

A Teacher's Supportive Practices for Preschoolers' Writing

By

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CHAPTER 1

INTRODUCTION

Writing in Early Childhood Classrooms

Young children's participation in writing, including individual composing attempts and collaborative writing activities provides important opportunities to develop foundational literacy skills. Research has demonstrated that as children engage in emergent writing, they practice important literacy skills, such as alphabet knowledge and phonological awareness (McBride-Chang, 1998; Ouellette & Sénéchal, 2016; Puranik, Lonigan & Kim, 2011; Whitehurst & Lonigan, 2001). Other research concluded that oral language, spelling, and letter writing fluency are related to children's narrative writing ability at the end of kindergarten (Kim, AlOtaiba, Puranik, Folsom, Greulich, & Wagner, 2011). These findings support the U.S. National Early Literacy Panel's (National Early Literacy Panel [NELP], 2008) meta-analysis which identified writing or writing name as one of six preschool skills that predict later reading, writing, and spelling ability.

Although extensive research has focused on young children's writing and identified the importance of early writing experiences, there is a limited amount of writing occurring in some early childhood classrooms. In addition, few studies have focused on adults and their ways of supporting young writers. Several recent studies looked broadly across a representative sample of preschool classrooms and found that writing occurred infrequently (Gerde, Bingham, & Pendergast, 2015; Justice, Mashburn, Hamre, & Pianta, 2008; Pelatti, Piasta, Justice, & O'Connell, 2014). For example, Pelatti et al. (2014) reported that preschool-age children participated in language and literacy practices in early childhood classrooms an average of 18

minutes per day and of this total an average of only 2 minutes included writing practices. Writing events were coded regardless of whether an adult was present or participating, thus capturing both teacher-directed and child-directed activities. Similarly, Gerde et al. (2015) observed that four-year-old children chose to write infrequently in classrooms, even when the classrooms included a variety of writing materials and substantial opportunities to write independently. These studies indicated that in some classrooms preschool children have few experiences writing and limited teacher support for writing.

It is important to focus on the supportive practices that adults utilize as adult interactions are important to young children's engagement in writing. Vukelich (1991) determined that adult modeling increases preschool children's engagement in literacy-related activities. In her study, theme-appropriate reading and writing materials were incorporated into the classroom dramatic play area and appropriate adult modeling was provided for material use. During adult modeling, the amount of time preschoolers engaged in literacy-related practices increased but when adult modeling stopped, preschoolers' engagement in literacy-related practices decreased. Christie and Enz (1992) obtained similar results conducting an intervention study in two preschool classrooms. Literacy-related materials were added to the dramatic play area in both classrooms with one classroom also receiving adult modeling for incorporating literacy materials into play. Observations revealed that the group receiving adult support for material use was more effective in encouraging literacy-related play than the group only provided materials. These findings support the claim that adult interactions help to shape children's engagement in writing. Therefore, since research has demonstrated that children's engagement in emergent literacy practices facilitate the development of foundational literacy skills, yet emergent writing practices are infrequently supported in classrooms, it is important to provide a description of the types of

supportive practices that teachers can use to support young writers and then disseminate the results to both researchers and practitioners with the aim of increasing opportunities for writing in preschool.

Teachers' Supportive Practices for Emergent Writing

While research over the last three decades has informed our understanding of how young children learn to write, little is known about the practices that teachers use to support preschool students in learning to write in classrooms. Research is needed with teachers who have been identified as providing high-quality and frequent support for emergent writing in order to provide descriptions of expert writing instruction. This study describes the supportive practices provided by a teacher for students' writing in pre-kindergarten.

The purpose of this study was to provide a comprehensive picture of the ways a teacher interacts with students to support writing. This study is an important contribution to the literature as very few empirical studies describe teacher's supportive practices in classroom settings. Some studies have examined teaching practices and materials described in Head Start curricula (e.g., Gerde, Skibbe, Wright, & Douglas, 2018), teachers' approaches to writing support (e.g., King, 2012; Logue, Robie, Brown, & Waite, 2009; Mackenzie & Petriwskyj, 2017; Schrader, 1990), and the relationship of writing materials and teacher interactions to students' writing development (e.g., Bingham, Quinn, & Gerde, 2017; Clark & Kragler, 2005; Gerde et al., 2015; Guo, Justice, Kaderavek, & McGinty, 2012; Zhang, Hur, Diamond, Powell, 2015). However, most previous research has only reported on selected skills or concepts related to teacher support for writing. For example, in articles authored by Bingham, Gerde, and colleagues, the researchers only captured data on writing support for handwriting, spelling, or

composing skills (e.g., Bingham et al., 2017; Gerde, et al., 2015; Quinn, Gerde, & Bingham, 2016). Existing research has also categorized the majority of teacher supports for writing as low-level support (i.e., reminding children to write name on paper, providing letters for children to copy) (Bingham et al., 2017; Gerde et al., 2015). Furthermore, several studies conducted classroom observations on 1-2 days, lasting approximately 3 hours per day. These observations did not occur across time where a variety of supports in differing contexts could be observed and then described in-depth for teacher's writing instruction. A few studies did observe classroom literacy activities across time but these studies were conducted to identify the presence of specific kinds of teacher supports (e.g., Clark & Kragler, 2005; Mackenzie & Petriwskyj, 2017; Schrader, 1990). This is a gap in the literature that the current study was designed to fill. The current study included continuous observation of one expert teacher's writing instruction over several months which provided a comprehensive picture of this teacher's supportive practices.

Research Questions

The following research questions guided this study:

1. What kinds of supportive practices does a teacher provide for students' writing in a pre-kindergarten classroom?
2. Does the teacher's pattern of support change for different types of writing activities?
3. Does the teacher's pattern of support change for different teacher identified student groupings?

In order to answer these questions, I analyzed data from a ten-week long qualitative case study of one teacher's supportive practices for four- and five-year-old writers in a pre-

kindergarten classroom. This research documented an expert teacher's supports for student's writing and the features of support for different types of writing events and teacher identified student groupings.

Overview of the Dissertation

The dissertation is divided into seven chapters. In this chapter, I outlined the goal of this study in relation to the current research on teacher's supportive practices for preschooler's writing, described how I will contribute to the existing body of work, and provided the research questions that guide this study. In Chapter 2, I discuss the theoretical framework for the study, review methodological approaches and findings from existing literature, and explain how I designed the study to provide a needed description for how teachers can provide support for writing in preschool classrooms. Chapter 3 details my research methods, included is a description of the research design, teacher selection criteria, participants, study site, and my researcher role in the classroom. I provide details of my data collection procedures and data sources. At the end of the chapter, I describe the methods of analysis for each research question and discuss the strengths and weaknesses of the study.

The next three chapters detail study findings and are organized around my three research questions. In Chapter 4, I present findings on supportive practices across writing events, provide a comprehension description of key supportive practices that were used to support writing, and describe the pattern of support for children's writing. Chapter 5 details findings on supportive practices during different types of writing events and describes the teacher's supportive pattern for different types of writing events. In Chapter 6, I discuss teacher identified student groupings, detail the teacher's pattern of support, and identify trends suggesting variations in the support for

students from different groups. Finally, Chapter 7 contains an overview of the study's findings relevant to each research question, a discussion of this study's contribution, implications for practice, and directions for future research.

CHAPTER 2

REVIEW OF THE LITERATURE

Theoretical Framework

In this section, I present the framework that I used to describe the supportive practices that an expert teacher provided for writing in a preschool classroom. I am taking a socio-cognitive perspective of literacy learning which considers both the development of literacy skills (e.g., reading, writing, speaking) and the social context in which learning occurs. I am also taking an emergent view of literacy to inform my description and analysis of the teacher's supportive practices.

Socio-Cognitive Perspective of Literacy Learning

Social Cognitive Theory explains human functioning or behavior as a dynamic, three-way model in which personal factors, behavior, and environmental events continually influence one another (Bandura, 1986). From this view, people learn through both their own experiences and by observing the actions of others and then the consequences of those actions. Thus, learning occurs from both personal experiences and observations of others (i.e., social modeling provided by others). In classroom settings, teachers and peers are models that transmit knowledge, skills, and behaviors that influence learning.

From a socio-cognitive perspective, writing is both an individual act and a social process. Langer (1986) describes the social nature of literacy learning in which literacy is a purposeful activity situated in the context of the act. In other words, it is an act of communication for a

specific purpose shaped by individual action and by environmental events. For example, a student's writing in a preschool classroom is influenced by the actions of the student writing and by interactions and models provided by the teacher. Each interaction between teacher and student potentially supports the student in learning about writing, and targets specific aspects of writing (e.g., handwriting skill, understanding that marks carry meaning). In schools, teachers create meaningful instructional experiences that support students in learning literacy skills, such as making a grocery list in the dramatic play area or writing the morning message. The social environment in which writing occurs (e.g., shopping in dramatic play, whole group writing activity) and teacher modeling influences how individuals engage in writing activities and how individuals learn from engaging in those activities.

This study focused on the supportive role of a teacher and included an examination of the practices used by one teacher to support writing within a preschool classroom. When considering literacy instruction, a socio-cognitive view is concerned with "how people learn how to do new things" (Langer, 1986, p. 19). Thus, when considering the role of a teacher from this view, a teacher influences learning by supporting students' actions during writing and by modeling writing. Instruction is a key social process defined by the interactions between teachers and students in classroom-based settings. This interaction includes what teachers target for writing instruction and the supports that teachers provide for student's writing.

Emergent Literacy

Beginning in the 1960s, Marie Clay (1966) began using the term emergent readers. This term captures the belief that children are in the process of becoming readers. In the following years, work from an emergent literacy perspective (Harste, Woodward, & Burke, 1984; Teale &

Sulzby, 1986) recognized that children were learning about reading and writing through early experiences and observations. Children in literate communities begin to develop emergent literacy skills long before entering school, learning about the functions of print and the reading and writing processes from everyday experiences beginning at birth. Emergent literacy is comprised of the skills, knowledge, and attitudes that are believed to precede conventional forms of reading and writing (Sulzby, 1989; Teale & Sulzby, 1986). For example, from an emergent literacy perspective, when a child makes seemingly random marks on paper and then points to the marks and says, “my new shoes”, they have written a message. When the child makes marks and reads a message, the child demonstrates that print carries meaning and that print is used for communication with others. Even though the marks are unconventional, from an emergent literacy perspective, the child is writing. Emergent writing experiences provide children with an opportunity to engage in a meaning making process that includes the generation of ideas for writing, the oral stating of messages, and the marks (e.g., drawing, random letters, or invented spelling) that are used to record messages.

Literature Review

The purpose of this review was to identify research-based recommended practices and to use those recommendations as a starting point for observing and analyzing an expert teacher’s supportive practices for students’ writing. This review shaped the design of my study by providing the supportive practices that an expert teacher of writing would utilize, framing my observations of how a teacher provides support for writing, and identifying potential gaps in the literature. Teacher supports identified in the review were used as initial guides for observations and analysis.

To be included in the review, articles had to meet the following criteria: (a) be an empirical research study involving teacher support for writing, (b) be published in a peer-reviewed journal between 1990-February 2019, (c) be conducted in a preschool setting with children between the ages of 3 and 5, (d) not be limited to a particular subgroup such as English Language Learners, and (e) be written in English. First, I conducted a literature search of four key databases: EBSCO, Web of Science, ERIC, and PsycINFO for existing empirical studies of teacher support for writing in preschools. The search phrase (*early OR emergent*) writing AND (*preschool OR early childhood*) was used. Second, I examined the reference list of studies meeting my criteria for additional articles.

Surprisingly, given the importance of early writing to later literacy development (NELP, 2008), very few studies were located that considered writing supports in preschools. A total of ten empirical studies examined different aspects of writing support, including the teaching strategies and materials described in Head Start curricula (e.g., Gerde, Skibbe, Wright, & Douglas, 2018), teachers' approaches to writing support (e.g., King, 2012; Logue, Robie, Brown, & Waite, 2009; Mackenzie & Petriwskyj, 2017; Schrader, 1990), and the relationship of writing materials and teacher interactions to students' writing development (e.g., Bingham, Quinn, & Gerde, 2017; Clark & Kragler, 2005; Gerde, Bingham, & Pendergast, 2015; Guo, Justice, Kaderavek, & McGinty, 2012; Zhang, Hur, Diamond, Powell, 2015).

While these ten studies provided an indication of how the field has identified supports for writing and what the field has identified as supports for writing, a more comprehensive picture is obtainable by including reviews of existing research and peer-reviewed articles or books containing research-based suggestions for practitioners. Thus, I broadened the search and a total of 37 peer-reviewed articles or books were located, including 10 empirical studies, 3 reviews of

research and theory, and 24 articles or books with research-based suggestions for practitioners. The review of teacher supports for writing works from this larger set of professional materials.

Methodological Approaches

In this section, I describe the methodological approaches utilized by the ten empirical studies. Nine of these studies included observations of teachers and one study did not include observation of teachers (e.g., Gerde et al., 2018) instead this study analyzed Head Start curricula, including the listed suggestions of teacher supports of writing. The methods for collecting data on teacher supports for writing varied greatly across studies. In several studies, observations of classroom literacy activities were conducted to identify the presence of specific kinds of teacher supports, such as if a teacher's approach to teaching and assessing literacy and writing matched information provided by the teacher during an interview (Mackenzie & Petriwskyj, 2017), whether writing activities in the classroom were teacher-directed or spontaneously produced by students (Clark & Kragler, 2005), or if teacher response to student talk extended or redirected students' literacy-related play (Schrader, 1990). However, these studies did not provide further description of supports beyond the selected focus (e.g., teacher-directed or spontaneous, student talk extended or redirected). Two ethnographic studies provided rich descriptions of students' experiences. One focused on how a teacher supported writing in preschool using daily modified writer's workshop (King, 2012) and the other described a dance project which included teacher support for some writing activities (Logue et al., 2009). Still, in both studies, the descriptions of teacher support were limited.

Other studies collected information on teacher supports using observation tools, such as the Early Language and Literacy Observation Toolkit (ELLCO, Smith & Dickinson, 2002), and

the Writing Resources and Interactions in Teaching Environments (WRITE) for preschool classrooms (Gerde & Bingham, 2012). The writing subscale on the ELLCO included three items. Two items considered materials in the environment and were assessed without the presence of the teacher or students. One item looked at teacher supports for students' writing by scoring the presence of student writing during play, student attempts at writing, adult help for students' writing, and adult modeling writing. While the ELLCO provided some information about the presence of specific environmental supports and teacher practices, this tool had a limited focus on what is considered a writing support.

The WRITE observational tool assessed a wider range of writing supports, including the writing environment, environmental print, teacher modeling of writing, teacher scaffolding of children's writing, and independent child writing in preschool classrooms. Teacher modeling included writing letters, words, and symbols; drawing attention to print while writing; explaining the use of writing and writing tools; writing children's words, and engaging children in interactive writing. Teacher scaffolding included directing a child to a writing activity or area; reminding a child to write their name on papers; offering instruction for a writing activity; saying letters or sounds while a child writes; offering letters for child to trace; asking a child about a letter name, shape, or sound to prompt child writing. Teacher behaviors were coded as occurring or not occurring. If the teacher behavior was coded as occurring, the frequency and duration of support was noted. While WRITE provided a description of the kinds of writing supports present in a preschool classroom, this tool may not have captured all the teacher's supportive practices as categories were predetermined. It is possible that teachers provided supports that were not listed on the observation tool. Also, WRITE provided broad descriptions of support, such as *teacher asks child about the letter name, shape, or sound to prompt writing*. A detailed

description was not provided for how teachers provided different kinds of support for sounding out a message. For example, did the teacher invite the student to sound out the message? If the teacher sounded out the message for the student, was the beginning, middle, or ending sound emphasized? Was further prompting required to connect the sound to letter name? It is important to provide a more comprehensive description of how support is provided for student's writing so that teachers have detailed guidance for how to implement supportive writing practices in preschool classrooms.

Overall, only the studies utilizing the WRITE observational tool (e.g., Bingham et al., 2017, Gerde et al., 2015) were able to capture the scope of teacher provided supports for student's writing. However, these studies only conducted one observation in each classroom lasting 2.5 to 3.5 hours and more detailed descriptions of support were not provided. A more comprehensive description of writing support could be provided using another methodological approach. Specifically, a case study using qualitative research methods would include continuous observation of the same teacher and students across time. This approach to observing teacher support for writing could identify additional supports not listed on the observational tools, provide a more detailed description of how a teacher provides different dimensions of support, and capture instances of support occurring outside of the two or three scheduled observations.

Patterns of Practice

In this section, I describe the supportive practices for writing in preschool classrooms reported in empirical studies. Several studies looked broadly across a representative sample of preschool classrooms and found that while writing materials were present and a writing table was

typically available, few teacher supports were provided to facilitate student's writing (Bingham et al., 2017; Clark & Kragler, 2015; Gerde et al., 2015; Guo et al., 2012; Zhang et al., 2015). When support was provided, teachers mostly focused on handwriting with less support for spelling (Bingham et al., 2017). Spelling support concentrated primarily on letters with infrequent support provided for letter sounds or print concepts. In one study, while teachers modeled writing in less than half of the classrooms, students were observed writing independently with an average of only 1-2 teacher provided writing supports per classroom, which primarily consisted of reminders for children to write their names on products or writing letters for students to copy (Gerde et al., 2015).

One study that included observations in a play-based preschool classroom reported that teachers modeled the use of literacy-related play materials, demonstrated the different purposes of writing, and discusses literacy concepts during children's play (Schrader, 1990). Two other studies found that when materials and opportunities for writing were provided for students, writing opportunities were often connected to play-based learning and did not include intentional teaching of writing (Logue et al., 2009; Mackenzie & Petriwskyj, 2017). One classroom's schedule included daily modified writer's workshop for students to experiment with writing (King 2012). This was the only example of a teacher intentionally incorporating student writing into a daily routine. The writer's workshop included three parts: independent student writing in journals, share time with peers, and writing conferences were conducted. Materials and space were provided during journal time. When students were finished writing, an adult invited the student to orally share their message and then the adult recorded the message. During conferences, the teacher asked questions about student thinking when they were writing, discussed possible future journal topics, and offered individualized suggestions for a student's

next story, such as using conventions or expanding content. Examples of suggestions were not provided.

Overall, across studies, teachers provided writing materials and opportunities for students to engage in writing. However, limited teacher support was provided for student's writing (Bingham et al., 2017; Clark & Kragler, 2015; Gerde et al., 2015; Guo et al., 2012; Zhang et al., 2015). When support was provided, many teachers focused on handwriting skills (Bingham et al., 2017), encouraged name writing, or provided letters for spelling (Gerde et al., 2015). Others incorporated writing into children's play-based learning and did not include planned writing instruction (Logue et al., 2009; Mackenzie & Petriwskyj, 2017; Schrader, 1990). Only one study (King, 2012) reported planned opportunities for daily student writing using a modified writer's workshop. These studies highlight the need for research describing how to provide a wider range of supports which target different aspects of writing.

Teacher Support for Writing

In the following sections, I provide findings from my examination of the larger set of existing literature including the empirical studies, reviews of research and theory, and articles or books with research-based suggestions for practitioners. First, I describe what literature has identified as targets of writing supports (e.g., print concepts, handwriting skills, writer identity, engagement in writing). Next, I provide examples of recommended teacher supports (e.g., providing materials, providing authentic writing opportunities), divided into environmental supports and teacher practices, including a closer examination of the properties (e.g., modeling material use) and dimensions (e.g., teacher modeling of materials supports or does not support children in understanding purposes of materials) of these supports. Finally, I provide a general

discussion of how this review informed my study. The following sections have a dual purpose to identify recommended practices that could be used to recognize an expert teacher of writing and to frame my observations by providing initial support categories for data collection and analysis.

Target of Writing Support

The literature review revealed diverse perspectives on what it means to support writing, in other words, the intended target of writing support varies. Some authors (e.g., Dennis & Votteler, 2013; Kissel, 2008; Rowe, 2018) targeted the development of a writer identity (i.e., knowing what it means to be a writer, identifying as a writer) for support. Other authors targeted motivation to write (e.g., Mackenzie & Petriwskyj, 2017; Neumann, 2004) or engagement in writing (e.g., Clay, 1991; Hall, 2016; King, 2012; Ray & Glover, 2008) for support. In articles authored by Bingham, Gerde, and colleagues, writing support typically targeted handwriting, spelling, or composing skills (e.g., Bingham et al., 2017; Gerde et al., 2015; Quinn, Gerde, & Bingham, 2016). Composing is writing for meaning-making or for communication. Print concepts such as understanding that marks carry meaning, understanding the range of purposes for writing, and understanding writing forms and conventions were also targeted for support (e.g., Owocki, 2005; Rowe & Flushman, 2013; Wheatley, Gerde, & Cabell, 2016). Overall, writing support had 11 possible targets, including the following: skills such as composing, spelling, handwriting, oral language, and phonological awareness; concepts of writing such as understanding that marks carry meaning, understanding the various purposes of writing, and understanding writing forms and conventions; and descriptions of writers such as identifying as a writer, motivation or interest in writing, and engagement or participation in writing. Table 1 presents these findings. Included is the total number of articles and books referencing each

target of support and a definition of each target. See Appendix A for the complete reference list of the articles and books targeting each area for support.

Table 1
Targets of Writing Support

Target of Support	Number of Articles/Books	Definition of Target
<i>Writing Skill – Composing</i>	24	Writing for mean-making or communication, includes creation of ideas and the process of translating these ideas or thoughts into written text
<i>Writing Skill – Spelling</i>	23	Recognizing that letters have sounds and using print including symbols, invented spelling, and conventional spelling to write words
<i>Writing Skill – Handwriting</i>	18	Practicing letter formation
<i>Print Concept – Marks Carry Meaning</i>	13	Understanding that print on page is meaningful and can be communicated
<i>Print Concept – Various Purposes of Writing</i>	7	Understanding that writing has different purposes such as providing information, sharing an opinion, or telling a personal narrative
<i>Print Concept – Writing Forms and Conventions</i>	5	Understanding that writing has rules for punctuation, capitalization, grammar, and sentence structure
<i>Writer Identity</i>	6	Knowing what it means to be a writer, identifying as a writer
<i>Motivation or Interest in Writing</i>	7	Wanting to take part in writing activity
<i>Engagement or Participation in Writing</i>	12	Taking part in writing activity
<i>Oral Language</i>	4	Practicing vocabulary and narrative production
<i>Phonological Awareness</i>	3	Ability to segment and manipulate the sounds of oral language

Looking broadly across this literature, a picture begins to emerge for what is considered a target of support for early writing. Teacher support for writing in preschool included support for composing, spelling, handwriting, understandings about print, writer identity, motivation, participation, oral language, and phonological awareness. Interestingly, if only empirical studies had been included in the literature review, writer identity, oral language, and phonological awareness would not have been identified as targets of emergent writing support. However, the authors of reviews and literature intended for practitioners provided convincing reasons for targeting these three areas. For example, Rowe (2018) stated that when children participate as writers, they have opportunities to form their identity as someone who writes for academic and social purposes. Emerson and Hall (2018) described a positive writing identity which included self-efficacy and motivation. A writer identity is important to the writing process because when children believe they are writers, they believe that their writing is a meaningful message that can be communicated to others. Regarding oral language and phonological awareness, Wheatley et al. (2016) asserted that while oral language, phonological awareness, and writing appear to be separate skills, children merge these skills and actively use them while composing. Hall et al. (2015) argued that preschool writing should produce significant increases in oral language and phonological awareness skills. Therefore, in my study, I included writer identity, phonological awareness, and oral language in order to obtain a more comprehensive picture of supports for early writing.

Examples of Teacher Supports

Many recommendations for writing supports were found in the empirical studies, reviews of research and theory, and practitioner-oriented literature. I divided the supports into two types, consisting of environmental supports (e.g., materials, physical spaces) and teacher practices (e.g.,

modeling writing, general teacher practices). Each type of support was divided into categories and then each category was further examined to identify properties of each category and to define the dimensions of each property that could possibly be empirically observed in a classroom.

Environmental Supports. The categories for environmental supports included: writing materials, physical environment, environmental print, and writing opportunities. The reviewed literature provided many properties to consider in the writing materials category including quality, provision, digital technology, potential, and appropriate modeling. Quality of writing materials was defined by whether or not the materials aligned to curricular goals or the program framework (e.g., Gerde et al., 2018). Provision of materials was defined in five different ways: whether materials were readily available (e.g., Guo et al., 2012; Rowe & Flushman, 2013; Zhang et al., 2015; Zhang & Quinn, 2018); whether learning centers were filled with related materials (e.g., Clark & Kragler, 2005; Emerson & Hall, 2018;); whether appropriate materials were provided (e.g., Rowe, 2018; Schickedanz & Collins, 2013); whether materials and opportunities were available throughout the classroom to encourage writing (Gerde et al., 2012); and whether sufficient amounts of materials were provided and well matched to learning areas as to foster motivation or engagement in authentic writing opportunities (e.g., Bingham et al., 2018). Figure 1 provides a detailed overview of the properties and dimensions of the categories for environmental support.

Figure 1
Properties and Dimensions of Environmental Supports

<i>Environmental Supports</i>	Properties and Dimensions of Support
<i>Writing Materials</i>	<p>Quality – materials aligned to curricular goals or program framework</p> <p>Provision – materials readily available; learning centers filled with related materials; providing appropriate materials; materials and opportunities are available throughout classroom to encourage writing; sufficient amount provided and well matched to learning area as to foster motivation or engagement in authentic writing opportunities</p> <p>Digital Technology – inclusion of digital technology to enrich learning opportunities; available for us</p> <p>Potential – the provided materials have potential to encourage representations</p> <p>Appropriate Modeling - extent to which introduction and modeling by teacher engages children's attention, supports children's understanding of material/writing purposes, and engages children in writing</p>
<i>Physical Environment</i>	<p>Arrangement – space provided for children to work comfortably; encouraging writing through physical arrangement and types of materials available and accessible</p>
<i>Environmental Print</i>	<p>Content – environmental print is meaningful because related to children’s interests and co-created with children, environmental print is useful because referenced for letter names, sounds, and formation</p> <p>Variety – a variety of writing is available throughout the classroom</p>
<i>Writing Opportunities</i>	<p>Provision – opportunities for authentic and meaningful writing purposes incorporated into play facilitating motivation and social participation; provide opportunities for authentic and meaningful writing throughout classroom</p> <p>Incorporation – writing is incorporated throughout daily schedule</p>

The literature provided several recommendations for preschool classrooms. The following environmental supports represented what was considered good practice: classrooms should include sufficient space for students to write; variety of quality materials, which are aligned to standards and curricula, should be readily accessible throughout the classroom, including digital technology to support student’s writing; a diverse assortment of writing examples should be present throughout the classroom, including individual writing, teacher-student created writing, and teacher models; and the print present in the environment should be meaningful to students and available as a reference for letter names, letter sounds, and letter formation. Overall, the areas of the classroom should provide opportunities for authentic and meaningful writing and writing should be incorporated throughout the daily schedule. In the

current study, these recommendations were used as a guideline to identify an expert teacher of writing.

Environmental supports are important, yet insufficient on their own, to encourage children's participation in writing (Gerde et al, 2015). Interactions with adults encourage children's participation in writing (Copp et al., 2016; Ray & Glover, 2008; Schickedanz & Collins, 2013; Schrader, 1990). Therefore, while I acknowledge the importance of providing environmental supports in preschool classrooms, I focused the current study specifically on teacher practices and how environmental supports are incorporated. In the following section, I describe categories of recommended teacher practices and then select specific categories to further define properties and dimensions of support.

Teacher Practices. The categories for teacher practices included differentiated instruction, scaffolding writing, modeling writing or demonstrations, shared writing, interactive writing, and general teacher interactions. Table 2 displays the properties of recommended teacher practices.

Differentiated Instruction. Differentiated instruction is a teaching approach that involves making adjustments to meet the individual needs and interests of students. Differentiated instruction implies that a teacher is observing each child and tailoring support to meet individual need (Tomlinson, 2000). This type of support does not necessarily extend student's learning beyond their current level of understanding. Properties of this category include support, materials, activities, and logistics (i.e., physical arrangement of the classroom). Owocki (2005) described the properties of differentiated instruction: *support* is tailored to meet individual need, *materials* support individual development, *activities* provide choices and meet interests, and the *logistics* of the social and physical environment provide support for

collaborative groupings. This category informed the current study by emphasizing the need for individualized writing supports. Therefore, I sought to identify different dimensions of support during observations. For example, I attended carefully to how words were segmented by the teacher (e.g., Did the teacher emphasize the beginning sound in a word or segment the word into individual phonemes?)

Table 2
Properties of Teacher Practices

Teacher Practices	Operational Definition	Properties of Support
<i>Differentiated Instruction</i>	Differentiated instruction is a teaching approach that involves making adjustments to meet the individual needs and interests of students.	<p>Support – observing each child and tailoring support to meet individual needs</p> <p>Materials – individualized materials to best support individual development</p> <p>Activities – offering individual choices to meet interests and provide choice in activities</p> <p>Logistics – deliberately altering social and physical environment to best support children in collaborative groupings</p>
<i>Scaffolding Writing</i>	Scaffolded writing is a technique that requires teachers to first determine each student’s level to set appropriate writing goals and then provide effective teaching strategies.	<p>Matching Ability - extent to which scaffold is matched to child's level; adapted to individual competency; scaffolding at current level of development using low-level strategies - modeling, reducing choices, guiding or high-level strategies - extending, explaining, comparing</p> <p>Extending - supporting student just beyond level of current understanding</p> <p>Cognitive Demand - low-level strategies provide minimum cognitive demand of children and high-level strategies are more cognitively challenging (distinction between the levels relates directly to the cognitive demand required of the child to meet the target skill or the quality of support, rather than the amount of support offered to the child)</p> <p>Engagement Level - meaningful, fun, interactive</p> <p>Scaffolding Type - making connection to knowledge, reducing choices, guiding, asking for explanations, asking to compare; direct to write, remind to write, ask questions, draw attention to features of writing</p>
<i>Modeled Writing</i>	Modeling writing is a teacher demonstration of writing in front of students.	<p>Engagement Level - meaningful, fun, interactive</p> <p>Cognitive Demand - low-level strategies provide minimum cognitive demand of children and high-level strategies are more cognitively challenging (distinction between the levels relates directly to the cognitive demand required of the child to meet the target skill or the quality of support, rather than the amount of support offered to the child)</p>

		<p>Frequency – teacher offering help, modeling writing</p> <p>Teacher Behavior - teacher writes, draws attention to features of writing, explains use, engages children; connecting writing to topics of interest, think aloud about process of writing, explain planning process of writing, using environmental print; discusses strategies, introduces different genres; formal or informal teaching demonstrations to highlight writing content, processes, and purposes</p>
<i>Shared Writing</i>	Shared writing is a teaching strategy where the teacher and students jointly create messages, sound out words, and match sounds to letters. However, only the teacher writes.	Engagement Level - meaningful, fun, interactive
<i>Interactive Writing</i>	Interactive writing is a teaching strategy where the teacher and students jointly create messages, sound out words, and match sounds to letters. Both the teacher and students write, taking turns writing on the page.	<p>Engagement Level - meaningful, fun, interactive; sustaining engagement by choosing writing topics based on children’s interests</p> <p>Prior Knowledge – activates prior knowledge and connects to writing</p> <p>Conversation – engaging children in conversations about text construction</p>
<i>General Teacher Practices</i>	General teacher practices are the ways in which a teacher understands and implements instruction which includes their approach to interacting with students and facilitating development.	<p>Affect – provides intentional and positive encouragement, praise, and guidance</p> <p>Acceptance/Encouragement - encouraging children to focus on message instead of form; accepting all forms of writing; freedom to make approximations</p> <p>Collaboration – teacher collaborates with children versus prescribing thematic choices and materials to encourage understanding of function of print</p> <p>Conferencing - having natural conversations about writing that improves student writing practice and understanding</p> <p>Lesson Pacing – lesson pacing maintains children’s engagement</p> <p>Proximity – teacher sits with children to increase opportunities for interactions and observations through talk, support, and writing demonstrations</p> <p>Interactions - low-level quality to high-level quality (higher rating indicates promotion of higher-order thinking and cognitive skills); match instructional support to child’s specific level of skill and understanding about print</p> <p>Feedback - low-level quality to high-level quality (higher rating indicates promotion of higher-order thinking and cognitive skills); learners get feedback from knowledge others</p> <p>Language Use - low-level quality to high-level quality modeling of language forms and functions (higher rating indicates promotion of higher-order thinking and cognitive skills); extending or redirecting language to engage children in writing activities; expanding language and providing more meaningful opportunities for children to talk, draw, and write</p>

Observation – understanding writers’ approaches to producing print forms and messages
Set Appropriate Goals - understand writing development, set appropriate goals

Scaffolding Writing. Scaffolded writing is a technique that requires teachers to first determine each student’s level to set appropriate writing goals and then provide effective teaching strategies. Scaffolding writing was described in two distinct ways in the literature. Some articles described scaffolding as matching a child’s ability level or competency (e.g., Bingham et al., 2018; Mackenzie & Petriwskyj, 2017; Quinn et al., 2016). Others described scaffolding as supporting students just beyond their level of current understanding (e.g., Cabell et al., 2013; Hall, 2016; Rowe, 2018; Schickedanz & Collins, 2013). The first definition is remarkably similar to the description for differentiated instruction (tailoring support to meet individual need) provided by Gerde et al. (2018) and Owocki (2005), while the latter definition provides a clear distinction between differentiated instruction and scaffolding (supporting student’s writing just beyond current level of understanding).

The properties of scaffolding writing, as discussed in the literature, included matching ability, extending, cognitive demand, engagement level, and scaffolding type. Matching ability, extending, and cognitive demand required a teacher to know a child’s level or abilities in order to provide an appropriate support. Matching ability was described in three ways: the extent to which a scaffold is matched to a child’s level (Bingham et al., 2018); adapted to individual competency (e.g., Mackenzie & Petriwskyj, 2017); and scaffolding at the student’s current level of development (e.g., Quinn et al., 2016). Extending was described in the literature as supporting a student just beyond their level of current understanding (e.g., Cabell et al., 2013; Hall, 2016; Rowe, 2018; Schickedanz & Collins, 2013). Cognitive demand, as described by

Bingham et al. (2017), defined the quality of support by the cognitive demand required of the child to meet the targeted skill. For example, if a teacher provided letter names for children to write, this would be considered a low-quality support because minimal thinking is required for children to identify letter sounds and make connections between letter sounds and letter names. If a teacher encouraged children to identify the initial sound in a word and then make connections between the letter sound and letter name, this would be considered a high-quality support because this is more cognitively challenging for children.

This category informed the current study by highlighting the definitions provided in the literature. Scaffolding was described, in some literature, as matching a child's ability level or competency and in other literature, as supporting students just beyond their level of current understanding. To determine if a teacher was scaffolding writing for a student, I would need to know the student's current level. The purpose of the current study was to describe a teacher's supportive practices by focusing on the teacher's moves and talk. I did not collect data that would allow me to discern whether a support was at or just beyond a student's level. While scaffolding writing was recommended throughout the literature, I did not use the term *scaffolding* to define a support, as using the term would require knowledge of a student's level.

Modeling Writing. Modeling writing is a teacher demonstration of writing in front of students. For example, a teacher could write a grocery list in the dramatic play area or record a student's written message underneath their drawing. Modeling writing included descriptions of engagement level, cognitive demand, frequency, teacher behavior (the teacher behaviors were specific to this type of support), and book demonstrations. Engagement level was described by Zhang and Quinn (2018) as meaningful, fun, and interactive. Cognitive demand was defined by Bingham et al. (2017) in the same manner as described for scaffolding writing (i.e., low-level

strategies provide minimum cognitive demand of children and high-level strategies are more cognitively demanding). Frequency was described by Zhang et al. (2015) as a teacher offering help and modeling writing. Teacher behavior was described across a range of dimensions as follows: writes, draws attention to features of writing, explains uses of writing, and engages children (e.g., Gerde et al., 2015); connects writing to topics of interest, thinks aloud about process of writing, explains planning process of writing, and uses environmental print (e.g., Byington & Kim, 2017a); introduces different genres, and discusses writing strategies (e.g., Kissel, 2008); and uses formal or informal teaching strategies to highlight writing content, processes, and purposes (Rowe & Flushman, 2013). The teacher behavior dimensions ranged from all teacher demonstration without explanation (e.g., writes) towards explanation and discussion intended to increase children's understanding of writing (e.g., discusses writing strategies). Book demonstrations were described as reading, listening, looking, talking, and thinking about books to expand understandings and processes about what it means to be a writer (e.g., Ray & Glover, 2008; Schickedanz & Collins, 2013). This category informed the current study by providing initial descriptions of observable teacher behaviors that are recommended while modeling writing. For example, I observed the teacher talking about her plan for writing and then recording a message on her paper.

Shared Writing and Interactive Writing. Interactive writing and shared writing are teaching strategies where the teacher and students jointly create messages, sound out words, and match sounds to letters. However, during shared writing, only the teacher writes. Whereas, during interactive writing, both the teacher and students write, taking turns writing on the page. While shared writing and interactive writing are described in the literature (e.g., Hall, 2014; Hall, 2016; Zhang & Quinn; 2018), the described supports for shared writing only focused on whether

the activities were meaningful, fun, and interactive (i.e., inviting children to co-author texts). The described supports for interactive writing focused on whether the activities were meaningful, fun, and interactive; activated prior knowledge and connected to writing; and engaged children in conversations about text construction. All are important for supporting shared writing and interactive writing but further dimensions of support were not described. These categories informed the current study by identifying recommended practices that could be used to identify an expert teacher of writing. The current study included both shared and interactive writing activities which provided opportunities to further describe teacher supports utilized during these activities.

General Teacher Practices. General teacher practices are the ways in which a teacher understands and implements instruction which includes their approach to interacting with students and facilitating development. The category of general teacher practices contained the most properties, including affect, acceptance/encouragement, collaboration, lesson pacing, proximity, interactions, feedback, language use, observation, and setting appropriate goals. The category of general teacher interactions can be observed across all teacher supports.

In the literature, the properties of general teacher practices were typically described by a set of guidelines or recommendations for integrating writing into the classroom or supporting individual learners. For example, teachers should pace lessons appropriately to maintain children's engagement (e.g., Hall, 2016). The dimensions of interactions, feedback, and language use ranged from low-level to high-level quality determined by whether the support promoted higher-order thinking and cognitive skills. This implies that a teacher would have knowledge of a child's level or abilities when providing support that is intended to promote higher-order thinking and cognitive skills; however, in the literature, to be considered high-

quality a support does not necessarily need to consider a child's level or abilities. For example, when a teacher uses language to engage children in analysis, reasoning, creating, integrating ideas and making connections to the real world this is considered a high-quality language use (Guo et al., 2012). The determination of quality is based upon the promotion of higher-order thinking and cognitive skills. Instead of determining the quality of a particular support, the current study offered a detailed description of the teacher's interactions providing support for student's writing, including praise and affirmation, proximity of teacher and students, and teacher responses to students.

Discussion

This review guided my study in three key ways. First, the review provided research-based recommendations for supporting writing. An expert teacher of writing would likely utilize many of these practices to support writing in a preschool classroom. Therefore, the recommendations were used as a guideline for identifying the expert teacher, who was the focus of the current study. Specifically, I looked for a teacher who supported composing, spelling, handwriting, understandings about print, writer identity, motivation, participation, oral language, and phonological awareness by providing a variety of environmental supports and using teaching practices which included differentiated instruction, modeling writing, shared writing, and interactive writing. Second, the literature review provided an initial description of teacher supports that served as a beginning point for observations and analysis in the current study. In particular, initial observations included field notes which recorded the writing materials, spatial organization of the classroom, examples of environmental print, and how writing was incorporated throughout the school day. Observations focused on teacher supports provided

during individual writing, adult writing, shared writing, and interactive writing as these practices were recommended throughout the literature and used by the teacher in the current study.

Third, the literature review highlighted the scarcity of research on teacher supports for writing. Ten empirical studies were identified for this review. One study did not include classroom observation and therefore did not describe the supportive practices of a teacher. Three studies had a narrow focus on specific supports for writing such as if a teacher's approach to teaching and assessing literacy and writing matched information provided by the teacher during an interview, whether writing activities in the classroom were teacher-directed or spontaneously produced by students, or if teacher response to student talk extended or redirected students' literacy-related play. Two studies provided rich descriptions of student's writing experiences but only a limited description of the supportive practices utilized by teachers. Two studies used the ELLCO to assess the writing environment and the supports provided for student's writing but the ELLCO focuses on a limited scope of writing supports. Two studies used WRITE to assess writing practices which provided a broader description of support than the ELLCO but WRITE does not provide a detailed description of the different dimensions of writing support. Overall, the studies showed that material and opportunities were provided for writing but teacher support for writing was limited and generally focused on few writing skills. It is important to describe in detail how a teacher provides different types of support for student's writing. This is a gap in the literature that the current study seeks to fill. More studies are needed to add to this research base. A case study using qualitative research methods would provide a detailed description of the different dimensions of writing support from continuous observation of an expert teacher and students across time. This method could provide a broader and more in-depth description of how a teacher provides different dimensions of support, identify additional supports not included on

the observational tools, and capture instances of support that were not captured in one to three days of scheduled observations.

Using Table 2 as a starting point, in the current study, I observed different types of writing activities (e.g., shared writing, interactive writing) and recorded supportive practices that focused on the targets of writing support from Table 1 and supportive practices that incorporated environmental supports listed in Figure 1. Then, I looked for other potential supports, not identified from the literature review, to create a more comprehensive picture of how writing is supported in a preschool classroom by an expert teacher of emergent writing.

CHAPTER 3

RESEARCH METHODOLOGY

There were three primary aims for this study. The first aim was to provide an in-depth description of the supportive practices that a teacher provided for four- and five-year-old writers in a preschool setting. The second aim was to describe the teacher's pattern of supportive practices for different types of writing activities. The third aim was to describe and compare the pattern of supportive practices that a teacher provided for different teacher identified student groupings.

This study extended the previous work done by empirical studies in the literature review (e.g., Bingham et al., 2017; Clark & Kragler, 2005; Gerde et al., 2015; Gerde et al., 2018; Guo et al., 2012; King, 2012; Logue et al., 2009; Mackenzie & Petriwskyj, 2017; Schrader, 1990; Zhang et al., 2015) and sought to provide a broader and more in-depth description of how a teacher provided support for student's writing in a preschool classroom. In particular, most previous works considered only a limited scope of writing support (e.g., whether writing activities in the classroom were teacher-directed or spontaneously produced by students or if teacher response to student talk extended or redirected students' literacy-related play), except for studies that captured a broader view of support using WRITE (Gerde & Bingham, 2012). However, while the supports listed in WRITE are more comprehensive, including assessment across five areas of support: Writing Environment, Environmental Print, Teacher Models Writing, Teacher Scaffolds Children's Writing, and Independent Child Writing, only the Teacher Scaffolds Children's Writing section, containing nine items, captured instances of a teacher directly supporting

children's writing. In addition, each item listed a general description of support (e.g., teacher asks the child about the letter name, shape, or sound to prompt child writing) which was coded as occurring or not. If the item was coded as occurring, then the frequency of the teacher using the support and the duration of each support was coded. The current study shifted from a priori selection of what was counted as support to recording and describing instances of all teacher support for writing during the observation of the same teacher and students across time. Thus, more types of support were identified than described in previous reviews and the descriptions of support were more detailed (e.g., teacher emphasizes constant blend in word while child writes).

This was an intensive case study using qualitative research methods with the purpose of providing a detailed description of teacher supports for emergent writing development. A case study allows a researcher to extensively investigate an existing phenomenon in an everyday context (Yin, 2018). In this instance, the case study focused on one teacher in one pre-kindergarten classroom. This design allowed for a more intensive investigation of how an expert teacher supported writing by capturing an extensive range of supportive practices across different types of writing events and different student groupings. Continuous observation of the same teacher and students across time allowed me to both describe the supportive practices in this classroom and to identify patterns of support for different types of writing activities and different teacher identified student groupings. As part of this design, descriptions of teacher support were grounded in socio-cognitive theory, an emergent view of writing, and data collected from classroom observations, reflecting a naturalistic qualitative design (Lincoln & Guba, 1985). The targets of support (e.g., spelling skill, writer identity) and recommended teacher supports (e.g., environmental supports and teacher interactions) described in the literature review in Chapter 2

provided the initial guide for classroom observations and were used as a guideline to identify an expert teacher of writing. A description of the teacher selection process is provided below.

Next, I will describe the research site and participants and then I will describe the data collection and analysis procedures.

Context of the Study

The school district was located in an urban city in the southeastern United States. The director of the Pre-Kindergarten department appointed a representative, Dr. Barnes¹, to work with me to identify a teacher for this study. Dr. Barnes was the Literacy Teacher Development Specialist (LTDS) for two early learning centers containing pre-kindergarten classrooms serving children ages 3-5. She was a high-qualified early literacy specialist who had extensive knowledge of early writing best practices. She regularly observed and provided professional development for the teachers at the two learning centers.

Design of the Study

Teacher Selection Criteria

As the goal of the study was to provide a comprehensive description of the supportive practices that an expert teacher provided for writing, a teacher was needed who had knowledge of early writing practices and who regularly provided support for students' writing. Dr. Barnes identified and recommended one teacher, Ms. Graham, as an exceptional teacher of emergent writing at Armstrong Early Learning Center. I observed Ms. Graham prior to Dr. Barnes inviting

¹ Pseudonyms will be used for the school and teachers in this study.

her to participate in the study. I was particularly interested in observing if she targeted the different aspects of writing listed in Table 1 and utilized the recommended supports from the literature review. I referenced the environmental supports and teacher practices listed in Figure 1 and Table 2 in Chapter 2 while I observed Ms. Graham.

I observed in Ms. Graham's classroom for two hours one morning. I saw a variety of writing materials throughout the classroom including a designated writing table and opportunities for authentic and meaningful writing during play. Space was provided for students to write at different tables around the room and on the rug where there was a basket containing clipboards, paper, and pencils. There were examples of environmental print posted including teacher writing, interactive writing where the teacher and students jointly created messages, journal writing, and independent writing in learning centers. There was also an iPad station in the classroom that could be used for drawing and writing. I observed Ms. Graham supporting a small group of students during journal writing. She provided differentiated support for each student's writing. She sat at the table in close proximity to students and engaged students in conversations about their writing. She constantly interacted with students providing feedback and answering questions. She encouraged students to compose messages and supported spelling by referring students to the word wall. She provided verbal directions to assist a student with letter formation. She asked students to read their messages which supported their understanding that marks carry meaning. Generally, Ms. Graham provided consistent praise and encouragement to writers. She focused on a writer's intended message and accepted all forms of writing. On this day, I did not observe Ms. Graham supporting the development of writer identify but I observed her targeting composing, spelling, handwriting, understandings about print, motivation, participation, oral language, and phonological awareness. Also, I did not

observe her modeling writing or engaging the students in shared or interactive writing but there was evidence of the regular occurrence of these activities. Examples of joint teacher-student writing, teacher writing, and student writing were posted around the room and a morning message was written on the board. Based upon Dr. Barnes' recommendation and my observation of Ms. Graham's practice which included many of the supports identified in Chapter 2, I chose Ms. Graham for the current study.

Participants

Participants in the selected classroom were Ms. Graham, Ms. Parker, and 20 pre-kindergarten students. Ms. Graham was white. She was in her eighth year of teaching, all within the same school district. It was her fifth year as a pre-kindergarten teacher. According to Ms. Graham, her university's elementary education program placed a high emphasis on literacy, especially reading and writing. Since she started teaching, she had participated in many professional development sessions focused on literacy. Many of these sessions were led by a district literacy specialist and the others were led by local universities. Ms. Parker was the educational assistant in the classroom. Ms. Parker was black. She had been an educator in the district for twenty years. She had served in several different roles, including the director of a literacy program at another school. There were 20 children in this classroom, 10 females and 10 males. On the class roster, 16 students were identified as black; 2 were identified as Latinx; 1 was identified as Asian; and 1 was identified as white. 19 students were identified as having a home language of English and 1 was identified as having a home language of Spanish. At the beginning of the study, the children were between four years and seven months, and five years and seven months old.

Site Description

Armstrong Early Learning Center was a public preschool which enrolled children between 3- and 4-years-old. The school was one of the district's early learning centers that only contained pre-kindergarten classrooms. In the early learning centers, all teachers received professional development and coaching from pre-kindergarten coaches located within each building. The school program focused on educating the whole child including early literacy, early math, and social and emotional well-being with the primary focus on preparing students for kindergarten. The school encouraged play-based learning at home and in the classroom. The typical school-day lasted 6 hours, beginning with breakfast. The day included curricular activities (e.g., literacy, math, social studies, science, and discovery), garden, library, art, gross motor activities, social and emotional learning, choice centers, and an hour-long rest period. The school's academic program included the *Creative Curriculum for Preschool* (Dodge, Colker, Heroman, & Bickart, 2002) and *Phonemic Awareness: The Skills that They Need to Help Them Succeed!* (Heggerty, 2010). The *Creative Curriculum* featured exploration and discovery using hands-on, project-based investigations as a way of learning. Investigations or units of study were based on a theme like a "Pets" study. Each unit of study typically lasted 4-6 weeks and included theme-related literacy, math, social studies, science, and learning center-based activities. Teachers were required to use the phonemic awareness curriculum as part of their daily language arts instruction. The phonemic awareness activities focused on rhyming and onset fluency; isolating final or medial sounds; blending and segmenting words, syllables, and phonemes; adding and deleting words, syllables, and phonemes; and substituting phonemes. The segmentation activities were accompanied with hand movements, such as making rollercoaster motions up and down while stating a word.

A typical day in Ms. Graham's classroom began at 7:45 am with breakfast and parent sign-in with books and some centers available for students finished with breakfast. Following breakfast, Ms. Parker led songs and the morning message routine on the rug, which included students' participation both verbally and at the board writing parts of the message. Ms. Graham then led shared reading and related activity on the rug which sometimes included a math activity or whole group writing. Small groups met briefly after the large group meeting. The purpose of small groups was to target a specific language or math skill. For example, Ms. Parker would lead a counting object activity and Ms. Graham would lead a letter naming activity. These small groups did not involve a writing component. Next, the class had recess outdoors for one hour. Following recess, Ms. Graham led the whole group in phonemic awareness activities and then presented a social-emotional or safety lesson. After whole group, the students chose play-based learning centers. At center time, students chose their own centers for play and they decided how long to remain at each center. During this time, Ms. Graham hosted journals or other small group activities at the writing table. In other learning centers, students sometimes engaged spontaneously in writing as part of their play but adult support was not typically provided. However, writing materials were present in each learning center and students engaged in writing. The time spent in learning centers varied from 45-90 minutes, depending on if art or library was taking place on that day. Lunch and an hour of rest time followed. The day ended with a closing circle that usually included a read-aloud and review of the day's events. School dismissed at 2:00 pm.

Writing Instruction

The school district's pre-kindergarten department hosted professional development focused on early writing instruction for all pre-kindergarten teachers. The session was conducted

by district coaches and faculty from local universities. The goal of the session was to promote early writing. As part of this effort, teachers were required to conduct a daily journal activity.

In addition, Ms. Graham had been part of a research-practitioner partnership between the district and a local university. The purpose was to increase the amount and quality of early writing instruction in pre-kindergarten classrooms. Ms. Graham had participated as an early adopter of the strategies for incorporating writing into her daily instruction.

In Ms. Graham's classroom, writing regularly occurred throughout the morning period. Each day began with a morning message that lasted 10-15 minutes. This was an interactive writing activity that involved both Ms. Parker and the students jointly writing a message. Students were invited to state parts of the message such as, "Today is sunny." Ms. Parker called students to the board to write. While one student recorded part of the message, the other students participated by sounding out words, matching sounds to letters, and naming letters to write on the board. Ms. Parker and the students would reference other environmental print around the room to support writing, such as the alphabet strip or the word wall.

Other types of writing activities occurred frequently. Whole group writing activities were supported by Ms. Graham 2-3 days per week each lasting between 15-20 minutes. Both teachers took turns supporting small group interactive and independent writing activities 1-2 days per week. These activities each lasted between 17-48 minutes. Journal writing took place on 2-3 days per week. The journal sessions each lasted from 45-75 minutes. On most days, Ms. Graham supported journal writing but on other days, Ms. Parker sat at the writing table and supported students. While the teachers participated during the entirety of events at the writing table, students did not, as journals took place during play-based center time. Students moved freely throughout the centers. The amount of time that students remained at the writing table

varied widely from 5-60 minutes. Students typically chose when and how long to participate in journals and the other types of small group writing activities. Therefore, the time of participation was determined by a student's choice to participate. Averaged over the course of a week, students participated in 20 minutes of whole group writing instruction per day. Participation in small group writing activities varied widely per student with averages between 5 and 15 additional minutes of engagement in writing per day. Thus, on the days I observed, students were engaged in writing between 25-35 minutes per day.

Many writing events were planned in this classroom. A variety of topics were provided by Ms. Graham for composing messages. Some writing topics were related to the current unit of study. During my observations, the class studied "pets" and "clothing." For example, one whole group event involved writing about ideas for clothing. During a small group writing activity, students were asked to cut out pictures of clothing from catalogs, glue clothing to their pages, draw their bodies wearing the clothing, and then write about their pictures. Other writing topics were related to books. For example, several writing activities included students writing about the beginning, middle, and end of a story that was read by the teacher during a whole group meeting. Other writing topics were related to students' daily lives, such as "What did you do over Spring Break?"

Instead of primarily following the lead of students and incorporating writing into students play, Ms. Graham intentionally planned for writing activities. Students participated daily in play-based activities but opportunities for writing and specific purposeful writing events were part of the daily schedule. Ms. Graham actively planned for writing daily with students and ensured that students had opportunities to participate in a variety of writing activities with both teachers. Ms. Graham and Ms. Parker intentionally spent time supporting children in writing

during the free choice learning center periods. Teachers frequently supported writing in this classroom both in large groups and during centers. The description of writing in this classroom is altogether different than what has been previously identified in research where writing was only briefly included in the preschool day (Pelatti et al., 2014) or limited teacher support was provided for student's writing (Bingham et al., 2017; Clark & Kragler, 2015; Gerde et al., 2015; Guo et al., 2012; Zhang et al., 2015).

Data Collection Procedures

I, a Ph.D. candidate in the Dept. of Teaching & Learning at Peabody College, Vanderbilt University and a former early childhood teacher for twelve years, collected all data in the classroom. I was an observer in the classroom and did not participate in activities.

Data collection occurred over a ten-week period, 1-2 days per week, in order to capture an in-depth account of the ways one expert teacher supports writing. Data collection took place on 16 days, for approximately four hours each morning, beginning in March, after teacher and parent/guardian consents were returned, and ending in May. Observations occurred towards the end of the year when students and teachers were more familiar with each other and classroom routines were well established. Ms. Graham was preparing students to enter kindergarten in the fall.

Data collection included classroom observations, video recordings, and a teacher interview. Next, I describe my data collection methods.

Classroom Observations

Data recorded during daily classroom observations included: video recordings, written field notes, photographs of classroom activities, and student writing products. An overview of

data collection activities can be found in Table 3. I told the teacher and educational assistant that I was interested in observing and learning about usual writing instruction, and that no special plans or other arrangements were necessary for the observation visits. My role was to collect data through observation. I only responded to student- or teacher-initiated interactions. I was not a participant in classroom activities. My goal was to describe the teacher's supports for students' writing.

The classroom teacher planned a variety of writing activities including interactive writing and shared writing with the whole group seated on the rug, and journal writing, interactive writing, and independent writing with small groups at the writing table. All writing events led by the classroom teacher were analyzed totaling 15 events consisting of the following: 5 small group journal events, 3 small group interactive writing events, 3 small group independent writing events, 2 whole group interactive writing events, and 2 whole group shared writing events. I was able to observe the same teacher and students across these events.

Table 3
Overview of Data Collection

Method	Activity/Setting	Focus	Total
Field notes and video recordings of observations	1. Whole group shared writing 2. Whole group interactive writing 3. Small group interactive writing 4. Small group individual writing 5. Small group journal writing	1. Target of writing support 2. Teacher support for writing 3. General teaching practices 4. Children's participation 5. Environmental supports 6. Children's writing	1-2 days per week, 10 weeks, 16 observations
Photographs	1. Classroom writing activities 2. Student writing products	1. Writing-related activities 2. Student produced writing	1-2 days per week, 10 weeks
Transcriptions and field notes of teacher debriefs	Classroom teacher debrief	Description and rationale of teacher support for individual student writing	1 debrief weekly, 15-20 minutes, 8 debriefs

Video Recording. The focus of data collection was the lead classroom teacher who was identified by a district literacy leader and by my observations as an expert emergent writing teacher. Only activities that included writing were video recorded. I began recording at the beginning of a writing activity and stopped recording when the writing activity ended. At the beginning of each observation day, a stationary video camera was placed on a tripod at the back of the meeting area where whole group activities were held.

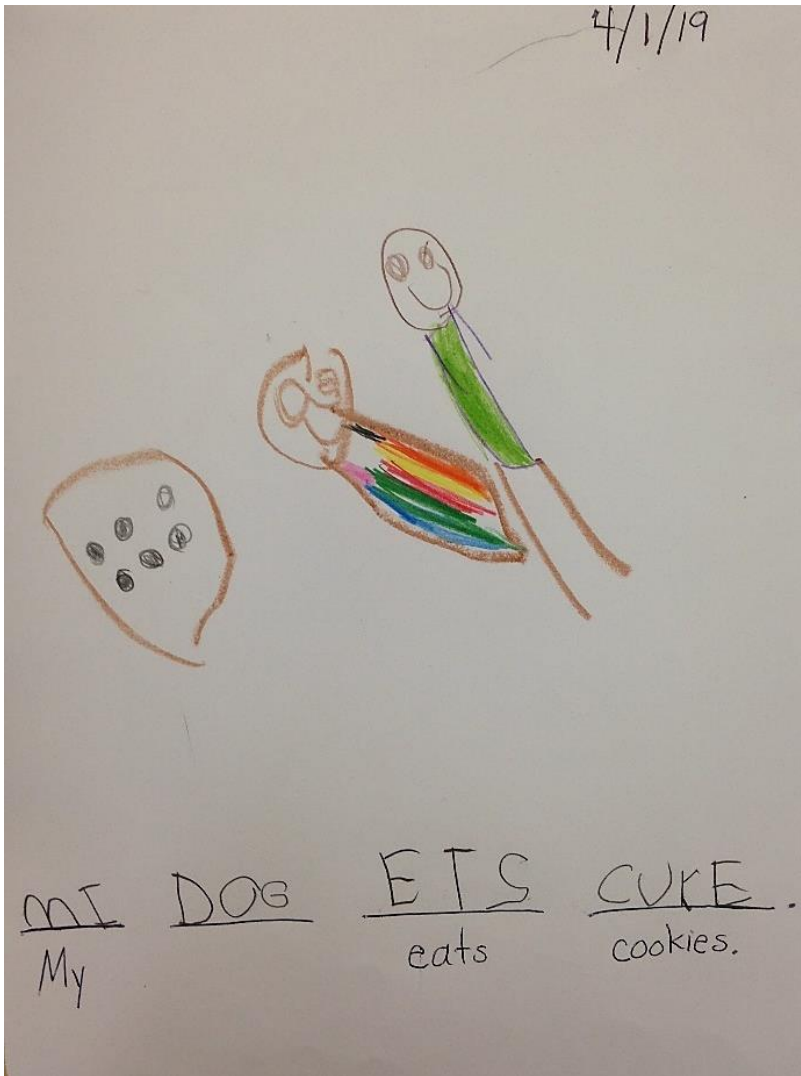
Following the morning meeting, the video camera was moved to record the whole group or small group writing-related activities. At interest area time, the video camera was placed at the writing center to record children's writing. Expanded field notes were created for all videos containing Ms. Graham's writing demonstration/activity or teacher/student writing-related interactions (e.g., teacher talks with student about story at writing table, student asks teacher how to spell a word). The expanded field notes described the targets of writing support (see Table 1); teacher practices that supported writing (see Table 2); children's participation during interactions with teachers; and the literacy environment, including environmental supports (see Figure 1) and children writing independently around the room. A chart was created to document the video file name, teacher leading event, date, student participants, writing activity type, description of writing event, targets of support, and ideas for categories to be used during analysis. Some categories that were identified included word wall reference, segmenting words, and writing purpose.

Videos of the educational assistant, Ms. Parker, leading the morning message were recorded as background for understanding the classroom literacy environment but these videos were not analyzed as part of the current study.

Narrative Field Notes. Field notes were recorded throughout the morning observation using a laptop. After each data collection event, I revisited my field notes in order to create expanded field notes inclusive of personal notes, methodological notes, and theoretical notes. Personal notes were used to convey my emotional responses and reactions and for recording my connections to teaching experience and observations. Methodological notes were used to summarize the research process, comment on the process, and for making notes about future research and any necessary adjustments. Theoretical notes included any patterns and themes that emerged from the data.

Photographs. Digital photographs were taken of all teacher and child produced writing. Photographs were also taken of classroom activities. An example can be seen in Figure 2.

Figure 2
Child's Writing Product Example



Teacher Interview. To address my third research question, “Does the teacher’s pattern of support change for different teacher identified student groupings?”, I conducted one interview with the teacher to ask her about students’ writing abilities. The purpose was to determine the teacher identified characteristics of different groups of writers in the classroom. The teacher’s description included students’ knowledge of print concepts, letter names, letter sounds, letter formation, ability to match sounds to letters, ability to segment sounds in messages, and

independent use of strategies to support writing. This information was used in the analysis to determine whether the teacher's supportive practices matched her description of the characteristics of writers.

First, I provided Mrs. Graham with slips of paper with each student's name written on it. Then, I asked her to sort the students into 3 groups based upon how she thought about them as writers. Instead of sorting into 3 groups, she grouped the students into 5 different groups with 5 being the more sophisticated writers and 1 being the less sophisticated writers. I then asked her to describe how she defined the different student groupings.

Data Analysis Methods

Qualitative data analysis was ongoing throughout the study using the constant comparative method (Corbin & Strauss, 2008). This method involved analysis of video recordings of writing events, field notes of writing event observations, digital photographs of writing products, and the audio recording of the teacher interview for emerging patterns and themes. Throughout the data collection period, I created theoretical notes recording possible patterns of supportive practices during writing events. I then used these emerging patterns along with the targets of support identified in the literature review to guide my first round of coding.

There were four main stages to my analysis process: narrowing the range of data for analysis, creation of multimodal transcripts, qualitative analysis of writing events, and descriptive analysis of supportive practices. The following sections detail each of these stages.

Range of Data

In order to obtain a comprehensive picture of the types of writing support that were provided by the teacher, analysis was conducted on all video recordings of Ms. Graham

providing support for students' writing during whole group or small group writing events. Table 4 shows the setting during each type of writing activity and the number of events of each type. Fifteen total writing events were part of this analysis with a total of approximately 10 hours of video.

Table 4
Video Recordings of Writing Activities

Setting	Type of Writing Activity	Number of Events
Whole group on rug	Interactive writing	2
	Shared writing	2
Small group at writing table	Journal writing	5
	Interactive writing	3
	Independent writing	3

Multimodal Transcripts

Multimodal transcripts were created for all 15 writing events. Transcripts included verbatim recordings of student and teacher talk. For the multimodal transcripts, I included the teacher's arrangement of materials, gestures and facial expressions intended to support segmentation of messages or isolation of sounds in messages, movements signaling affirmation to a child (e.g., head nodding in response to a child correctly matching a sound in a word to a letter), hand placement or movement on a page, hand movements supporting letter formation, pointing to written artifacts around the classroom, and the object of the attention (i.e., I recorded who the teacher was talking to or the child's writing that the teacher was supporting). The following is an excerpt from one of the multimodal transcripts. Note that the teacher's multimodal behaviors are enclosed by brackets.

- Ms. Graham: James, can you read it to me? [points to writing, then self, and then writing]
- James: I have a dog. [Ms. Graham points to each word as he reads. She then takes foam 'G' and puts back on word wall]
- Ms. Graham: Oh, I love the way you pointed to the words when you were reading.
- Ms. Graham: James, can I write your message, too? [takes journal and places in front of herself]

Qualitative Analysis of Writing Events

NVivo 12 Plus software was used for open coding to inductively generate codes to describe the teacher's writing supports. Purposive sampling was used to select five writing events (e.g., one event from each of the five types of writing activities in Table 5) for coding to develop a set of categories and sub-categories. The selected events were typical examples of each type of writing activity. I coded each instance of teacher action or teacher talk that was a writing support for students' writing. Message units were determined by my contextualization of the entire event. In other words, my interpretation of a meaningful unit of support was based upon my experience during each event and my repeated viewings of video recordings of each event. Some message units were several lines long. For example, Ms. Graham asked students to think about what they wanted to learn during a new clothing unit. Her talk covered 11 lines of transcript. Other message units were much shorter. For example, in response to a student reading their writing, Ms. Graham said, "Good job." Each message unit was coded once to a support node and once to the student recipients of the support, as I collected interview data on how the teacher thought about students' writing ability. While each message unit was only coded to one support node, each message unit was coded to either one recipient or multiple recipients of support. For example, during whole group writing activities, Ms. Graham provided

support for idea generation with all students as the intended recipients of support. However, during small group independent writing, Ms. Graham typically provided support for stating an oral message to one recipient at a time.

My coding was informed by the literature review that identified 11 broad targets of support (e.g., composing, spelling, handwriting, print concepts, writer identity, motivation or interest in writing, engagement or participation in writing, oral language, and phonological awareness) and from my theoretical notes which identified other possible supportive practices not identified in the literature review (see Chapter 2, Table 1). For example, I wrote in my theoretical notes that drawing appeared to be a support for some students to first be able to record their message as a picture and then use the picture as a reference as the student wrote the message as text. Therefore, *inviting a child to draw* was identified as a support category which was defined as when an adult invites a child to draw to record a message on the page.

During the first round of coding, I identified initial categories which described Ms. Graham's writing supports. I revisited these grounded categories and refined them throughout this process. Coding produced a total of 120 teacher support codes of which 11 were superordinate support codes or parent nodes and 109 were subordinate support codes or child nodes. For example, *name writing* was a parent node defined as when an adult provides support for name writing or the name writing process. *Name writing* had two child nodes which included drawing a child's attention to a written name and making a request for a child to write their name.

Once the initial set of codes was identified, axial coding was used to make connections between the categories and to further describe dimensions of specific supports. For example, the classroom teacher frequently provided different kinds of support for oral segmentation of a

message (e.g., segmenting message into words, segmenting a word into sounds, segmenting sounds in a word while emphasizing the initial sound in word, segmenting sounds in a word while emphasizing the middle sound in word, segmenting sounds in a word while emphasizing the last sound in word, segmenting sounds in a word while emphasizing a consonant blend in word). In this example, the parent node was *oral segmenting – phonological awareness* and the child nodes were *segmented message*, *segmented word*, *isolated initial sound*, *isolated middle sound*, *isolated ending sound*, and *isolated blend*. Support categories not related to the research questions, such as codes identifying the spatial position of an adult in relation to the intended child recipient of support, were eliminated. A final code book was generated including operational definitions and examples which included 12 parent nodes and 107 child nodes. A full description of these codes can be found in Appendix B.

Overall, these codes represented the teacher's supportive practices for students' writing and will be discussed in more detail. These codes were used to describe the range and pattern of supportive practices that the teacher used across writing events, including supports centered on adult writing, the drawing process, engagement or participation, material management, name writing, phonological awareness, praise or affirmation, the print process, responsiveness, rules, and vocabulary.

A second round of coding was conducted on all 15 whole group and small group writing events using the final code book. The findings reported in Chapters 4, 5, and 6 reflect the second round of coding with the final set of categories.

I checked inter-rater reliability by training a second coder using the codebook. Ten percent of the data set was purposively selected for the second coder to code. The same percentage of each type of writing activity represented in the total data set was selected for each

type of writing activity. This proportional selection totaled 10% of the total video data. The goal was for IRR to be above 80% to show consistency across coders. Overall agreement between coders equaled 80.3%.

Descriptive Analysis of Supportive Practice

First, to address my first research question, “What kinds of supportive practices does a teacher provide for students’ writing in a pre-kindergarten classroom?”, descriptive analysis was used to determine the relative frequencies of teacher support categories. This information was used to identify key teacher supports and the pattern of supportive practices used by the teacher in this classroom.

Second, to address my second research question, “Does the teacher’s pattern of support change for different types of writing activities?”, descriptive analysis was used to compare the supportive practices for different types of writing activities. The relative frequencies of teacher support categories were calculated for each of the different types of writing activities (e.g., whole group interactive writing, whole group shared writing, small group interactive writing, small group journals, small group independent writing). The relative frequencies were examined to identify possible trends suggesting variations in the support for each type of writing activity. For example, I looked to see if different teacher supports had higher relative frequencies during whole group shared writing versus small group journals. This information was used to describe the teacher’s supportive practices for different types of writing activities.

To determine if the variations in the teacher’s supportive practices were significant, I used the Friedman test. The Friedman test is a nonparametric statistical procedure for comparing more than two related samples and the test can be used with continuous data. It was necessary to use a non-parametric test since the number of writing activities was small ($n < 20$). The

Friedman test is similar to the parametric repeated measures ANOVA but the Friedman test avoids the pitfalls of tests that have more stringent requirements of data being independent and the assumptions of a normal distribution and equal variances.

Finally, to address my third research question, “Does the teacher’s pattern of support change for different teacher identified student groupings?”, descriptive analysis was used to compare the supportive practices for different teacher identified student groupings. The relative frequencies of teacher support categories were calculated for each of the teacher identified groupings (see Table 4). The relative frequencies were examined to identify possible trends suggesting variations in the support for each teacher identified grouping. This information was used to describe the teacher’s supportive practices in relation to her beliefs about and observations of student’s writing. To determine if the variations in the teacher’s supportive practices were significant, I used the Friedman test.

Strengths and Limitations

This qualitative case study provides an in-depth analysis of the numerous supportive practices that a teacher provided for 4- and 5-year-olds’ writing in preschool and the differing patterns of teacher support observed across different contexts and for students that the teacher perceived to have differing levels of emergent writing skill. The research was designed to investigate ways that young writers were supported in an early childhood classroom and to describe how one teacher adapted her practice for different types of writing activities and for how she perceived students’ writing ability. While designing the study, collecting data, and analyzing the data, I utilized traditional methods of naturalistic inquiry to address trustworthiness (Erlandson et al., 1993; Lincoln & Guba, 1985).

Issues of Trustworthiness

First, several methods were used to address the credibility of my research report. I was in the classroom for 16 observations of approximately 4 hours each across 10 weeks. My observations were focused on writing activities which the class engaged in several times each day. I was able to observe different types of writing activities to form an understanding of how the process of teacher support worked in this classroom. During data collection, I discussed my emerging beliefs about the process of support with the classroom teacher. For example, Ms. Graham and I discussed my observations about how she assists students who compose lengthy oral messages. We discussed how I observed her, at times, supporting students in condensing messages into a more manageable length for writing. This method of checking with the classroom teacher ensured that my interpretations were not solely my perspective but also those of the teacher. I also used peer debriefing methods to explore my support categories and interpretations of the data. I checked inter-rater reliability and the overall agreement between coders equaled 80.3%.

Second, I addressed transferability by providing thick description and conducting purposive sampling. I described the setting of my research study, the participants, and different types of writing activities with enough details to allow readers to decide if my findings may transfer to another context. However, my context and findings are restricted to one pre-kindergarten classroom. Therefore, my categories and findings may not be transferable to other classrooms where teachers may have differing experiences and beliefs about emergent writing or children with different backgrounds.

Third, I addressed dependability by collecting multiple sources of data and by using systematic data analysis procedures. Field notes, video recordings, photographs, and the teacher

interview were all examined during data collection to note and check patterns and themes that began to emerge from the data. These emerging patterns were checked across multiple data and then used to inform my first round of coding. The use of systematic data analysis procedures ensured that categories and patterns evolved from the data.

Fourth, my research safeguards addressed confirmability using several methods. I collected several different data sources and compared them to support my interpretations. I checked my interpretations with the classroom teacher. I conducted an inter-rater reliability check using a second coder. I also included thick descriptions and some raw data to allow readers to make judgements about my findings. All of these methods were used to confirm my conclusions.

Limitations

Although my study met standards for trustworthiness, there are several limitations that should be noted. First, the focus of my observations and the subsequent analysis focused on the teacher's supportive actions and talk. My analysis did not trace students' responses and I am not making inferences about students' learning. Instead, I am describing the practices of a teacher who was identified by a district literacy specialist as an expert teacher of writing and by myself as using practices recommended in the literature. Second, students' responses and writing performances are not reflected in the categories and thus I am unable to describe how their responses and performances may impact the pattern of teacher support. Third, the statistical analysis may have been affected by using a small sample size of writing events or by the way the data were coded. It is possible that the way categories were grouped could have prevented the identification of variances between supports. A larger sample size or changes to the coding procedure could alter the results of significance testing. Finally, data collection began in the

eighth month of the school year and continued into the last month, when classroom routines were well established. Therefore, it is possible that the teacher's supportive practices might be different earlier in the school year.

To address these limitations in the future, I would include categories to reflect students' participation in the writing events. This would enable me to describe the dynamic interactions between the teacher and students during writing, and to possibly capture how students' participation patterns impact a teacher's supportive practices. In addition, I would increase the sample size by capturing more writing events. This would provide a broader view of writing instruction within the classroom and possibly allow for other types of statistical analysis to be conducted. Finally, I would design the study to include observations over the course of the entire school year to describe the processual pattern of support across the pre-kindergarten year.

CHAPTER 4

A TEACHER'S SUPPORTIVE PRACTICES FOR EMERGENT WRITERS

In this chapter, I address my first research question, “What kinds of supportive practices does a teacher provide for students’ writing in a pre-kindergarten classroom?”, as I examine the types of supportive practices used by the classroom teacher during whole group and small group writing events. This chapter considers teacher supports across all types of writing events and provides a comprehensive description of key practices used to support preschoolers’ writing and identifies an overall pattern of teacher support during events.

Ms. Graham integrated writing across the school day. She planned a variety of writing activities for students including opportunities for interactive writing and shared writing with the whole group on the rug, and journal writing, interactive writing, and independent writing with small groups at the writing table during learning centers. Interactive writing is a teaching strategy where the teacher “shares the pen” with students, jointly creating the message by sharing the job of writing. Shared writing is a teaching strategy where the teacher invites students to participate by creating the message or offering suggestions for writing the message but the teacher is the sole writer. During journal writing, the students were typically provided with a prompt related to their current unit of study, such as pets or clothing. Sometimes, the journal prompt resulted from conversations during the whole group morning meeting.

Supportive Practices

My analysis identified numerous practices that Ms. Graham used to support student's writing during the 15 writing events. As described in Chapter 3, I grouped her practices under parent nodes or categories. Then I calculated the relative frequency of each category. The category identified most frequently in my analysis was support for print processes which included stating an oral message, segmenting an oral message, making sound-letter connections, forming letters, understanding concepts of print, developing an identity as a writer, and moving students through the writing process. All other categories were identified with much less frequency. The following categories had similar frequencies: responsiveness, praise or affirmation, material management, idea generation, drawing process, and adult writing. The remaining categories had remarkably lower frequencies, including name writing, rules, invitation, phonological awareness, and vocabulary. Each category is described and examples are provided in following sections. Table 5 shows the relative frequencies and number of total references for each support category. There was a total of 5824 data units.

Table 5
Relative Frequencies of Support Categories

Category	Relative Frequency	References
Print Process	41.8	2433
Responsiveness	13.4	782
Praise or Affirmation	9.4	546
Material Management	9.3	539
Idea Generation	8.1	474
Drawing Process	6.7	393
Adult Writing	6.6	386
Name Writing	1.3	73
Rules	1.2	69
Invitation	1.0	57
Phonological Awareness	0.9	53
Vocabulary	0.3	19
Total	100	5824

In the following sections, I describe and provide examples of the kinds of supports that occurred within each of these categories.

Print Process

This section describes practices that were key to supporting students' writing. The print process category included teacher supports offered during students' writing that were intended to develop students' understanding of the writing process including composing (meaning-making for communication), spelling, handwriting, and the development of concepts about print.

However, this category was only coded for supports offered when students were engaged in composing and recording a message in print but this category was not coded when students were writing their name. While students were engaged in the print process, the teacher provided support for stating oral messages, segmenting oral messages, understanding print concepts, producing print, developing an identity as a writer, and moving forward through the writing

process. Together these supports represented 41.8% of all identified supports across categories. Table 6 shows the overall relative frequency for each type of print process support in relation to all supports, the relative frequency of each type within the print process category supports, and the number of total references for each type of support.

In the following sections, the print process supports are discussed in the sequence in which they were enacted by the teacher. Following the discussion of the print process categories, the remaining categories are presented in order from highest to lowest relative frequency.

Table 6

Relative Frequencies of Print Process Supports

Support	Overall Relative Frequency	Print Process Relative Frequency	Number of References
Moving Forward	10.5	25.1	611
Print Concepts	9.8	23.5	571
Segmenting Oral Messages	8.3	19.9	484
Stating Oral Messages	6.7	16.2	393
Print Production	6.4	15.2	371
Writer Identity	0.1	0.1	3
Total	41.8	100	2433

Stating Oral Messages

Adult support was provided to students to assist in the stating of an oral message for the purpose of then writing the oral message. Stating Oral Messages comprised 16.2% of all print process supports. Ms. Graham typically made an explicit request for a student to state their message. Sometimes, she would ask a student to clarify or restate the message if the message was not clear. Rarely, a student would not provide a message and then Ms. Graham would

suggest a message. Sometimes, she provided support to decrease the length of the student's message to facilitate the translation of the oral message into a written message. The following is an example of the teacher managing message length.

- Jeremiah: He was running away from the man so fast before he got caught.
- Ms. Graham: He was running away so fast before he got caught? [looking at Jeremiah]
Let's think about how we can shorten our sentence so we can write it.
[uses hands to show shorter distance]
- Jeremiah: I got one.
- Ms. Graham: Tell me.
- Jeremiah: He run away from the man before he got caught.
- Ms. Graham: "He ran away from the man."
- Jeremiah: "He ran away from the man."

Segmenting Oral Messages

After deciding on a message, Ms. Graham supported students in segmenting their messages into smaller parts. Segmenting Oral Messages comprised 19.9% of all print process supports. Segmenting spoken language into smaller parts is a component of phonological awareness. This support had four main forms which included oral segmentation, sound isolation, rollercoaster segmentation, and scaffolded writing. First, oral segmentation involved slowing and segmenting the entire message into individual words (e.g. I/saw/a/cat) or segmenting words into sounds (e.g., c/a/t). When students stated an oral message, Ms. Graham would often repeat the message slowly, segmenting the message into words. Second, sound isolation included emphasis of specific sounds in words while a student was writing. Ms. Graham would slowly repeat a word and emphasize a specific sound such as the first sound, last sound, middle sound,

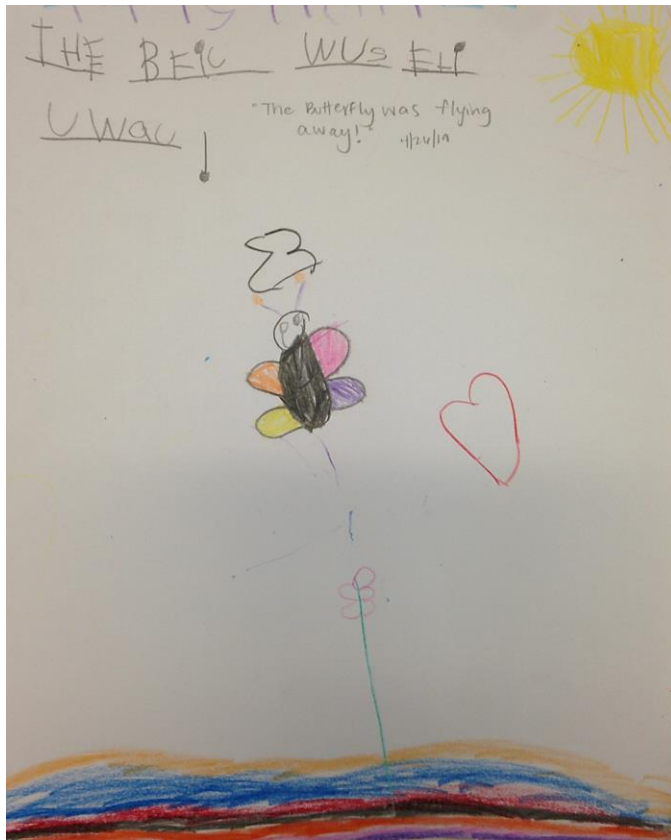
or a consonant blend in a word. Third, rollercoaster segmentation involved moving hands in rollercoaster motions up and down while stating a word. For the beginning sound in a word, the hand rested flat at the bottom of a rollercoaster and then rose to the top of the rollercoaster for the middle sound and then dropped to the bottom for the last sound in a word. Ms. Graham used this gestural support while sounds were stated orally. The gesturing emphasized the beginning, middle, and ending sounds in words. Students were invited to use the rollercoaster hand motion on their own to hear multiple sounds in a word. The rollercoaster support was a component of a daily phonemic awareness lesson from a curriculum developed by Michael Heggerty (2010). Teachers were required to use this curriculum as part of their language arts instruction in pre-kindergarten.

Finally, scaffolded writing was used to segment messages into words. This technique is different than the definitions of scaffolded writing from the literature review in Chapter 2 which described scaffolding as matching a child's ability level or competency (e.g., Bingham et al., 2018; Mackenzie & Petriwskyj, 2017; Quinn et al., 2016) or as supporting students just beyond their level of current understanding (e.g., Cabell et al., 2013; Hall, 2016; Rowe, 2018; Schickedanz & Collins, 2013). In this classroom, scaffolded writing was used as a support strategy adapted from Bodrova and Leong (1998) which included stating an oral message, repeating the oral message while drawing one line for each word, pointing to each line while repeating the oral message, and then writing words on each of the lines to represent the message. Ms. Graham often helped students to segment messages and make lines for each word. Sometimes, she invited students to make their own lines or to read their lines before writing. When students made their own lines, Ms. Graham would monitor the number of lines and correct errors which typically occurred from multi-syllabic words (e.g., a student drew two lines for

“kitten” and Ms. Graham talked about how “kitten” was one word with two syllables). Figure 3 is an example of the scaffolded lines used to support student’s writing. The student’s message was “The butterfly was flying away.”

Figure 3

Scaffolded Lines



Print Production

In this section, I discuss the teacher’s supportive practices for student mark making or printing on paper as part of a written message. Ms. Graham invited students to both draw and write messages. The print process is discussed here. The drawing process will be discussed in a later section.

Ms. Graham’s practices included connecting sounds to printed letters, supporting letter formation, reinforcing letter naming, and referring to writing around the room. Print Production comprised 15.2% of all print process supports. First, she encouraged the explicit connections of sounds in student’s messages to printed letters in known words, such as friends’ names (e.g., “Latrice’s name starts with that sound. Look at her name on the word wall”). Ms. Graham also provided support for letter formation including verbal commands (e.g., “Make a straight line down.”), adult modeling (e.g., tracing letter shapes in the air or writing letter on a page), and hand over hand support. Ms. Graham supported letter naming by asking a student to name a letter or by naming the letter for the student. She also referred students to materials in the environment, such as pictures or sight words on the letter/word wall, written artifacts around the room, or the morning message to support printing on the page.

Print Concepts

During student writing, Ms. Graham provided support for the development of print concepts including understanding that marks carry meaning, understanding writing forms and conventions, and understanding various purposes of writing. Print Concepts comprised 23.5% of all print process supports. Figure 4 shows an example of support for each print concept.

Figure 4
Examples of Support for Print Concepts

Print Concept	Teacher Supports
Understanding that marks carry meaning	“What does this say?” “Can you read it to me?” “Read me your sentence.” [taps writing on page]
Understanding writing forms and conventions	“I like that you used that capital ‘I’ to start your sentence.” “End your message with a mark. You forgot to tell your sentence is all done.” [points to page]
Understanding various purposes of writing	“All right, so remember we’re telling something that we like about pre-k.” “So, we’re going to draw and write about our new ant farm.”

Writer Identity

Explicit discussions of students' roles as writers occurred infrequently. Writer Identity comprised 0.1% of all print process supports. However, this category was only coded when the teacher explicitly stated or discussed what it meant to be a writer or identified students as writers. The teacher supported students in identifying as writers in other ways, such as inviting students to read their own writing. However, these implicit ways were not coded in this category. In a few explicit instances, Ms. Graham supported the development of the knowledge or vocabulary related to knowing what it means to be a writer or identifying as a writer. For example, during one center time, Ms. Graham led a small group activity in which students were creating plot charts to write about the beginning, middle, and end of the story read at whole group (i.e., a piece of paper was divided into three sections for writing about the beginning, middle, and end of the story). The following is an excerpt of the conversation between Ms. Graham and a student about what it means to be an author.

Ms. Graham: Alright Mr. Aaron [takes Aaron's paper from his hand holding in air and places on table in front of her], what did you add?

Aaron: "By Aaron and James."

Ms. Graham: Aaron and James, you guys were both doing this story? Because you are the authors of this page, aren't you? Who's the author of the book, Aaron? [picks up book and brings over to show Aaron the author's name] Do you see his name on the front? Do you see the author's name right there? [points to author's name on cover of book] But you guys are the authors of this one [points to Aaron's page]. Aaron, good work today. [hands Aaron his page]

Moving Forward

Throughout my analysis of the writing events, I identified teacher supports that served to move students forward to continue or finish writing. Moving Forward comprised 25.1% of all print process supports. In other words, some of Ms. Graham's supportive practices for student's writing functioned as a push or nudge towards the act of printing on the page. These supports occurred at different stages of student's writing. To move students to begin writing individually, Ms. Graham would make a verbal invitation with or without gesturing towards the page for students to write. During shared or interactive writing, she would pause and ask "Are you ready?" and then she would engage students in writing a message. When a student was already writing a message but became unfocused, Ms. Graham would remind them to continue writing their message or to think about what they were writing. She would also ask a student to state the next word in their message with the intention to support the child in writing the word or to continue writing individually. Ms. Graham sometimes corrected mistakes in student's writing, such as drawing attention to a word missing from message. As needed, she provided space for students to write by suggesting that a student move, pointing to a location for the student to sit, or requesting that another student make room at the table. As Ms. Graham identified that a student's writing was nearing completion, she asked if students wanted to add more to their message or if they were finished writing. Typically, she relied on the students to decide when their writing was complete. However, on occasion, she either requested that students add more to their message or she told students that they were finished writing.

Responsiveness

The responsiveness category included Ms. Graham's reactions to student talk. Ms. Graham provided a response that signaled to a student that she was listening or attending to the student, including repeating what a student had said but did not include affirmation or the writing or drawing processes. This category included adult questions or comments that are part of conversation that was not readily identified as part of the writing or drawing processes. The intention was not to develop understanding of or give support for composing process. Utilizing responsive language strategies assists students in developing oral language skills, self-expression, and social-emotional skills (Girolametto & Weitzman, 2002). Suggested strategies for responsive language include repetition of what child said at the beginning of a conversation to let them know they were heard and that the adult is receptive to elaboration; expansion of what child said; and parallel talk by adult which repeats what child may be doing, feeling, and thinking to help them connect with language. Ms. Graham demonstrated responsiveness to students' talk and actions throughout the writing events, totaling 13.4% of all supports. She provided responses to the students which signaled that she was listening or attending to students. At times, her response involved repeating a student's statement which demonstrated she was listening to the student. Sometimes she asked questions or made comments to continue the conversation with students. She was responsive to students both during the students' writing and outside of the writing process. For example, during a clothing activity, Ms. Graham asked the students to cut pictures of clothing from catalogs, glue the clothing on paper, draw their bodies wearing the clothing, and then write about their pictures. At the beginning of the activity, she constantly conversed with the students regarding their clothing choices. This constant responsiveness moved the activity forward and engaged the students in the activity.

Praise and Affirmation

The praise and affirmation category included teacher support involving praise for student's thought, talk, or actions. Examples of support included talk and gestures to provide praise and affirmation. Ms. Graham provided praise for students' thoughts and actions related to their drawing or writing, totaling 9.4% of all supports. Praise was identified in several ways, such as explicitly stating praise, gesturing or moving head in a movement of affirmation (e.g., nodding head up and down in agreement), or repetition of a student's statement that signaled affirmation (e.g., horse begins with 'h').

Material Management

The material management category included support for how to prepare and use materials related to the writing process. Adult support was provided for writing materials throughout the writing events, totaling 9.3% of all supports, including provision of materials, management of materials, explanation of material use, asking students questions about materials, and providing explicit direction to students regarding materials use. Ms. Graham provided materials to support composing by handing materials to students or asking the students what materials they needed for writing. She prepared materials for students use before and during the writing events. This included the rearrangement of materials, such as moving a container of pencils so a student could reach or adjusting a journal so that a student could more readily write. Ms. Graham provided explanations for how to use materials and the purpose of materials. She asked students questions about the properties and characteristics of the writing materials. Also, she gave explicit directions for the placement and appropriate use of materials.

Idea Generation

The idea generation category included teacher support for thinking about ideas for composing. This included comments, questions, or requests for more information. The purpose was to support students in generating ideas for a message or developing a concept. However, this category was only coded for supports offered before students were engaging in recording a message in print (e.g., Ms. Graham was talking about the topic and leading discussion at the beginning of the activity). Idea generation totaled 8.1% of all supports. The teacher engaged students in thinking about ideas for composing (i.e., creating messages for meaning-making or for communication). The purpose was to support students in developing a concept and generating ideas for messages. The teacher supported idea generation by making comments, providing information, asking questions, and requesting more information about students' ideas. For example, during a whole group interactive writing event, Ms. Graham asked the students to think about ideas for writing about the lifecycle of butterflies. That day, the class was releasing butterflies on the playground that had arrived in the classroom as tiny caterpillars. Ms. Graham first describe the lifecycle of humans and then compared our lifecycle to that of butterflies to support students in generating ideas for writing about the butterfly lifecycle. The following is an excerpt from the beginning of that conversation.

Ms. Graham: We're going to think about their lifecycle. When you [points to Ciara] were first born, you were a [crosses both arms against her chest]

Whole Class: Baby!

Ms. Graham: Baby. Now you are a... [points towards group]

Whole Class: Big kid!

Ms. Graham: Now you're a kid. Then you might be... [raises flat hand into air]

Whole Class: Bigger!

Ms. Graham: A bigger kid, a teenager. And then you turn into a... [points to herself]

Whole Class: Grown up!

Ms. Graham: A grown up. And then when you're an old...And then after you're a grown up... When you're a really old grown up who would that be?

Student: You would be a big kid!

Ms. Graham: A really old grown up.

Student: No!

Ms. Graham: Like who?

Student: Papa. [points to group]

Student: Grandpa!

Ms. Graham: Like your grandpa, your grandma! [points to group]

Ms. Graham: So. Wait. [looks at and points to butterfly cage] Ms. Parker. Do butterflies turn into grandmas?

Whole Class: No.

Ms. Graham: They don't have the... [slightly shaking head side to side]

Student: Legs?

Ms. Graham: They don't have the same life cycle as us, right?

Drawing Process

The drawing process category included teacher supports that drew attention to student's marks on the page by asking questions, reading, or interpreting drawing. Supports also included facilitation of student's drawing process by providing assistance or adult demonstration. Students were encouraged to record messages by drawing. Drawing occurred both before and/or after

student writing. When student writing preceded drawing, the teacher would ensure that students matched the content of their written message to their drawings.

Supportive practices categorized within drawing process made up 6.7% of all supports. The teacher's supportive practices included inviting students to draw, providing help for students' drawings by providing an explanation for how to draw something, making requests for students to provide clarification for how to understand or interpret drawings, drawing attention to the marks on the page by asking questions, discussing the meaning of drawings, requesting for students to add more details to drawings, supporting the development of knowledge or vocabulary related to drawing (e.g., discussing what an illustrator does), and using technology (i.e., internet search for pictures on smartphone) to locate pictures for students to reference as they drew. For example, when David was answering the question of the day, "Do you have a pet?" He was struggling with drawing a chew toy for his dog. So, Ms. Graham used her smartphone to locate a picture that David could reference for his drawing. The following is an excerpt from that event.

- David: It's...It's [Ms. Graham looks at him] really hard to make a chew toy.
- Ms. Graham: To make a chew toy? Let's see. Should we look at what the chew toy looks like, David? [turns and picks up her phone and begins to search for a picture of a dog chew toy] Let's see... dog chew toy. Let's see what it looks like on our picture. And then we can try and draw it.
- Ms. Graham: David, what kind were you thinking of? [leans across the table towards David and shows him pictures of chew toys on her phone] Like the one that looks like a bone?
- David: The one I'm talking about is green. [Ms. Graham is scrolling through pictures on her phone]
- Ms. Graham: That kind? [stops and points to picture]
- David: Yeah.

Adult Writing

The adult writing category included instances of the teacher writing in front of students. Ms. Graham directly modeled the writing process for students. At times, Ms. Graham was participating by writing alongside students. Supports categorized within adult writing totaled 6.4% of all supports. Ms. Graham wrote in front of students both during whole group and small group writing events. During whole group events, adult writing was intended to model the writing process. During small group events, adult writing primarily occurred after a student had completed their own writing and the teacher was writing the student's message under the student's writing. For example, the following is an excerpt from a journal writing event where students were asked to answer the question of the day, "Do you have a pet?" Ms. Graham read the student's writing aloud and then wrote the message again in the journal while stating the message aloud. This was a common practice during journal time.

- Ms. Graham: Wow, that's a long sentence with a big message. "I do not like Oreo. He is so messy in my daddy's home", [points to last word with finger] or my daddy's house?
- Latrice: Yup.
- Ms. Graham: What kind of messes does Oreo do? [takes journal to write message]
- Latrice: He always mess with me.
- Ms. Graham: Do you guys have a pet at mom's house or only at dad's?
- Latrice: We have daddy's house.
- Ms. Graham: "I do not like Oreo. He is so messy in my daddy's house?" [writes message while reading aloud]

During adult writing, Ms. Graham demonstrated how to engage in the writing process by slowly stating words and then segmenting sounds in the words while writing, matching sounds to letters and identifying letters by name, pointing while rereading her writing, and talking about the writing process or what it means to be a writer. For example, when a small group at the writing table had been writing ideas for the items that would be needed to turn the home living center into an animal shelter during a unit of study on pets, the teacher talked about writing words in different lists on chart paper as she wrote “animals” at the top of one list to denote what animals would be needed for the animal shelter and “doctor” at the top of another list to denote what the animal doctor needed to care for animals. During a small group interactive writing event, she asked the group “Who’s the story by? Who’s the author?” She then pointed to herself and stated, “I’m the author.” Next, she pointed to each group member and stated that they were each an author while she also recorded their names on the chart. This example illustrated how Ms. Graham thinks about herself as an author and what it means to be a writer. By first pointing to herself, she identified herself as a writer. Then, she pointed to each student to identify them as a writer. Ms. Graham demonstrated a variety of different aspects of the writing process, including what it means to be a writer.

Name Writing

The name writing category included teacher support for name writing or the name writing process. Name writing was encouraged at the beginning of a few writing events and was only identified as 1.3% of all supports. During whole group writing events, no support was provided for name writing as students did not record their names on the chart paper. During journal time, name writing was not requested by the teacher as students’ names were already written on the

cover of each journal. However, at times, students would write classmates' names as part of their message. Ms. Graham would draw attention to those names, read students' names, or ask about what name had been written. During small group independent writing events, explicit requests were made for student to write their names and directions were provided for the location for name writing. Only one small group interactive writing event included name writing, this was mentioned previously in which she asked the group "Who's the story by? Who's the author?" and then the authors were named and names were written.

Rules

The rules category included teacher supports involving requests using words, gestures, or movements that signaled to student rules or expectations. Examples included establishing procedures for a writing event, and reminders to take turns or share materials. Infrequently or only totaling 1.2% of all supports, Ms. Graham reminded students of classroom rules or expectations for participating in group activities. Writing activities typically ran smoothly in this classroom. As needed, her reminders included verbal requests, gesturing, or movements that signaled to a student the expectations or rules that were to be followed during the activity. The majority of supports involved reminders for following the expected procedures of a writing event, such as taking turns when speaking or sharing writing materials.

Invitation

The invitation category included teacher support provided by inviting a student to participate at the writing table or directing another child to invite a child to writing table. This category totaled 1.5% of all supports. There was not a consistent pattern to how children were

invited to a writing event, except for whole group events when all students were invited to participate. At the beginning of small group events, sometimes the teacher offered an open invitation to all students and selected the first 4-5 students who volunteered to participate and other times the teacher selected specific students to participate. Rarely, a student would not want to be selected and she would choose another student to participate. During small group events, which occurred during center time, students would often walk over to the writing table and ask to join. Ms. Graham would invite students to join when space was available at the table. Otherwise, as students finished writing and space became available, Ms. Graham would select other students to join the table, send a student who had just finished at the writing table to go pick a friend to replace them at the table, or she would conclude the writing event.

Phonological Awareness

The phonological awareness category included teacher support for the development of phonological awareness by drawing attention to the sounds in words and the relationship between sounds (e.g., rhyming words, starting with same sounds). There was no direct attempt to connect sounds to letters in print. This category did not include supports offered when students were engaged in the print process and writing messages on the page. While supports for phonological awareness were mostly provided during student writing and were discussed in detail in the print process section discussing message segmentation, the teacher also supported the development of phonological awareness during discussions which occurred during the writing event but were not directly related to the print process in which the student was engaged. Supports for phonological awareness outside of student writing totaled 0.9% of all supports. These types of supportive practices included drawing attention to the sounds in words and the

relationships between sound in words (e.g., rhyming words, alliteration). For example, during a journal writing event one of the students referred to me as “Aurora” and Ms. Graham responded, “No, Ms. Laura. They're names kind of sound alike though. Laura. Aurora. They've got rhyming names.” Ms. Graham used naturally occurring incidents to draw attention to rhyming words, targeting development of phonological awareness.

Vocabulary

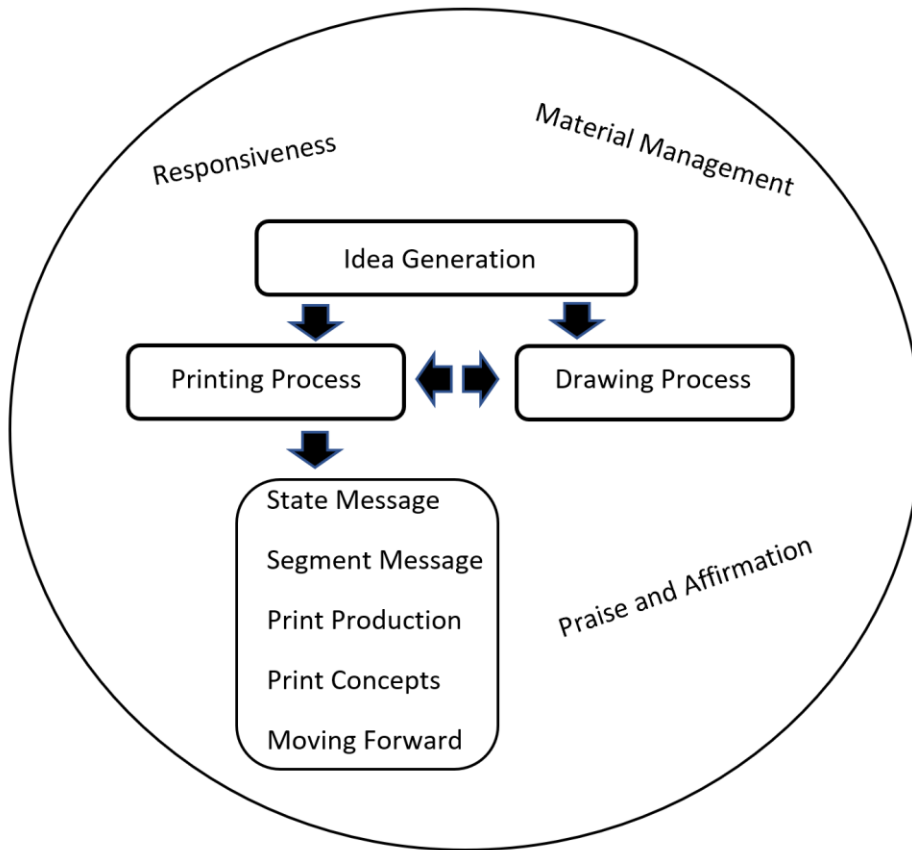
This category included teacher support for the development of vocabulary or differentiating the meaning of similar words. Vocabulary development was not a significant portion of the teacher’s supportive practice, totaling 0.3% of all supports. However, there were several instances in which new words or uses of words were introduced by Ms. Graham. For example, when writing about the lifecycle of butterflies, she introduced “abdomen” as a vocabulary word while talking about the body parts of butterflies.

Pattern of Supportive Practices

Analysis of writing events revealed a consistent pattern of supportive practices for student’s writing. Across writing events, Ms. Graham’s supports appeared to follow a similar procedure which began with inviting students to an activity and engaging students in the activity by participating in idea generation prior to writing. After different ideas were shared and discussed, Ms. Graham switched her language usage from talking about ideas to stating a message. This was a linguistic cue to students that it was time to write. Then, students were invited to either draw or write about their message or Ms. Graham modeled drawing and writing (e.g., whole group shared writing). Next, students were invited to write about their picture or

draw about their writing. When children engaged in the print process, as described in the print process section, they were most often encouraged to state a message, segment the message, and then record the message with print. During writing, Ms. Graham provided support for students to develop phonological awareness skills by attending to the sounds in their messages, identifying those sounds, and segmenting their spoken messages into smaller units. When the activity was whole group shared writing, Ms. Graham encouraged the group to create a message, segment the message, and then support her as she wrote the message by identifying sounds and matching to letters. During writing, Ms. Graham supported the understanding of print concepts and she moved students forward through the process using verbal and gestural reminders (e.g., Asking a student, “What is the next word in your message?” while tapping the page with her fingers). Throughout writing events, Ms. Graham used other supports including responsiveness, praise and affirmation, and material management. These three foundational teaching practices held the events together by maintaining student engagement and motivation, demonstrating that the adult was listening and responding to student needs and interests, and maintaining the accessibility and availability of materials. The pattern of supportive practices is illustrated in Figure 5.

Figure 5
Pattern of Supportive Practices



The following is an illustration of the pattern of support provided in this classroom using excerpts from the journal writing event where students were writing about releasing butterflies on the playground. This demonstrates the initial engagement of students at the writing table and provides examples of generating ideas based on the writing topic, releasing butterflies.

Ms. Graham: All right. [collecting extra journals around table] Let's see who found their first blank page and, Anthony, we always start with our...name at the top

Anthony: I want to write about the ball.

Ms. Graham: But we're writing about our butterflies. We're writing about our butterflies...All right. So, I want you to think about some information you can tell me about your butterflies, all right?

Jazmin: It's going to... The ones that will all... When they fly.

Ms. Graham: What about them?

Jazmin: When they're out of their basket.

Ms. Graham: You want to write about when they flew out of the basket? [raises hands into air] All right... You want to write what, David? [points at David]

David: Different colors.

Ms. Graham: What kind of different colors? For what?

David: For butterflies.

Ms. Graham: Oh, you want to tell me about how butterflies can be different colors?

David: Like yellow. Some of them are yellow and orange.

Ms. McNelis: Okay. All right, Anthony. What are you going to write about butterflies?

Anthony: I'm going to write... I don't know. His antennae and his body.

Ms. McNelis: His antennae? You're right, he does have antennas on top of his head doesn't he and has wings.

In the example, Ms. Graham told students that they were writing about butterflies and instructed them to think about information on butterflies. As students were prompted to share their ideas, Ms. Graham asked questions or provided comments to further their idea generation. When, she asked David what he wanted to write he responded, “different colors” so she pushed him to develop the idea further and he eventually stated that he wanted to tell about how the butterflies could be different colors like yellow and orange.

After Ms. Graham explained the writing topic and encouraged students to think about what they could tell about butterflies, she encouraged them to draw and write about their ideas.

Some students preferred to draw first and others preferred to write. Ms. Graham typically let them choose. When students engaged in the print process, Ms. Graham supported the recording of messages by asking students to state a message, assisting with the segmentation of that message, and then supporting print production. On the following page, there are several excerpts from a transcript that illustrates this pattern for one student which included stating a message, segmenting a message, and printing a message. The transcript was edited to only show the interactions and talk between Ms. Graham and Ayana.

In the excerpt, Ayana was encouraged to state her message and she decided to use the same message as Jazmin. Ms. Graham supported Ayana in stating the message by asking, “They flew out the cage?” Then Ms. Graham told Ayana to be ready and Ms. Graham said, “It...” and Ayana finished, “flew out of the cage.” The teacher provided support for the student to state the oral message. Immediately, Ms. Graham repeated the message while making scaffolded lines (i.e., writing one line for each word in the message). Ms. Graham invited Ayana to read the lines and then Ayana began writing her message. As Ayana began writing, Ms. Graham referred her to the word wall to support her printing on the page and she referred to a capital ‘I’ supporting

Ms. Graham: All right, well let's write a message together, what do you want to tell me about your butterfly?... Let's think first, [rests hand on center of page] what do you want to tell me about your butterfly?

Ayana: I... I'm going to... I put in something brown and orange and brown and rainbow.

Ms. Graham: Okay, remember we're telling real information about our butterfly, what were you going to tell me about your butterfly?

Ayana: I don't remember.

Ms. Graham: Yes, Ayana.

Ayana: I'm going to do the same thing, okay. So...[Ayana is looking at Jazmin's page]

Ms. Graham: They flew out of the cage?

Ayana: Yes.

Ms. Graham: All right. So ready? It- [writes line]

Ayana: Flew out of the cage.

Ms. Graham: Flew. We'll write the message and then you can write the cage. "It flew..." [making lines]

Ayana: Out.

Ms. Graham: "Out." [making line]

Ayana: To.

Ms. Graham: "To the..." [making lines] You're right. "It flew out to the cage." [making lines] All right, you read your lines. [points to lines]

[Ayana begins writing her sentence]

Ms. Graham: Well since it's the first part of our sentence Ayana, we need a capital 'I' [points to letter on word wall] since it's the first part of our sentence.

[Ayana continues writing]

Ms. Graham: What's the next line here Ayana?

the development of concepts about print (i.e., understanding what it means to say capital letter). An example of moving the activity forward occurred at the end of the excerpt when Ms. Graham asked, "What's the next line here Ayana?" Ms. Graham was signaling to Ayana to move to the next line and work on writing that word.

As part of her pattern of support, Ms. Graham used other supportive practices, described in previous sections, such as responsiveness, praise and affirmation, and material management. These practices represented foundational teaching practices which provided students with the

opportunity to engage in activities that developed knowledge and skills. Examples of each type of practice are provided in Figure 6.

Figure 6
Supportive Practices across Events

Supportive Practice	Examples of Support
Responsiveness	- Responds to student questions - Responds when student calls her name
Praise and Affirmation	- Nods head in affirmation - Referring to student’s drawing, says “that looks nice” - After student writes a message, says “good job”
Material Management	- Folds student’s journal to one page - Gives journal to student - Asks student to find first blank page in journal

Summary

In this chapter, the supportive practices used by the classroom teacher were discussed. Specifically, the key supports for student’s writing were presented and examples were provided. The classroom teacher provided support for students to state oral messages, segment oral messages, record messages using print, develop understandings of print concepts, and move forward to complete their writing. Other key supports included responsiveness to students’ talk by providing a verbal or gestural response that signaled that the adult was listening to the child; praise and affirmation; managing writing materials; encouraging students to draw to record messages; and adult writing which modeled the print process.

The current study filled a gap in existing literature by describing an expert teacher who utilized a broad range of supportive practices for student’s writing. In particular, this study described one teacher’s practices which included all of the targets of writing support in Chapter 2, Table 1. Previous studies have determined that writing materials and opportunities for

students to engage in writing were provided in preschools but limited teacher support was provided for students' writing (Bingham et al., 2017; Clark & Kragler, 2015; Gerde et al., 2015; Guo et al., 2012; Zhang et al., 2015). When support was provided, teachers focused on handwriting skills (Bingham et al., 2017), name writing, or provided letters for spelling (Gerde et al., 2015). While prior studies across a broad sample of classrooms observed support for transcription skills, these studies did not observe frequent support for composing messages. Ms. Graham's supportive practices encompassed a wider range of recommended targets for writing support than has been previously described in literature and demonstrates what is possible when an expert teacher engages students in emergent writing.

In addition, I described Ms. Graham's pattern of supportive practices for student's writing. Ms. Graham's support began by first engaging students in the writing event and generating ideas related to the writing topic. Then, students drew or wrote about their message. As students engaged in the print process, they were encouraged to state a message, segment the message, and then record the message with print. During the print process, students were supported to develop understandings of print concepts and to move forward through the print process. Other supports that are considered foundational teaching practices were used including these key supports mentioned previously: responsiveness, praise and affirmation, and material management. Foundational practices support student engagement and motivation, demonstrate that an adult is listening and responding to student needs and interests, and maintain the accessibility and availability of materials during writing events.

A strength of the current study was the use of a more fine-grained description for supporting message segmentation. This included isolating different sounds in words, segmenting sounds with hand motions, and using a scaffolded writing technique (Bodrova & Leong, 1998).

These supports have not been previously included on formal observation measures and could be added to increase the specificity for observing how message segmentation is supported in classrooms.

A limitation of the current study was the narrow definitions used for categorizing supports as writer identity or phonological awareness. In Table 5, it appeared as if writer identity and phonological awareness were infrequently supported; however, both categories had narrow definitions that impacted which supports were coded in each category. The teacher supported students in identifying as an author each time she read or invited students to read their written messages. Phonological awareness was supported frequently while students wrote, especially during message segmentation. Therefore, the frequencies reported in Table 5 captured only part of the supports provided to students for developing their identity as an author or for developing phonological awareness skills.

CHAPTER 5

A TEACHER’S SUPPORTIVE PRACTICES FOR DIFFERENT TYPES OF WRITING ACTIVITIES

In this chapter, I address my second research question, “Does the teacher’s pattern of support change for different types of writing activities?”, as I consider the various types of teacher planned writing activities. First, descriptions of the different types of writing activities and the analyzed writing events will be provided. Next, I report on the qualitative descriptive analysis of the teacher’s supportive practices for different writing activities. Then, I provide the results from statistical analysis which examined the differences between writing activities. Finally, connections to the existing literature will be discussed.

Writing Events

As described in Chapter 4, the classroom teacher planned a variety of writing activities including interactive writing and shared writing with the whole group on the rug, and journal writing, interactive writing, and independent writing with small groups at the writing table. Interactive writing and shared writing are teaching strategies where the teacher and students jointly create messages, sound out words, and match sounds to letters. However, during shared writing, only the teacher writes. Whereas, during interactive writing, both the teacher and students write, taking turns writing on the page.

My analysis focused on all 15 writing events that Ms. Graham supported. Table 7 displays information for each analyzed writing event including the name of the event, the type of writing activity, and a description of the writing event. This information contextualizes each

Table 7
Writing Event Information

Event Name	Type of Activity	Description
Journals 3.4.19	Small Group Journals	Students answered question of the day, "Do you have a pet?" Students who did not have pets wrote a request to parents to get a pet.
Journals 3.18.19	Small Group Journals	Students answered question of the day, "What did you do over spring break?"
Journals 4.5.19	Small Group Journals	Students wrote about a new ant farm that was just introduced during the morning meeting.
Journals 4.26.19	Small Group Journals	Students wrote about releasing their butterflies on the playground that had started as caterpillars.
Journals 5.13.19	Small Group Journals	Students wrote about what they liked in pre-kindergarten.
Plot Charts 3.26.19	Small Group Independent	Following a read-aloud, students created plot charts to tell what happened at the beginning, middle, and end of story.
Rhyming Activity 3.29.19	Small Group Independent	Students completed a rhyming activity using prepared papers saying, "I see a _____ on a _____."
Clothing Activity 5.3.19	Small Group Independent	Students cut out pictures of clothing from catalogs, drew themselves in the clothing, and then wrote about picture.
Interactive Writing 3.5.19	Small Group Interactive	Teacher requested ideas from students for the items that were needed to turn home living into an animal shelter.
Stray Bunny Story 4.16.19	Small Group Interactive	Teacher led group in discussion for ideas telling what could happen in a story about Bun Bun the stuffed rabbit. Then each child took a turn writing and drawing a sentence for the story.
Idea Web 4.23.19	Small Group Interactive	Using an idea web for organization, teacher discussed clothing ideas with students and then invited each student to name and write their idea about clothing.
Fruit Salad Recipe 4.9.19	Whole Group Interactive	Teacher led discussion about what goes in fruit salads and then supported students taking turns writing the recipe on one chart paper.
Butterfly Lifecycle 4.26.19	Whole Group Interactive	Teacher led discussion about the lifecycle of butterflies and then supported students taking turns writing the lifecycle on one chart paper.

Read Aloud with Plot Chart 4.1.19	Whole Group Shared	Following a read-aloud, teacher wrote students ideas on a plot charts to tell what happened at the beginning, middle, and end of story.
Clothes Questions 4.23.19	Whole Group Shared	At the start of a new unit of study, teacher led class discussion about what they want to know about clothes and the teacher wrote their questions on chart paper.

event and reports the kinds of activities that were planned by the classroom teacher. Other writing activities were supported by Ms. Parker, the educational assistant, throughout the observation period including a daily morning message, additional journal writing, and small group interactive writing. However, only events led by Ms. Graham were analyzed for this study.

Supportive Practices for Different Types of Writing Activities

Table 8 shows the relative frequencies and total number of references counted in the support categories for each type of writing activity. Print process supports were key for most writing activities except shared writing, as the teacher wrote the message. While students were engaged in composing their own messages, all writing supports were coded to the print process category. All other categories were only coded outside of the time when students were writing their own messages. Ms. Graham supported students to state oral messages, segment oral messages, print messages, develop understandings about print concepts, and move forward to complete their writing. Table 9 provides the overall relative frequency for each type of print process support.

When a writing activity involved students working individually on writing (e.g., small group journals, small group independent), the most frequently occurring supports were categorized as print process, responsiveness, or material management. When a writing activity

was interactive in small or whole groups (i.e., joint creation of message with both teacher and students writing in small or whole group settings), the most frequently occurring supports were categorized as print process, idea generation, or praise or affirmation. Whole group shared writing was the only activity that did not include student's writing. Not surprisingly, Ms. Graham provided the most frequent support using adult modeling of writing during these activities. This activity also had a higher frequency of supports categorized as idea generation or responsiveness. Support for name writing, following classroom rules, developing phonological awareness not directly related to student writing, and developing vocabulary occurred infrequently and had the four lowest relative frequencies of support across all types of writing activities. However, the phonological awareness category only reported support occurring outside of students' writing. Phonological awareness was an essential component during writing as students worked to segment their messages and match sounds to letter names. The phonological awareness category most likely had a low relative frequency because the teacher was incorporating this skill into writing instruction.

Table 8*Relative Frequencies of Support Categories for Different Types of Writing Activities*

Support Category	Small Group Journals Frequency	Small Group Independent Frequency	Small Group Interactive Frequency	Whole Group Interactive Frequency	Whole Group Shared Frequency
Print Process	43.6 (1179)	45.2 (656)	46.0 (471)	27.9 (127)	0.0 (0)
Responsiveness	17.1 (462)	11.7 (170)	8.9 (91)	9.2 (42)	8.9 (17)
Praise or Affirmation	8.8 (237)	8.5 (124)	10.9 (112)	13.4 (61)	6.3 (12)
Material Management	9.3 (251)	11.9 (173)	8.3 (85)	6.2 (28)	1.1 (2)
Idea Generation	3.9 (105)	5.2 (75)	12.1 (124)	24.6 (112)	30.5 (58)
Drawing Process	7.5 (203)	7.9 (114)	4.7 (48)	5.1 (23)	2.6 (5)
Adult Writing	4.8 (130)	4.4 (64)	6.7 (69)	6.6 (30)	48.9 (93)
Name Writing	1.9 (52)	1.4 (21)	0.0 (0)	0.0 (0)	0.0 (0)
Rules	1.0 (27)	0.7 (10)	1.0 (10)	4.2 (19)	1.6 (3)
Invitation	1.5 (40)	0.7 (10)	0.7 (7)	0.0 (0)	0.0 (0)
Phonological Awareness	0.5 (14)	1.8 (26)	0.5 (5)	1.8 (8)	0.0 (0)
Vocabulary	0.1 (4)	0.6 (8)	0.2 (2)	1.1 (5)	0.0 (0)
Total	100 (2704)	100 (1451)	100 (1024)	100 (455)	100 (190)

Note. Parentheses contain total number of references of each support per type of activity.

Table 9*Relative Frequencies of Print Process Supports for Different Types of Writing Activities*

Print Process Support	Small Group Journals Frequency	Small Group Independent Frequency	Small Group Interactive Frequency	Whole Group Interactive Frequency	Whole Group Shared Frequency
Moving Forward	11.1 (301)	12.3 (178)	9.4 (96)	7.9 (36)	0.0 (0)
Print Concepts	9.9 (267)	9.7 (141)	14.9 (153)	2.2 (10)	0.0 (0)
Segmenting Oral Messages	7.9 (213)	8.2 (119)	10.9 (112)	8.8 (40)	0.0 (0)
Stating Oral Messages	6.2 (168)	10.7 (155)	5.8 (59)	2.4 (11)	0.0 (0)
Print Production	8.5 (230)	4.1 (60)	5.0 (51)	6.6 (30)	0.0 (0)
Writer Identity	0.0 (0)	0.2 (3)	0.0 (0)	0.0 (0)	0.0 (0)
Print Process Total	43.6 (1179)	45.2 (656)	46.0 (471)	27.9 (127)	0.0 (0)

Note. Parentheses contain total number of references of each support per type of activity.

Description of a Similar Pattern of Supportive Practices across Writing Events

Qualitative analysis suggested that Ms. Graham utilized essentially the same pattern of support across writing events. This pattern of support included the generation of ideas for writing, followed by an invitation to either draw or write about their message or the teacher modeled drawing and writing. For the activities that included student writing, students were next invited to write about their picture or draw about their message. When students engaged in the print process, they were encouraged to state a message, segment the message, and then record the message with print. During whole group shared writing, the teacher encouraged the group to create a message, segment the message, and then support her as she wrote the message by identifying sounds and matching to letters. During all writing events, the teacher used other supports including being responsive, providing praise and affirmation, and managing writing materials.

Comparison of the Pattern of Supportive Practices

After performing qualitative analysis, statistical testing was performed to see if the nuanced variations in the pattern of support were large enough to attain significance. Statistical analysis was conducted using the Friedman test of differences. Two tests were conducted. The first test used the overall support categories listed in Table 8 and second test used the print process supports listed in Table 9. However, the whole group shared writing activity was not included in the second test as no print process supports were not coded because I defined this category to only include supports for student's engaged in writing. Only the teacher writes during this type of activity.

After testing the overall support categories, the results from the Friedman test indicated that the supports the teacher offered for the five types of activities were not significantly different ($F_{r(4)} = 5.635, p > 0.05$). Therefore, no follow-up contrasts were needed. This result suggests that the overall pattern of supportive practices for student's during different types of writing activities was similar.

Figure 7
Writing Activity Ranks for Overall Categories

Ranks	
	Mean Rank
Small Group Journals	3.25
Small Group Independent	3.33
Small Group Interactive	3.00
Whole Group Interactive	3.33
Whole Group Shared	2.08

Figure 8
Writing Activity Test of Differences for Overall Categories

Test Statistics^a	
N	12
Chi-Square	5.635
Df	4
Asymp. Sig.	.228

a. Friedman Test

A second analysis including only the print process supports indicated that the supports the teacher offered in the four types of writing activities were not significantly different ($F_{r(3)} = 2.357, p > 0.05$). Therefore, no follow-up contrasts were needed. This result suggests that the overall pattern of supportive practices for student's engaged in the print processes was similar across different activities.

Figure 9
Writing Activity Ranks for Print Process

Ranks	
	Mean Rank
Small Group Journals	2.67
Small Group Independent	2.83
Small Group Interactive	2.67
Whole Group Interactive	1.83

Figure 10
Writing Activity Test of Differences for Print Process

Test Statistics^a	
N	6
Chi-Square	2.357
Df	3
Asymp. Sig.	.502

a. Friedman Test

These findings illustrate that there was not a significant difference in the teacher’s pattern of support for different types of writing activities. Thus, the teacher’s supportive strategies were transferable across different types of writing activities. In other words, a similar pattern of supportive practices was used across different types of writing activities. A different supportive approach was not used for each type of writing activity. This has implications for classroom teachers as one pattern of supportive practices could be implemented for multiple writing opportunities.

Summary

Qualitative observations and analysis determined that the teacher utilized a similar pattern of supportive practices across different types of writing activities. Statistical analysis confirmed that there was not a significant difference in the frequency and types of supports used in different types of writing activities. This is important as it illustrates that one pattern of support can be transferred across different types of writing activities. The observed patterns in this study support previous research (Rowe & Flushman, 2013) which described steps for engaging young children in writing. The current study described a pattern of support which included the generation of ideas for writing. Then, the teacher modeled drawing and writing or an invitation was offered to students to either draw or write about their message. When students engaged in the print process, they were encouraged to state a message, segment the message, and then record the message with print. During whole group shared writing, the teacher encouraged the group to create a message, segment the message, and then support her by identifying sounds and matching sounds to letters as she wrote the message. During all writing events, the teacher used other foundational teaching practices which included being responsive, providing praise and affirmation, and managing writing materials.

In the current study, support for name writing occurred infrequently. This was consistent with the overall findings in Chapter 4 and could be contrasted with previous studies where name writing was common. For example, in one study, name writing was one of the most frequent forms of support (Gerde et al., 2015). This can be compared to Ms. Graham's writing instruction which focused on composing a novel message instead of name writing. This suggests that her overall writing instruction was different in many ways than previously described in literature.

CHAPTER 6

A TEACHER'S SUPPORTIVE PRACTICES FOR DIFFERENT TEACHER IDENTIFIED STUDENT GROUPINGS

In this chapter, I address my third research question, “Does the teacher’s pattern of support change for different teacher identified student groupings?” I examined the types and amounts of supports that were provided to different groups of students. First, descriptions of the teacher identified student groupings are provided. Next, I report on the qualitative descriptive analysis of the teacher’s supportive practices for different student groupings. Then, I provide the results from statistical analysis which examined the differences between groups. Finally, the findings are summarized and situated within existing literature.

Teacher Identified Student Groupings

During an interview, I gave Ms. Graham slips of paper with each student’s name and asked her to sort students into 3 groups based on how she thinks of students as writers. She sorted students into five groupings. Her opinion was formed by daily observations of students, ongoing classroom-based literacy assessment (e.g., letter sounds and letter names) and school-based literacy assessments (e.g., concepts of print, onset sounds, letter names, letter sounds, and descriptive information on features of student’s writing). She explained that she divided student writers into groups based upon their knowledge of print concepts, letter names, letter sounds, letter formation, ability to match sounds to letters, ability to segment sounds in messages, and independent use of strategies to support writing. This information was important because the teacher created her own groupings and categories that reflected her thinking about the writers in

her classroom. Table 10 shows the groups described by the teacher and the number of students assigned to each group.

Table 10
Teacher Identified Groupings

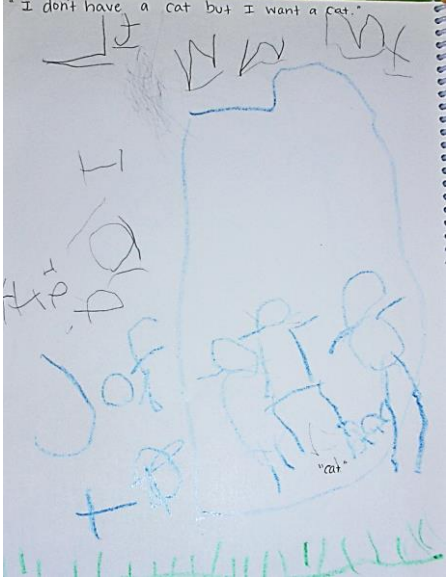
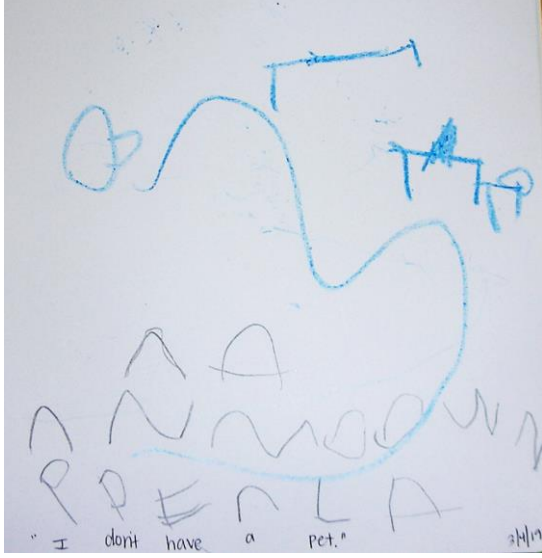
Group	Teacher Description	Number of Students
Group 5	<ul style="list-style-type: none"> • Fluently identifies all letters (26 upper- and lower-case) and sounds (31 including long vowels) • Uses sight words • Segments sounds in words independently • Identifies multiple sounds in words • Matches sounds correctly to letters • Use strategies without prompting • Writes using invented spelling 	6
Group 4	<ul style="list-style-type: none"> • Fluently identifies all letters (26 upper- and lower-case) and sounds (31 including long vowels) • Segments sounds in words with minimal support • Identifies some sounds in words with minimal prompting able to identify more sounds • Matches sounds correctly to letters • Writes using invented spelling 	3
Group 3	<ul style="list-style-type: none"> • Identifies all letters (26 upper- and lower-case) and all but 1-3 sounds (31 including long vowels) with some fluency • Requires support to segments sounds in words • Identifies first sound in words with support able to hear more sounds • Matches sounds correctly to letters • Writes using invented spelling 	3
Group 2	<ul style="list-style-type: none"> • Identifies 15-20 letters (26 upper- and lower-case) and 15-20 sounds (31 including long vowels) with some fluency • Requires more support to segment sounds in words • Attempting to identify first sound in words with support 	4




	<ul style="list-style-type: none"> • Attempting to match sounds to letters • Writes independently using random letter strings and sometimes personal cursive 	
Group 1	<ul style="list-style-type: none"> • Identifies 8-10 letters (26 upper- and lower-case) and 8-10 sounds (31 including long vowels) with some fluency • Not yet segmenting sounds in words • With prompting and support, are not yet matching sounds to letters • Writes independently using random letters or letters from name • Know that print has meaning 	4

Table 11 displays photographs of students' writing. The writing examples were typical of writing from students in each group. The examples were from a journal writing activity where students answered the question of the day, "Do you have a pet?"

Ms. Graham stated that all five groups understood that print carried meaning and that letters were used to print messages. She also provided distinct descriptions for each student grouping. Students in Group 1 identified 8-10 letter names and letter sounds correctly and wrote several random letters or letters in their name independently. These students were not yet segmenting sounds in words or matching letter sounds to letter names. During the interview, Mrs. Graham stated, "They know that I should be writing some letters on my page and that is going to have some meaning but aren't really connecting. A lot of time, even with a lot of prompting, they are not really connecting." As seen in Table 11, the Group 1 writing sample showed that a student knew to write letters on the page and tell a message to Ms. Graham but the letters on the page did not match their oral message, "I don't have a cat but I want a cat."

Table 11
Students' Writing Samples

Group	Student's Writing Sample	Student's Message
Group 1		<p>"I don't have a cat but I want a cat."</p>
Group 2		<p>"I don't have a pet."</p>

<p>Group 3</p>		<p>When asked to state an oral message, student stated, "I have a pet."</p> <p>When prompted to read written message, student stated "I love pets."</p>
<p>Group 4</p>		<p>"I got two dogs!"</p>
<p>Group 5</p>		<p>"I love Bella."</p>

Students in Group 2 identified 15-20 letter names and letter sounds correctly and wrote using random letter strings and sometimes personal cursive or long wavy lines of print (e.g., Rowe & Wilson, 2015). As seen in Table 11, the Group 2 writing sample contained random letters for their message which was “I don’t have a pet.”. These students required considerable support to segment sounds in words and then students would attempt to identify the first sounds in words and match letter sounds to letter names. Ms. Graham stated, “They are trying to like hear first sound and connect to it but don’t really have too much more like sometimes you can help them stretch like one word but these kiddos on their own would be like letter string or [pointing to one name] she likes personal cursive. So that is what these guys would kinda do on their own.”

Students in Group 3 identified all letter names and all but 1-3 letter sounds correctly and wrote using invented spelling. These students required some support to segment sounds in words. Ms. Graham stated, “They don’t need to be told the letter but can be like guided through hearing the sounds.” They could identify the first sound in words and with support hear more sounds in words. They matched letter sounds to letter names correctly. In Table 11, the Group 3 student’s writing sample does not match the teacher’s message. However, in this instance, the student first stated that their message was “I have a pet.” Then, while Ms. Graham assisted someone else, the student independently segmented their message and drew lines but the lines did not match the number of words in their sentence. Next, the student wrote their message repeating “I have a pet.” The student tapped the third line twice for “a pet” while writing the letter “p”. After writing their oral message, the student continued writing on the lines. Later, when Ms. Graham asked the student to read their message, the student said “I love pets.” After that, Ms. Graham asked the student to write the word “fish” next to their picture. Ms. Graham

provided support to segment the sounds in the word. With support, the student was able to correctly write all the sounds in the word. This example illustrated that a student in Group 3 could independently identify the first sound in words but they required support to segment their message.

Students in Group 4 fluently identified all letter names and letter sounds correctly and wrote using invented spelling. These students required minimal support to segment sounds in words. They could identify some sounds in words and additional sounds with minimal prompting. They matched letter sounds to letter names correctly. As seen in Table 11, the Group 4 writing sample demonstrated that the student segmented their message into the correct number of words. One line was drawn for each word in the message. The student independently wrote one sound for each word. With Ms. Graham's support, the student identified an additional sound in the last word. During the interview, Ms. Graham stated, "If they were left on their own, they would probably get a few sounds correctly but are able to get more. They have the ability to get more with just a little bit of prompt."

Students in Group 5 fluently identified all letter names and letter sounds and wrote using invented spelling. They segmented words independently, identified multiple sounds in words, matched letter sounds correctly to letter names, and used sight words. She stated, "These kids know every letter, every sound. They really understand using letters and sounds." As seen in Table 11, the Group 5 writing sample contained multiple correct sounds for the words in the message.

Differences in Group Participation in Writing Activities

Before I present the pattern of teacher supports for different student groupings, it is important to highlight the distinct participation rates of each grouping across writing events. Interestingly, when considering the total supports provided for each student, the most supports were provided for students in Group 5. This does not indicate that Ms. Graham chose to provide more support for writers in Group 5. Instead, this means that students in Group 5 tended to choose to participate in more writing activities than students in the other groups and therefore, the students in Group 5 received more overall support due to their increased participation rate. In addition, students in Group 1 tended to choose to participate in fewer writing activities than other students. The participation rates were determined by looking at whether or not an individual student participated in each writing event. While all students participated in whole group writing events, students typically chose whether or not to join small group writing events. Table 12 shows the total number of events in which each student participated (i.e., each number represents the total writing events in which an individual in that group participated), the average number of events in which a student in each group participated, the total number of supports provided for each group, the average number of supports provided per student in each group, and the average number of supports provided to each student in each group per writing event. Looking across groups, on average, a student in Group 5 received the most supports per writing event and they also received more than double the amount of supports than a student in Group 1. Again, this does not indicate that Ms. Graham chose to provide more support for writers in Group 5. Instead, this implies that students in Group 5 tended to participate in more writing activities than students in the other groups. This pattern of increasing support per student from Group 1 to Group 5 suggests, as students become more sophisticated in their approaches to

writing, students tend to choose more frequently to participate in writing events. Consequently, the students identified by Ms. Graham as more sophisticated writers engaged more often in writing and received more overall support for writing, while less sophisticated writers engaged less frequently in writing and received fewer supports.

Table 12
Student Participation in Writing Events and Teacher Support

Student Group	Student Participation in Writing Events	Teacher Support Group Total	Student Support per Writing Event
Group 1 (N=4)	4,6,7,8 (6.25)	383 (95.8)	15.3
Group 2 (N=4)	8,9,9,12 (9.5)	1100 (275)	28.9
Group 3 (N=3)	6,8,10 (8)	658 (219.3)	27.4
Group 4 (N=3)	10,11,12 (11)	1077 (359)	32.6
Group 5 (N=6)	11,12,13,14,14,15 (13.2)	3215 (535.8)	40.6

Note. First parentheses contain the average number of writing events in which a group member participated. Second parentheses contain the average number of total supports provided to each student in group.

Supportive Practices

To obtain the relative frequencies of teacher support categories or parent nodes for each of the teacher identified groupings, the total number of supports provided to individual students were calculated for each category and then individual student totals were added to obtain a group total. The total counts reported here were higher than in the two preceding chapters as teacher support was sometimes directed towards multiple student recipients. Each teacher support was coded to a node and to all student recipients of the support. Table 13 shows the relative frequencies and total number of references counted in the support categories for each student group. Table 14 provides the overall relative frequency for each type of print process support

(e.g., stating oral messages, segmenting oral messages, understanding print concepts, producing print, developing writer identity, and moving forward) in relation to all supports and the number of total references for each type of support. Table 15 shows the overall relative frequency for each type of print production support (i.e., letter-sound connections, environmental print, letter formation, letter knowledge, and sight words).

Table 13
Relative Frequencies of Support Categories for Different Groups

Support Category	Group 1 (N=4)	Group 2 (N=4)	Group 3 (N=3)	Group 4 (N=3)	Group 5 (N=6)
Print Process	41.8 (160)	42.5 (467)	42.2 (278)	44.4 (478)	40.2 (1291)
Responsiveness	14.1 (54)	11.2 (123)	11.1 (73)	11.8 (127)	12.6 (406)
Praise or Affirmation	8.6 (33)	11.6 (128)	10.8 (71)	8.6 (93)	7.2 (233)
Material Management	17.5 (67)	11.1 (122)	9.4 (62)	7.7 (83)	9.8 (316)
Idea Generation	5.5 (21)	7.5 (83)	12.6 (83)	9.7 (104)	8.6 (277)
Drawing Process	2.9 (11)	5.2 (57)	5.8 (38)	6.8 (73)	7.8 (251)
Adult Writing	3.4 (13)	6.2 (68)	3.6 (24)	3.9 (42)	9.2 (295)
Name Writing	2.9 (11)	2.3 (25)	1.2 (8)	1.8 (19)	1.3 (42)
Rules	1.3 (5)	0.6 (7)	0.8 (5)	2.2 (24)	0.9 (30)
Invitation	1.0 (4)	1.3 (14)	1.5 (10)	1.1 (12)	1.1 (34)
Phonological Awareness	1.0 (4)	0.4 (4)	0.6 (4)	1.5 (16)	0.9 (28)
Vocabulary	0.0 (0)	0.2 (2)	0.3 (2)	0.6 (6)	0.4 (12)
Total	100 (383)	100 (1100)	100 (658)	100 (1077)	100 (3215)

Note. N denotes the total number of students per group. Parentheses contain total number of references of each support per group.

Table 14*Relative Frequencies of Print Process Supports for Different Groups*

Support Category	Group 1 (N=4)	Group 2 (N=4)	Group 3 (N=3)	Group 4 (N=3)	Group 5 (N=6)
Moving Forward	12.5 (48)	9.9 (109)	10.5 (69)	12.8 (138)	10.0 (322)
Print Concepts	6.5 (25)	9.6 (106)	9.3 (61)	12.0 (129)	12.4 (399)
Segmenting Oral Messages	4.7 (18)	9.5 (105)	9.7 (64)	8.2 (88)	6.7 (216)
Stating Oral Messages	5.2 (20)	5.0 (55)	5.3 (35)	6.1 (66)	6.9 (222)
Print Production	12.8 (49)	8.4 (92)	7.4 (49)	5.4 (57)	4.0 (129)
Writer Identity	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	0.1 (3)
Print Process Total	41.8 (160)	42.5 (467)	42.2 (278)	44.4 (478)	40.2 (1291)

Note. Parentheses contain total number of references of each support per group.

Table 15*Relative Frequencies of Print Production Supports for Different Groups*

Support Category	Group 1 (N=4)	Group 2 (N=4)	Group 3 (N=3)	Group 4 (N=3)	Group 5 (N=6)
Letter-Sound Connections	4.2 (16)	3.2 (35)	5.2 (34)	3.5 (38)	2.2 (72)
Environmental Print	1.3 (5)	2.6 (29)	1.2 (8)	0.9 (10)	0.9 (28)
Letter Formation	6.0 (23)	1.6 (18)	0.3 (2)	0.3 (3)	0.2 (7)
Letter Knowledge	1.3 (5)	0.5 (6)	0.8 (5)	0.4 (4)	0.2 (7)
Sight Words	0.0 (0)	0.4 (4)	0.0 (0)	0.2 (2)	0.5 (15)
Print Production Total	12.8 (49)	8.4 (92)	7.4 (49)	5.4 (57)	4.0 (129)

Note. Parentheses contain total number of references of each support per group.

Description of the Pattern of Support for Different Groups

In this section, I describe differences that I observed qualitatively, and that are supported by visual inspection of the relative frequency of teacher supports for each student group (see Table 13). Some supportive practices were similar across groups. The most frequently provided support was for students engaged in the print processes, as would be expected given the focus of this study on student writing events. Across all groups, Ms. Graham more frequently provided support by being responsive to student-initiated talk. She infrequently provided supports for following rules, name writing, phonological awareness that were not connected to student writing, joining writing events, and vocabulary. As discussed previously, support for phonological awareness was incorporated into the writing process which is not reflected in the phonological awareness category. When Ms. Graham provided supports that encouraged student engagement and motivation (e.g., praise or affirmation), demonstrated that she was listening and responding to student talk (e.g., responsiveness), and maintained the accessibility and availability of materials (e.g., material management), she used foundational teaching practices that supported the continuance of the writing event. Despite the overall similarity of patterns across groups, close examination of the relative frequencies revealed seven interesting trends.

Material Management

First, looking at Group 1, Ms. Graham provided a higher relative frequency of support for managing writing materials (17.5%) than she provided to other groups. This suggests that students in this group were possibly less familiar with handling materials and thus Ms. Graham offered more frequent support for using writing materials. Several times, I observed students in this group who required more assistance to locate a page to write on in their journal or who needed support to correctly orient the page in front of them.

Idea Generation

Second, Ms. Graham provided Group 3 and Group 4 with a higher relative frequency of support for idea generation (12.6% and 9.7%) than for other groups. There was a trend that students in these group were provided with more frequent support for generating ideas or developing a concept about the topic of the writing event before they engaged in their own writing. It is possible that either the students in Group 3 and Group 4 participated more readily in discussing ideas and thus Ms. Graham engaged these students more frequently in discussions of ideas or that these students needed more frequent support to think about ideas or developing a concept.

Drawing Processes

Third, there was a trend showing that the ratio of support offered for student's drawing processes increased starting with Group 1 (2.9%) and steadily increased across groups to Group 5 (7.8%). This suggests that students in Group 5 engaged in drawing messages more frequently than students in other groups. Interestingly, considering the teacher's description for writers in each group, as students became increasingly sophisticated in their approaches to writing, Ms. Graham provided more frequent support for students engaged in drawing by asking questions about marks, interpreting marks, and facilitating student's drawing processes. This was counterintuitive as I expected students to have engaged more frequently in recording messages in print as their approaches to writing became more sophisticated. An explanation supported by my qualitative observations is the possibility that as students more readily recorded messages using print, more time was available for drawing. Ms. Graham usually allowed students to choose if they wanted to draw or write messages first. When students drew first and then wrote messages, Ms. Graham would allow them to add more to their picture after writing their message, which

would explain why support for drawing processes increased across groups, since Ms. Graham would have provided support to students as they continued to add to drawings.

Adult Modeling

Fourth, Ms. Graham provided Group 5 with a higher relative frequency of support using adult modeling (9.2%) than she provided to other groups. This occurrence was explained by examining the types of writing activities in which adult modeling occurred at a higher frequency. During whole group shared and interactive writing events, Ms. Graham regularly modeled the writing processes but these types of events would not explain the higher relative frequency as all students were present. She also wrote more frequently in front of students during small group interactive writing and some students chose more frequently to participate in these types of events. During small group interactive events, 6.7% of all supports were considered adult modeling compared to 4.8% during journals and 4.4% during small group independent events (see Chapter 5, Table 8). Additionally, students in Group 5 participated in small group interactive writing events at a much higher rate than students in the other groups. Overall, the students in Group 5 comprised 67% of the participants during these types of writing events. The higher relative frequency of adult writing for Group 5 possibly resulted from students in Group 5 comprising the majority of participants during small group interactive writing events. During these events, adult writing occurred more frequently than during journals or small group independent writing events.

Print Production

Fifth, Ms. Graham provided a higher relative frequency of support for print production (i.e., student mark making or printing on page as part of a written message) to students in Group 1 and support gradually decreased from Group 1 (12.8%) to Group 5 (4.0%). Print production

supports included connecting sounds to printed letters, supporting letter formation, reinforcing letter naming, and referring to writing around the room. The decrease in relative frequency of support from Group 1 to Group 5 demonstrated that the students Ms. Graham identified as more sophisticated writers received less frequent support for printing on the page which suggests that as students more readily engaged in invented spelling by connecting sounds to letters and writing letters, less frequent teacher support was necessary for printing on the page. Table 16 shows that Group 1 received the most frequent support for letter formation (6.0%) and connecting sounds to letters (4.2%) while engaged in printing on the page, which corresponds to the description that Ms. Graham provided for these writers. She identified that additional support was needed as they were not yet matching sounds to letters and were writing using random letters or letters from name. Group 2 received the most frequent print production support for connecting sounds to letters (3.2%), including references to environmental print to support writing (2.6%), which corresponds to the description that Ms. Graham provided for these writers. She identified that students were attempting to match sounds to letters and with support identify first sounds in words. During journal writing, Ms. Graham often referred students in Group 2 to the word wall to connect sounds in the words they were writing to known pictures to support the recognition of the corresponding letter. The remaining groups all received the most frequent print production support for connecting sounds to letters when engaging in printing. The frequency of support decreased from Group 3 (5.2%) to Group 4 (3.5%) to Group 5 (2.2%) as students required less support to match sounds to letters. Ms. Graham's support to these groups for connecting sounds to letters typically included asking students what other words they know that started with that sound or stating, "That sounds like the first letter in Jeremiah's name." These students did not

require as much explicit connection between the sound and the corresponding letter as students in Group 1 and Group 2.

Print Concepts

Sixth, the frequency of support for developing an understanding of print concepts increased from Group 1 (6.5%) to Group 5 (12.4%). Visual inspection of descriptive statistics suggested that Ms. Graham more frequently supported the development of understanding writing forms and conventions, understanding that marks carry meaning, and understanding the purposes of writing as she perceived students became more sophisticated writers. When support was offered for print concepts, the teacher's talk and practices were generally the same across groups. Ms. Graham provided the most frequent support for developing the understanding that marks carry meaning by reading students' writing or requesting that students read their writing. Ms. Graham frequently asked students to read their messages when they were completed.

Segmenting Oral Messages

Seventh, the relative frequency of support for segmenting oral messages was highest for Group 3 (9.7%) and also higher for Group 2 (9.5%) and Group 4 (8.2%). The frequency of support was lower for students in Group 5 (6.7%) and Group 1 (4.7%). These observed differences were consistent with Ms. Graham's view that students in Group 2 and Group 3 needed support to segment sounds in words and students in Group 4 needed minimal support to match sounds in words. Students in Group 5 were independently segmenting words and students in Group 1 were not yet segmenting words. This suggests that as Ms. Graham perceived students to be capable of segmenting words with support, she provided more frequent support for students to segment words into sounds and then provided less frequent support as students were able to independently segment words.

While Ms. Graham had a similar approach to providing supports, how she supported oral segmentation varied across the different groups. Table 16 shows the relative frequencies within the oral segmentation category for different types of support that were provided to students in

Table 16
Relative Frequencies of Oral Segmentation Supports for Different Groups

Support Category	Group 1 (N=4)	Group 2 (N=4)	Group 3 (N=3)	Group 4 (N=3)	Group 5 (N=6)
Scaffolded Writing	55.6 (10)	21.9 (23)	23.4 (15)	25.0 (22)	27.3 (59)
Segmenting Words into Sounds	16.7 (3)	22.9 (24)	20.3 (13)	28.4 (25)	31.9 (69)
Isolating Initial Sound	22.2 (4)	18.1 (19)	20.3 (13)	8.0 (7)	9.3 (20)
Rollercoaster Hand Motions	0 (0)	17.1 (18)	12.5 (8)	28.4 (25)	18.1 (39)
Isolating Last Sound	5.6 (1)	9.5 (10)	14.1 (9)	5.7 (5)	4.6 (10)
Isolating Medial Sound	0 (0)	6.7 (7)	9.4 (6)	2.3 (2)	1.9 (4)
Isolating Blend	0 (0)	1.0 (1)	0 (0)	2.3 (2)	4.6 (10)
Segmenting Messages into Words	0 (0)	2.9 (3)	0 (0)	0 (0)	2.3 (5)
Oral Segmentation Total	100 (18)	100 (105)	100 (64)	100 (88)	100 (216)

each group. More specifically, Ms. Graham tended to provide almost equal frequencies of support to Group 4 and Group 5 by slowing and segmenting sounds in words, making hand motions matching the emphasis and separation of sounds in words, and using scaffolded writing. In this classroom, scaffolded writing was used as a support strategy adapted from Bodrova and Leong (1998) which included stating an oral message, repeating the oral message while drawing one line for each word, pointing to each line while repeating the oral message, and then writing words on each of the lines to represent the message. Sometimes, when supporting segmentation for students in Group 4 and Group 5, Ms. Graham isolated consonant blends. This practice rarely or never occurred for the other groups. Ms. Graham supported segmentation for students in Group 3 by isolating the first sound in words, isolating the last sound in words, making hand motions matching the emphasis and separation of sounds in words, and using scaffolded writing. For students in Group 2, Ms. Graham primarily offered support by segmenting sounds into words, isolating the first sound in words, making hand motions matching the emphasis and separation of sounds in words, and using scaffolded writing. For students in Group 1, Ms. Graham primarily used the scaffolded writing technique.

The teacher's description of each student grouping and the variations in the teacher's pattern of support for each group are displayed in Table 17.

Table 17*Teacher Identified Groupings and Variations in Pattern of Support*

Group	Teacher Description	Variations in Pattern of Support
Group 5*	<ul style="list-style-type: none"> • Fluently identifies all letters (26 upper- and lower-case) and sounds (31 including long vowels) • Uses sight words • Segments sounds in words independently • Identifies multiple sounds in words • Matches sounds correctly to letters • Use strategies without prompting • Writes using invented spelling 	<ul style="list-style-type: none"> • Print concepts • Adult writing • Drawing processes
Group 4	<ul style="list-style-type: none"> • Fluently identifies all letters (26 upper- and lower-case) and sounds (31 including long vowels) • Segments sounds in words with minimal support • Identifies some sounds in words with minimal prompting able to identify more sounds • Matches sounds correctly to letters • Writes using invented spelling 	<ul style="list-style-type: none"> • Print concepts • Idea generation • Segmenting oral messages • Drawing processes
Group 3	<ul style="list-style-type: none"> • Identifies all letters (26 upper- and lower-case) and all but 1-3 sounds (31 including long vowels) with some fluency • Requires support to segments sounds in words • Identifies first sound in words with support able to hear more sounds • Matches sounds correctly to letters • Writes using invented spelling 	<ul style="list-style-type: none"> • Idea generation • Segmenting oral messages • Print concepts • Connecting sounds to letters
Group 2	<ul style="list-style-type: none"> • Identifies 15-20 letters (26 upper- and lower-case) and 15-20 sounds (31 including long vowels) with some fluency • Requires more support to segment sounds in words • Attempting to identify first sound in words with support • Attempting to match sounds to letters • Writes independently using random letter strings and sometimes personal cursive 	<ul style="list-style-type: none"> • Print concepts • Segmenting oral messages • Connecting sounds to letters • Environmental print
Group 1	<ul style="list-style-type: none"> • Identifies 8-10 letters (26 upper- and lower-case) and 8-10 sounds (31 including long vowels) with some fluency • Not yet segmenting sounds in words • With prompting and support, are not yet matching sounds to letters • Writes independently using random letters or letters from name • Know that print has meaning 	<ul style="list-style-type: none"> • Material management • Letter formation • Connecting sounds to letters

Note. Asterix indicates group that received the highest total number of supports.

The nuanced variations in the supportive trends matched the teacher's descriptions of student groupings. For example, Group 1 received more frequent support for writing print than other groups. The teacher described students in this group as writing few letters, not yet segmenting words, and not yet matching sounds to letters and findings demonstrated that the teacher focused on letter formation and connecting sounds to letters. For Group 2, the teacher focused on connecting sounds to letters when students were printing and additional assistance was provided by referencing environmental print around the room to support students in making sound-letter connections, which corresponded to the teacher description of these students. By referencing environmental print, Mrs. Graham supported students in making connections more readily between sounds and letters. She described these students as making attempts to match sounds to letters and identify first sounds in words. The teacher also provided a higher relative frequency of support for segmenting oral messages than she provided to all other groups besides Group 3. This trend matched her description of students. Group 3 was described as requiring support to segment words and identify more sounds in words. Findings showed a trend that the teacher provided a higher relative frequency of support for segmenting oral messages and connecting sounds to letters than was provided to other groups. Group 4 was described as needing minimal support to segment words and identify more sounds in words. Findings showed that the teacher provided less frequent support for segmenting oral messages than Group 2 or Group 3 and more frequent support than Group 1 received. The description for Group 5 did not include any print process areas that needed support.

Comparison of the Pattern of Support for Different Groups

Since visual inspection of the relative frequencies showed some slight variations in the teacher's supportive practices for different groups of students, I used the Friedman test of differences to determine whether these observed patterns rose to the level of statistical significance. Three tests were conducted. The first test used the overall support categories listed in Table 14, the second test used the print process supports listed in Table 15, and the third test used the print production supports listed in Table 16.

After testing the overall support categories, the results from the Friedman test indicated that the supports the teacher offered to the five groups were not significantly different ($F_{r(4)} = 3.000, p > 0.05$). Therefore, no follow-up contrasts were needed. This result suggests that the overall pattern of supportive practices for different groups was similar.

Figure 11
Group Ranks for Overall Categories

Ranks	
	Mean Rank
Group1	2.67
Group2	2.92
Group3	2.75
Group4	3.67
Group5	3.00

Figure 12
Group Test of Differences for Overall Categories

Test Statistics^a	
N	12
Chi-Square	3.000
Df	4
Asymp. Sig.	.558

a. Friedman Test

A second analysis including only the print process supports indicated that the supports the teacher offered to the five groups were not significantly different ($F_{r(4)} = 1.673, p > 0.05$). Therefore, no follow-up contrasts were needed. This result suggests that the overall pattern of supportive practices for student's engaged in the print process was similar across groups.

Figure 13
Group Ranks for Print Process

Ranks	
	Mean Rank
Group1	2.58
Group2	2.58
Group3	3.08
Group4	3.42
Group5	3.33

Figure 14
Group Test of Differences for Print Process

Test Statistics^a	
N	6
Chi-Square	1.673
Df	4
Asymp. Sig.	.796

a. Friedman Test

A third analysis including only the print production supports indicated that the supports the teacher offered to the five groups were not significantly different ($F_{r(4)} = 5.732, p > 0.05$). Therefore, no follow-up contrasts were needed. This result suggests that the overall pattern of supportive practices for student's engaged in printing on the page was similar across groups.

Figure 15
Group Ranks for Print Production

Ranks	
	Mean Rank
Group1	3.90
Group2	3.60
Group3	3.20
Group4	2.40
Group5	1.90

Figure 16
Group Test of Differences for Print Production

Test Statistics^a	
N	5
Chi-Square	5.732
Df	4
Asymp. Sig.	.220

a. Friedman Test

The results of these tests determined that the trends observed through qualitative observation and visual inspection of frequency distributions were not statistically significant. In other words, there were not statistically significant differences between the supports the teacher provided to the five teacher-identified groups. It is possible that the descriptions of supports used for coding needed to be more fine-grained for statistical testing to identify significant differences between the different teacher identified student groupings. On the other hand, it is possible that a larger sample of events was needed to see significant differences in teacher support. Given the findings of this analysis, it is clear that Ms. Graham's overall pattern of support was quite similar across different groups. Future research should examine teachers' supportive practices to determine if variations exist in the writing supports provided to different groups of students. This is important as research has suggested that instruction should be differentiated. Tomlinson (2000) recommended that teachers should observe each child and tailor their supports to meet individual need. Owocki (2005) described the properties of differentiated instruction which included tailoring support to meet individual need, providing materials that support individual development, planning activities that provide choices and meet interests, and constructing the social and physical environment to provide support for collaborative groupings.

Summary

In this chapter, the supportive practices for different teacher identified student groupings were discussed. Visual examination of the relative frequencies of teacher supports for different groups revealed some trends suggesting differential supports for children in different teacher-identified groups. However, when statistical analysis was performed, there were no significant differences in teacher supports between groups. It is possible that either the way the data was coded prevented the identification of variances between supports or that the sample size was not large enough. More fine-grained categories may have been required to detect statistically significant variations. While nonsignificant, qualitative analysis in the present study may help to identify areas of teacher instruction that should be targeted for close observation and analysis in future studies.

Analyses presented in this chapter demonstrated that as teacher perceived student writing sophistication increased, the rate of participation in writing events increased, resulting in a higher total of teacher provided supports to students who were identified as the most sophisticated writers. On average, the total number of supports provided to students in Group 1 was less than half the total number of supports provided to students in Group 5. This suggests the gap may widen between students who are considered to be more sophisticated writers and students who are considered to be less sophisticated writers. Also, increased participation in certain types of events, like small group interactive writing, possibly resulted in students in Group 5 being provided with more frequent opportunities to observe adult writing.

While differentiation has been a recommended practice in the literature (e.g., Owocki, 2005; Tomlinson, 2000), qualitative patterns in the present study did not achieve a level of statistical significance, and therefore it is unclear whether Ms. Graham's practice included

differentiation instruction for the five identified student groupings. Future research should examine teachers' practices to determine how and whether differentiated support is provided to young writers. Furthermore, future research should specifically focus on how differential support is provided for segmenting oral messages.

CHAPTER 7

CONCLUSION

Previous research on emergent writing development and existing studies on teachers' supportive practices for 4- and 5-year old students' writing have identified recommendations for support but these studies have identified very few instances of teachers providing frequent support in preschool classrooms (Bingham et al., 2017; Clark & Kragler, 2015; Gerde et al., 2015; Guo et al., 2012; Zhang et al., 2015). In previous studies, support was typically provided during child-directed play and incidents of intentionally planned writing events were few (Logue et al., 2009; Mackenzie & Petriwskyj, 2017). In contrast, Ms. Graham worked in a public school district and school building where there was a strong commitment to both incorporating writing into the pre-kindergarten curriculum and to providing teachers with professional development for supporting young children's writing. Ms. Graham frequently and intentionally planned for daily writing activities. In her classroom, students were engaged in writing activities between 25 and 35 minutes per day. The total time spent on writing contrasted with other classrooms described in previous studies where students engaged infrequently in writing (Gerde et al., 2015; Justice et al., 2008; Pelatti et al., 2014). One study reported that students engaged in writing activities for only 2 minutes per day (Pelatti et al., 2014).

The purpose of this study was to analyze the supportive practices provided by an expert teacher of writing to describe what writing support can look like in preschool. In this chapter, I provide a summary of Ms. Graham's supportive practices for students' writing in her classroom. In particular, I describe her approach to providing support during different types of writing

events and for teacher-identified student groupings which were based on her observation and professional judgements of the sophistication of students' writing.

Research Question Summary

Three research questions guided my analysis with the goal to describe the kinds of supports that were provided when an expert classroom teacher working from an emergent literacy perspective interacted with her 4- and 5- year-old students during writing events. Here I report on the overall findings for each research question.

Research Question 1: What kinds of supportive practices does a teacher provide for students' writing in a pre-kindergarten classroom?

Many opportunities were provided for students to write in this classroom. When supporting student's writing, Ms. Graham utilized a variety of practices to support the entire event. While her primary focus was supporting student's individual writing attempts, Ms. Graham demonstrated how other types of support were used to maintain student participation and to prepare students to engage in writing, including responsive language strategies. In other research, responsive language strategies have been found to assist students in developing oral language skills, self-expression, and social-emotional skills (Girolametto & Weitzman, 2002). Ms. Graham provided additional support by offering praise and affirmation; providing writing materials and directions for use; generating ideas about writing topics and concepts; facilitating the drawing process as a means of composing messages; providing adult models of writing; supporting name writing; providing reminders of expectations during participation in writing events; inviting students to join writing activities; developing phonological awareness; and

building vocabulary. These teacher practices were used throughout events for preparing students to engage and remain engaged in the print processes.

Once students engaged in the print processes, Ms. Graham's key practices focused on supporting students to state an oral message, segment the message, print their message, and develop understandings about print concepts. This is different than the key supports identified in previous research. When teachers were observed providing support, they focused on handwriting (Bingham et al., 2017) or provided letters for spelling (Gerde et al., 2015). In the current study, the teacher provided a wider variety of supports for the print processes.

The pattern of this teacher's support was similar throughout writing events. She started each event by generating ideas about the writing topic and then she typically allowed students to choose to write or draw. When students engaged in writing, she supported the print processes. During events, she used foundational teaching practices such as responsiveness, praise and affirmation, and material management that facilitated students' engagement in writing events.

Ms. Graham regularly planned writing activities and frequently provided support throughout each event which allowed me to identify a broad range of practices. This is unique as previous studies focused on specific kinds of teacher practices used to support writing (e.g., Clark & Kragler, 2005; King, 2012; Gerde et al., 2018; Logue et al., 2009; Mackenzie & Petriwskyj, 2017; Schrader, 1990) or observed once in a classroom using observational tools (Bingham et al., 2017; Gerde et al., 2015; Guo et al., 2012; Zhang et al., 2015) that may not have captured all instances of support.

Research Question 2: Does the teacher's pattern of support change for different types of writing activities?

In the current study, qualitative analysis determined that the teacher's pattern of support for different types of writing activities was quite similar. Statistical analysis confirmed that there were not significant differences in the pattern of support across activities. This is important because it demonstrated that one pattern of support was transferred across different types of writing activities. Ms. Graham's pattern of supportive practices was similar across most types of writing events, except for shared writing events, during which adult writing was used as a key support that modeled the writing process for students. When students were producing their own writing, Ms. Graham facilitated composing, message segmentation, matching sounds to letters, and letter formation. This is important as previous research has shown that writing in preschool predicts later reading, writing, and spelling ability (NELP, 2008) and that oral language, spelling, and letter writing fluency are related to children's narrative writing ability at the end of kindergarten (Kim et al., 2011).

Ms. Graham's practice was a different approach to writing instruction than has been described in research. Previous research has shown that many teachers focused on handwriting skills (Bingham et al., 2017), encouraged name writing, or provided letters for spelling (Gerde et al., 2015). In contrast, Ms. Graham used a broad range of practices to support students in writing novel messages which included stating messages, segmenting messages into smaller units, connecting sounds to letters, printing letters, and reading their messages. She did not focus exclusively on handwriting or name writing during writing events. Instead, she supported students in producing meaningful messages using a similar pattern of supportive practices which included many targets of writing support identified in the literature review (see Chapter 2, Table 1).

Research Question 3: Does the teacher’s pattern of support change for different teacher identified student groupings?

Qualitative analysis suggested supportive trends for different student groups. However, statistical analyses determined that the teacher’s supportive pattern for different groups was not significantly different. It is possible that either the way the data was coded prevented testing from identifying significant differences between supports or that a larger sample size was required. For example, the print process category encompassed all supports provided during students’ writing. If this category had been separated into multiple categories, such as stating a message, segmenting a message, connecting sounds to letters, identifying letter names, forming letters, and reading a message. It is possible that statistical testing could have detected variances in the supportive pattern for different student groups that could not be detected when all supports for students engaged in writing were consolidated into one category.

Examination of the relative frequencies of teacher supports for different groups revealed that the rate of participation in writing events increased in parallel to the increase in teacher identified sophistication of student writing. Students who were considered to be more sophisticated writers participated in twice as many events and received more than twice the amount of supports that students who were considered to be the least sophisticated writers in the classroom. In this classroom, students moved freely between centers. Students chose where they wanted to play and for how long they wished to remain. Choice-based center time impacted the amount of time that students participated in writing activities and supported the idea of the “Matthew Effect” that is acknowledged in the educational community. The “Matthew Effect” refers to the idea that the rich get richer and the poor get poorer. In the current study, this implies that the students who were the more sophisticated writers, participating in more writing

events and receiving more support for writing, will continue to become more sophisticated writers. While the writers who were considered to be less sophisticated, participating in less writing events and receiving less support for writing, will continue to be less sophisticated in their approaches to writing. Future research should consider the potential downside to choice-based center time. If students are free to choose whether or not they participate in writing, how do educators ensure that all students are spending sufficient amounts of time practicing important early literacy skills? Should student choice be prioritized over ensuring that all students spend time writing? This is a dilemma that should be considered in future research.

Contribution

The current study included continuous observation of one expert teacher's writing instruction over several months which provided a comprehensive picture of this teacher's supportive practices and described a pattern of supportive practices. This is important because research has provided few empirical descriptions of what an emergent writing teacher does to support young writers. While Rowe and Flushman (2013) have provided one description for supporting young writers, other research has shown that little writing instruction is actually occurring in classrooms (Bingham et al., 2017; Clark & Kragler, 2015; Gerde et al., 2015; Guo et al., 2012; Zhang et al., 2015). Ms. Graham provided a similar pattern of support for students' writing across different writing activities. While this pattern reflects the work of only one expert emergent writing teacher, it does provide initial insights into the ways the writing supports can be woven into daily instructional practices. These patterns may be useful to early childhood educators who aim to increase their level of support for young writers.

Observational tools are important for understanding the effects of writing instruction on literacy skills. Recent research has determined that the current assessment strategies for young children's composing need to be broadened (Quinn & Bingham, 2019). The supports identified in this study could be added to existing formal observational tools to increase the range of teacher supports for composing that are being observed by researchers and practitioners. For example, the WRITE observational tool (Gerde & Bingham, 2012) contained 5 main sections with multiple items listed within each section. The sections included *writing environment*, *environmental print*, *teacher models writing*, *teacher scaffolds children's writing*, and *independent child writing*. The section most relevant to the current study was the *teacher scaffolds children's writing* section. This section contained 9 items that are scored as occurring or not occurring. Three items do not concern the actual print process. For example, the items included observing whether a teacher invites a child to write, reminding a child to write their name, or offering instructions for a writing activity. Four items focused on teacher support for letter formation such as writing a letter copying, creating letters for tracing, providing verbal descriptions of letter shapes, and using hand-over-hand strategies. The last two items included examples of spelling supports, such as saying a letter/sound as a prompt for child writing and asking the child about the letter name, shape, or sound to prompt writing. While the scaffolding section on the WRITE provided many more examples of writing support than typically provided on formal observational tools, the robustness of classroom observations could be increased considerably by incorporating the findings from the current study. For example, the WRITE observational tool (Gerde & Bingham, 2012) provided a few broad descriptions of support for handwriting and spelling. This study offered a more fine-grained description of supportive practices for stating, segmenting, and printing messages. In particular, message segmentation

included segmenting the whole message, isolating different sounds in words, segmenting sounds with hand motions, and using a scaffolded writing technique (Bodrova & Leong, 1998). The contribution of this study is important to the development of future observational tools as previous research indicated that few opportunities and limited teacher support for writing is occurring in preschools. By developing observational tools with more specific supports for writing, the field may begin to recognize the additional possibilities for supporting writing in preschools and practitioners may be able to use the tools as guides for instruction.

Finally, this study provided an in-depth description for a pattern of supportive practices that was provided during intentionally planned writing activities. Perhaps, it is time for the field to focus on incorporating intentional teaching opportunities within activities provided by a child-centered play-based curriculum. By intentionally planning and providing support for writing, it is possible that students would engage more frequently in writing activities that included more frequent teacher support. Early writing experiences are vital to future literacy success.

Directions for Future Research

Existing research on teacher supports for preschoolers' writing is limited. While this study provided a description of one expert teacher's supportive practices for four- and five-year old students' writing, this study was not designed to measure the effectiveness of those practices. Future work should consider the impact of teachers' supportive practices on students' emergent literacy skills. In particular, future research should examine the impact of writing supports in pre-kindergarten on reading and writing at the end of kindergarten and first grade. It is important to determine how practice influences the growth of literacy skills during the preschool year as writing in preschool predicts later reading, writing, and spelling ability (NELP, 2008).

Additional research should investigate how teachers make decisions for supporting preschoolers' writing. Currently, the field has very few studies on teacher support for writing and no studies exist that considered the pedagogical methods that are necessary for thinking about student needs and teacher practice. The current study illuminated one part of this process by providing the teacher's descriptions of students' writing sophistication and the supportive practices utilized for different teacher identified student groupings but a more comprehensive description is needed that details how the teacher used assessment data and student observations to think about supporting students' writing.

Finally, I did not analyze student responses to teacher support and the possible shift in support based upon student responses. It is important to incorporate students' responses to expand understanding about how dynamic interactions between a teacher and students influence writing and supportive practice.

Implications for Practice

Writing in preschool is an important aspect of literacy development as writing is a foundational literacy skill that impacts future literacy achievement. Therefore, it is important to not only integrate writing materials and opportunities into daily practices but to intentionally support students' writing. Previous work has concluded that adult support or modeling of writing increased student engagement in literacy activities (Christie & Enz, 1992; Vukelich, 1991). This study identified a pattern of support that was used across different types of writing events. Specifically, Ms. Graham engaged students in the activity by generating ideas about the writing topic. Then, she invited students to either draw or write about their message or she modeled drawing and writing. Next, she invited students to write about their picture or draw

about their writing. When students wrote, she supported students in stating a message, segmenting the message, and then recording the message with print. During writing, Ms. Graham supported the understanding of print concepts and moved students forward through the process using verbal and gestural reminders. Ms. Graham used foundational teaching practices including responsiveness, praise and affirmation, and material management. This pattern of support offers a way for teachers to increase support for writing in preschool classrooms. It is possible that some teachers do not integrate writing into their classrooms as they may not know how to support emergent writing. The described pattern of support could be a starting point for some teachers.

Furthermore, the current study demonstrated that as students participated in more writing activities, more supports were provided. Therefore, it is crucial to consider the frequency and length that each student chooses to participate in writing activities. Specifically, teachers should monitor students whose writing is considered to be less sophisticated and encourage these students to engage more often in writing and then provide frequent intentional support when these students participate in writing. For all students, daily opportunities should be provided that include adult modeling of writing and students engaged in their own writing. When a student engages in the writing process, multiple literacy skills are required to state a message, segment the message into units, match sounds to letters, identify letters, write letters, monitor messages, and read messages. Emergent writing opportunities increase the likelihood of developing literacy skills that are linked to future literacy ability.

Appendix A

Targets of Writing Support

Targets of Support with References

Target of Support	Articles or Books Describing Target of Support <i>(bolded indicates empirical study)</i>
<i>Writing Skill – Composing</i>	Bingham, Quinn, & Gerde (2017) ; Bingham, Quinn, McRoy, Zhang, & Gerde (2018); Byington & Kim (2017a); Byington & Kim (2017b); Copp, Cabell, & Tortorelli (2016); Dennis & Votteler (2013); Gerde, Bingham, & Pendergast (2015) ; Gerde, Bingham, & Wasik (2012); Gerde, Goetsch, & Bingham (2016); Gerde, Skibbe, Wright, & Douglas (2018) ; Hall (2014); Hall, Simpson, Guo, & Wang (2015); King (2012) ; Logue, Robie, Brown, & Waite (2009) ; Kissel (2008); Mayer (2007); Oken-Wright (1998); Owocki (2005); Quinn, Gerde, & Bingham (2016); Ray & Glover (2008); Rowe & Flushman (2013); Schickedanz & Collins (2013); Walker, Allen, & Glines (1997); Zhang & Quinn (2018)
<i>Writing Skill – Spelling</i>	Bingham, Quinn, & Gerde (2017) ; Bingham, Quinn, McRoy, Zhang & Gerde (2018); Byington & Kim (2017a); Byington & Kim (2017b); Clark & Kragler (2005) ; Copp, Cabell, & Tortorelli (2016); Cabell, Tortorelli, & Gerde (2013); Gerde, Bingham, & Pendergast (2015) ; Gerde, Goetsch, & Bingham (2016); Gerde, Skibbe, Wright, & Douglas (2018) ; Guo, Justice, Kaderavek, & McGinty (2012) ; Hall (2014); Hall, Simpson, Guo, & Wang (2015); King (2012) ; Neumann (2004); Oken-Wright (1998); Owocki (2005); Quinn, Gerde, & Bingham (2016); Ray & Glover (2008); Rowe & Flushman (2013); Schickedanz & Collins (2013); Zhang, Hur, Diamond, & Powell (2015) ; Zhang & Quinn (2018)
<i>Writing Skill – Handwriting</i>	Bingham, Quinn, & Gerde (2017) ; Bingham, Quinn, McRoy, Zhang & Gerde (2018); Byington & Kim (2017a); Byington & Kim (2017b); Copp, Cabell, & Tortorelli (2016); Gerde, Bingham, & Pendergast (2015) ; Gerde, Goetsch, & Bingham (2016); Gerde, Skibbe, Wright, & Douglas (2018) ; Guo, Justice, Kaderavek, & McGinty (2012) ; Hall (2014); Hall, Simpson, Guo, & Wang (2015); King (2012) ; Oken-Wright (1998); Quinn, Gerde, & Bingham (2016); Rowe & Flushman (2013); Schickedanz & Collins (2013); Zhang, Hur, Diamond, & Powell (2015) ; Zhang & Quinn (2018)
<i>Print Concept – Marks Carry Meaning</i>	Clark & Kragler (2005) ; Clay (1991); Gerde, Bingham, & Wasik (2012); Kissel (2008); Mayer (2007); Neumann (2004); Owocki (2005); Ray & Glover (2008); Rowe (2018); Rowe & Flushman (2013); Schickedanz & Collins (2013); Walker, Allen, & Glines (1997); Wheatley, Gerde, & Cabell (2016)
<i>Print Concept – Various Purposes of Writing</i>	Kissel (2008); Neumann (2004); Owocki (2005); Ray & Glover (2008); Rowe (2018); Schickedanz & Collins (2013); Wheatley, Gerde, & Cabell (2016)
<i>Print Concept – Writing Forms and Conventions</i>	Clark & Kragler (2005) ; Hall (2014); Logue, Robie, Brown, & Waite (2009) ; Ray & Glover (2008); Rowe & Flushman (2013)
<i>Writer Identity</i>	Dennis & Votteler (2013); Emerson & Hall (2018); Kissel (2008); Ray & Glover (2008); Rowe (2018); Rowe & Flushman (2013)
<i>Motivation or Interest in Writing</i>	Bingham, Quinn, McRoy, Zhang, & Gerde (2018); Erickson & Wharton-McDonald (2019); Hall, Simpson, Guo, & Wang (2015); Mackenzie & Petriwskyj (2017) ; Neumann (2004); Ray & Glover (2008); Rowe (2018)
<i>Engagement or Participation in Writing</i>	Bingham, Quinn, McRoy, Zhang, & Gerde (2018); Clay (1991); Copp, Cabell, & Tortorelli (2016); Gerde, Bingham, & Wasik (2012); Hall (2016); Hall, Simpson, Guo, & Wang (2015); King (2012) ; Ray & Glover (2008); Rowe & Flushman (2013); Schickedanz & Collins (2013); Schrader (1990) ; Wheatley, Gerde, & Cabell (2016)
<i>Oral Language</i>	Byington & Kim (2017a); Hall (2014); Hall, Simpson, Guo, & Wang (2015); Wheatley, Gerde, & Cabell (2016)

Appendix B

Teacher Supports for Emergent Writing Code Book

Final Codes

Name	Description	Files	References
Adult Writing	Adult is writing in front of children. This may or may not be intended to directly model the writing process. Adult could be participating by writing alongside child.	15	386
Adult Correct	Adult corrects misunderstanding of child while adult is engaging in the writing process. For example, if child incorrectly identifies spelling for sight word. Adult may provide correct spelling or direct child to location of spelling.	5	5
Environmental Support	Adult refers to print in the classroom to support child's understanding of the writing process.	1	2
Isolate First Sound	Adult emphasizes first sound in a word while adult is writing or preparing to write.	3	5
Isolate Last Sound	Adult emphasizes last sound in a word while writing.	1	3
Isolate Middle Sound	Adult emphasizes middle sound in a word while writing.	2	3
Letter ID	Adult names letter(s) during adult writing demonstration.	3	8
Name Writing	Adult is talking about or talking about and writing name on page.	2	5
Preparation	Adult signals verbally or gesturally that child should be ready to engage in the writing process.	6	12
Print Concepts	Adult provides support for the development of print concepts including understanding that marks carry meaning, understanding the range of purposes for writing, and understanding writing forms and conventions.	1	11
Read Request	Adult requests that child read what the adult is writing or has written on page.	5	12

Name	Description	Files	References
Read Scaffolded Lines	Adult points to lines and reads message or states one word per line.	1	1
Reads Message	Adult reads or reads and points to entire or portion of message written by adult.	8	19
ReadWrite	Adult orally states message while writing message.	14	111
Repeat Message	Adult repeats message that was spoken aloud by child or suggested by adult.	5	12
Request for Permission	Adult asks permission to write on child's page.	9	33
Rollercoaster	Adult uses rollercoaster hand motion to support child in hearing multiple sounds in a word, typically beginning, middle, and end.	5	16
OralGesture	Adult supports child with rollercoaster hand motion. Adult orally producing sounds while making hand motion.	5	14
RequestChild	Adult asks child to use the rollercoaster hand motion. Child may or may not produce orally sounds while making the gesture.	2	2
Scaffolded Lines	Adult slows and segments oral message while making scaffolded lines to write each word in message.	2	2
Segments Message	Adult segments message while composing. Typically, the adult is modeling the writing process for children. The adult is focusing on isolating sounds in the message for children to support connecting sound to letters names. All or part of the message is slowed and emphasized. Typically, adult segments word but may also include segmentation of longer message.	6	22
Sound Request	Adult asks child to state sound or identify sound(s) in message during adult composing (e.g., say the word "fly", what sound is next?)	6	14
State Message	Adult asks child to state or restate message or idea for message during adult writing. This includes asking child to tell about their drawing or to further the description of the child's written message.	6	25

Name	Description	Files	References
Talk Writing	Adult talks about the writing process (i.e., what they are writing or have written). This includes responses to child questions asking why adult writing may look different or adult talking about words in a message, such as identifying a word as a "sight word."	8	23
Writer Identity Adult	Adult supports the development of knowledge or vocabulary related to writing, such as discussing what an author does, knowing what it means to be a writer, or identifying as a writer.	1	9
Writes Child's Msg	Adult writes message after child has written message on page. This is typically intended to record the intended message so that adults can read at a later time.	7	33
Drawing Process	Adult draws attention to marks on page by asking questions, reading, or interpreting drawing. Adult also may be encouraging or facilitating child's drawing process.	14	393
Adult Drawing	Adult is engaged in the drawing process by drawing their own pictures. Talk may be occurring about the marks being placed on the page.	7	38
Assistance	Adult offers child some kind of help related to drawing. This could be providing explanation for how to draw something.	4	10
Clarify Draw	Adult makes a request for child to provide clarification for how to understand or interpret the child's drawing or for child to tell adult about drawing.	9	129
Comment Only	Adult comments on child's drawing without making a request to change, clarify, or extend the drawing.	9	43
Completion	Adult asks or suggests if child is finished with drawing.	7	23
Extend Drawing	Adult makes request for child to add more detail to drawing or asks child if they would like to add anything else to the drawing.	9	59

Name	Description	Files	References
Invite Draw	Adult invites child to draw to record message on the page.	8	53
Knowledge Drawing Process	Adult support the development of knowledge or vocabulary related to drawing, such as discussing what an illustrator does.	1	5
Message Match	Adult supports child in understanding that the content of the written message and drawing should match for the writing event. Writing precedes drawing	4	17
Technology	Adult uses technology (e.g., phone) to provide support for students. For example, adult may search for pictures to show how to draw something.	2	16
Idea Generation	Adult engages child(ren) in thinking about ideas for composing. This can be comments, questions, or requests for more information. The purpose is to support child in generating ideas for writing or developing a concept.	15	474
InviteWT	Adult invites child to participate at the writing table or directs another child to invite child to writing table.	9	57
Material Management	Adult provides support for how to prepare and/or use materials related to the writing process.	14	539
Adult Explanation	Adult provides explanation for how to use material or related to the purpose of a material or answers students questions related to materials. This also includes description or talk about characteristics of the material such as crayon color or label.	12	34
Adult Management	Adult prepares child's materials to prepare for or during the writing process. This includes adult taking journal after child has written message to write in adult writing.	13	185
Adult Question	Adult asks child a question about the properties of characteristics of a writing material.	8	9
Explicit Request	Adult provides an explicit direction for how to prepare materials for writing or for how to use materials during writing. This also includes	12	210

Name	Description	Files	References
	questioning if child is ready to put writing materials away and if child has located needed materials.		
Material Provision	Adult provides materials to support composing. This may include handing materials to child or asking what materials a child may need for writing.	13	101
Name Writing	Teacher provides support for name writing or the name writing process.	8	73
Attention Name	Adult draws attention to or reads child's written name. This includes praise for name writing. Also includes drawing attention to or asking about friend's names.	5	24
Name Request	Teacher provides explicit directions indicating that child should write name and/or where to write name on paper or asks child if they wrote their name.	7	49
Phonological Awareness	Adult supports the development of PA by drawing attention to the sounds in words and the relationship between sounds (e.g., rhyming words, starting with same sounds). There is no direct attempt to connect sounds to letters in print. This support for PA development is not directly related to the print process (e.g., talk about words that rhyme that are not being recorded on the page).	11	53
Praise Affirmation	Adult provides praise using talk or gestures to provide affirmation for child's thought, action, etc.	15	546
Affirmation Adult Writing	Adult provides affirmation for some part of the print process by repeating a child's statement or providing praise. Praise could be through gesturing or head movement in affirmation.	8	15
Affirmation Child Writing	Adult provides affirmation for some part of the print process by repeating a child's statement or providing praise. Praise could be through gesturing or head movement in affirmation. This includes praise for stating a message.	13	454
Affirmation Drawing	Adult provides affirmation for some part of the drawing process (either adult or child drawing) by repeating a child's statement or providing praise.	10	34

Name	Description	Files	References
Praise General	Adult provides praise using talk or gestures to provide affirmation for child's thought, action, etc. This category does not include praise that is readily identified as praise for child's drawing or writing process. This can include praise that is offered towards a child holding a journal but observation does not determine the intended target of praise (e.g., "good job" is stated but target of praise is unknown, praising child for having a good observation or question during discussion)	11	43
Print Process Child	Adult provides support for a child's developing understanding of the writing process including a child's composing (meaning-making for communication), spelling, handwriting, and the development of concepts about print.	13	2433
Moving Forward	Adult provides support that served to move students forward to continue, correct, or finish writing (i.e., some supportive practices for student's writing functioned as a push or nudge towards the act of printing on the page).	13	611
Adult Correct	Adult corrects misunderstanding of child to support the writing process. For example, if child incorrectly identifies spelling for sight word. Adult may provide correct spelling or direct child to location of spelling. Also, adult could draw attention to word missing from message (e.g., Where is the word "my"?) or incorrect letter formation.	11	64
Comment Writing	Adult makes a comment about an oral message, writing on page, or something else related to the writing process. The comment does not suggest a response or action. For example, when comparing a student's message to the adult recording of the message, the teacher may state, "That is almost exactly how I would write that word." Another example, when student was writing a difficult word, teacher may state, "That is a hard to word to use sounds for."	10	31
Completion	Adult asks or suggests if child is finished writing.	13	56

Name	Description	Files	References
Extend Print	Adult makes request or offers invitation for child to add more to their message by writing more.	9	41
Invite Write	Adult invites child to write to record message on the page. Adult may make verbal invitation or use gesturing while making invitation to write. During interactive writing, adult may draw picture and invite child to write about picture.	13	81
Physical Arrangement	Adult supports writing process by providing a space or a place to support child's writing. This may include request child to move closer to adult, making room at the table, or pointing to a location for child to sit.	10	45
Preparation	Adult signals verbally or gesturally that child should be ready to engage in the writing process.	13	105
Word Request	Adult asks child to state word in message with the intention to support the child in writing the word or the adult signals with gesture that the child should write.	10	96
Write Request	Adult makes verbal request for child to continue writing message or to refocus/think about what they are writing. This is different than Invite to Write as message has already been identified and the writing process has been initiated.	13	92
Print Concepts	Adult provides support for the development of print concepts including understanding that marks carry meaning, understanding the range of purposes for writing, and understanding writing forms and conventions.	13	571
Forms Conventions	Adult provides support for the development of print concepts including understanding writing forms and conventions.	11	117
Location Write	Adult supports child by providing a verbal or visual cue such as pointing with their finger to, making a dot for writing, or naming the line or location where child should be writing. This support is not to encourage more writing but to signal location to write.	13	61

Name	Description	Files	References
Marks Carry Meaning	Adult supports development of print concept that marks carry meaning. For example, adult may read or ask child to read a message that the child has written demonstrating that the print on the page has meaning.	12	330
Point ChildRd	Adult supports child in reading message by pointing to word(s) as child reads. Adult may read along during portions of the message reading but this reading is performed primarily by the child.	9	17
Read Request	Adult requests that child read writing on page. Read It to Me - RITM	12	124
Reads Message	Adult reads or reads and points to entire or portion of message written by child.	12	189
PictureMsg Match	Adult supports child in understanding that the content of a picture and the message should match. Picture is created before written message.	5	9
Print Concept - Title	Adult supports students in naming, writing, or creating ideas for a story title.	1	3
Purpose	Adult describes the purpose for the writing event or directs/redirects children to think about the intended purpose of the writing event or the written message. This could be a reminder as to the intended purpose of the writing event.	9	30
Space Management	Adult talks about, supports child in, or adult models adjusting spacing needed between letters or words while writing. Also, may include adding another journal page for more writing.	6	21
Print Production	Adult provides support for student mark making or printing on paper as part of a written message, including connecting sounds to printed letters, supporting letter formation, reinforcing letter naming, and referring to writing around the room.	13	371
Connect L-S	Adult supports explicit connection between letters and sounds. This could include referring to known words (e.g., friends names) to identify letter	10	72

Name	Description	Files	References
	matching to sound, naming letters that match sounds.		
Environmental Support	Adult refers to print in the classroom to support child's writing process.	12	73
Letter WordWall	Adult refers child to letter(s) on word wall to support writing process. Adult may point to or retrieve letter that is needed for message or draw similarities/differences between letters.	9	49
Morning Message	Adult refers to morning message to support child in writing. This can include referring to morning message for question of the day or punctuation examples.	2	4
Picture WordWall	Adult refers child to picture(s) on word wall to support writing process. Word wall has pictures of each child with name.	7	11
Writing Artifacts	Adult refers child to written artifacts around the room to support current composing process. This could include books, chart paper, journals, etc.	5	9
Letter Formation	Adult provides support for letter formation using verbal commands, modeling, or hand over hand instruction.	10	54
Clarify Letter	Adult asks child for clarification about the letter that they are writing.	1	1
Model Formation	Adult models by tracing letter shape in air, on top of foam letter, or by writing letter how to form the letter. This may also include hand over hand or hand support for letter formation.	7	13
Pre-Letter Formation	Adult provides support for the development of handwriting skills prior to letter formation (e.g., adult draws lines or circles for child to trace).	1	16
Verbal Cues	Adult provides verbal support for letter formation.	10	24
Letter ID	Adult names letter for a child or asks child to name letter.	12	29

Name	Description	Files	References
Sight Word Reference	Adult references sight words to support writing a sight word or a word that is quite similar to a sight word.	6	17
Sound Request - Child	Adult asks child to state sound or letter matching sound, add another sound, or identify sound in message with the intention to support the child in identifying and/or writing the sound or the adult signals with gesture that the child should identify and/or write the sound. Also includes when adult asks child which letter they would like to use for a sound when sound could be connected to more than one letter (e.g., /s/ /z/).	13	126
Segmenting Oral Messages	Adult slows and segments message to support child in writing message. This is a component of phonological awareness but is closely connected to print on page as the oral segmentation is part of the process whereby the oral message is directly translated into print on page.	13	484
Isolate Blend	Adult slows and emphasizes consonant blend in a word while child is writing.	6	13
Isolate First Sound	Adult emphasizes first sound in a word while child is writing.	11	65
Isolate Last Sound	Adult emphasizes last sound in a word while child is writing.	11	36
Isolate Middle Sound	Adult emphasizes middle sound in a word while child is writing.	6	19
Rollercoaster Segmenting	Adult uses rollercoaster hand motion to support child in hearing multiple sounds in a word, typically beginning, middle, and end. This activity was introduced during daily Heggerty (2010) phonemic awareness lessons for pre-kindergarten.	12	92
Gesture	Adult supports child with rollercoaster hand motion. Adult only uses hand motion without producing sounds orally.	9	17
OralGesture	Adult supports child with rollercoaster hand motion. Adult orally producing sounds while making hand motion.	10	44

Name	Description	Files	References
RequestChild	Adult asks child to use the rollercoaster hand motion. Child may or may not produce orally sounds while making the gesture.	10	31
Scaffolded Writing	Adult is supporting a child's writing by using lines to represent each word in a message. A child may with or without the adult's support state a message, draw a line for each word in the message, restate the message by pointing to the line for each word, and then uses emergent writing to represent words on each line.	9	129
Invite Scaffolded Lines	Adult asks child if they would like to make scaffolded lines or if the child would like the adult to make scaffolded lines.	6	6
Scaffolded Lines	Adult slows and segments oral message while making scaffolded lines for child to write each word in message.	8	47
Segment Lines - Adult	Adult segments message into words while adult points to scaffolded lines while saying message orally. One word is spoken for each line.	7	32
Segment Lines - Child	Adult segments child's oral message while pointing to the lines drawn by the child.	7	19
Segment Lines - Read	Adult invites child to read scaffolded lines before writing. Lines are adult or child created.	4	10
Segment LinesCorrection	Adult points out and/or corrects an error that child made while drawing scaffolded lines for message.	6	15
Segment Msg	Adult slows and segments message into words to support child in writing message.	4	8
Segment Word	Adult slows and segments sounds in words to support child in writing message or tells child how many sounds are in the message (e.g., "hear three sounds").	13	122
Stating Oral Message	Adult supports child or group in generating or stating an oral message for the purpose of then writing the message on paper.	13	393

Name	Description	Files	References
Adult Message	Adult states or suggests message for child or group to write.	3	9
Clarify Message	Adult asks child to clarify/restate all or part of their written/oral message.	11	64
Message Management	Adult supports child in stating, restating, or rewording a message that is shorter in length. This support is intended to assist child in remembering oral message as the oral message is translating into a written message.	1	2
Repeat Msg	Adult repeats message that was spoken aloud by child or suggested by adult.	12	168
State Message	Adult asks or insinuates child should state message or idea for message.	11	150
Writer Identity Child	Adult supports the development of knowledge or vocabulary related to writing, such as discussing what an author does, knowing what it means to be a writer, or identifying as a writer.	2	3
Responsiveness	Adult is responsive to child talk. Adult provides a response that signals to child that the adult is listening or attending to child, including an adult repeating what a child has said but does not include affirmation of part of writing or drawing processes. This category includes adult questions or comments that are part of conversation that is not readily identified as part of the writing or drawing processes. The intention is not to develop understanding of or give support for composing process.	15	782
Rules	Adult makes a request using words, gestures, or movements that signals to child rules or expectations. This could include establishing procedures for a writing event, reminder to take turns, or sharing materials.	13	69
Vocabulary	Adult supports the development of vocabulary or differentiates the meaning of similar words.	7	19

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