May include giving directions, explaining/prepping for classroom activities or managing behavior.	● I suppose giving directions, that's just giving directions, following routines… they don't help me in assessment. They don't give me anything.	17
	Teaching Comment	Describes using statements/comments in their practice or provides an example while scripting.	● Instead of just saying, "Sonya wants to come to the party," I start saying, "She's trying on a dress right now." You start helping them connect how pictures are context clues to the words that I read, so you want to do that too.	32
	Vocabulary Talk	Teacher describes language moves intentionally designed to teach word meanings Grandchild codes: vocab: explicit teaching (14), vocab: sophisticated talk (9), vocab: give label (3)	● I'm very big on vocabulary, so I would say, "Well, how are we going to make a prediction?" And I'm like, "Can anyone tell me what a prediction is?" They'll be like, "It's a guess." I'm like, "Yes. So can anyone give me a prediction of what the trunk may be like? What is it and where is it?" As well as the roots in the ground, and we'll play a little game like that and then I'll tell them the definition.	26