TEACHERS' DECISION-MAKING REGARDING LOW-PERFORMING EMERGENT READERS IN THREE KINDERGARTEN CLASSROOMS

A Capstone Project

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by

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Executive Summary

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Possessing the ability to read critically allows one to be a fully-participating member of our democratic society (Apple, 2000; Kretovics, 1985), and conversely, not having critical reading skills limits one's opportunities. As such, teaching students to read in elementary school is a fundamental concern, and schools spend a great deal of time, effort, and resources toward reaching this endeavor. However, many students do not reach high levels of reading skills (NAEP; National Center for Education Statistics [NCES], 2011), and many of these students are either living in poverty, non-White, or both, making this problem a social justice issue. This national issue pertains to Springwell Elementary School[1] in particular. The problem of practice at the school is that many students do not achieve high levels in reading. School data show that many students do not make the necessary progress to be on grade-level by the end of the school year. Researchers have found that offering students explicit classroom instruction that meets their developmental needs in the early grades can increase students' reading achievement (Piasta, Connor, Fishman, & Morrison, 2009) and reduce the incidence of reading disabilities (Vellutino & Scanlon, 1999).

Purpose

The purpose of this capstone project was to examine kindergarten teachers' reading instruction for low-performing emergent readers at Springwell Elementary School and to describe the preactive and interactive decisions of kindergarten teachers.

[1] pseudonym

Ultimately, the findings and implications were used to make recommendations to Springwell Elementary School on ways to improve kindergarten reading instruction.

Methodology

Using a qualitative multiple-case study design, I examined small-group reading instruction in three kindergarten classrooms at Springwell Elementary School over a period of eight weeks. I collected observation, interview, and document data, and analyzed data iteratively by coding, composing analytic memos, creating data displays, and developing assertions, in order to search for confirming and disconfirming evidence of findings.

Findings

The overall findings of this capstone study are:

1. Kindergarten teachers at Springwell Elementary School relied primarily on assessed Rigby (Houghton Mifflin Harcourt, 2007) reading levels to flexibly group students for small-group instruction during their literacy block. The prominent focus on Rigby levels may hinder teachers from addressing multiple indicators of emergent reader development.
2. Kindergarten teachers at Springwell Elementary School often planned and implemented differentiated small-group reading instruction for low-performing emergent readers. However, teachers did not appear to use a *systematic approach*, as instructional content and activities were delivered inconsistently; at times, teachers offered activities other than reading instruction during designated small-group time.

3. During interactive teaching, kindergarten teachers at Springwell Elementary School made two types of "pedagogical maneuvering decisions" (Duffy & Ball, 1983, p. 16) in response to student behaviors (i.e., stuck, incorrect, and correct): procedural (i.e., activity-oriented) and substantive (i.e., goal-focused). Within the initiation-response-feedback (IRF) framework, teachers missed opportunities to make substantive decisions to exploit their feedback turns. Additionally, instructional activities that seemed to be more goal-focused increased the potential for teachers to make substantive decisions.

Implications and Recommendations

The implications of the findings from this capstone study revealed that kindergarten reading instruction at Springwell Elementary School may both encourage and limit student growth. The recommendations to Springwell Elementary School on possible ways to improve kindergarten classroom instruction are:

1. In order to increase (1) teacher knowledge of emergent reader development, and (2) teacher skill in using assessment data to plan targeted instruction: Provide teachers instructional support in analyzing how the school's literacy-diet-based emergent reader lesson plan components (i.e., concepts of print, alphabet knowledge, phonological awareness, COW-T, and writing) and instructional activities can be used to support emergent reader development.
2. To improve the quality of teacher decisions when implementing small-group reading instruction: Provide teachers instructional support in (1) contrasting *procedural* (i.e., activity-based) and *substantive* (i.e., goal-focused) decisions,

and in (2) identifying and exploiting opportunities to make substantive decisions (i.e., asking metacognitive questions, offering explicit instruction, offering specific praise, and confirming with elaboration).

3. As part of a systematic approach to reading instruction:
    a. Use valid, reliable, and instructionally transparent assessment tools (e.g., PALS-K [Invernizzi, Swank, Juel, & Meier, 2003] and PALS-K Quick Checks) to determine students' strengths and weaknesses with respect to multiple indicators of emergent reader development including COW-T, spelling, letter recognition, letter sounds, and phonological awareness (i.e., rhyme and beginning sounds). Use these assessment data to flexibly group students and plan for differentiated small-group instruction. Kindergarten teachers and other collaborating teachers (e.g., ESOL, reading specialists, SPED) should meet at least monthly to discuss student progress (as measured on assessments) and adjust instruction.
    b. Design and use a daily record-keeping system to track which literacy components (i.e., concepts of print, alphabet knowledge, phonological awareness, COW-T, and writing) each teacher or teaching assistant is delivering during small-group instruction, to ensure that each student is getting appropriate amounts of instruction across the McGuffey literacy diet (http://readingfirst.virginia.edu/pdfs/diets.pdf) and to allow teachers to maintain a consistent daily routine (e.g., reread

books, practice letter sounds, and read a new book) with their emergent reader groups.

DEDICATION

I dedicate this capstone to my loving family who continually offers me support and encouragement. To my parents, Ron and Esther, and to my parents-in-law, Richie and Mary Ellen – I could not have been blessed with a better support system. I leaned on each one of you for moral support and for help in taking care of your grandsons! To my wonderful sons, Eric and Grant – I love you both more than you could ever know. Thank you for always encouraging me with, "Mom, you can do it. Now, get to work!" To my loving husband, Jon – thank you for being my number one supporter and for always having faith in me. I love you, always and forever.

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Chapter One: Introduction

Learning to read is a complex process (Adams, 1990), and likewise, teaching children to read is an equally complex process, requiring significantly more knowledge and skills than being an expert reader oneself (Phelps, 2009). To effectively teach reading, one requires specialized content knowledge about reading development (Moats, 1994; Moats & Foorman, 2003), pedagogical content knowledge (Shulman, 1986), knowledge of individual student need (Connor et. al, 2009) and knowledge of evidence-based reading practices (National Institute of Child Health and Human Development [NICHD], 2000). In the United States, one of the major responsibilities of elementary schools is to help students become literate; appropriate early literacy instruction is crucial to preventing future reading difficulties (Snow, Burns, & Griffin, 1998). Improving reading instruction is, therefore, a continual task of the school.

In order to be an active and complete member in a democratic society, one must be able to use disciplined thinking when reading and evaluating multiple sources of information. Students need to learn to read critically so that they can be full participants in our democracy (Apple, 2000; Kretovics, 1985). Distressingly, many children not only fail to meet the high-levels of reading achievement necessary to gain access to higher-level texts, but also fail to read on a most basic level as measured on the National Assessment of Educational Progress (NAEP; National Center for Education Statistics [NCES], 2011). According to the NCES report for 2011, 33% of fourth-grade students were reading at the Below Basic level, and another 33% of fourth- grade students were

reading only at the Basic level. For fourth-grade students, reading at the Basic level means that students are able to read a text at the fourth-grade level, make simple inferences about the text, support a particular conclusion with information from the text, and use context to understand vocabulary (NCES, 2011). However, students who score Below Basic are not able to perform at this minimum standard. In fact, the results of the 2011 NAEP (NCES, 2011) for fourth-grade reading show that 22% of White students were at the Below Basic level and 35% were reading at the Basic level. Of further concern, 51% of Black students fell into the Below Basic level and an additional 33% of Black students were reading at the Basic level. Taken together, 84% of Black students were reading at either the Below Basic or Basic levels. Likewise, for Hispanic students, 49% were reading at the Below Basic level and 33% were reading at the Basic level. So, for fourth-grade Hispanic students, 82% of students were reading at the Basic or Below Basic level (see Table 1.1 for pass rates).

Table 1.1

Percentages of Pass Rates by All Students and Race/Ethnicity Groups (NCES, 2011)

Students	**Below Basic (%)**	**Basic (%)**	**Proficient (%)**	**Advanced (%)**
All	33	33	26	8
White	22	35	33	11
Black	51	33	14	2
Hispanic	49	33	16	3

Although not reported in the same manner, of the bottom quartile of scores, 74% of the students were eligible for Free and Reduced Lunch, a common measure of poverty. Clearly then, a majority of students who struggle with learning to read are poor and non-

White, refocusing this problem of lack of reading achievement in an arena of social justice and equity in education.

Students who fall behind early in their school careers do not make as much progress as those who read at least on grade level (Juel, 1988). Persistent reading problems can lead to many negative consequences, including students ultimately dropping out of school (Hernandez, 2012). Students who drop out of high school are eligible for only 10% of all jobs, because 90% of jobs in the United States require at least a high school diploma (Statistic Brain Research Institute, 2012). Moreover, students who do not graduate from high school are more likely to be involved in crime: 75% of crimes are committed by students who do not finish high school, and 60% of Black high school dropouts have been imprisoned (Statistic Brain Research Institute, 2012).

Nonetheless, many reading problems can be corrected or even prevented with careful early instruction (Snow et al., 1998). Snow, Burns, and Griffin (1998) state that, "Research affirms that quality classroom instruction in kindergarten and the primary grades is the single best weapon against reading failure" (p. 343). Wenglinsky (2002) asserts "that the effects of classroom practices, when added to those of other teacher characteristics, are comparable in size to those of student background, suggesting that teachers can contribute as much to student learning as the students themselves" (p. 1). Appropriate instruction, differentiated to meet the needs of individual students, is critical (Connor et al., 2009). Thus, teachers and teaching practices matter (Darling-Hammond, 2010; Foorman & Moats, 2004; Hanushek & Rivkin, 2006; Wenglinsky, 2002), as do the decisions that teachers make regarding their classroom practices (Kennedy, 2008). In this

current exploratory study, I examined early reading instruction at Springwell Elementary School at the kindergarten level to describe decisions that kindergarten teachers make regarding classroom reading instruction as they teach low-performing students.

In the following sections, I will provide definitions to commonly used words in this capstone project; present an overview of the literature concerning emergent reader development, effective classroom-based reading practices, and teacher knowledge and decision-making; offer a statement of the problem associated with this capstone project; examine the conceptual framework that informed this research; and introduce the research questions.

Definitions

Definitions Related to Students

- *Literacy Development* refers to the notion that reading, writing, and spelling develop along a continuum as students grow and mature (Bear, Invernizzi, Templeton, & Johnston, 2012; Chall, 1983; Ehri, 1997).
- *Developmental Literacy Stages* describe qualitative changes in what students are able to do with regard to reading, writing, and spelling; instruction is focused not only on what the stage characteristics suggest that children know and are able to do, but on individual characteristics of a particular student. There are five developmental literacy stages: emergent, beginner, transitional, intermediate, and advanced (Bear et al., 2012; Templeton & Gehsmann, 2014), ranging from birth through adulthood.

- *Emergent readers, writers, and spellers* describes children from infancy to the point where they become beginning readers, a time when they know most upper- and lowercase letters and sounds, understand that print holds a message, develop aspects of phonological awareness (rhyming, syllable, and beginning sound awareness), achieve a rudimentary concept of word (e.g., are able to self-correct when finger-pointing to a memorized text, such as a nursery rhyme, identify some words in context, and identify a few words from the memorized text out of context), and understand the alphabetic principle (i.e., that sounds correspond to letters and proceed in a left to right fashion in print) (Bear et al., 2012). Students are expected to become beginning readers during the second semester of kindergarten.
- *Beginning readers, writers, and spellers* describes the developmental stage that follows the emergent stage. *Beginning readers, writers, and spellers* are able to track print, read some words automatically, begin to blend sounds to read words (decode), segment sounds in order to write the sounds that are perceived (encode); make complete connections between letters and sounds; and write words and sentences (Bear et al., 2012).
- *The Phonological Awareness Literacy Screening for Kindergarten, PALS -K* (Invernizzi, Swank, Juel, & Meier, 2003) is an assessment used to determine the level of a kindergarten student's literacy development and serves as a screening, diagnostic, and progress monitoring assessment instrument. PALS-K (Invernizzi, Swank, et al., 2003) is used to assess the areas of Phonological Awareness (rhyme

and beginning sounds), Alphabet Knowledge (lowercase alphabet recognition), Letter Sound Knowledge (letter sounds and spelling), and Concept of Word (pointing, word identification in context, and identification of words out of context).

- *Concept of Word in Text (COW-T)* refers to the understanding that printed words are individual entities that are separated by spaces. Additionally, COW-T is noted as a "watershed" (see Flanigan, 2007; Henderson, 1980; Morris, 1993) event for children and is essential to the reading development process. COW-T is measured on a continuum from *developing*, to *rudimentary*, to *firm*, indicating the student's increasing ability to match speech to memorized text, identify individual words in a memorized text, and identify words in isolation after reading a memorized text (Blackwell-Bullock, Invernizzi, Drake, & Howell, 2009; Invernizzi, Meier, & Juel, 2003; Flanigan, 2007; and Morris, 1993).
- *Low-performing emergent readers* refer to students who are (1) emergent readers and (2) performing below benchmarks. At the mid-point of the school year, most kindergarten students show progress on PALS-K (Invernizzi, Swank et al., 2003) and are moving towards a rudimentary COW-T, but some students do not show much growth. In the case of this capstone, low-performing emergent readers are considered to be those students who do not fall into the ranges specified on the mid-year PALS-K (Invernizzi, Swank et al., 2003).

Definitions Related to Teachers

- *Specialized Content Knowledge* describes the specialized knowledge that teachers possess for teaching a particular subject. In the case of this capstone, specialized content knowledge refers to the knowledge that teachers have about reading development, beyond being able to read oneself (McCutchen & Berninger, 1999; Moats & Foorman, 2003; Phelps, 2009; Piasta, Connor, Fishman, & Morrison, 2009).
- *Pedagogical Content Knowledge* (Shulman, 1986) refers to the ability of a teacher to know how to assist students in increasing achievement in a particular content area. In the case of this capstone, the area is early reading instruction.
- *Evidence-based Reading Practices* are empirically-supported teaching practices, such as teaching phonemic awareness and phonics (National Institute of Child Health and Human Development [NICHD], 2000).
- *Explicit instruction* refers to instruction in which a teacher offers careful explanations to students and directs their attention to the content of the lesson (e.g., the teacher says, "This is a letter B, and B says /b/"), and is contrasted with *implicit instruction*, referring to instruction in which the concept is implied (e.g., the teacher reads a book with words that begin with B but does not comment on the letters or sounds) (Connor, Morrison, & Katch, 2004; Foorman, Francis, Fletcher, Schatschneider, & Mehta, 1998).
- *Preactive decisions* (Jackson, 1968/1990) refer to instructional decisions that teachers make prior to teaching a lesson.

- *Interactive decisions* (Jackson, 1968/1990) refer to instructional decisions that teachers make during active teaching.
- *Differentiated reading instruction* refers to instruction provided to students based upon their assessed developmental reading needs (Templeton & Gehsmann, 2014). This type of instruction stands in contrast to providing all students the same instruction.

Emergent Literacy Development

Learning how to read is a complex developmental process that begins when we are born and continues throughout our lives (Adams, 1990). Literacy development can be conceived of as having stages (i.e., emergent, beginning, transitional, intermediate, and advanced). The movement between these stages does not represent an abrupt jump; rather, the stages are qualitative designations of particular skill levels along a continuum (Bear et al., 2012; Chall, 1983; Ehri, 1997). In the first stage, emergent readers, writers, and spellers have much to learn between infancy and becoming beginning readers. The development of these components typically happens in "synchrony" (Bear et al., 2012), meaning that reading, writing, and spelling are intertwined as the child progresses through stages, and that each component supports the development of the others. Most kindergarteners, and certainly those students who are low-performing, enter kindergarten in the emergent stage of reading development.

At first, emergent readers do not demonstrate knowledge of early skills: knowledge of letter names, knowledge of letter sounds, phonological awareness, concepts about print, the alphabetic principle, or concept of word in text. As students move

through the emergent stage, by gaining experience and through instruction, they gain knowledge and understanding about reading and writing (Bear et al., 2012). Knowledge of letter names can help students learn letter sounds, as many of the letter sounds are found in letter names. For example, the name of the letter K begins with the sound /k/. Students must also learn to form both upper- and lowercase letters. Phonological awareness progresses from being able to perceive larger units (e.g., syllables) to smaller units (e.g., phonemes, or individual sounds in words). Experience with concepts about print develops student knowledge that reading moves from left to right and from top to bottom. Students must also learn the alphabetic principle: words contain sounds, which can be mapped to letters that proceed in a left to right fashion.

A crucial milestone in early literacy development, and what Henderson (1980) described as the "watershed" (p. 9) event that moves emergent readers into the next stage of development, is achieving Concept of Word in Text (COW-T; Blackwell-Bullock et al., 2009; Flanigan, 2007; Morris, 1980; Morris, 1993). Being able to demonstrate *rudimentary* COW-T means that a student has woven together many seemingly separate skills: knowledge of letter names, knowledge of letter sounds, phonological awareness (i.e., rhyme, syllable, and beginning sound awareness), and concepts about print that include the understanding that printed words have letters grouped together and are separated by spaces. As discussed earlier, gaining literacy is a developmental process, as is developing COW-T. These skills develop over time and with instruction, and qualitative differences in COW-T can be identified as "developing," "rudimentary," and

"firm" (Blackwell-Bullock et al., 2009). See Figure 1.1 for the relationship between COW-T stage, pointing behaviors, and literacy stage.

Figure 1.1

Development of Concept of Word in Text (adapted from Johnston, Invernizzi, Helman, Bear, & Templeton, 2015, p. 142)

COW-T Stage	Pointing	Literacy Stage
Firm	Accurate Tracking	Beginning
	Self-corrects when gets off track	Emergent to Beginning
Rudimentary	Points to words but gets off track on syllables	Emergent
	Points to words and says stressed units	
Developing	Left to right directionality but does not point to words	

Once emergent readers understand that print carries a message and they know that they should point to the words on a page to "read" them, students are said to have *developing* COW-T. Students with developing COW-T may know that they should point from left to right and top to bottom (i.e., they understand directionality), but one of the following characterizes their pointing: they show no word awareness or they point to words as stressed units (i.e., either the one-syllable word or a syllable in a multisyllabic word). Students demonstrating *developing* COW-T typically point to each letter as they say the words to a memorized rhyme or point to words as they say syllables. These students cannot self-correct, and most likely do not realize that they did not point to the words as modeled by the teacher. Students with *developing* COW-T are unable to

identify any words in or out of context, outside of guessing (Blackwell-Bullock et al., 2009).

When emergent readers are able to point to the words and self-correct when they make a mistake, they are said to have *rudimentary* COW-T. Additionally, with *rudimentary* COW-T, students are able to identify some words in context and a few out of context. Finally, once children are able to (1) accurately and consistently track memorized print, (2) can recognize all words in context (i.e., they can identify any word that the teacher points to in the text), and (3) can recognize most words in isolation (i.e., students can identify many words from the text that are presented on a list) just after reading the text, they have achieved *firm* COW-T. Achieving firm COW-T means that students have fully moved into the beginning stage of reading development. In other words, as emergent readers gain experience with and have opportunity to practice integrating their letter knowledge, letter-sound knowledge, phonological awareness, and concepts of print skills, they further develop COW-T and move into the beginning stage of literacy development (Flanigan, 2007; Morris, 1993). Researchers have identified effective instructional practices that provide the experience and practice that students need to develop each literacy skill (NICHD, 2000) and also to integrate all of these skills (see Bear et al., 2012). These instructional practices will be detailed in the following section.

Effective Classroom-Based Reading Practices

Content and teaching practices for reading instruction matter in children's literacy development (Foorman et al., 1998; NICHD, 2000; Snow et al., 1998; Taylor, Peterson,

Pearson, Rodriguez, 2002). Using appropriate materials also plays a part in student learning (Fountas & Pinnell, 1986; Mesmer, 2008).

Content

The National Reading Panel (NICHD, 2000) determined that instruction in the areas of phonemic awareness, phonics, fluency, vocabulary, and comprehension are critical to students' reading development, and should be taught in the regular classroom. Other critical elements of literacy instruction include motivation and writing (Templeton & Gehsmann, 2014). At each literacy stage, these components are addressed in different ways. For instance, at the emergent level, content of instruction is focused on developing phonemic awareness (Ball & Blachman, 1991; Ehri, 2011; Yopp & Yopp, 2000), as they first learn about aspects of phonological awareness, including rhyme awareness, syllable awareness (i.e., identifying the number of syllables in a word, yet understanding that there is just one word), and beginning sound awareness. Phonics at the emergent level is based on matching letters and sounds (Bear et al., 2012). Comprehension and vocabulary are addressed during read-alouds. Teachers think aloud in order to model comprehension strategies and choose particular vocabulary words to teach directly and interactively (Beck, McKeown, & Kucan, 2013; Lane & Wright, 2007; Santoro, Chard, Howard, & Baker, 2008). Teachers continue to build vocabulary as they discuss daily activities and offer students practice with the vocabulary chosen from read alouds. Writing is an integral part of learning to read at the emergent stage, as reading and writing are reciprocal processes: children learn about reading from writing, and about writing from reading (Templeton & Gehsmann, 2014).

Teaching Practices

Appropriate general classroom practices, particular research-based practices addressing specific literacy components, differentiation, and appropriate grouping formats (i.e., whole-group, small-group, or individual setting) can work together to create effective literacy instruction. Effective general classroom practices identified by Bohn, Roehrig, and Pressley (2004) include:

- designing and implementing classroom routines,
- holding high expectations for students,
- providing students with meaningful tasks, and
- offering praise specific to the exact skill or response (e.g., rather than saying "good job," a teacher might say, "I see that you have worked hard on learning your letters and now you know them all!").

Similarly, when teaching students skills and procedures, using the framework of the Gradual Release of Responsibility Model (Fisher & Frey, 2008) (which includes modeling the skill, guiding student practice with the skill, and providing independent practice of the skill) is an effective pedagogical technique. In the same manner, using particular research-based practices is effective for developing literacy skills (NICHD, 2000). For example, some identified effective practices at the emergent reader stage include:

- interactive read-alouds (Lane & Wright, 2007; Santoro et al., 2008),
- shared reading (Justice, Kaderavek, Fan, Sofka, & Hunt, 2009),

- playing with rhymes and practicing other phonological skills (Adams, Foorman, Lundberg, & Beeler, 1998),
- writing letters while learning letters and sounds, and
- practicing voice-to-print tracking (i.e., pointing to text while reading) using memorized text to increase COW-T (Blackwell-Bullock et al., 2009).

However, one-size-fits-all instruction does not meet the needs of all students, and indeed, classroom instruction must be differentiated in order to be effective (Foorman & Moats, 2004; Piasta et al., 2009). As students have varied backgrounds and instructional experiences, consideration of individual student characteristics is imperative (Connor et al., 2011). Some types of instruction work well in a whole group setting (e.g., interactive read-alouds), but for others (e.g., addressing different levels of COW-T), small-group instruction is more appropriate (Al Otaiba et al., 2011).

Materials

Literacy materials also play an important role in the kindergarten classroom; appropriately leveled books for instruction, enlarged charts and big books, and magnetic letters are fitting materials for emergent readers. Generally, reading materials need to be at an appropriate instructional level for students (Fountas & Pinnell, 1996; Mesmer, 2008). More specifically, at the emergent level, appropriate texts have simple, predictable sentences that are printed clearly on the pages of the book (Fountas & Pinnell, 1996; Cunningham et al., 2005; Mesmer, 2008), and enlarged texts (e.g., large charts) are created from nursery rhymes or other poems (Blackwell-Bullock et al., 2009).

However, teacher use of appropriate instructional content, evidence-based reading practices, and suitable materials is not inevitable (Foorman & Moats, 2004) and many factors play into decisions that teachers make (Kennedy, 2008), including the classroom context (Cuban, 1993b). Thus, the nature of teacher decision-making is complex.

Teacher Knowledge and Decision-Making

In order to provide appropriate instruction, teachers must make numerous decisions both when planning lessons and when teaching students (Jackson, 1968/1990; Peterson, Marx, & Clark, 1978), as "Teachers do not… implement curricula or other instruction devices exactly as they have been prescribed" (Kennedy, 2008). In his examination of classrooms, Jackson (1968/1990) classified two types of teacher decision-making: "preactive" and "interactive." The term *preactive* refers to decisions made prior to the beginning of instruction, including planning. *Interactive* decisions happen during the teaching act itself. Similarly, Peterson, Marx, and Clark (1978) termed these categories "planning decisions" and "interactive decisions." In either case, preactive or interactive, teachers' decisions are not made in a vacuum, but rather in the complex context of a classroom (Cuban, 1993b; Jackson, 1968/1990; Kennedy, 2008; Lortie, 1975) that is situated within a school, and positioned within a larger system of district, state, and federal policies.

In their review of research on teachers' thinking, decisions, and behavior, Shavelson and Stern (1981) provide a conceptual framework for understanding teacher decision making, which Borko, Roberts, and Shavelson (2008) adapted. Borko et al. (2008) explain that:

> … teachers are seen to integrate information about students, subject matter, and the school and classroom environment, filtering it through their beliefs and conceptions of the subject matter, so as to reach a judgment or decision on which their behavior is based…(p. 44)

To elaborate, this conceptual framework displays a cycle addressing how existing classroom conditions (e.g., students' assessed needs, instructional goals, and context) are filtered through teacher characteristics (e.g., beliefs, values, understanding of subject matter). These conditions and characteristics affect teacher thinking (e.g., information selection and integration, and inferences), leading to consequences for teachers (i.e., planning and interactive decisions and behaviors) (Borko, Roberts, & Shavelson, 2008). These consequences affect both the existing classroom conditions (as discussed earlier) and the students (i.e., achievement, motivation, and emotion) (Borko et al., 2008). Consequences for students lead teachers to evaluate their judgments, decisions, and teaching routines, which completes the circle by affecting classroom conditions (Borko et al., 2008).

Based on Borko et al.'s (2008) conceptual framework on teacher decision-making, and given that each teacher has unique experiences, beliefs, and values, it is a logical conclusion that decisions each teacher makes may differ as well. In fact, Stephens et al. (1995) examined the decisions that teachers in four schools made concerning assessment and concluded that classroom practices varied because of the way that teachers make decisions despite using the same tools. Stephens et al. (1995) also noted the impact of the specific context of each school on decision-making. Similarly, Cuban (1993b) noted that teachers must make "situationally constrained choices" (p. 260) due to contexts both inside and outside the classroom. In other words, multiple factors affect the

"taught curriculum" (Cuban, 1993a, p. 184), what is actually taught in a particular classroom, which is distinct from the "official curriculum" (Cuban, 1993a, p. 183) listed in curriculum documents. Not only are teachers' decisions filtered through teachers' beliefs (Sleeter, 2005), but these decisions are developed from several kinds of knowledge. Specifically, Shulman (1987) enumerated several categories of teacher knowledge including content knowledge, knowledge of learners, curricular knowledge, and pedagogical content knowledge (p. 8). In sum, teachers must make instructional decisions inside a particular context, using their own knowledge filtered through their beliefs about knowledge, learning, and students.

Statement of the Problem

Teacher decision-making affects student learning. As stated earlier, most reading problems can be prevented by appropriate early instruction (Foorman & Moats, 2004; Snow et al., 1998; Torgesen, 2002). However, when instructional opportunities are not compatible with student needs, reading achievement stagnates and students fall behind. For example, in their longitudinal study on first grade reading intervention, Vellutino and Scanlon (1999) report that, "Our results suggest that reading difficulties in most impaired readers are caused by experiential and/or instructional deficits rather than basic cognitive deficits" (p. 3). As a result of reading below grade level, many problems can occur, including: the inability of students to receive developmentally appropriate instruction (Allington, 1983), fewer reading opportunities (Stanovich, 1986), and fewer challenging, higher-order questions (see Brown, Palincsar, & Purcell, 1986). The results can lead to lowered self-efficacy (Oka & Paris, 1987) and the need for additional instruction by a

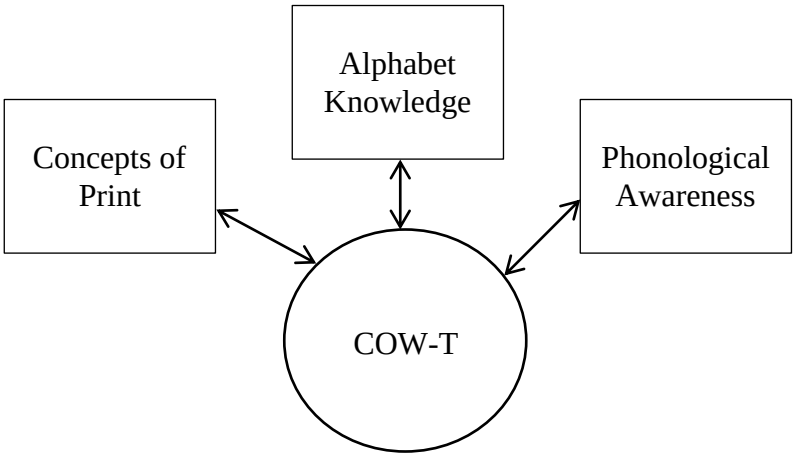
reading specialist or other intervention specialist (see Invernizzi, Justice, Landrum, & Booker, 2004). Additionally, students who struggle with reading are more likely to receive special education services (Vellutino & Scanlon, 1999) and to ultimately drop out of school (Hernandez, 2012).

In particular, emergent readers need a combination of specific skills as well as practice integrating skills in order to further their literacy development and move into the next literacy stage (Bear et al., 2012). Certain research-based practices have been shown to be effective at developing the skills that the students need (NICHD, 2000). Although at the beginning of the school year, most students in kindergarten are emergent readers, the students fall along a continuum with respect to their literacy development. Teachers must first accurately assess a child's level of development and performance on various skills in order to provide appropriate instruction (Invernizzi, Justice et al., 2004). In order to provide the most effective instruction, teachers must match instruction to the students' alphabet knowledge, concepts of print, and phonological awareness skills as well as offer support as students develop COW-T. The interactive relationship of concepts of print, alphabet knowledge, and phonological awareness with COW-T are shown in Figure 1.2.

Effective instruction requires many planning decisions as well as interactive decisions (Peterson et al., 1978) that are based on individual reader characteristics. Ultimately, the teacher's decisions affect the degree to which student needs are met, which in turn increases a student's reading skills, or the skills remain stagnant (Connor et al., 2011). Determining how best to meet student need in a particular classroom, school, and community context is of great concern in order to help students to develop necessary

Figure 1.2

Interactive Relationship of Literacy Skills and COW-T



reading skills (Walpole, Justice, & Invernizzi, 2004). For individual schools then, this undertaking means determining how to best meet the needs of all students at each grade level, beginning in the first year of formal schooling, kindergarten.

Springwell Elementary School is a school where teachers work to meet the diverse reading needs of their students is. Located in a medium-sized city in a mid-Atlantic state, Springwell Elementary School serves approximately 600 students of racially, ethnically, and linguistically diverse backgrounds with approximately 70% of the students receiving free and reduced lunches. Only 60% of students at the school passed the state accountability reading tests for the 2012-2013 school-year. Low-performance begins in kindergarten. Approximately half of the kindergarten students at Springwell Elementary School did not meet the benchmark ranges on the mid-year PALS-K (Invernizzi, Swank et al., 2003), even though external reading supports were in place in the form of reading specialists and Title I teachers. Ending the year below

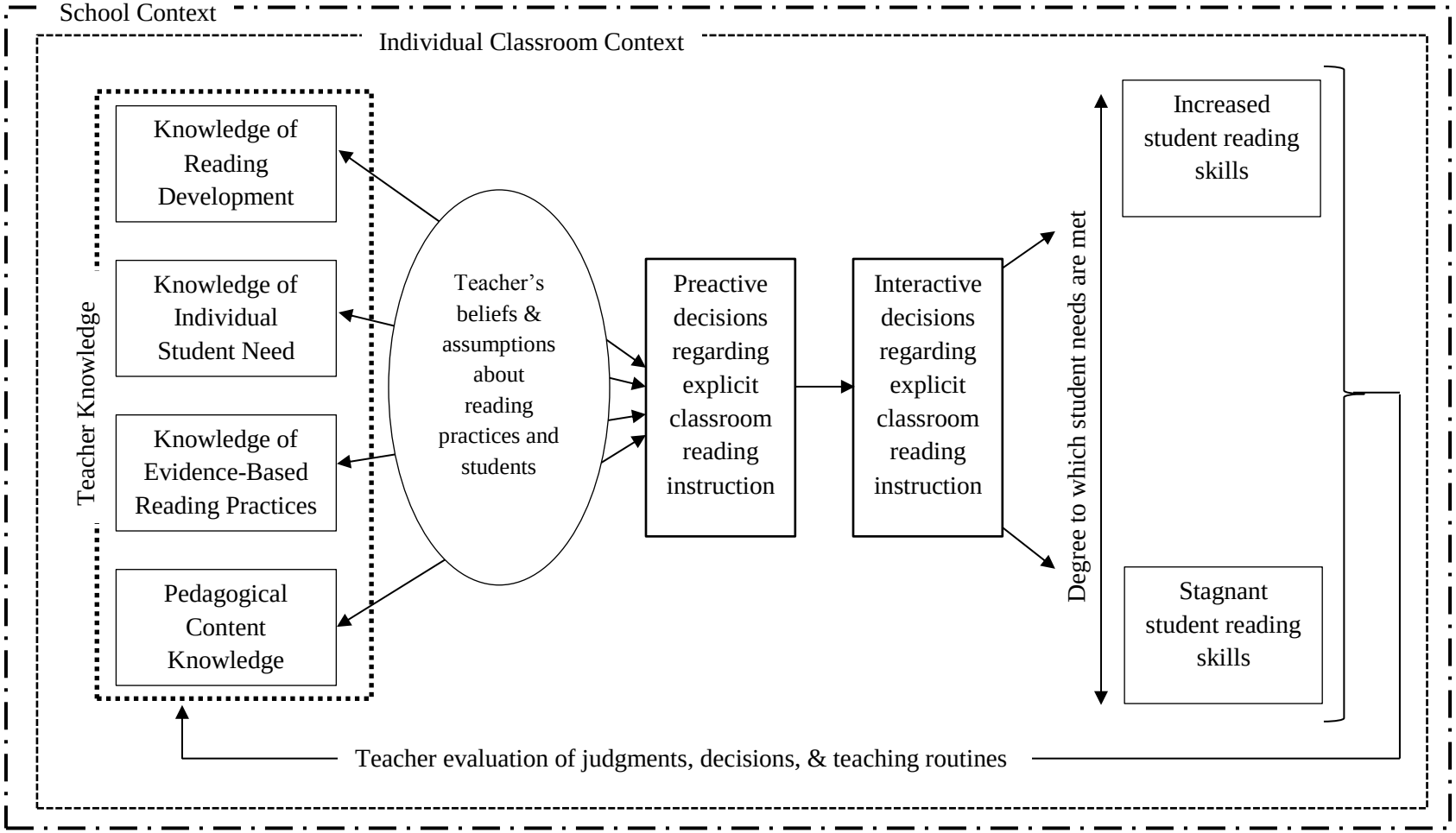
benchmarks puts kindergarteners at risk for later reading difficulties (Invernizzi, Meier et al., 2003). Therefore, the purpose of this qualitative capstone project was to examine preactive and interactive decisions that kindergarten teachers make regarding classroom reading instruction at Springwell Elementary School in order to provide the school with recommendations about how to support teachers as they teach low-performing emergent readers.

Conceptual Framework

I developed a conceptual framework (see Figure 1.3 for a visual model) to guide this capstone. I regarded classroom reading instruction as a function of decisions that teachers make based upon their (1) specialized knowledge of reading development (Moats, 1994; Moats & Foorman, 2003), (2) knowledge of individual student need (Invernizzi, Meier et al., 2003; Invernizzi, Swank et al., 2003), (3) knowledge of evidence-based reading practices (NICHD, 2000), and (4) pedagogical content knowledge (Shulman, 1986) of teaching reading, filtered through the teacher's lens holding beliefs and assumptions about reading practices and students (Sleeter, 2005), and positioned in a particular context. Teacher beliefs and assumptions about reading practices and students are complex, and are situated in a teacher's identity and experience (Sleeter, 2005). Moreover, these decisions are not a one-time event, but rather, occur during both designing and implementing instruction (Jackson, 1968/1990; Peterson et al., 1978), when teachers make nearly one decision per minute (see Borko & Shavelson, 1990). Teachers are situated in a complex classroom context. The act of implementing instruction cannot be seen as a direct application of a lesson plan (Kennedy, 2008), but

Figure 1.3

Conceptual Framework of Classroom Reading Instruction



rather as an interaction between the planned curriculum, the teacher, and the students. Additionally, based upon experiences with students during classroom reading instruction, and interactions with peers, a teacher's knowledge of what instructional practices work can change.

Because students learn most efficiently when instruction is directed at their zone of proximal development (Vygotsky, 1978), accurate interpretation of assessment data is a crucial part of the process of matching instruction to student need. Using both formal assessment (e.g., PALS-K, Invernizzi, Swank et al., 2003; PALS 1-3, Invernizzi, Meier et al., 2004) and informal formative assessment (Black & Wiliam, 2010) to inform instruction is useful for gauging initial literacy levels as well as increased literacy development throughout the year. This evaluative process allows teachers to design and implement appropriate instruction. The level of progress that children make in reading is a function of their current knowledge and skills, the degree to which student needs are met with classroom instruction (explicit instruction) and experience (non-explicit instruction), as well as experiences outside of the classroom, whether at home or at school (see Connor et al., 2011).

The greater the match between students' instructional needs and instruction the more progress students will make (Connor et al., 2011). For example, Connor et al. (2011) found that students whose teachers differentiated reading instruction to match student needs showed greater gains in their reading skills. The authors examined the implementation of a computerized system to inform teachers of appropriate types and durations of particular reading interventions for individual students and analyzing the

data using hierarchical linear modeling (HLM) found "Child Characteristic X Instruction (CXI) interactions" (Connor et al., 2011, p. 173), meaning student characteristics should be considered when designing reading instruction. Indeed, the degree to which instruction matches student need makes a difference in the amount of student growth in reading: in the cases where there is a high level of fit between classroom instruction and student need, student reading skills increase (Connor et al., 2009). Conversely, the lesser the match between student need and instruction, the fewer improvements are seen in student reading achievement (Connor et al., 2009).

Research Questions

Students who fall behind their peers in reading need explicit and informed instruction to move them forward in their literacy development (Duffy, 2009). Examining preactive and interactive teaching decisions may shed light on ways to improve reading instruction for low-performing emergent readers and put students on the path to achieving critical literacy. Based on the particular context of Springwell Elementary School, and the desire of the administrators and teachers to improve reading instruction for low-performing emergent readers, the following research questions guided this capstone project:

1. What preactive decisions do kindergarten teachers at Springwell Elementary School make as they plan reading instruction for low-performing emergent readers?

2. What interactive decisions do kindergarten teachers at Springwell Elementary School make as they implement reading instruction for low-performing emergent readers?
3. To what degree do preactive and interactive decisions of kindergarten teachers at Springwell Elementary School correspond as they plan and implement reading instruction for low-performing emergent readers?
4. What recommendations can be made to improve the quality of classroom reading instruction for low-performing emergent readers in kindergarten at Springwell Elementary School?

Chapter Two: Literature Review

One of the main goals of elementary school instruction is teaching children to read. In fact, "few would argue that learning to read is the most important accomplishment of a child's early elementary school experience" (Strickland, 2002, p. 69). Reading has always received much attention in schools, but in the past fifteen years, there have been heightened discussions. For example, Public Law PL 107-110, the No Child Left Behind Act of 2001 (NCLB), brought discrepancies between groups of students to the forefront of political deliberations regarding reading. Another reason that reading is a central education issue is that even though students are passing exams at about the same frequency as they always have, available jobs are calling for more and more literacy skills (NICHD, 2000; Torgesen, 2002). The Common Core State Standards, recently adopted by 45 states, call for attention to be placed on critically reading complex texts. In order for students to read critically, they must first learn to "crack the code."

Not all students have equal access to high quality instruction, which is especially concerning for students for whom school is the only means of educational opportunity, and in turn, reading instruction. Indeed, Hanushek (1992) measured differences in teacher quality with respect to low-income Black students' outcomes on the Iowa Reading Comprehension and Vocabulary tests in grades 2-5 over a period of four years, finding that some teachers' students made an average of 18 months of progress in one year, whereas other teachers' students averaged only 6 months of progress in one year.

Similarly, Wenglinsky (2002) examined the 1996 NAEP data for eighth-grade mathematics using multilevel modeling and determined that classroom practices accounted for 56% of the variance noted. Whereas Wenglinsky found socioeconomic status (SES) to have an effect size of 0.76, he found total teacher quality (i.e., classroom practices; professional development; and teacher characteristics, such as educational attainment) to have an even greater effect size of 0.98. Clearly, then, good instruction matters for student learning, especially for students who struggle. The purpose of this capstone is to determine ways to help kindergarten teachers provide low-performing students with appropriate reading instruction that meets their needs so that the students in these kindergarten classrooms make adequate progress.

The conceptual framework developed for this capstone was informed by the literature, but it also frames how I understand the literature. For the purpose of this capstone, relevance was privileged over thoroughness in this literature review (Maxwell, 2006). That is, materials particularly relevant to this capstone are included, and those not directly related are excluded from this review. In this chapter, I will discuss classroom reading instruction in the context of teacher knowledge and decision-making with regard to reading development, student needs, and evidence-based reading practices. This discussion will lay a foundation for thinking about how to assist teachers who endeavor to promote literacy development for their low-performing emergent readers. My findings for this capstone study shed light on kindergarten teachers' preactive and interactive decisions about low-performing emergent readers at Springwell Elementary School and enable me to provide recommendations to improve the quality of kindergarten classroom

reading instruction for low-performing emergent readers at Springwell Elementary School.

Teacher Knowledge and Decision-Making

Teachers do not just implement curriculum: they interpret it with their own understanding in order to determine how to teach content in their own classrooms (Cuban, 1993a; Kennedy, 2008; Sleeter, 2005). Clark and Yinger (1987) connect teacher thinking and teacher behavior this way:

> The thinking, planning, and decision-making of teachers constitute a large part of the psychological context within which curriculum is interpreted and acted upon and within which teachers teach and students learn. Teacher behavior is substantially influenced and even determined by teachers' thought processes. (p. 84)

Arguably, teachers must have knowledge of reading in order to make instructional decisions about reading (Moats, 1994). However, as Moats and Foorman (2003) suggest, "…the level of knowledge and ability that distinguishes an adequate teacher from an inadequate or an expert one, or a general education teacher from a specialist, is not yet informed by empirical research" (p. 25). Both theoretical and empirical works, therefore, are valuable when considering teacher knowledge.

Teacher Knowledge: Theoretical

Working from a theoretical perspective, Shulman (1986) identified teacher knowledge as the "missing paradigm" in research aimed at improving student learning, and proposed three domains of teacher knowledge: content, pedagogy, and curriculum. Although Shulman (1986) refers to content knowledge as knowledge of a discipline (e.g., science), these three categories can be related to teacher knowledge of reading, in this

capstone (McCutchen & Berninger, 1999). Here, Shulman's (1986) subject matter content knowledge relates to a teacher's knowledge of reading development; curricular knowledge correlates to teacher knowledge of evidence-based reading practices; and pedagogical content knowledge refers to knowledge of how to teach reading. Although implicit in Shulman's (1986) work, I consider knowledge of students as a separate construct for this capstone (see Figure 1.3 in chapter 1) as I will specifically examine assessment of student instructional reading needs.

Similar to Clark and Yinger's (1987) discussion of curriculum interpretation by teachers, Shulman's (1986) conception of categories of teacher knowledge works within Cuban's (1993a) idea of the existence of different curricula. Cuban (1993a) breaks down "curriculum" into four curricula: the *official* curriculum, the *taught* curriculum, the *learned* curriculum, and the *tested* curriculum. In this study, it is the *taught* curriculum - the "black box" - that uses teachers' content knowledge, pedagogical content knowledge, and curricular knowledge within a particular context to shape the enacted (i.e., taught) curriculum. Even to the extent that teachers have high content knowledge, high pedagogical content knowledge, and high curricular knowledge they enact instruction in different ways. Thus, content knowledge of reading development that includes an awareness of relationships between literacy components, pedagogical content knowledge that includes an understanding of why a particular concept is easy or difficult for students to grasp, and curricular knowledge that includes insight into curricular materials, all play a role in what teachers actually do in the classroom.

In spite of the fact that one would like to assume, simply, that improving teacher knowledge improves teacher practice which, in turn, improves student learning, relationships between teacher knowledge, instructional practices, and student learning are highly complex. Shulman (1986) and Cuban (1993a) are working in the realm of theory, but there is empirical evidence of the connection between teacher knowledge and practice; however, this connection is not linear (Piasta et al., 2009). As Borko et al. (2008) state, "Knowing does not mean effective doing" (p. 64). In other words, high teacher knowledge may be a necessary, but not sufficient condition to promote high-quality practice in the classroom (Moats, 1994; Piasta et al., 2009).

Teacher Knowledge: Empirical

A small body of research shows a relationship between higher teacher knowledge and higher quality teaching practices (e.g., McCutchen, Abbott et al., 2002; McCutchen & Berninger, 1999; McCutchen, Harry et al., 2002; Moats & Foorman, 2003). Another line of research shows positive effects of professional development on (1) teacher knowledge (e.g., McCutchen, Abbott et al., 2002; McCutchen & Berninger, 1999; Moats, 1994; Moats & Foorman, 2003), (2) teacher practice (e.g., McCutchen, Abbott et al., 2002; McCutchen & Berninger, 1999), and (3) student outcomes (McCutchen, Abbott et al., 2002).

Teacher knowledge and teacher practice. Notably, McCutchen, Harry et al. (2002) examined correlations between teacher beliefs regarding instruction, instructional practices, teacher knowledge, and student learning in kindergarten, first, and second grade (n = 59). The researchers measured teacher knowledge of literature with a title

recognition test; teacher knowledge of phonology with the Moats (1994) Informal Survey of Linguistic Knowledge; general teacher knowledge with test developed by Stanovich and Cunningham (1993); teacher beliefs about reading instruction with the DeFord Theoretical Orientation to Reading Profile (TORP; DeFord, 1985); classroom practice with four 15-minute coded observations (see McCutchen, Abbott et al., 2002) between October and June; and student learning with word reading (kindergarten); vocabulary and comprehension subtests on the Gates-MacGinitie Reading Tests (first and second grade); spelling (first and second grade); and writing fluency (narratives by first and second graders). McCutchen, Harry et al. (2002) found no significant correlations between teacher beliefs and content knowledge; between teacher beliefs and classroom practice; and for first and second grade, between teacher phonological knowledge, teacher practice, and student word reading, comprehension, or spelling. However, the authors did find significant correlations between teacher phonological knowledge and delivery of explicit phonological instruction ($r = .30$, $p < .05$) at all grade levels; for kindergarten, both teacher phonological knowledge ($r = .49$, $p < .05$) and explicit phonological instruction ($r = .47$, $p < .05$) were significantly related to student end-of-year word reading (McCutchen, Harry et al., 2002). These correlations do not show causal results, but do demonstrate evidence that teacher knowledge, teacher practice, and student learning are related.

Effects of professional development. McCutchen and colleagues (i.e., McCutchen, Abbott et al., 2002; McCutchen & Berninger, 1999) subsequently conducted an experimental study with a subset of the teachers in McCutchen, Harry et al.'s (2002)

study. The authors provided professional development to teachers in the experimental group over the course of a year and offered the control group professional development the following year (see McCutchen & Berninger, 1999). McCutchen, Abbott et al. (2002) reported on part of the study in which kindergarten and first grade teachers (n = 24), received professional development in the form of an intensive two-week summer session focused primarily on providing teachers with knowledge of phonological awareness, orthographic awareness, comprehension, writing, and explicit instruction, followed by three sessions throughout the school year (for further details on the professional development, see McCutchen & Berninger, 1999). Twenty teachers served as the control group. Three pertinent findings regarding effects of professional development on teacher knowledge, teacher practice, and student growth follow.

Professional development and teacher knowledge. McCutchen, Abbott et al. (2002) measured general teacher knowledge using a "cultural literacy test developed by Stanovich and Cunningham (1993)" (p. 70), as well phonological awareness knowledge using Moats' (1994) Informal Survey of Linguistic Knowledge. The two groups were equivalent on these measures; however, the authors note that teachers did considerably better on the cultural literacy test than on the Informal Survey of Linguistic Knowledge. After the year-long professional development, teachers took the Moats' (1994) survey again, and the scores of teachers in the experimental group showed statistically significant differences over the control group ($F(1,23) = 11.43$, $MSE = 59.33$, $p < .01$). Thus, the researchers were able to demonstrate increased teacher knowledge about phonology and orthography through their professional development.

Professional development and teacher practice. In order to investigate changes in practice as a result of the intervention, McCutchen, Abbott et al. (2002) observed all teachers (both experimental and control) in their classrooms by coding 15 minute observations for predetermined categories of knowledge affordance (e.g., letter-sound knowledge), literacy activity (e.g., choral reading), textual context (e.g., whole text or isolated words) and group context (e.g., small-group), and calculating the total time spent in the various categories. McCutchen, Abbott et al. (2002) found that the professional development offered to the teachers in the experimental group (n = 24) improved classroom instruction on some of the measures. For example, in kindergarten, the intervention teachers spent nearly half of their time during phonological awareness activities providing explicit instruction, significantly more than the control teachers, who, on average, spent only one-fifth of the time delivering explicit instruction, $F(1, 19) = 6.98$, $MSE = 30.72$, $p < .05$, with a large effect size of 0.82 (McCutchen, Abbott et al., 2002).

Professional development and student growth. Using hierarchical linear modeling, McCutchen, Abbott et al. (2002) analyzed student growth (n = 779; 492 kindergarteners; 287 first graders) with two separate analyses to account for the fact that the researchers found a wide range in amounts of explicit instruction in each of the groups (intervention and control). So, in addition to analyzing the effect of the intervention teachers' improved practice on student growth, they examined the effect of the amount of explicit instruction (in either the intervention or control group) on student skills. The results showed that for kindergarten, the experimental condition had a

statistically positive effect on orthographic fluency (i.e., alphabet production), $t(19) = 2.42$, $p < .026$, but not on the other three student measures of phonological awareness, listening comprehension, or word reading. For first grade, the experimental condition predicted growth in phonological awareness, $t(18) = 2.15$, $p < .05$; reading comprehension, $t(18) = 3.03$, $p < .003$; reading vocabulary, $t(18) = 2.23$, $p < .039$; spelling, $t(18) = 3.54$, $p < .003$; and composition fluency, $t(18) = 3.50$, $p < .003$; but not in orthographic fluency. Overall, McCutchen, Abbott et al. (2002) provide evidence that professional development can increase teacher knowledge regarding phonological awareness and may cause teachers to provide more explicit instruction to students; however, it is not clear if the increased knowledge caused the change in practice. Interestingly, McCutchen, Abbott et al. (2002) found that students whose teachers provided more explicit instruction, in both phonological awareness and in comprehension, showed statistically significant growth over students whose teachers did not provide as much explicit instruction. Thus, kindergarten students made greater growth in measures of phonological awareness when teachers provided more explicit instruction (McCutchen, Abbott et al., 2002).

Measurement of teacher knowledge. One question that arises out of this discussion of teacher knowledge is how various types of teacher knowledge (i.e., declarative, procedural, and conditional) should be measured (Callahan, Griffo, & Pearson, 2009). Moats and Foorman (2003) report on attempts to refine a measurement of declarative teacher knowledge relating to language. In my earlier discussion of McCutchen and colleagues, I noted that the researchers used Moats' (1994) Informal

Survey of Linguistic Knowledge. In refining the survey with the intent to predict student achievement on the Woodcock-Johnson Tests of Achievement Basic Reading and Broad Reading clusters, and in doing so, diagnosing what teachers needed to learn in order to support student achievement, Moats and Foorman (2003) developed three forms of the Teacher Knowledge Survey. Additionally, Moats and Foorman (2003) measured teachers' general effectiveness using the Texas Teacher Appraisal System (TTAS) observation instrument. By conducting regression analyses at the end of their longitudinal study, Moats and Foorman (2003) found a "significant but modest" (p. 29) relationship between teacher scores on the TTAS and scores on the WJR-Revised (Basic and Broad Reading) for third- and fourth-grade, $F[1,82] = 4.46$ and $F[1,82] = 4.87$, $p < .05$, respectively. These effect sizes were only between .046 and .049. The regression analysis for Teacher Knowledge Survey (Form #3) and Broad Reading on the WJR-Revised was also significant, $F[1,82] = 7.55$, $p < .05$. Overall, Moats and Foorman (2003) found that professional development increased teacher knowledge, as measured by the Teacher Knowledge Survey, and increased student achievement, but they could not relate global teaching ability, as measured by TTAS, to student achievement.

Teacher knowledge, explicit instruction, and student achievement. Until this point in time, the evidence connecting improved teacher knowledge with increased student achievement was somewhat positive, but was not overwhelming. Connor and colleagues (Connor et al., 2004; Connor et al., 2009; Connor et al., 2011; Piasta et al., 2009) examined the effects of individualized instruction on children's reading growth as part of the Individualizing Student Instruction (ISI) intervention, and in doing so

determined that teacher knowledge and explicit decoding instruction were mitigating factors in student growth (Piasta et al., 2009). In fact, there is an *interaction* between teacher knowledge and explicit instruction in order to produce higher student achievement (Piasta et al., 2009). Piasta, Connor, Fishman, and Morrison (2009) examined literacy instruction provided to 437 students by 42 first-grade teachers and found that although general teaching practices may have been similar, a teacher's knowledge during explicit instruction was a crucial factor in student learning: teachers who had less knowledge were not able to provide high-quality explanations, whereas, teachers who had high knowledge were able to give quality explanations. Piasta et al. (2009) state that their "Findings highlight the importance of teachers' specialized body of knowledge about reading as it informs effective instruction" (p. 224), but point out, however, that it is not just teacher knowledge that is important, but how that knowledge is enacted in the classroom.

Using hierarchical linear modeling (HLM) with measures of word-reading gains, Piasta et al. (2009) found no direct relationship between teacher knowledge and student word-reading gains; instructional practices and student word-reading gains; or teacher knowledge and teacher practices. The researchers, instead, found an *interaction* of teacher knowledge and the amount of explicit instruction. That is, teachers that possessed greater knowledge, as measured by the Teacher Knowledge Assessment (Piasta et al., 2009), *and* provided more explicit instruction, had students with the highest word-reading score increases. For those teachers rated as having low knowledge, however, providing more explicit instruction resulted in less student learning, perhaps

due to the fact that these teachers were giving inappropriate explanations that confused students even more.

In essence, researchers seeking connections between teacher knowledge, teacher practice, and student outcomes report conflicting findings, elucidating the notion that although these relationships exist, they are complex and difficult to measure:

- There are significant correlations between teacher phonological knowledge and delivery of explicit phonological instruction for kindergarten and first grade (McCutchen, Harry et al., 2002).
- For kindergarten, there is a significant correlation between teacher phonological knowledge and student end-of-year word reading, and between teachers' explicit phonological teaching and student end-of year word reading (McCutchen, Harry et al., 2002).
- Professional development can increase:
    - kindergarten and first grade teacher knowledge with regards to phonological awareness (McCutchen, Abbott et al., 2002; Piasta et al., 2009).
    - the amount of explicit teaching with regard to phonological awareness activities in kindergarten (McCutchen, Abbott et al., 2002).
    - some (i.e., not all) measures of student growth (McCutchen, Abbott et al., 2002).
    - teacher knowledge and student achievement (Moats & Foorman, 2003).

- There is an interaction of teacher knowledge and the amount of explicit instruction in first-grade word-reading scores (Piasta et al., 2009).
- However, neither teacher knowledge nor instructional practices have a direct relationship with student gains (Piasta et al., 2009).

Complexity of teacher knowledge, insufficiently measuring teacher knowledge (see Bos, Mather, Dickson, Podhajski, & Chard, 2001; Fitzharris, Jones, & Crawford, 2008; Hindman & Wasik, 2011; Moats, 1994; Moats & Foorman, 2003; Phelps & Shilling, 2004; Piasta et al., 2009 for measures of teacher knowledge), omitting teacher practice in research (see Piasta et al., 2009), or even having a discrepancy between the content of the measures of teacher knowledge and the measures of student knowledge, are but a few reasons why these connections between knowledge, practice and student outcomes may be difficult to make. In order to more fully understand the relationships between teacher knowledge, teacher practice, and student outcomes, also examining teacher decision-making may be fruitful. Indeed, in their review of teaching word recognition skills, Tunmer and Nicholson (2011) link teacher knowledge to decisions that teachers make:

> The ability to determine what instructional approach works best for which children will require high levels of teacher knowledge and professionalism, including knowledge of a conceptual framework for implementing differential instruction in which a cognitive-developmental model of reading acquisition (of the sort described by Ehri, 2005) provides the basis for systematic assessment, the results of which point to appropriate instructional strategies for students with particular needs. (p. 423)

Thus, Tunmer and Nicholson (2011) concur with Moats (1994) when she says, "teachers' content knowledge is critical to successful instruction because they can then choose what

to teach, when, how, and to whom" (p. 95). Both teacher knowledge and decision-making are central to this capstone in determining how to support teachers' classroom reading instruction.

Teacher Decision-Making

Classrooms are complex places in which teachers, in order to meet the instructional needs of students, must make numerous decisions every day (Clark & Peterson, 1986). In their review of teacher decision-making research, Borko et al. (2008) identify seminal work that recognized teacher decision-making as a fundamental process to teaching: Bishop and Whitfield (1972), Shulman and Elstein (1975), and Shavelson (1973). Bishop and Whitfield (1972) grounded their theory in practice, whereas, Shulman and Elstein (1975) and Shavelson (1973) began with theory.

Teacher decision-making: Grounded theory. Similar to Jackson's (1968/1990) designation of *preactive* (i.e., planning) and *interactive* (i.e., on-the-fly teaching) decisions, Bishop and Whitfield (1972) named these categories *pre-lesson decisions* and *within-lesson decisions.* For Bishop and Whitfield (1972), pre-lesson decisions regarded topics such as objectives, content, method, and material. Within-lesson decisions dealt with implementation and/or modification of the plans that had been made, language used by the teacher, examples given to the students, dealing with student errors, student motivation, and classroom management. Bishop and Whitfield (1972) developed "teaching situations" which arose out of their discussions with practicing teachers about dilemmas that they faced when teaching, such as determining how to "buy time" as a teacher ponders how to answer a student's response in mathematics, with the belief that

preservice teachers could learn from the decisions that the practicing teachers made in those particular teaching situations (Bishop, 1976). In other words, Bishop and Whitfield (1972) grounded their theory of interactive decision-making (i.e., background, values, and experience affect decisions in specific teaching situations) on their research of practicing teachers in "the undoubtedy [sic] complex decision framework" (p. 6).

Although Bishop and Whitfield (1972) concentrate on the interactive decisions made by teachers, both of these types of decisions (i.e., preactive and interactive) are of interest in this capstone project because planning decisions necessarily affect interactive decisions (Shavelson, 1983). For example, Peterson et al. (1978) examined the relationship between teacher planning, teaching actions, and student outcomes. Twelve teachers planned aloud and taught three social studies lessons to three different small groups (n = 8 per group) of junior high school students. Peterson et al. (1978) coded teachers' 90 minute "think aloud" planning sessions and video-taped teaching and correlated these measures with measures of student achievement (i.e., multiple-choice and essay) and attitude about learning. The researchers found some correlations between what the teachers talked about as they planned and what they taught in the lessons: teachers who talked about subject matter during planning tended to have more focus on subject matter and asked more questions related to the subject matter; teachers who planned instructional processes (e.g., role playing) tended to have more group focus in the actual lesson. These correlations, along with other empirical evidence, prompted Shavelson (1983) to state in his review of teacher planning, "Plans exert such a strong influence on teachers that teachers tend not to deviate from them once they have begun

teaching (Joyce 1978-79; Peterson & Clark 1978; Shavelson & Stern 1981; Zahorik 1970)" (p. 401).

Teacher decision-making: Cognitive theory. Rather than beginning with practice, as Bishop and Whitfield (1972) had done, but with a similar focus on interactive decisions, both Shulman and Elstein (1975) and Shavelson (1973) began by looking at decision-making from a cognitive theory perspective. Shulman and Elstein's (1975) review focused on how individuals process information in order to make judgments, and suggested several methods (e.g., in-basket, think-alouds) for investigating decision-making that had been found to be useful in the literature for fields outside of education (e.g., medicine and law), and offered suggestions for researching diagnostic and remediation efforts for reading as well as general classroom decision making. Considering that "Feedback to teachers on the underlying policies or processes that characterize their own judgments may be an effective method for modifying those policies if they are inappropriate" (Shulman & Elstein, 1975, pp. 35-36), it may be possible to intervene with teacher thinking, perhaps through increasing teacher knowledge, in order to influence better decision-making and, in turn, provide for more appropriate classroom outcomes. Likewise, Shavelson (1973) states that "Any teaching act is the result of a decision, either conscious or unconscious" (p. 144) and even argues that "*the* basic teaching skill is decision making" (p. 144; italics in original).

Thus, all three of these seminal works understood the complex context of the teaching situation to be a critical component of teacher decision-making. In addition to the emphasis on early works, Borko et al. (2008) identified three lines of research that

emerged from seminal research on teacher decision-making: planning and interactive decision-making, differences between expert and novice teachers, and the role of professional knowledge, noting a shift in the focus of research from decision-making and expertise to teacher knowledge and teacher learning (see also Kennedy, 2008). All three of these research lines are pertinent to this capstone because in order to plan and to make informed decisions, teachers must possess both content knowledge and pedagogical knowledge. Differences in teacher knowledge, as shown by comparing expert and novice teachers, can affect the quality of planning and decision-making, and thus, the effectiveness of a particular teacher in a particular content area.

The Role of Classroom Context. It is worth reiterating the point that teachers do not make instructional decisions in a vacuum but rather in the context of a school, and that there are school-level and district-level factors that may constrain teacher decisions (Borko et al., 2008). Cuban (1993b) calls these decisions "situationally constrained" choices, and Kennedy (2008) points out that reformers do not necessarily attend to real-life scenarios in which teachers find themselves. To be sure, the distinct characteristics of students, teachers, and resources give each classroom a unique atmosphere. Apple (2000) suggests that teachers are so stretched for time that they are not able to take the time to think critically about instructional decisions in the classroom.

Piasta et al. (2009) also discuss the importance of examining classroom context: "Overall, these results indicate that, although specialized knowledge of language and early literacy is essential for teachers of first-grade reading, its influence should be considered within the context of the actual classroom instruction provided" (p. 242).

Indeed, Piasta et al. note that teacher knowledge was not correlated to teacher preparation or years of teaching, but was correlated to years of teaching first grade, and suggest that might have been the case because the school system used a scripted basal that gave the teacher information about reading (although the authors did not endorse using a scripted basal). These basal materials, in this context, may have supported teacher knowledge in a way similar to the "educative" curricular materials discussed by Beyer and Davis (2009) in their study of preservice teachers' planning efforts with both general and lesson-specific supports. In other words, whereas basal materials helped teachers by developing knowledge about appropriate content, Beyer and Davis' materials provided principles of practice and possible adaptations. In general, educative materials:

> …can help teachers make productive and informed decisions about how to design instruction for their students. They can also help teachers learn in and from their work by developing their knowledge and beliefs about content and learners and expanding their repertoire of instructional practices (Collopy, 2003; Schneider & Krajcik, 2002). (Beyer & Davis, 2009, p. 680)

Dimensions of teacher decisions. Instructional decisions fall into multiple dimensions. The first dimension is temporal: decisions may be preactive or interactive (Jackson, 1968/1990). Preactive decisions refer to planning decisions, and interactive decisions refer to in-the-moment teaching decisions. Duffy and Ball (1983) identified a second dimension of teacher decisions, related to qualitative differences: procedural and substantive. Figure 2.1 displays the relationship between these two dimensions of teacher decisions. A particular decision rests in one of the four quadrants.

Figure 2.1

Dimensions of Teacher Decisions

	Preactive	**Interactive**
Procedural	Quadrant I Preactive & Procedural	Quadrant II Interactive & Procedural
Substantive	Quadrant III Preactive & Substantive	Quadrant IV Interactive & Substantive

Duffy and Ball (1983) emphasize the need for substantive rather than procedural decisions in both preactive and interactive situations. The researchers comment on the lack of empirical research linking teachers' instructional decision making to teacher effectiveness and propose that some level of researcher expertise about reading instruction is necessary in order for researchers to recognize when teachers make instructional decisions. Additionally, Duffy and Ball suggest that most research on instructional decision making may not be focused on what is important. That is, they say that researchers focus on *procedural* rather than *substantive* concerns (Duffy & Ball, 1983, p. 15). Duffy and Ball (1983) state that:

> *Substantive decisions*, in contrast [to procedural decisions], are those decisions designed to promote student understanding of the content and the processes involved in reading, and include decisions about what to teach, interpretation of the content, exploitation of critical moments, qualitative restructuring of student responses, selection of alternative explanations or strategies, and affective responses to student interaction with content. (p. 15, emphasis in original)

Duffy and Ball identify methods which would be appropriate for examining substantive decision-making, including think-alouds for determining preactive decisions and ethnographic case studies for examining the context of the classroom. Duffy and Ball

call for researchers to examine (1) reading instruction in the context of the classroom and (2) substantive rather than procedural decisions.

Subsequently, Putnam and Duffy (1984) reported on an ethnographic case study of the second authors' (Duffy) preactive and interactive decisions regarding a high-level reading group and a low-level reading group in a third/fourth grade classroom over the course of a year.. The researchers found that the decisions that Duffy made fit into the theoretical decision making model put forth by Shavelson and Stern (1981), a framework discussed in Chapter 1. Additionally, Putnam and Duffy found that "…a close relationship existed between Duffy's preactive and interactive decision making and that a clear set of knowledge, values and beliefs about how reading should be conducted formed that basis for all his decisions" (p. 6). In addition, Putnam and Duffy found fewer interactive decisions than preactive decisions, and found that these interactive decisions focused on modifying examples, responding to student mistakes, and "maintaining the smooth flow of instructional activity" (p. 19). Certainly, determining which examples to provide and deciding on appropriate action regarding student errors would be considered substantive decisions.

For this capstone, I focus on both the classroom context and substantive decisions in order to develop cases of kindergarten classroom reading instruction to describe instructional decisions regarding low-performing emergent readers. Students' linguistic, socioeconomic, and racial/ethnic diversity is woven into the distinctive context of the kindergarten classrooms at Springwell Elementary School, and will necessarily affect

teacher decision-making and any recommendations that I will make to the school for ways to help teachers reach their low-performing students.

Developmental Literacy Theory

In order to make decisions about how to meet the instructional needs of students, teachers must have specialized knowledge in order to make informed instructional decisions (Moats, 1994; Tunmer & Nicholson, 2011). Teachers also need to consider what students already know and what they need to learn next (Chall, 1983; Vygotsky, 1978). For the purposes of providing a framework for understanding reading and conceptualizing learning as it relates to reading instruction, I will discuss developmental literacy theory.

Developmental Reading Theory

According to Chall (1983), the first reading stage theory was proposed by Gray (1925). Gray (1925) stated that "A careful study of the progress of children in reading shows that they pass through different stages of development in acquiring mature habits" (p. 21). Chall (1983) notes that Gray was interested in using knowledge of stages, in order to plan appropriate instruction. Several more developmental theories were developed in the middle of the century (Chall, 1983). However, in the 1970s, interest for understanding developmental stages in reading had been replaced with interest in methods of instruction (Chall, 1983): "The concern for what should be taught, when, and how it should be taught, took over the developmental concerns of what is generally learned, when, how, and why" (p. 140). Chall (1983) reinvigorated the discussion of developmental reading theory, and her understanding of reading development is now

commonplace: students' reading develops on a continuum marked by qualitatively distinct stages that can be characterized by different reading behaviors (Chall, 1983). Chall (1983) identified six stages, numbered from zero to five:

- *Stage 0. Prereading*: students learn letters and learn about print
- *Stage 1. Initial Reading, or Decoding*: students begin to decode words
- *Stage 2. Confirmation, Fluency, Ungluing from Print*: students begin to develop some automaticity in reading
- *Stage 3. Reading for Learning the New: A First Step*: students turn their focus to learning from what they read
- *Stage 4. Multiple Viewpoints*: students begin to understand various perspectives; and
- *Stage 5. Construction and Reconstruction – A World View*: students think critically about the texts that they are reading.

Similarly, as the result of an extensive, and ongoing, line of research regarding how children learn to read words automatically (i.e., read words by sight), Ehri (1997) proposes a theory of four stages of word reading:

- *Pre-alphabetic*: students rely on visual cues like the target symbol for Target™;
- *Partial Alphabetic*: students rely on some of the letters in words, typically the beginning and then the ending sounds;
- *Full Alphabetic*: students rely on all of the letters and sounds in words and can sound out words; and

- *Consolidated Alphabetic*: students begin to chunk words into parts (e.g., br-ing) and begin to develop fluency and automatic word recognition.

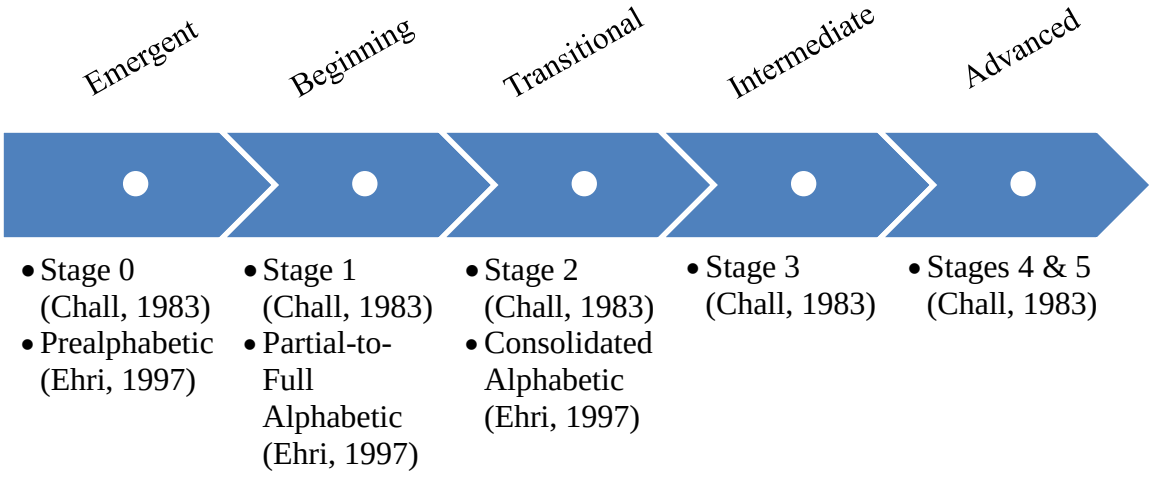
Likewise, Bear, Invernizzi, Templeton, and Johnston (2012) name five literacy stages, which correspond to a student's stage of word knowledge:

- *Emergent*: students learn letters, letter-sound correspondence, and develop a rudimentary concept of word in text;
- *Beginning*: students develop a full concept of word in text, reach full phonemic awareness, and begin to develop automatic word recognition;
- *Transitional*: students continue to develop automatic word recognition, become more fluent, and shift emphasis to learning information;
- *Intermediate*: students read increasingly difficult texts and begin to take outside perspectives; and
- *Advanced*: students critically consider texts.

The stages of these three developmental models roughly correspond with one another, with Bear et al.'s (2012) advanced stage encompassing Chall's (1983) Stages 4 and 5, and Ehri's (1983) Consolidated Alphabetic stage encompassing Bear et al.'s (2012) Intermediate and Advanced stages. Figure 2.2 shows how these three stage theories relate to one another. In this capstone, I use Bear et al.'s (2012) terminology when discussing reading development because these terms are widely used in the school system in which this capstone takes place.

Figure 2.2

Relationship of Reading Stages (adapted from Bear et al., 2012, p. 16)



Similarly to Gray (1925), Bear et al. (2012), Chall (1983), and Templeton and Gehsmann (2014) consider the implications of reading development on instruction, and Chall (1983) notes the importance of "Knowing…where students are, where they have been, where they are going, and what their instruction should be to bring them forward" (p. 3). In other words, teacher knowledge of reading development and student achievement are crucial in making decisions about appropriate instruction (Moats, 1994).

Developmental Spelling Theory

Learning to read and learning to spell are closely related, especially at the early stages of development (Bear et al., 2012). Similar to reading development, spelling development is also conceptualized in stages. In a seminal study, observing 20 cases of "invented spelling" (Read, 1971, p. 4) in pre-school children, Read (1971) determined that student's spelling attempts are not random, but rather demonstrate students' word knowledge and their understanding about letters and sounds. That is, young children use

systematic, phonetic logic to spell, based upon the sounds that they hear in words. For example, children may spell the word "day" as "DA," indicating that they know that the sound \d\ can be represented by the letter "D" and the sound \ā\ is the name of the letter "A." Thus, they put these letters together to spell "day" (Read, 1971).

At the University of Virginia, Henderson and colleagues furthered Read's (1971) work, in what became known as the "Virginia spelling studies" (see Bear et al., 2012, p. 3) that included 14 studies and dissertations (see Invernizzi, Meier et al., 2003. This body of work examined preschool to adult spelling errors and developed a comprehensive model of developmental word knowledge (see Henderson, 1990). The most recent designations for these five identified spelling stages, *Emergent*, characterized by random marks, random letters, and salient sounds; *Letter Name – Alphabetic*, when students learn to write with beginning sound, ending sounds, and finally represent all sounds phonetically; *Within Word Pattern*, a time when students learn long vowel patterns (i.e., t<u>ail</u>, t<u>ale</u>); *Syllables and Affixes*, characterized by student understanding of syllable juncture spelling (i.e., tap—tapping; tape—taping), prefixes, and suffixes; and *Derivational Relations*, when students learn about Greek and Latin roots, correspond to the reading stages identified earlier. Although reading development typically precedes spelling development once students reach the late transitional stage, the one-to-one relationship between reading and spelling stages is shown in Figure 2.3. Thus, understanding developmental spelling can help teachers further understand where students are in their literacy development.

Figure 2.3

Relationship between Reading and Spelling Stages (based on Bear et al., 2012)

Reading Stage	Spelling Stage
Emergent	Emergent
Beginning	Letter Name – Alphabetic
Transitional	Within Word Pattern
Intermediate	Syllables and Affixes
Advanced	Derivational Relations

Assessment of Students' Instructional Needs

With all students generally, and with low-performing students in particular, it is critical to know where students stand relative to what they need to learn. Within a developmental model of literacy, assessment serves to show where students are currently functioning, pointing out: what they already know, what they are currently working on, and what they will work on next (Bear et al., 2012; Chall, 1983). Assessments range from teachers informally using student work to infer levels of student achievement and instructional needs (Afflerbach, Cho, Kim, & Clark, 2010) to more formal evaluations like PALS-K (Invernizzi, Swank et al., 2003) which offers direct information about what students know and need to learn. There is not a consensus for the "best" way to assess students' literacy skills, and test development is not without debate (Invernizzi, Landrum, Howell, & Warley, 2005). For example, tests involving reading of nonsense words (e.g., DIBELS) have been shown to predict future reading, but these tests do not give teachers specific instructional direction (Invernizzi et al., 2005). One of the first assessments of early literacy, *Sand: Concepts about Print Test*, was created by Clay (1979) to measure Concepts about Print (CAP) after closely observing children's reading attempts (Mallett,

2008). Researchers developed several qualitative spelling analyses including the McGuffey Qualitative Inventory of Word Knowledge (Schlagal, 1982), the Developmental Spelling Analysis (Ganske, 1994), and the Primary Spelling Inventory (Bear et al., 2012).

Additionally, several screening instruments exist: Early Reading Screening Instrument (ERSI; Morris, 1998) and the Phonological Awareness Literacy Screening (PALS; Invernizzi, Meier et al., 2004; Invernizzi, Swank et al., 2003). Specifically, PALS-K (Invernizzi, Swank et al., 2003) was designed to screen, diagnose, and progress monitor kindergarten students in response to the Early Intervention Reading Initiative (EIRI) in the state of Virginia (Invernizzi, Justice et al., 2004). PALS-K (Invernizzi, Swank et al., 2003) is an instructionally transparent assessment, meaning that it provides teachers with knowledge of students' particular instructional needs (Invernizzi et al., 2005).

Invernizzi, Justice, Landrum, and Booker (2004) state that instructionally transparent assessments move "toward the ultimate goal of developing and implementing effective strategies to prevent reading difficulties and promote comprehensive, robust and effective classroom instruction" (p. 498). Kindergarten teachers at Springwell Elementary School are required to give PALS-K (Invernizzi, Swank et al., 2003) three times a year: in the fall mid-year (winter), and in the spring. The principal and instructional coach stated that the teachers use PALS-K (Invernizzi, Swank et al., 2003) data to plan instruction.

Instructional Implications of Developmental Literacy Theory

There are several instructional implications of this developmental theory of reading and spelling, particularly for the emergent and beginning stages of reading. First, later reading achievement can be predicted by examining kindergarten reading and spelling (Morris, Bloodgood, & Perney, 2003; Warley, Landrum, & Invernizzi, 2005). In their longitudinal examination of 102 kindergarten students in four rural elementary schools, Morris, Bloodgood, and Perney (2003) found that four skills, measured at the beginning, middle, and end of kindergarten: alphabet recognition, concept of word in text, spelling with beginning and ending consonants, and word recognition, accounted for 77% of the variance in first grade reading achievement. However, the only two variables that predicted future achievement at the beginning, middle, and end of kindergarten were alphabet recognition and concept of word (Morris et al., 2003). Warley, Landrum, and Invernizzi (2005) replicated Morris et al. (2003) using kindergarten data from PALS (Invernizzi, Meier et al., 2004; Invernizzi, Swank et al., 2003) from over 54,000 students across the state of Virginia over a three year period. Warley et al. (2005) examined three of the same skills as Morris et al. (2003): alphabet recognition, spelling, and concept of word in text. Additionally, they included rhyme awareness, beginning sound awareness, and letter sounds tasks (Warley et al., 2005). The authors found that although all of these factors were significantly correlated with the spring first grade oral reading level, two variables explained almost all of the variance at different points in time: in the fall of kindergarten, concept of word in text and alphabet recognition tasks explained 33% of the variance in spring first grade oral reading; in the spring of kindergarten, concept of word

in text and letter sounds explained 40% of the variance in spring first grade oral reading (Warley et al., 2005). Warley et al., (2005) specifically note that "Historically, concept of word has been overlooked as a predictor of reading achievement…this task warrants a prominent position in future research efforts" (p. 439). Thus, this capstone specifically considers instruction in concept of word in text in kindergarten classrooms.

Second, greater problems can arise if students' instructional reading needs are not met. Stanovich's (1986) synthesis of more than 25 studies of individual differences in reading achievement led him to discuss the negative consequences of poor early reading skills, particularly concerning phonological awareness and alphabetic principle, that can "initiate a causal chain of escalating negative side effects" (p. 364) which he termed "Matthew Effects." Stanovich (1986) argued that small differences in early reading skills can become much larger differences later because low-performing students are more likely to be placed in text that is too difficult, and are likely to read less, thus limiting their growth in general knowledge, vocabulary and reading more difficult text. Juel (1988) demonstrated empirical evidence supporting Stanovich's (1986) framework as she followed 54 first-grade students in an elementary school with a high minority and low socioeconomic status population. Using the reading comprehension subtest from the Iowa Test of Basic Skills (ITBS) as a measure, Juel (1988) found that the 29 students who were poor readers at the end of first grade (i.e., the bottom quartile; achieving only as high as would be expected at the second month of first grade) had an 88% chance of being poor readers at the end of fourth grade (i.e., being at least six months behind). Juel (1988) also calculated the probability of students who were at least average readers at the

end of first grade becoming poor readers at the end of fourth grade, and found that it was only 12%. Stanovich (1986) noted that instruction is "one important possible mediator of Matthew effects" (p. 396).

Third, many reading difficulties can be remediated, or even prevented, with explicit and appropriate instruction (Snow et al., 1998; Vellutino & Scanlon, 1999) offered in the classroom (Denton & Mathes, 2003). Notably, Denton and Mathes (2003) synthesized several studies on classroom instruction and found that across four studies, solid classroom instruction can reduce the number of students reading below the 30th percentile to between 5% and 6%. In their review of the literature, Snow et al. (1998) identified both instructional (e.g., reading aloud, model finger-pointing, language experience approach, and games and activities that promote phonological awareness and letter-sound correspondence) and organizational (e.g., reducing class size and restructuring schools to increase time and intensity in reading instruction) strategies appropriate for developing primary students' reading skills. Similarly, Foorman et al. (1998) examined three different types of reading programs, varying in the explicitness of instruction with respect to the alphabetic code and phonological awareness for 285 first and second graders receiving Title I services. Using individual growth curves, the authors found that students in programs that provided explicit instruction demonstrated the most growth in word reading skills, moving them near national averages (Foorman et al., 1998). In addition to receiving explicit skill instruction, these students exercised their knowledge in authentic reading and writing activities.

The next section of this paper focuses on effective classroom-based reading practices that teachers can use in order to meet the assessed needs of their emergent readers. Most of these practices are specific to reading instruction, although some will necessarily be more general classroom practices.

Effective Classroom-Based Reading Practices

A significant amount of energy in educational research is spent in an attempt to answer the question of "what works" to increase student learning, and researchers have identified many teaching practices that move students forward in literacy development (see NICHD, 2000). I will discuss overall exemplary instruction and specific practices to foster literacy development, including using a balanced literacy diet and differentiated instruction. Although the particular context of the teaching situation matters, it will not be the focus of this section of the review.

Exemplary Instruction

Classroom instruction matters in teaching students to read (Bohn, Roehrig, & Pressley, 2004; Duffy et al., 1986). As an outgrowth of the literature of effective classroom practice, and in order to arrive at specific findings for effective reading instruction, Wharton-McDonald, Pressley, and Hampston (1998) used qualitative methods to observe and interview nine first-grade teachers nominated for their quality literacy instruction and found that the highest-achieving teachers had multiple characteristics in common. These characteristics included (1) providing integrated, balanced instruction (i.e., providing both explicit skill instruction and authentic and integrated reading and writing opportunities); (2) offering a high level of instructional

density, whereby teachers have multiple goals for each lesson; (3) using extensive scaffolding when students need assistance (see also Duke & Pearson, 2002; Frey, 2011); (4) encouraging students to develop self-regulation; (5) holding high expectations for all students; (6) effectively managing the classroom; and (7) having an awareness of purpose for the content and activities in the classroom. Pressley et al. (2001) replicated the results of Wharton-McDonald et al. (1998) by conducting observations and interviews with 30 teachers in five states across the United States. In another study, Morrow, Tracey, Woo, and Pressley (1999) examined six first-grade teachers' exemplary literacy instruction and named four major strategies for teaching reading: *settings* (e.g., whole-group, small-group); *materials* (e.g., pencil and paper, instructional texts); *types of instruction* (e.g., explicit and direct, open-ended); and *experiences and assessment* (e.g., guided reading and guided writing, word analysis instruction). Taken together, teachers that employ principles of effective practice may increase student learning.

Balanced Literacy Diet

When contemplating essential instructional content for students, teachers must also consider how much time is allotted to each instructional component, as emergent readers need to develop numerous skills. Researchers at the University of Virginia developed the concept of a balanced literacy diet as being akin to a balanced nutritional diet (Hayes & Flanigan, 2014). This balanced literacy diet provides an "instructional framework for literacy" (Hayes & Flanigan, 2014), and shifts the amount of time spent on various components as students move through literacy stages. For emergent readers, the McGuffey Emergent Diet (http://readingfirst.virginia.edu/pdfs/diets.pdf) consists of 20%

of time for each of the following instructional components: concept of word, concept of print, alphabet, phonological awareness, and writing. Hayes and Flanigan suggest that students spend 30% of instructional time in small-group reading instruction, 30% on word knowledge, 20% engaging in read alouds, and 20% in writing instruction and practice.

Differentiated Small-Group Instruction

For individual students, learning is most efficient when instruction that is aimed at their developmental level (Kulik, 1992) in their zone of proximal development (Vygotsky, 1978), and differentiated small-group reading instruction, designed to meet students' particular learning needs as opposed to whole group instruction, can increase student learning (Al Otaiba et al., 2011, Foorman & Moats, 2004; Piasta et al., 2009; see Torgesen, Houston, Rissman, & Kosanovich, 2007). For example, Taylor, Pearson, Clark, & Walpole (2000) examined both school and classroom level factors in reading instruction across 14 schools and found that the amount of small-group instruction was statistically significant in determining the most effective teachers. The most effective classrooms averaged almost one-hour of small-group instruction daily, and the ratio between small-group instruction to whole-group instruction was 2:1. However, not all small-group instruction is of equal value.

Taylor, Peterson, Pearson, and Rodriguez (2002) observed elementary school classrooms in eight high-poverty schools using the CIERA Classroom Observation Scheme (Taylor, Pearson, Clark, & Walpole, 2000) and measures of student reading achievement. Using an HLM analysis, the authors found that specifically for

kindergarten students, teacher telling (as opposed to students being actively engaged in the activity) was negatively related to measures of letter-name, phonemic awareness, concepts of print, and word dictation scores.

Individualizing instruction. One line of research by Connor and colleagues (Connor et al., 2004; Connor et al., 2009; Connor et al., 2011), as discussed earlier in the context of teacher knowledge, examined the interaction of child characteristics and instruction in the regular classroom. Connor, Morrison, and Katch (2004) examined the classrooms of 42 teachers across three continua in the classroom: teacher-managed or child-managed, explicit or implicit instruction, and changes in the amount of time spent on activities across the school year, against the reading achievement of 108 first-grade students. They found interaction effects for these students based upon their initial decoding and vocabulary knowledge, the type of classroom instruction (e.g., alphabet instruction, read aloud), and the amount of time spent on particular types of instruction (i.e., explicit vs. implicit instruction and child-managed vs. teacher-managed instruction). The authors advocate the use of flexible small-groups because "appropriately targeted instructional strategies can have a dramatic impact on growth of children's early reading skills and their prospects for academic success" (Connor et al., 2004, p. 332). Connor et al. (2009) even say that "one reason children fail to achieve proficient reading skills is because they do not receive appropriate amounts of particular types of literacy instruction during the primary grades" (p. 77).

After matching schools based on percentage of students with free and reduced lunch, Reading First status, and third-grade reading scores, Connor et al. (2009) taught 23

first-grade teachers to individualize reading instruction during their two-hour literacy block, encouraging teachers to use flexible, homogeneous, small-group instruction. The type (i.e., teacher or child managed, code or meaning focused) and amount of instruction for each child was generated by imputing student assessment scores into computer algorithms. Although the students scored significantly higher on measures of reading comprehension than their control counterparts, the authors question whether increased teacher knowledge may be at the root of the reading achievement improvement, rather than the effect of the particular intervention. Results of HLM show that "the more precisely the children received recommended amounts of instruction, the stronger was their literacy skill growth" (Connor et al., 2009, p. 77).

In a similar manner, Connor et al. (2011) conducted a cluster randomized control field trial of individualizing student instruction using the researchers' A2i web-based software and professional development (n = 369 first graders and n =25 first grade teachers). Connor et al. (2011) used computer algorithms to help teachers interpret assessment data and provided teachers with recommended amounts of time dedicated to instruction that varied on the amount of code-focused or meaning-focused instruction that was either child managed or teacher/child managed. In this case, the authors measured word reading scores and found that children with poor fall word reading scores made the most improvement when there were greater amounts of Teacher/Child Managed Code-Focused instruction. On the whole, the work of Connor and associates (Connor et al., 2004; Connor et al., 2009; Connor et al., 2011) shows that differentiating student

instruction is central to optimal student literacy growth, as different children benefit from different types of instruction at different points in their literacy development.

Conclusion

It is crucial to consider effective instruction because children do not automatically possess knowledge or skills in literacy and must be taught (Morrow, Tracey, & Del Nero, 2011). Particular research-based reading practices, especially those with respect to alphabet and phonemic awareness instruction (NICHD, 2000) have been shown to be effective in teaching emergent readers. Additionally, COW-T has been shown to predict later reading achievement (Morris et al., 2003; Warley et al., 2005).

Taken together, teacher knowledge of reading development (Moats, 1994; Moats & Foorman, 2003) and teacher knowledge about evidence-based reading practices (NICHD, 2000) are crucial to providing effective reading instruction to students (see McCutchen, Abbott et al., 2002; McCutchen, Harry et al., 2002; Piasta et al., 2009). Additionally, teachers must be able to use this knowledge to make appropriate classroom instructional decisions. The goal of this capstone was to examine existing classroom reading instruction at Springwell Elementary School in order to determine how teachers can be supported in meeting the instructional reading needs of their low-achieving emergent readers.

Chapter Three: Research Design and Methodology

Included in this chapter are the research design and methodology for the capstone study. In particular, I will address the purpose, research questions, paradigm and assumptions, research approach, research site and participants, researcher as instrument statement, data-collection methods, data-analysis methods, quality criteria, ethical considerations, and research bias.

Purpose and Research Questions

The purpose of this capstone study was to explore kindergarten classroom reading instruction and describe how teachers at Springwell Elementary School make preactive and interactive decisions regarding low-performing emergent readers in order to make recommendations to the school on how to support teachers as they teach these students. The research questions for this study were as follows:

1. What preactive decisions do kindergarten teachers at Springwell Elementary School make as they plan reading instruction for low-performing emergent readers?
2. What interactive decisions do kindergarten teachers at Springwell Elementary School make as they implement reading instruction for low-performing emergent readers?
3. To what degree do preactive and interactive decisions of kindergarten teachers at Springwell Elementary School correspond as they plan and implement reading instruction for low-performing emergent readers?

4. What recommendations can be made to improve the quality of classroom reading instruction for low-performing emergent readers in kindergarten at Springwell Elementary School?

Answers to these particular research questions may add to the knowledge base about preactive and interactive teacher decision-making regarding reading instruction in classrooms and helped me to provide useful recommendations to kindergarten teachers at Springwell Elementary School as they plan and implement reading instruction for low-performing emergent readers.

As I discussed in the literature review in chapter two, this particular study relied on several lines of research (i.e., teacher knowledge and teacher practice, teacher decision-making, developmental reading theory, and effective classroom practice); these studies directly informed the methodological approach selected for this capstone. In particular, Hoffman, Maloch, and Sailors (2011) observed that relatively few studies of reading that employ qualitative observation methods have been published (i.e., 181 between 1977 and 2006), and that these studies include observations varying in number and duration. Notably, Pressley and colleagues (i.e., Morrow, Tracey, Woo, & Pressley, 1999; Pressley et al., 2001; Wharton-McDonald, Pressley, & Hampston, 1998), used qualitative methods, including observation, in order to generate a grounded theory of characteristics of effective first-grade literacy instruction. In particular, Morrow et al. (1999) observed first-grade teachers' literacy block eight times and all subjects twice over the course of one school year, and looked for cross-classroom similarities of exceptional teachers, rather than examining particular contexts of individual classrooms.

More recently, some studies included classroom observation in their examination of teacher knowledge and/or practice, and student outcomes with respect to reading instruction (e.g., McCutchen, Abbott et al., 2002; Piasta et al., 2009; Taylor et al., 2002); however, these studies relied on only a few (i.e., up to four) relatively short (i.e., 15 minutes to one hour or literacy block) observations spread out over a year, and the data were analyzed using quantitative methods. Thus, similar to Pressley and colleagues' work, these studies were not designed to examine the context of classroom reading instruction.

The importance of instructional context in this capstone study cannot be overlooked. Indeed, as Barr (1986) noted in her observations of research on classroom reading instruction, "…intervention should follow careful study of the existing *system*. On the basis of this understanding suggestions for change that are compatible with the existing system can be made" (p. 234; italics in original). That is, in order for me to make appropriate recommendations about improving classroom reading instruction, I needed to study kindergarten classrooms at Springwell Elementary School in a holistic manner. Calderhead (1984) summed up the importance of classroom context this way:

> To develop an understanding of teachers' classroom practice, of how it may be changed and improved, and of the capacity for teachers themselves to bring about such improvement, the study of teachers' thinking and decision-making must include investigation of the teaching context, the extent to which teachers are involved in establishing that context and the ways in which it limits or constrains teachers' thought, decisions and actions. (p. 13)

Therefore, taking an "alternate approach" (Maxwell, 2009) to studying classroom reading instruction by using qualitative methods, I examined how teachers made preactive and interactive decisions, as imbedded in the context of kindergarten classrooms at

Springwell Elementary School, in order to gain a better understanding of how classroom reading instruction functions to benefit low-performing emergent readers.

Research Paradigm and Assumptions

Guba and Lincoln (1994) defined *paradigm* "…as the basic belief system or worldview that guides the investigator, not only in choices of method but in ontologically and epistemologically fundamental ways" (p. 105). Thus, for this study, it was important to consider the ontological, epistemological, and methodological assumptions that support a constructivist paradigm. Guba and Lincoln (1994) characterized constructivist ontology as "relativist," meaning that there are "local and specific constructed realities" (p. 109). That is, there is not one "Truth" as to how the world works, but distinctive realities are created by different people (although several people may hold the same views on reality). What is "true" is not absolute, but is "simply more or less informed and/or sophisticated" (Guba & Lincoln, 1994, p. 111). Epistemologically, I presumed a necessary interaction between the context and me, in order to determine "findings." For this study, my ontological and epistemological assumptions led me to want to understand classroom reading instruction, not just from my perspective, but from the people directly involved in creating classroom instruction – the teachers. That is, I wanted to make the most "informed and/or sophisticated" (Guba & Lincoln, 1994, p. 111) interpretations about classroom reading instruction that I was able to construct. Methodological assumptions are necessarily constrained by ontological and epistemological assumptions (Guba & Lincoln, 1994). Here, my assumption was that I needed to interact with the participants in order to gain their perspectives, so that I could develop a more informed

understanding of classroom reading instruction in kindergartens at Springwell Elementary School.

Research Approach

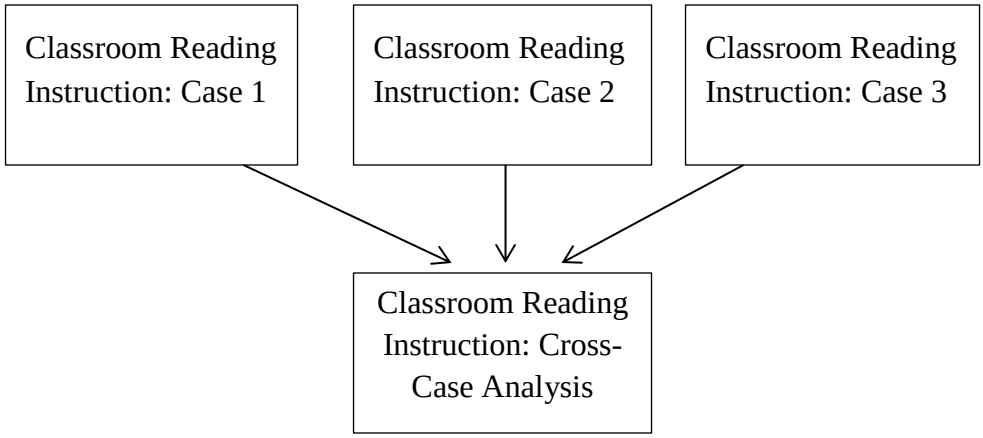
The research questions being asked, as well as the researcher's conceptual framework and paradigm assumptions informed the choice of research methodology and methods (Marshall & Rossman, 2011). In this capstone, I used a qualitative multiple-case study design (Yin, 2014) and employed multiple sources of evidence, including classroom observations, teacher interviews, and some document and artifact review. A qualitative research approach was appropriate because, in this study, I examined how participants made *meaning* of the *process* of teaching and learning in the *context* of reading instruction in particular kindergarten classrooms (Maxwell, 2009, p. 232). More specifically, and firmly connected to the paradigm discussion presented earlier, Merriam (1988) noted that "A case study approach is often the best methodology for addressing these problems in which understanding is sought in order to improve practice" (p. xiii). Thus, a qualitative case study approach fit the purpose of this capstone, which was to ultimately inform a particular problem of practice (i.e., poor student reading progress at Springwell Elementary School) and accordingly recommend ways in which teachers could be supported as they attempt to meet the instructional needs of their students.

A potential benefit of choosing multiple-case studies over single-case studies is that the findings may be more compelling (Miles, Huberman, & Saldaña, 2014; Yin, 2014). One reason for the possibility of increased robustness is that replication logic suggests that cases are either chosen because they are expected to show similar findings

or they are expected to show differing results for a particular reason and are done in succession (Yin, 2014). Analogous to this logic, for this capstone, I examined classroom reading instruction in three classrooms. However, in this multiple-case study, I simultaneously collected data on each case of kindergarten classroom reading instruction rather than completing one case study prior to beginning the next, as suggested by Yin (2014). There are several reasons for this adaptation, related to both paradigm and practicality. First, Yin (2014) and I differ on our paradigm orientation. Yin (2014) noted that case studies "…can embrace different epistemological orientations" (p. 17) and that he is coming from a "*realist* perspective, which assumes the existence of a single reality that is independent of any observer" (p. 17). On the other hand, I view the world from a relativist perspective (Guba & Lincoln, 1994), and thus considered my role not as finding the one Truth about kindergarten classroom reading instruction, but about how I could best interpret kindergarten classroom reading instruction from multiple teacher perspectives in multiple classrooms at Springwell Elementary School. So, even though there were multiple cases of classroom reading instruction, there was not a need to find out about one case of classroom reading instruction prior to seeking a second case. Secondly, I collected data on multiple cases simultaneously because when comparing cases, I wanted to make more "informed and/or sophisticated" (Guba & Lincoln, 1994, p. 111) interpretations about similarities and differences in classroom reading instruction, and therefore wanted to capture the phenomenon at the same point in time for each case. Figure 3.1 represents the multiple-case study design of this capstone study.

Figure 3.1

Study Design



Research Site, Participants, and Access

Research Site

Springwell Elementary School is located in the mid-sized Washington County Public School district, which is in turn, located in a city with a population of over 40,000 in a mid-Atlantic state. Springwell Elementary School houses nearly 600 students in preschool through fifth grade, equally distributed between boys and girls. Student demographics are shown in Tables 3.1 and other designations in Table 3.2.

Table 3.1

Student Demographics at Springwell Elementary School

Students	Percentage
African-American	30
Latino	20
White	30
Female	50
Male	50

Table 3.2

Student Designations at Springwell Elementary School

Students	Percentage
Disadvantaged	70
Limited English Proficiency	30
Students with Disabilities	10

The school's website notes that students who are classified as "disadvantaged" "are those who receive free and reduced price meals under the federal program" (school website), and that "Students with Disabilities" refers to the students who have been identified for special education services. The school's website does not provide a definition for students who are labeled as having "limited English proficiency," but the school division website notes that it refers to the No Child Left Behind designation for students who are not fluent in English, with respect to speaking, reading and writing.

The school system itself is a high-achieving school system as shown on state accountability tests; however, Springwell Elementary School struggles in both mathematics and reading. The elementary school is fully accredited by the state (i.e., the school met the state's benchmarks for a three year average for scores); however, data from state exams show that the school's pass rate on state exams for the 2012-2013 school year was only approximately 60% for both mathematics and reading.

Access

I had existing relationships with some of the staff at Springwell Elementary School: I completed an internship in a preschool classroom at Springwell Elementary School about one year prior to the study, and briefly met some of the kindergarten

teachers at that time. Previously, I worked with the school's instructional coach when we were both employed at a different elementary school. Prior to proposing this study, I met with the principal, the vice-principal, and the instructional coach to gain their understanding of the problem at Springwell Elementary School. They determined that too many students were not prepared for the state reading exam by the end of third grade, and they traced the issue back to the fact that students were not leaving kindergarten with the basic skills that they needed, as measured by PALS-K (Invernizzi, Swank et al., 2003), and found that many students were starting below grade level as they entered first grade (i.e., they did not catch up to developmental expectations during the summer between kindergarten and first grade). Specifically, they were concerned about measures of COW-T. All three of these people were supportive of my research at the school, and they were anxious to receive recommendations of how to help their teachers with their low-performing emergent readers. The administration honored my request to allow me, rather than the administration, to invite the teachers so that they did not feel pressured to take part in the study. The invitation letter is shown in Appendix A and the consent form for teachers is found in Appendix B. The parent notification letter, required by the district, is in Appendix C, which allowed parents to opt their child out of the study, meaning that I would not record any information about their child. However, no parents declined their child's participation.

Participants

Since the research questions were directed at a particular school (i.e., Springwell Elementary School) and a particular grade level (i.e., kindergarten), the number of

possible participants was limited to six teachers. Purposeful sampling (Maxwell, 2009) led me to invite all of the kindergarten teachers at Springwell Elementary School to participate in the study. I sent invitation letters to the teachers and followed up with teachers when I was invited to a team meeting to discuss the study. Three teachers agreed to participate.

As only three teacher participants opted into the study, exactly the number of teacher participants that I needed, I acknowledge that there may be differences between these three teachers and the teachers who declined to participate. It is possible that the teachers who elected not to participate felt stressed by the end of the school year approaching, as when I met with the teachers to invite them, the teachers asked if I would consider beginning the study after they came back from spring break.

The teacher participants in this study are three kindergarten teachers at Springwell Elementary School: Isabella[2], Elizabeth, and Patricia. Isabella is in her 30s, and has been teaching for approximately seven years, three of which have been in kindergarten. She has a Bachelor's degree in psychology and Master of Teaching in Early Childhood Education. Elizabeth is also in her 30s and has been teaching for nine years, seven of which have been in kindergarten. She has a Masters of Education in Elementary Education with a focus in reading instruction. Patricia is in her 40s. She taught at a variety of levels, including ten years in pre-kindergarten. Patricia has a Bachelor's degree in psychology with a concentration in education.

[2] All names are pseudonyms

I asked each teacher to select three low-performing emergent readers to include in the study, requesting that these three students have different strengths and weaknesses, as shown on PALS-K (Invernizzi, Swank et al., 2003) Fall 2013 and Mid-Year 2014 assessments (i.e., students must be emergent readers – not yet have a rudimentary concept of word in text). I did not have access to students' PALS-K (Invernizzi, Swank et al., 2003) scores, but my observations indicated that eight of the nine students identified were emergent readers, and one was a beginning reader (i.e., this student knew a number of high-frequency words automatically). I elected not to include students with Individualized Education Programs (IEPs) in this study because, although most students can learn to read (Torgesen, 2002; Vellutino & Scanlon, 1999), I was concerned that students who are already found to be eligible for special education services by the second semester of kindergarten may be in such great need of support that they may receive a bulk of their reading instruction outside of the classroom.

Once I started observations, I quickly realized that including all students in small-group observations where one or more students was teacher-identified as a low-performing emergent reader would offer richer data than focusing only on particular students. Therefore, instead of just including the teacher-identified students in small-group observations, I included all of the students in that group.

Researcher as Instrument Statement

When using a qualitative research approach it is appropriate to consider the researcher as the instrument, as all data and analyses are filtered through the researcher, and to consider possible issues in the field even prior to beginning research (Marshall &

Rossman, 2011). In the spirit of full disclosure, as is appropriate in a qualitative study, it is important to consider my own experiences that likely influenced this study, even from its inception. My own understanding of classroom reading instruction influenced my choice to study classroom reading instruction for this capstone, and my own experiences necessarily gave me a particular lens as I designed and conducted this study. A representation of part of this lens is shown in the conceptual framework (see Figure 1.3, p. 21). As I began teaching first grade quite a number of years ago, I did not understand reading development or effective practices for teaching students how to read. I sought out and received educational experiences to bolster my knowledge in these areas. I taught first grade for four years, privately tutored numerous students in kindergarten through fifth grade, was an instructor for small-groups of students reading below grade level, as measured by PALS-K (Invernizzi, Swank et al., 2003) and PALS 1-3 (Invernizzi, Meier et al., 2004), and most recently was enrolled in the Ed.D. program at the Curry School of Education at the University of Virginia, pursuing a degree in Curriculum and Instruction with a focus on reading education. Additionally, during the proposal stage of the capstone project, I was the instructor of practice for an elementary education reading methods class at the University of Virginia. After I finished collecting data at Springwell Elementary School, I took a part-time teaching position as a PALS instructor, again working with students having difficulties in reading in kindergarten through third grade. Because my own knowledge base in reading instruction was limited when I began teaching in 1995, and knowing the difficulties I faced as I learned about reading while on the job, I empathize with teachers who do not have a strong background

in reading education in order to make appropriate decisions (Miles et al., 2014). I value the opportunities that I have been given, and the knowledge and skills that I have developed over a long period of time which allow me to make more informed teaching decisions that spur student growth. Along these lines, the research questions for this capstone reflect my understanding of the influence that teachers and teacher decisions have on student outcomes.

With the intention of counteracting my own biases, I employed three means of increasing the validity of this capstone study (Miles et al., 2014). First, in order to document my research decisions to leave an audit trail, I kept a methodological journal during all phases of the study. Second, during data analysis, I searched for confirming and disconfirming evidence of any claims that I made. Third, I worked with a peer reviewer who examined some of my observation write-ups, checked my codebook, and helped me to consider what I was interpreting from the field. Due to time constraints caused by my interviews and observations occurring at the end of the school year, I used informal member checks (Guba & Lincoln, 1989) only for the first interview transcripts, rather than for both interview transcripts and preliminary analyses. When I asked teachers to review the first transcripts to ensure that their ideas have been fully captured, Isabella and Elizabeth flipped through the pages, and Patricia did not wish to look at the transcript.

I fully disclosed the purpose of my capstone study to the teachers, although I did not reveal the particular research questions. I told the participants that I would not give any raw data to the principal, and that any report that the principal receives will be

overall recommendations that are not specific to a particular classroom. Certainly, no report had teachers' names associated with it. I had no authority over the teachers in this proposed study, although my role as a researcher may have made some of the teachers uncomfortable at first, even though they agreed to be in the study. I do believe that I gained the teachers' trust: I was empathetic to their situations, helped them by teaching their small-groups for a day so that they could work on assessments during that time (the assistant principal gave permission for me to do so), and let them know that I was systematically working to help to determine what happens in the classroom and to find ways for them to help their students.

Data-Collection Methods

In this qualitative multiple case-study of classroom reading instruction, I collected data from a variety of sources, including teacher interviews, classroom observations, and some documents/artifacts in order to triangulate data to increase the validity of the study by limiting systematic bias that may come from using only one method of data collection (Maxwell, 2009). Each of these sources of data was applicable to all of the research questions as I examined preactive and interactive teacher decisions and the correspondence of these decisions, and made recommendations to the school about how they may support teachers' reading instruction. In order to document and organize data collection, I created a log of the data-gathering activities (Appendix D) that included the date, place, activity, participants, and content, theme, or topic.

Teacher Questionnaire

I asked all teacher participants to complete a questionnaire containing questions regarding number of years teaching, literacy instruction, degrees earned, courses and professional development about literacy, available resources, and age categories (see Appendix E). I gathered data using the questionnaire for the purpose of shortening the amount of time that teachers need to spend in an interview.

Teacher Interviews

In order to allow teachers to speak for themselves, to better understand how they make meaning of their teaching situation, and to explore their thought processes, I conducted two semi-structured interviews (Patton, 2002) about reading instruction in participants' classrooms (see Appendix F for the first interview protocol and Appendix G for the second interview protocol). The first interview preceded classroom observations and the second took place just prior to the last classroom observation, although in the third case, the second interview was followed by two more observations. These interviews gave the teachers the opportunity to discuss, in their own words, their current instructional practices and talk about how they make decisions about reading instruction. I used open-ended interview questions with the intent of not leading teachers to respond in a certain manner (Patton, 2002). I voice recorded all interviews: no participants indicated that they did not want to be taped. I transcribed all interviews, substituted pseudonyms for each participant, and removed personally identifiable information from the interview transcripts. Once the transcripts were complete, I deleted the tapes of the interviews.

The first round of interviews held multiple purposes: to establish rapport with the teachers, to better understand the language that teachers used to identify activities and settings in their classrooms, to get a sense of how they planned for and conducted reading instruction, and to determine particular language that the teacher used so that I could use the same language during informal conversational interviews and could identify any particular concerns of the teachers regarding reading instruction. In the first interview, I asked teachers to describe their classroom reading instruction, consider their low-performing emergent readers, choose three low-performing emergent readers to focus on during observations, and think-aloud (Peterson et al., 1978) about planning for reading instruction for a small-group of low-performing emergent readers, including at least one of the students they identified. The think-aloud question pertained specifically to the first research question: What preactive decisions do kindergarten teachers at Springwell Elementary School make as they plan reading instruction for low-performing emergent readers?

I held the second round of interviews just prior to the last observations, although for the third teacher, this interview was held before the last two observations. During interviews, I asked questions regarding experience and behavior, opinion and values, feelings, knowledge, and background (see Patton, 2002). I followed Patton's (2002) suggestion to open the interview with "noncontroversial present behaviors, activities, and experiences" (p. 352), and follow this by questions about opinions and feelings. In order to elicit greater detail from participants, I asked additional probing questions (Patton, 2002). In the second interview, I asked teachers how they implement reading instruction

and consider if and how they change plans mid-teaching; what factors support or constrain program effectiveness; and if teachers would be interested in participating in professional development opportunities. The questions in this second interview pertained more to the second and fourth research questions: (2) What interactive decisions do kindergarten teachers at Springwell Elementary School make as they implement reading instruction for low-performing emergent readers? and (4) What recommendations can be made to improve the quality of classroom reading instruction for low-performing emergent readers in kindergarten at Springwell Elementary School? I used data from both interviews to inform the third research question: To what degree do preactive and interactive decisions of kindergarten teachers at Springwell Elementary School correspond as they plan and implement reading instruction for low-performing emergent readers?

During the course of my observations, I intended to have a number of "informal conversational interviews" (Patton, 2002, p. 342) with teachers before or after a classroom activity in order to clarify what teachers expected to happen in the course of reading instruction or to gain teachers' perspective on motives or decisions for particular activities or interactions. However, teachers moved quickly from one group to the next, with little transition time, and I wanted to avoid interrupting teachers during their instructional period. Although more frequent informal conversational interviews may have enriched my data by giving me a stronger understanding of the context, my conviction to avoid interfering with instructional time was even stronger. In line with

this reasoning, I conducted the semi-structured interviews during teachers' planning times or after school, never during instructional time.

Classroom Observations

Observations can be "…used to discover complex interactions in natural social settings" (Marshall & Rossman, 2011, p. 140). In this study, in order to understand classroom reading instruction, I observed eight times in each of three kindergarten classrooms during the part of the day designated for reading instruction, which lasted approximately two hours each day. I used the observation protocol that I created based on reviewed literature to guide my observations of teachers' preactive and interactive decisions (see Appendix H). For each observation, I noted evidence of preactive decisions by noting the content of the lesson (e.g., letter names, sound-symbol correspondence, phonological awareness, COW-T, comprehension, vocabulary); student grouping (i.e., small-groups, whole-group, individual, or literacy centers); materials (e.g., teacher-created, publisher-created, district materials, classroom resources); activities (e.g., interactive read aloud, shared reading, oral reading, echo reading, choral reading, shared writing, individual writing, picture sorting, alphabet matching); assessment or formative evaluation; and teacher-stated objective. During the observation, I looked specifically for evidence of "substantive" teaching decisions: those decisions "designed to promote student understanding of the content and the processes involved in reading" (Duffy & Ball, 1983, p. 15). Based on the literature, I looked for decisions such as: (1) high-quality explanations (Connor, Morrison, & Katch, 2004; Foorman et al., 1998); (2) response to incorrect student answers; scaffolding (Frey, 2011; Wharton-McDonald et al.,

1998); (3) use of "teachable moments" (Almasi & Fullerton, 2012, p. 60); (4) explicit instruction (Piasta et al., 2009); and (5) feedback loops (i.e., teacher-student-teacher-student…; Pianta, La Paro, & Hamre, 2008). During my observations, I took handwritten notes in spiral notebooks on action, behavior, and teacher-student interactions, including direct quotations, particularly when the teacher focused on particular low-performing emergent readers. I included separate analytic notes (i.e., I noted any thoughts that I had about how behavior may be interpreted, the beginning of analysis), as well as observer notes (i.e., I wrote down background information so that the field notes may be more easily followed). I typed up field notes and made them into "expanded write-ups" (Miles et al., 2014, p. 71) within 24 hours of the observation and prior to the next observation, and removed all participant identifiers. I conducted analysis with the completed write-ups rather than the handwritten notes.

Throughout this capstone, my "participantness" (Marshall & Rossman, 2011, p. 113) could be characterized as "observer as participant" (Merriam, 1988, p. 93). That is, I was an observer as much as possible, although I did participate and assist at the teacher's discretion. Although I planned to offer assistance to the teacher (e.g., copying, placing materials on tables, cleaning the room), during my visits when students were out of the room, there were relatively few opportunities. I did substitute teach once for each teacher, with the assistant principal's permission, so that teachers had time to pull students one-on-one for assessments without losing instructional time, as I felt that they were becoming increasingly stressed about getting end-of-the-year assessments completed.

Documents and Artifacts

I collected a few documents and artifacts during my observations. Teachers gave me a copy of some of the sight word worksheets that they used, and some lesson plan templates. I used these documents and artifacts to help to triangulate data. Kindergarten teachers did not share plans with me, nor did I see evidence of them using written plans. However, I cannot conclude that teachers did not have written plans – these plans may have been elsewhere. A sample document summary form (Miles & Huberman, 1984) is in Appendix I.

Summary of Data-Collection Methods

I used multiple methods of data-collection in this capstone study in order to attempt to triangulate data to support findings. First, I asked teachers to complete a questionnaire. Next, I conducted the first round of interviews. Then, I conducted observations, typically four days a week, rotating between the three classrooms. Finally, I conducted the second interview just prior to the last observation. Throughout the observation period, I collected pertinent documents and artifacts. A graphic of the interview and observation timetable is shown in Table 3.3.

Table 3.3

Interview and Observation Schedule

	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
Week 1: April 7					INT 1.1a INT 2.1a
Week 2: April 14	INT 1.1b INT 2.1b	INT 3.1	OBS 1.1	OBS 2.1	OBS 3.1
Week 3: April 21		OBS 2.2	OBS 3.2		OBS 1.2
Week 4: April 28		OBS 3.3	OBS 2.3	OBS 1.3	OBS 3.4
Week 5: May 5	OBS 3.5	OBS 2.4	OBS 1.4	OBS 3.6	OBS 2.5
Week 6: May 12		OBS 1.5		OBS 2.6	
Week 7: May 19	OBS 2.7		INT 2.2	OBS 1.6	
Week 8: May 26		INT 3.2	OBS 3.7	OBS 1.7	OBS 2.8 INT 1.2
Week 9: June 2			OBS 3.8	OBS 1.8	

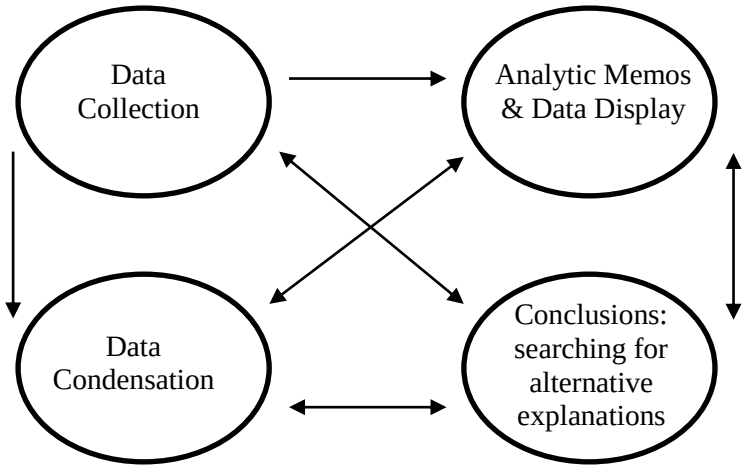
Data-Analysis Methods

Although discussed separately in this chapter, I conducted data-collection and data-analysis simultaneously (Maxwell, 2009; Miles et al., 2014). That is, I began analysis when I collected the first data. Analysis persisted throughout data collection and continued after leaving the field. Maxwell (2009) offered three primary clusters of qualitative analysis strategies that are useful to conceptualizing data analysis: (1) categorizing (e.g., coding), (2) memos and displays, and (3) connecting (e.g., looking across cases), and suggested that these three strategies "can, and generally should, be

combined" (p. 236) in a single qualitative study. Maxwell's (2009) strategies are similar to Rossman and Rallis' (2012) broad types of *categorical* or *holistic* analysis. In order to structure these general strategies, I primarily used "interactive" data analysis methods as conceptualized by Miles, Huberman, and Saldaña (2014), which included (1) data condensation, (2) data display (including memos), and (3) conclusion drawing/verifying conclusions, although I prefer to think of "verifying conclusions" as more of a process of looking for alternate explanations and ruling them out (Marshall & Rossman, 2011). The interactive nature of the analytic process is shown in Figure 3.2, which is a modification of Miles et al.'s (2014) "Components of Data Analysis: Interactive Model" (p. 14).

Figure 3.2

The Interactive Nature of Data Analysis (adapted from Miles et al., 2014)



I kept an extensive methodological journal to record my decisions about methods of data collection and analysis in order to show a logical progression of decisions. I used qualitative data analysis software (NVivo, version 10) to manage coding.

Data-Condensation

As previously mentioned, I conducted data-collection and analysis simultaneously, and started analysis after the first data were collected. The first step in data-analysis was data-condensation, which Miles et al. (2014) noted is not "reducing" data, but rather putting it into a form that can be more readily analyzed. Although I had observation write-ups of all of the small-groups that I observed, my peer reviewer and I "came to the conclusion that it would be better only to code the part of the data relevant to the low-performing emergent readers so as to not cloud the data with other groups (because the questions focus on the emergent readers)" (Methodological Journal, May 2, 2014). I coded both interviews and emergent-reader observations according to start codes developed from the literature and my conceptual framework. Additionally, many descriptive codes emerged from the data. In this way, I coded both deductively (start codes) and inductively (emergent codes) which allowed for a more robust analysis of the data. I used First Cycle coding (Miles et al., 2014) methods to assign codes to the data, working first with two observations from each teacher, and revising codes until I was satisfied with the codes. I then added in more observations, leaving the last two observations to code until I had developed Second Cycle (Miles et al., 2014) codes by examining the relationships between the repeated codes. At that point, I coded the last two observations from each teacher to see if I had reached data-saturation. I had finished data-collection by that point in time, but I wanted to confirm that I had, in fact, reached data-saturation.

Codebook. I used a codebook to keep track of my codes, including information such as the date and action I took regarding a particular code (i.e., when I added, revised, or dropped a code), a working definition, and an example (and sometimes a non-example) of the particular code. My peer reviewer examined parts of my codebook and observation write-ups, and provided feedback on the appropriateness of codes, possible relationships between codes, and possible conflation of codes. Developing and revising the codebook was an important part of analysis because writing definitions, examples, and non-examples forced me to clarify my thinking regarding what I was coding in the data. I modified the start codes to be more germane to the context of the school or dropped them altogether, and my original emergent codes developed as I coded more data. Some of the codes were even split into subcodes (Miles et al., 2014). For example, the emergent code "teacher response" became "Feedback" with 20 nuanced subcodes. Table 3.4 shows start codes, or what Miles et al. (2014) call "provisional codes," generated from the literature and my conceptual framework. The codes for interactive decision making are shown in Appendix J.

In order to look at instances when teachers and students were interacting, what I refer to as and "interactive sequences," (Wells, 1996) without losing more nuanced codes, I coded both the individual actions and the interactive sequence in total. Additionally, I also used "jottings" (Miles et al., 2014), in the form of "annotations" (NVivo, Version 10) for sections of data. Examining these "analytic sticky notes" (Miles et al., 2014) allowed me to further interpret the data by noting particular chunks of data that had particular meaning outside of coding.

Table 3.4

Start codes

ASMT	Assessment
GRP	Grouping
ROUT	Routines
B&V	Beliefs & Values
D - PLN	Planning Decisions
D - INT	Interactive Decisions
INS – IM	Implicit Instruction
INS - EX	Explicit Instruction
TK - RD	Teacher Knowledge of Reading Development
TK - SN	Teacher Knowledge of Student Need
TK - RP	Teacher Knowledge of Evidence-Based Reading Practice
TK - PCK	Pedagogical Content Knowledge
SN	Student Need
SN - M	Student need met
SN-UM	Student need unmet

Analytic Memos and Data Display

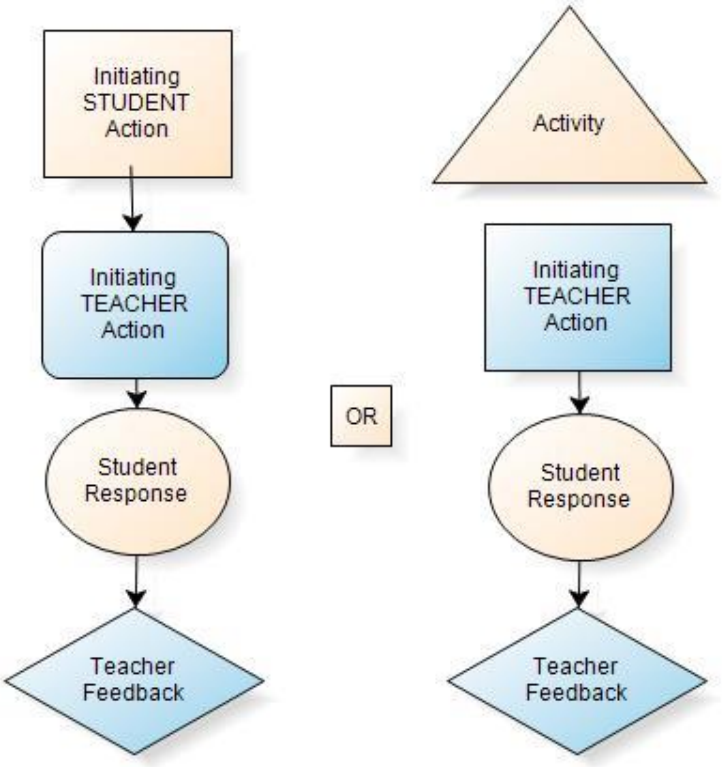
Besides coding, analytic memos and data display are ways of analyzing data. Throughout analysis, I wrote analytic memos in order to "synthesize…[data]…into higher level analytic meanings" (Miles et al., 2014). Various scenarios triggered me to write analytic memos: the act of coding, an observation, or a conversation with my peer reviewer or advisor. At times, it was useful to display data in a visual format in order to make connections between pattern codes (Miles et al., 2014). I used a number of matrices, sometimes including the same information in various formats to allow me to see the data in different ways. For example, I created a matrix with teachers as column headings and content areas as row headings. In each cell, I placed activities that teachers conducted in their small-groups, including the observation number. I examined the same

data in a different manner by placing content and activities in columns with the observation number as the row headings.

I also used data displays; an example of a data display is shown in Figure 3.3. This event-state network display represents the pieces of an interactive sequence: what happens prior to teachers initiating an interaction (i.e., teachers notice a particular student action or conduct a teacher-led activity), teacher initiation, student response, and teacher feedback.

Figure 3.3

Event-State Network Display of Interactive Sequence



I also examined patterns in the data in ways that Hatch (2002) described including frequency and sequence. Descriptive codes, analytic memos, and data displays allowed me to develop assertions as to what was happening in the field.

Searching for Alternative Understandings

Keeping more in line with my paradigmatic assumptions, rather than "verifying conclusions" as Miles et al. (2014) suggest, I searched "for alternative understandings" (Marshall & Rossman, 2011, p. 209) in order to look "suspiciously at… [my]…own observations" (Marshall & Rossman, 2011, p. 220). I wrote analytic memos and kept a broad methodological journal in which I wrote my thoughts, reread what I had written, and wrote more notes to myself. Additionally, as I sought meaning in the data, I reread pertinent literature and read previously unread literature. This continual analyzing-writing-thinking process allowed me to seek alternate understandings that could arise from the data and helped me determine how my explanations may, indeed, be the most plausible (Marshall & Rossman, 2011).

Summary of Data Collection and Data Analysis

Data collection and data analysis occurred simultaneously, although data analysis continued after I left the field. Generally, once data were collected, I condensed the data using (1) codes and then (2) pattern codes. I wrote analytic memos and displayed data in a visual manner, using matrices and networks in order to highlight relationships in the data. The process of writing analytic memos and creating data displays assisted me in developing conclusions.

In sum, I looked for triangulation of evidence from multiple sources (Maxwell, 2009) in order to strengthen my assertions, and I searched for both confirming and disconfirming evidence of the findings by reviewing the analytic data as well as reviewing the entire data corpus. I analyzed the case studies, and present both within-case description and cross-case findings, implications, and recommendations in the next chapters.

Quality Criteria and Responding to Threats

Guba and Lincoln (1994) report one way to critique an inquiry is by *trustworthiness*, which is based upon four criteria: *credibility, transferability, dependability*, and *confirmability*.

Credibility

Credibility refers to whether the inquiry shows what is really happening at the site(s) in which the study occurred. In this study, I used several strategies in an attempt to maintain credibility: time in the field, triangulation of data, and comparisons (Maxwell, 2009). I spent eight weeks at the school, observing in three classrooms and conducting two semi-structured interviews (Patton, 2002) with each teacher. Although I determined that I only needed observation data from the low-performing emergent reader groups, I observed each small-group and took field notes on the groups in order to minimize researcher effects. In this way, I hoped to have less impact on the classroom business than if I arrived only at the time of the emergent-reader small-groups. Although I designed the study for a fixed number of observations, I checked the last two observations from each classroom to see if I needed to include any new codes. As I

found no new codes, I concluded that I did reach data-saturation. Findings were based on multiple sources of data and analysis by looking for confirming and disconfirming evidence. Looking across multiple cases gives additional credibility to the study.

Transferability

Transferability refers to the possibility of the results of this study applying to another setting. Transferability is contrasted with generalizability in that the findings of this study are not generalizable to the greater population, but rather, the findings may apply to similar settings. The concept of transferability relates to the earlier paradigm discussion in that different people construct their own understandings, and providing readers with the opportunity to create their own interpretation of the setting allows them to do so. One way of responding to a threat against transferability is to provide "rich data" (Maxwell, 2009, p. 244) in order for readers to decide for themselves if the setting is similar to their own, and if so, perhaps the findings apply to their situation as well. In the field, I took copious notes which I made into detailed observation write-ups within 24 hours in order to preserve as much detail as I was able. I wrote the observation write-ups so that the reader would feel as if she were present in the classroom. Where appropriate, observation data is included in Chapter Four. Using data in the findings section allows the reader to determine if there is enough similarity to another site to warrant transferability of the results in this capstone study.

Dependability

Dependability refers to whether someone else would come to similar findings. In order to respond to threats against dependability, I worked to ensure that the findings are

"informed" and "sophisticated" (Guba & Lincoln, 1994, p. 111) through an iterative process of collecting data, coding, writing analytic memos, and going back to the literature. Having a peer reviewer gave me a critical reviewer that offered judicious feedback on my observation write-ups, assumptions, and means of analysis.

Confirmability

Confirmability refers to the notion that my biases and assumptions do not interfere with my findings by allowing me to consider only one perspective. Indeed, Maxwell (2009) suggests that researchers' biases (i.e., values and thoughts) and reactivity (i.e., how the researcher influences the research site) cannot, and should not, be eliminated, but that the researcher should seek to understand their own biases and assumptions and their role in the study. This last statement is particularly important to a constructivist paradigm because it is the researchers' values that facilitate construction of study findings (see Guba & Lincoln, 1994). Several strategies were used to respond to *confirmability* threats: multiple sources of data, consideration of my own bias and influence, and seeking confirming and disconfirming evidence for my assertions. As previously discussed, triangulation of multiple sources of data is an important consideration for *credibility*, and it is also an important consideration in thinking about *confirmability*. That is, having only one method of data collection may not allow the researcher to consider alternate ideas that may be found through other data sources. Thus, observation data sometimes confirmed interview data, and sometimes did not, in either case providing evidence for appropriate findings in the setting. Related to both of these concepts is bias and reactivity in observations and interviews. In order to limit the confirmability threats,

I was "observer as participant" (Merriam, 1988, p. 93) during observations, whereby I privileged being an observer over a participant by not interacting with the participants during reading instruction (unless invited). Additionally, I asked non-leading questions in interviews in order to allow the teachers to answer in a manner that reflects their own perspective. Lastly, I sought both confirming and disconfirming evidence for particular findings.

Ethical Considerations

Ethics are fundamental to the constructivist paradigm (Guba & Lincoln, 1994, p. 115), as a main consideration for findings are the views of the participants. One of the most important considerations in this capstone study was to keep the identity of the participants and the research site confidential. Most foreseeable risks to the participants were minimal and included feeling uncomfortable when being observed and interviewed. Each time I interviewed teachers, I reminded them that they could choose to not answer questions and could withdraw from the study at any time. The risks were countered by the possibility of the teachers being given recommendations on ways that they can improve their practice in order to better meet the needs of their students. Additionally, teachers may have found that the time that they took to reflect with the researcher on their classroom reading instruction benefitted them as they go about their important daily work of teaching. However, there is a risk that someone reading the report will be able to identify the schools and the teachers, although much identifiable information was eliminated or changed to protect the identity of the participants. All word-processed materials related to my study were stored in a password-protected file on a password-

protected computer. At the conclusion of the study, the data will be stored in password-protected files on an external hard drive and locked in a safe.

Conclusion

This qualitative multiple-case study was naturalistic, used multiple methods of data collection, was interpretive (Rossman & Rallis, 2012), and was appropriate for answering the research questions enumerated at the beginning of this chapter. By interpreting various data, I described preactive and interactive instructional decisions that teachers made regarding low-performing emergent readers in kindergarten classrooms at Springwell Elementary School and made recommendations about how to assist teachers as they provide reading instruction.

Chapter Four: Analysis and Findings

Introduction

In this capstone project, I explored the preactive and interactive decisions that kindergarten teachers at Springwell Elementary School made as they planned and delivered reading instruction for low-performing emergent readers. In this chapter, I first present three cases of kindergarten classroom reading instruction at Springwell Elementary School: Isabella's classroom, Elizabeth's classroom, and Patricia's classroom, and answer the first three research questions for each case:

1. What preactive decisions do kindergarten teachers at Springwell Elementary School make as they plan reading instruction for low-performing emergent readers?
2. What interactive decisions do kindergarten teachers at Springwell Elementary School make as they implement reading instruction for low-performing emergent readers?
3. To what degree do preactive and interactive decisions of kindergarten teachers at Springwell Elementary School correspond as they plan and implement reading instruction for low-performing emergent readers?

I describe each case in a similar format so that the cases may be more easily compared (Miles, Huberman, & Saldaña, 2014). Second, I discuss my overall findings for the capstone project in a cross-case manner. I will discuss the final research question

regarding recommendations to improve the quality of kindergarten classroom reading instruction in Chapter Five.

Kindergarten Reading Instruction

Kindergarten teachers at Springwell Elementary School made preactive and interactive decisions as they taught low-performing emergent readers. These teachers did not follow a basal program for reading instruction, nor did they have a teacher's guide to follow. Kindergarten teachers had to set up their own classroom procedures and decide what to teach and how to teach based upon assessed student needs, state standards, district guidelines, and the quarterly document developed by the team at the school level (Isabella, interview, April 11, 2014). Teachers began their literacy block with a whole group session followed by differentiated small-group instruction.

To focus my small-group observations on low-performing emergent readers, I asked each of the teacher participants to identify three students in their respective classrooms whose scores fell below the benchmark range on the PALS-K (Invernizzi, Swank et al., 2003) mid-year assessment, and who were not receiving special education services. Elizabeth and Patricia identified students from one reading group in each of their classrooms, and Isabella identified students from three different reading groups. However, Isabella's third identified student was able to do many activities appropriate for beginning readers (e.g., reading word bank words automatically). Thus, I included observations of only two small-groups in Isabella's classroom in the case-study analysis.

As my observations focused on teacher decision-making, I did not follow the students as they moved between rotations the classroom. Rather, I observed small-group

reading instruction as delivered by teachers. In so doing, I assigned students numbers based upon where they were sitting each time they came to their small-group, and thus refer to students by number (e.g., Student 2). I did not track particular students from observation to observation, so Student 1 in Observation 1 may be Student 5 in Observation 2. Originally, I planned to focus only on the teacher-identified students in each group. However, I quickly realized that observing all teacher-student interactions in a particular group would offer a richer picture of small-group reading instruction in the classroom. Thus, I included all teacher-student interactions from small-groups that included the teacher-identified low-performing emergent readers.

During small-group instruction, students answered correctly or incorrectly, read words correctly or incorrectly, or got stuck. Teachers responded to these student behaviors by scaffolding students and offering feedback. I analyzed the teacher-child interactions and found that many teaching decisions were procedural: they focused on ensuring that the instructional activity moved forward (Duffy & Ball, 1983). Alternatively, some decisions were substantive: they focused on goals of instruction (Duffy & Ball, 1983).

Case One: Isabella's Classroom

As I enter Isabella's classroom, all of the students are sitting on the rug in front of the Smart Board. The students take turns sharing their writing that Isabella projects onto the board with a document camera. Isabella calls one boy up to the board to read his paper to the class. Isabella gives him a pointer and asks him to read his writing. The student points to the words on the screen and reads "I am afraid of the dark" to the

class. Isabella asks the student to describe his picture, and the student does so. Isabella asks the whole class, "How might you help him not be afraid of the dark?" The other students suggest having a stuffed animal or having a night-light. After several more students have turns reading their writing, the students stand up and dance for a minute. Then, Isabella then asks the students to go to their first stations. The students move to their designated places, whether with the teaching assistant for handwriting, a computer to play literacy games, an ESOL assistant for a lesson in another area of the classroom, or Isabella at the kidney-shaped table in the far corner of the room.

Isabella begins the small-group lesson with one group of emergent readers by telling students that they will be rereading a book, highlighting some words, and discussing those words. First they reread a book together. Isabella holds up a copy of a book downloaded from readinga-z.com called "Bird Goes Home" and points to the words as the students read the title chorally. The book follows a pattern: "The bird goes over the _____." After they read the first page, Isabella says, "What's the first thing that the bird goes over?" The students say, "The tree." Isabella points to the word "the" and says, "This is a word that you are going to see everywhere." She writes "the" on a white board. Isabella says, "This is 'the.' You will see it a lot." Isabella writes the word "over" on the white board under "the" and says, "Over. This is another one."

Isabella places the book in front of her on the table, facing the students. Isabella says, "See how I touch every word." Isabella asks all of the students to continue reading chorally as she touches the words. When the students read the page, "The bird goes over

the farm," Isabella asks, "How do you know it's farm?" The students say, "F!" Isabella says, "And what does F say?" The students say, "/fffff/."

Isabella says, "Student 4, read this page." Student 4 reads, "The bird goes" and then stops. The next word is "over." The student says, "What?" Isabella says, "No, look here" as she points to the word "over" on the white board. Isabella then says, "This is over." Student 4 finishes reading the page.

Isabella turns the page and says, "Let's read together." The students read the page chorally. After finishing the book, Isabella says, "Everyone will get their copy. Everyone will read and then we will look for our sight words." Isabella passes out the books and says, "What I want to see is everybody touching the words."

All of the students are rereading their books now. The text says, "The bird goes over the trees," but student 5 reads, "The bird went over the trees." Isabella points to "goes" and says, "You said 'went.' What does 'went' start with?" Student 5 says, "W." Isabella says "Is that went?" The student says, "No." Isabella says, "What does it start with?" Student 5 says, "G." Isabella says, "What is that word?" Student 5 says, "Goes." Isabella says, "Yes."

As students finish reading their books, Isabella gives them highlighters and says, "I want you to highlight our sight words in your book: 'the' and' over.'" Student 6 finishes highlighting the designated words. Isabella gives him a pencil and says, "What you are going to do next is put one dot under each word."

Student 4 is highlighting the words "the" and "over." Isabella points to "over" on the white board and says, "Student 4, what is this word?" Student 4 says, "Goes."

Isabella says, "No, look at the first letter. What is the first letter?" Student 4 says, "O." Isabella says, "What is this word? The student says "Over."

Isabella turns back to Student 6, who is reading. The student reads all but the last word on the page: "The bird goes over the…" He does not read "mountains." Isabella says, "Get your mouth ready for the first sound."

I created the above vignette (Erickson, 1986) by merging two observations in order to give an overall flavor of Isabella's classroom. Isabella's classroom is designated as an ESOL classroom, meaning that a number of students in her room have a home language other than English. Isabella began the literacy block with a whole group writing activity and moved into small-group reading instruction with her 22 students. In the section that follows, I answer the first three research questions for this first case of classroom reading instruction: Isabella's classroom.

Research Question Number One: What preactive decisions do kindergarten teachers at Springwell Elementary School make as they plan reading instruction for low-performing emergent readers?

As expected, Isabella made preactive decisions about student grouping, management, content, activities, and use of available resources.

Student Grouping. Isabella chose to group her students by achievement level using assessment data that she gathers, including data from PALS-K (Invernizzi, Swank et al., 2003) and Rigby (Houghton Mifflin Harcourt, 2007). She described how the groups were formed:

> The kids are broken up into four…groups in here. And that's based on our assessment from PALS…, and we also use a little bit of the Rigby, and a little bit

> from teacher notes. And that's how we decide which group the kids will be in. It's based on how they are performing. And we try to put them in as close [to] the same group [with similarly leveled students] as we can. (Isabella, interview, April 11, 2014)

Isabella appeared to change her groups periodically because she said, "…*right now* we have the yellow, the green, the red, and the blue group" (Isabella, interview, April 11, 2014, italics added), and one student moved from the Red Group to the Yellow Group (Observation 1.6). Emergent readers were in both the Red and the Yellow Groups, although based on observation, the students in the Yellow Group were farther along in development than the students in the Red Group.

Management. Isabella made preactive decisions about the structure of the literacy block and the manner in which students moved to various activities. Isabella organized her daily literacy block (10:10 am to 12:00 noon) so that her students participated in a writing activity for approximately the first 35 minutes, and moved into 15-20 minute rotations for small-groups. Of the four total rotations, the first three were scheduled for 20 minutes each and the last rotation was 15 minutes. Isabella saw one low-performing emergent reader group first, and the other during the last rotation. The students in each small-group moved as a group through each rotation. Each small-group worked with Isabella for reading and word study, and with the assistant teacher for a handwriting program called *Handwriting without Tears* (http://www.hwtears.com/hwt). Students spent the other two rotations either at an independent station (using a computer or iPad, or working with word study words), or with a reading specialist. Students who were designated as ESOL (English for Speakers of Other Languages) worked in a small-group with the ESOL assistant for one rotation. Isabella noted that, "Some of the kids

don't have any independent stations. When it's their independent station time, they are with a reading specialist" (Isabella, interview, April 11, 2014). Isabella rang a bell to indicate that it was time to move to the next rotation, and the students made smooth and efficient transitions between groups.

Isabella arranged her room so that she worked with students at a kidney-shaped table in the corner of the room and she stored needed items on the shelf behind her (Observation 1.1). Isabella had her students put their reading materials in "bins" which they brought with them to the table (Observation 1.4). She kept the environment business-like.

Content. Isabella made preactive decisions about the content of her lessons. She planned different content for each of her low-performing emergent reading groups, although the content in both groups centered on alphabet, beginning sounds, and concept of word in text.

When planning for a particular group, Isabella reported that she used a literacy diet (i.e., designated percentages of time for various literacy components) of appropriate content and activities for emergent readers, a grade-level produced pacing guide, an instructional coach, her team, and the ESOL teacher (Isabella, interview, April 11, 2014). Although I did not observe Isabella using a lesson plan, she gave me copies of both a lesson plan template and an example lesson plan that were based on the emergent literacy diet from the McGuffey Reading Center at the University of Virginia (Isabella, interview, May 30, 2014; http://readingfirst.virginia.edu/pdfs/diets.pdf).

Isabella saw her small-groups for reading each day, although on two occasions, she did something "different" (Observation 1.8). On one day, she focused on cause and effect (Observation 1.7). At the end of the lesson, "she said, 'That wasn't exactly how I expected this to go today. It was a lot harder for them than I thought'" (Observation 1.7). On another day, Isabella focused on social studies content and "There was not reading instruction going on during this time" (Observation 1.8).

Isabella's choices for content for the low-performing emergent reader group, including number and percentage of total observations, are displayed in Table 4.1 below.

Table 4.1

Number of Observed Lessons (and Corresponding Percentage) Containing Content Areas in Isabella's Low-Performing Emergent Reader Small-Group Lessons

Content	Yellow Group	Red Group
Letters/Sounds (Word study)	3 (37.5)	4 (50)
COW-T	4 (50)	6 (75)
Writing	0 (0)	0 (0)
Sight Words	2 (25)	1 (12.5)
Phonological Awareness: Rhyme	0 (0)	0 (0)
Phonological Awareness: Syllables	0 (0)	0 (0)
Phonological Awareness: Beginning Sounds	4 (50)	2 (25)

Activities. Isabella made preactive decisions regarding student activities. Isabella's chosen activities for her low-performing emergent readers mostly fall under the content areas of concept of word and phonological awareness: beginning sounds. Isabella also had her Yellow Group work with same-vowel word families, indicating a

focus on the ending sound of words. Additionally, Isabella included highlighting high-frequency words (Observation 1.1.Y, 1.2.Y) with the Yellow Group, and did so once with the Red Group (Observation 1.2.R).

Isabella used oral reading in most lessons (Observation 1.1, 1.2, 1.3, 1.4.R, 1.5.R, 1.6, 1.7), and encouraged finger-pointing (Observation 1.1, 1.2, 1.3.R, 1.4.R, 1.5.R, 1.6). She asked the students to put dots under each word as they read the book (Observation 1.3.R, 1.4.R, 1.5.R), and reassembled cut-up sentences (Observation 1.1.R). Sometimes students read chorally or whisper read (individual reading), and Isabella occasionally called on different students to read a page.

Specifically working on letters and sounds with the students in the Red Group, Isabella provided activities such as going on a "letter hunt" where the students looked for specific letters m, t, and s (Observation 1.1), writing letters T, L, and F as the first letter in words from a book (Observation 1.2), playing letter/sound Bingo, where the teacher said the sound, and the students covered the letters (1.4), and highlighting first letters in words (Observation 1.7).

A summary of Isabella's choices of activities, grouped according to content area, is presented in Table 4.2.

Resources. Isabella chose materials that she used in her classroom: publisher-created materials, teacher-created materials, and classroom materials. Additionally, Isabella had many human resources to help her.

Human Resources. Isabella worked with many other teachers and support staff: an assistant teacher, an ESOL assistant, two reading specialists, instructional coach (for

Table 4.2

Activities in Content Areas during Isabella's Low-Performing Emergent Reader Small-Group Lessons

Content	Yellow Group	Red Group
Letters/ Sounds (Word study)	Word families: -an/-ad (1.3) Word families: -ap/-ag (1.4) Word families: -ot/-og/-op (1.5)	Circle Letters in Text (1.1) Writing letters (1.2) Letter/sound Bingo (1.4) Highlight first letters in words (1.7)
COW-T	Oral rereading (1.1, 1.2) Picture walk and choral reading (1.3) Choral rereading, individual reading; new book picture walk (1.6)	Rereading, rebuilding sentence (1.1) Oral/Choral reading (1.2) Oral/Choral rereading, mark words with dots (1.3) Book intro, modeling, oral reading, mark words with dots (1.4) Oral rereading, mark words with dots, match words in context (1.5) Book intro, picture walk, choral reading (1.6)
Writing	None Observed	None Observed
Sight Words	Highlighting words (1.1, 1.2)	Highlighting word (1.2)
Phonological Awareness: Rhyme	None Observed	None Observed
Phonological Awareness: Syllables	None Observed	None Observed
Phonological Awareness: Beginning Sounds	Sort beginning sounds w/y (1.1) Beginning sounds in context (1.2, 1.3) Words out-of-text; oral phonological awareness work (1.6)	Beginning sounds in context (1.4) Highlighting beginning letters, making sounds (1.7)

planning), an ESOL teacher (for planning), and a professional learning community (PLC). Isabella elected to engage the instructional coach and reports that

> I think probably my biggest help is [the instructional coach]. If I have a question about any reading related stuff, I ask her right away…. And if there's a kid that I feel like has been hitting a roadblock, is not making as much progress, I talk to her and get her input. (Isabella, interview, May 30, 2014)

Isabella relied on her PLC, made of her kindergarten teammates and an instructional coach, to determine the content she needed to teach (Isabella, interview, May 30, 2014).

Publisher-created materials. Isabella used PALS-K (Invernizzi, Swank et al., 2003) and Rigby (Houghton Mifflin Harcourt, 2007) assessments (Isabella, interview, April 11, 2014). She reported that she chose resources from *Being a Writer* (http://www.collaborativeclassroom.org/being-a-writer), *Words Their Way* (Bear et al., 2011), the Florida Center for Reading Research (www.fcrr.org/) , and *Reading A-Z* (including the projectable version for Smart Board) (Isabella, interview, April 11, 2014). Isabella mostly used *Reading A-Z* (readingatoz.com) to find books for her reading groups (Observations 1.1, 1.2, 1.3, 1.4.R, 1.5.R, and 1.6.Y), although I did observe a time when she used different Rigby books from the school bookroom for each small-group (Observation 1.6). Isabella used Words Their Way (Bear et al., 2011) word study cards (-ap/-ag) (Observation 1.4.Y) and (op, og, ot pictures and words) (Observation 1.5.Y). Isabella also used PALS materials, specifically PALS Quick Checks for sounds as BINGO boards (Observation 1.4.R).

Teacher-created materials. Isabella often wrote words from a given book onto sentence strips (Observations 1.1.R, 1.3.R, 1.5.R) and put them on the wall. At times, she created other materials: a "Jar of sight words" (Observation 1.2.Y) and "Turtle-themed

Elkonian Boxes" (Observation 1.3.Y), where students wrote one sound in each of three connected boxes to represent individual sounds in words.

Classroom materials. Isabella used various classroom materials and relied on her computer (Isabella, interview, April 11, 2014; Isabella, interview, May 30, 2014; Observation 1.2) as well as the Smart Board (Isabella, interview, April 11, 2014, Observation 1.2). She used letter/sound object tubs (Isabella, interview, April 11, 2014, Observation 1.1.Y), markers (Observation 1.2, 1.6), cardstock, scissors (Observation 1.2), dry erase markers and erasers (Observation 1.3, 1.4, 1.5, 1.6), page protectors (Observation 1.3), sticky notes (Observation 1.6), and pencils (Observation 1.3).

Research Question Number Two: What interactive decisions do kindergarten teachers at Springwell Elementary School make as they implement reading instruction for low-performing emergent readers?

Isabella made procedural and substantive interactive decisions as she responded to students during small-group reading instruction. Isabella was able to describe her thinking behind some decisions intended to move students forward, and my observations of her in the classroom verify that on many occasions, Isabella's actions show that she attempted to develop self-regulation in students as they learned to read.

Responding to Student Behaviors

During small-group instruction, Isabella often responded to students by scaffolding or giving feedback. On occasions when students were stuck or incorrect, Isabella considered instructional alternatives for scaffolding. Isabella explained her thinking in this way:

> when they are reading, I try to take time to listen in to every kid and see what words they're getting right, what words they're struggling with, and what strategies they are using. And then I try to prompt them, and remind them, "….What strategy do you think you could you use to help you figure out a word you don't know? Have you tried this? Have you asked your friend?" (Isabella, interview, May 30, 2014)

So, Isabella considered how she could prompt students who need help during a small-group lesson. Isabella later explained how she determines how to help a particular student figure out a word, attending not just to the group that the student is in and what content she already taught, but individual student characteristics:

> So …a kid who I know we've done…different chunks like -at and –ad, and I know they know that, I sometimes cover a few letters, and see if they can pick up that chunk….If I know we have not done certain things, I would…start with the beginning sound maybe or prompting to look at the picture on the page to see if they can guess. So, it's based on their needs and based on where they are. I do this more based on the different groups, because I know what we've covered…what the kids know. And I also know the individual kids and what skills they are lacking and what skills they are not using more of. And so, for example, when I did the Rigby on some of the kids, I noticed specific things that the kids needed and I jotted them down for their report cards. And so when I'm reading with them now, I'm trying to help them build those skills themselves, and not always looking at me to see if I can provide them with that word. (Isabella, interview, May 30, 2014)

Isabella stated that she tries to help students build their own knowledge about how to solve a word. She pointed out that she would rather help the student gain independence than provide the word for them. Indeed, Isabella only provided an answer to students on two occasions.

Isabella's stated intentions were observable. During one small-group lesson, Isabella helped a student to use what he had learned in a previous lesson to figure out an unknown word so that he could place the word in the appropriate column for beginning sound:

> Isabella picked up the sticky note with "cow" and handed it to Student 4. Isabella said, "What is that animal?" Student 4 said, "Cat." Isabella picked up the sticky note with "cat" on it, turned to Student 4, and covered the "c." Isabella said, "We've done the 'at' family. We know 'at,' and if you put C in front…" Isabella uncovered the C. "What is it?" The students said, "Cat!" Isabella said, "So, we haven't done 'OW' but 'OW' says, /ow/." Student 2 said, "Like if you get hurt." Isabella said, "Yes, like if you get hurt. /ow/." Student 4 said, "Cow" and put it under the C on the table. (Observation 1.6)

In this instance, rather than just correcting the student at the beginning of the interaction, Isabella helped the students to use what they knew (i.e., "at") to figure out "cat." She explicitly told them what "ow" says in the word "cow" so that the student could put the onset (/c/) and rime (/ow/) together to read "cow."

With each of her low-performing emergent reader groups, Isabella made both procedural decisions and substantive decisions. Isabella made these decisions in response to student behaviors that included the student being stuck, being incorrect, or being correct. I will discuss these decisions in a framework of student behavior.

Student Stuck

When students were stuck, Isabella made considerably more procedural decisions (Yellow Group: 67%; Red Group: 100%) than substantive decisions (Yellow Group: 33%; Red Group: 0%). Table 4.3 displays the number and relative percentage of Isabella's decisions. Figure 4.1 displays a decision tree showing the actions Isabella took in response to a student being stuck. Next, I will discuss each type of decision made by Isabella, as well as the resulting pedagogical actions.

Procedural Decisions – Student Stuck

When students got stuck on a word or with an answer, Isabella responded by (1) providing the answer, (2) prompting, or (3) questioning.

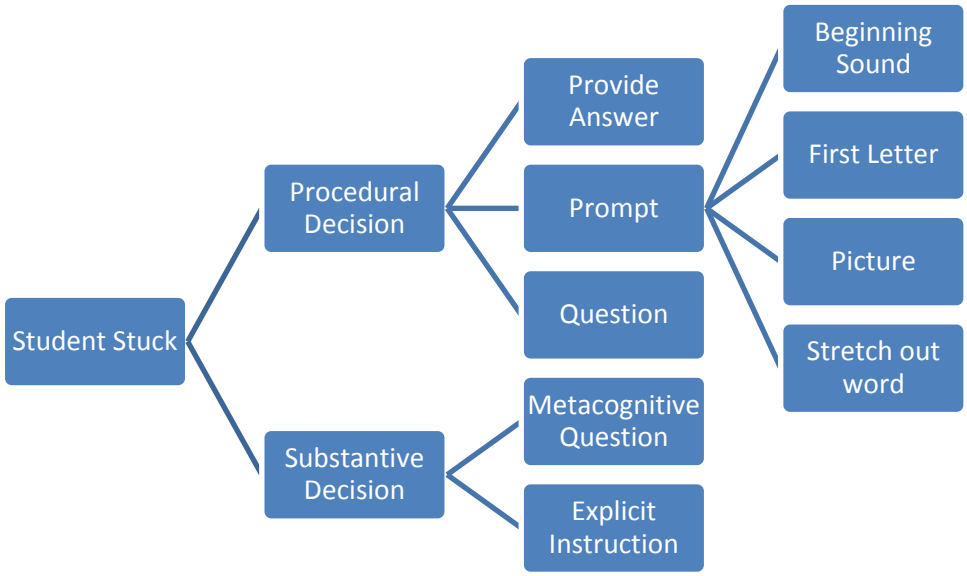
Table 4.3

Number (and Percentage) of Isabella's Procedural and Substantive Decisions for Student Stuck in Low-Performing Emergent Reader Small-Group Lessons

	Yellow Group	Red Group
Procedural Decisions	12 (67)	12 (100)
Substantive Decisions	6 (33)	0 (0)

Figure 4.1

Isabella's Decision Tree for Student Stuck



Providing the Answer. On only one occasion, Isabella provided an answer to a student. The students reread a book called *Fruit Colors* (Reading A-Z, GRL A) and a student started reading a page but got stuck on a word: "Student 3 was on a page that said, 'Fruits can be orange,' and had read 'Fruits can be…' Isabella said, 'What's the first letter?' Student 3 said, 'O.' Isabella said, 'Yes, O. Orange'" (Observation 1.4.R.6). Isabella first asked a question regarding the first letter of the unknown word. The student

answered correctly, Isabella confirmed that he was correct, and then she provided the word, "orange."

Prompting. Isabella used four types of prompts when students got stuck, including: (1) think about the beginning sound, (2) look at the first letter, (3) look at the picture, and (4) stretch out a word in order to spell it.

Prompting – Think about the beginning sound. Isabella prompted students in both the Yellow Group and the Red Group to think about the beginning sound. On one occasion, Isabella asked the students in the Yellow Group to reread the book *Bird Goes Home* (Reading A-Z) and highlight the words "home," "the," and "over." One "student read the all but the last word on the page: 'The bird goes over the…' He did not read 'mountains.' Isabella said, 'Get your mouth ready for the first sound'" (Observation 1.2.Y.7). Here, Isabella prompts the student to prepare to say the first sound in the word on which he was stuck.

Prompting – Look at the first letter. Isabella prompted students in both the Red Group to look at the first letter. An example of Isabella prompting a student to think about the first letter of a word to help read the word occurred when the students read sentence strips with the words from the book *Fruit* (Reading A-Z). Isabella pointed to the words in the first sentence as she read them, "This is a banana." She then asked the students to read the sentence again chorally. Isabella "gave the pointer to another student. The student pointed to the words for 'This is an apple,' but stopped before 'apple.' Isabella said, 'Look at the first letter.' The student read, 'apple'" (1.3.R.1).

Here, Isabella specifically prompted the student to look at the first letter of the word and the student read the word.

Prompting – Look at the picture. Isabella prompted students in Red Group to look at the picture. Once, when students read a book chorally: "The next page said, 'This is an orange.' The students read together but stopped before reading 'orange.' Isabella said, 'Look at the picture.'" (Observation 1.2.R.3). In this case, the students read, "This is an" but stopped before the word "orange." Isabella prompted students to look at the picture.

Prompting – Stretch it out. Isabella prompted students in the Yellow Group to stretch out a word in order to write it. The students wrote words and one student suggested "fat." One student was stuck and Isabella said, "Stretch it out /f/ /a/ /t/" (Observation 1.3.Y.4).

Questioning. Isabella sometimes asked students questions when they got stuck. One example happened when Isabella had the words from the book *Fruit Colors* (Reading A-Z) written on sentence strips on the wall. She gave the students sticky notes with different words from the book printed on them and asked the student to match their sticky note with the word on the sentence strip. When a student was not able to place his sticky note under the correct word, Isabella asked him a series of questions so that he could match his sticky note with the word "blue" with the word "blue" on a sentence strip on the wall.

> One student had the word "blue" on his card. Isabella asked him, "What does your card say?" The student shrugged his shoulders. Isabella took his sticky note and held it under each word, saying, "Does it match?" When she held it under the word "be" he said, "Yes." Isabella said, 'it's like it because it starts with B, but

> it's not a match." Isabella gave the sticky to the student and he worked his way down the sentence strips and stopped on "blue" (i.e., the correct answer). Isabella asked him what word he found. The student said, "B." Isabella said, "It's not B, but it's a word." The student didn't say anything. Isabella said, "What color is that?" The student said, "Blue." Isabella said, "What does that say?" The student said, "Blue." Isabella said, "Yes." (1.5.R.3)

Isabella did not give the student the answer, but rather used questioning so that he could complete the task and read the word on his card.

Substantive Decisions – Student Stuck

When Yellow Group students got stuck, Isabella responded in two ways that demonstrated substantive decisions: (1) asking metacognitive questions and (2) offering explicit instruction. Isabella did not show evidence of making substantive decisions when Red Group students got stuck.

Asking a metacognitive question. On three occasions when a student in the Yellow Group was stuck, Isabella asked the student metacognitive questions. Once, a student highlighted words in *What I Like* (Reading A-Z) and was getting ready to turn a page without highlighting the word "what" on the page. Isabella asked him if he should highlight anything. "Student 4 said, 'I don't know.' Isabella said, 'What do you think?'" (Observation 1.1.Y.4). Here, Isabella does not tell the student what to do, but rather asks the student a metacognitive question.

Offering explicit instruction. On two occasions, Isabella offered explicit instruction to students in the Yellow Group who got stuck. One time, Isabella asked the students to change "pan" to "pad" by erasing any letters that they needed to change and replacing them with the ones needed for "pad." In this case, the students needed to erase

the N and write a D in its place. Isabella asked the student to name the sounds in "pad." The student named the first two correctly, but got stuck on the D:

> Isabella leaned in to Student 3 and pointed to the P in pan. Isabella said, "What's the first sound? /p/." Student 3 said, "P." Isabella said, "What's the second sound? /a/." Student 3 said, "A." Isabella said, "What's the last sound? /p/ /a/." Student 3 did not respond. Isabella said, "/d/ that is a D." (Observation 1.3.Y.3)

In this case, when the student got stuck, Isabella explicitly stated that the sound /d/ is represented by the letter D.

Student Incorrect

When students were incorrect, Isabella made more procedural decisions (Yellow Group: 54%; Red Group: 62.5%) than substantive decisions (Yellow Group: 46%; Red Group: 37.5%), although with the Yellow Group, these decisions were nearly equal. Table 4.4 displays the number and relative percentage of both procedural and substantive decisions made by Isabella. Figure 4.2 displays a decision tree showing the actions Isabella took in response to a student being incorrect. Next, I will discuss the types of decisions that Isabella made and the resulting actions.

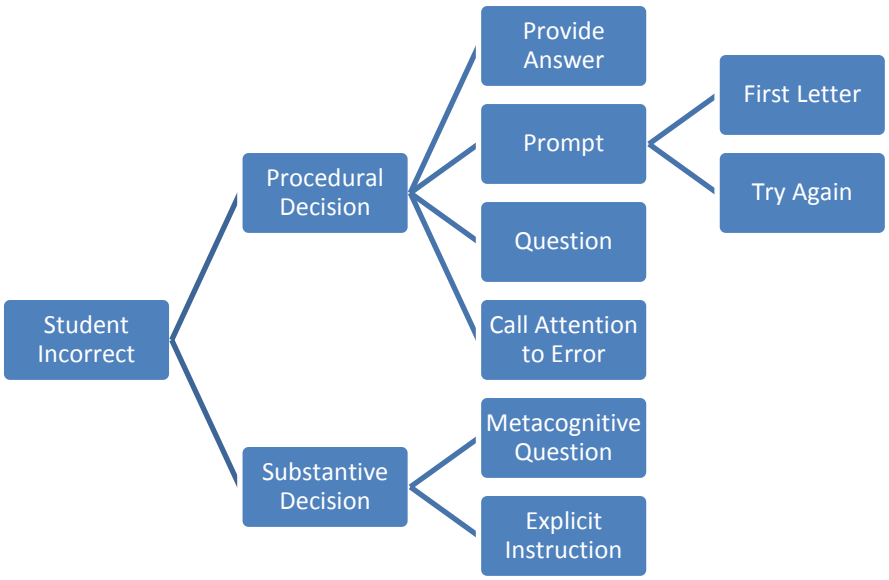
Table 4.4

Number (and Percentage) of Isabella's Procedural and Substantive Decisions for Student Incorrect in Low-Performing Emergent Reader Small-Group Lessons

	Yellow Group	**Red Group**
Procedural Decisions	19 (54)	10 (62.5)
Substantive Decisions	16 (46)	6 (37.5)

Figure 4.2

Isabella's Decision Tree for Student Incorrect



Procedural Decisions – Student Incorrect

When students read words incorrectly or answered questions incorrectly, Isabella responded by (1) providing the answer, (2) prompting, (3) questioning, and (4) calling attention to errors.

Providing the Answer. On one occasion, Isabella provided the word to a student in the Red Group immediately after he made a mistake. The students were reading the book *Fruit* (Reading A-Z) on the Smart Board. Isabella asked who could point to the next page. The sentence said "This is a pear." "Student 1 came up to the front, pointed to the first word and said, 'The.' Isabella said, 'This'" (1.2.R.1). In this case, Isabella told the student the word with which he made an error.

Prompting. When students were incorrect, Isabella prompted students in two ways: (1) look at the first letter and (2) try again.

Prompting – Look at the first letter. As Isabella described and as identified above, she is able to identify the fact that she considers different options to help students correct their mistakes based upon what she knows about a particular student. In the following example from the Red Group, students took turns reading sentences on a chart. One student came up and read "rain" instead of "storm" in the sentence "The storm comes." Isabella told the student that "rain" wasn't correct and prompted him to look at the first letter of the word.

> While one child was pointing and the others were gathered round, the sentence "The storm comes" came up. The child said, "Rain." Isabella said, "Not rain, but what's this [first] letter?" The child reads the word correctly and finishes pointing to the words in the poem. (Observation 1.1.R.2)

In this example, Isabella prompted a student to look at the first letter and the student is able to figure out the word himself, rather than Isabella providing the unknown word to the student. The student rereads the sentence with the correct word.

Prompting – Try that again. On several occasions with both the Yellow Group and the Red Group, Isabella prompted students to try again when they were incorrect. One example of a time when Isabella prompted students to try reading words again (after reading incorrectly) happened when the students read *The Plant* (Reading A-Z) for the first time. After a book introduction and a discussion of first letters, Isabella asked the students to read chorally. "Page 1 said, 'The dirt.' The students said, 'The plant.' Isabella said, 'No, let's look again.' Student 5 said, 'The dirt'" (Observation 1.3.Y.8). Here, Isabella did not give an indication of what the students read incorrectly, but prompts them to reread the page. Student 5 noticed what was wrong and read the words correctly.

Questioning. Just as Isabella asked questions of a student when he got stuck, sometimes when a student read a word incorrectly, Isabella asked questions. One time, the students in the Red Group took turns reading the sentence strips with the words from the book *Fruit* (Reading A-Z). One student read the sentence, "This is a pear," but got stuck on "pear." Isabella asked what sound the word started with and the student answered incorrectly, saying, "/d/ /b/." Isabella then asked another question: "What's the other letter that sort of looks like that?" Another student said, "P." Isabella said, "Yes, that's a P. /p/ /p/ /p/. What fruit begins with P?" The original student said, "Pear" (Observation 1.3.R.1). In this case, Isabella asked a question about thinking of another letter, and then asked a question about the whole word.

Calling Attention to Errors. On thirteen occasions with the Yellow Group, and on seven occasions with the Red Group, Isabella called students' attention to an error that they made. On all but one of those occasions, Isabella followed calling attention to an error with another action. Sometimes she was specific in calling attention to the error: "I don't see you touching the words" (Observation 1.2.Y.4), "Not the letter" (Observation 1.4.Y.1), "Isabella pointed to 'goes' and said, 'You said "went"'" (Observation 1.2.Y.5). In other cases, Isabella simply said, "No," and followed with another action. For example, when the students were reading *Fruit* (Reading A-Z) on the Smart Board, the students read the last page, "This is fruit." Isabella asked what sound F makes. "Student 6 said,'"/sssss/.' Isabella said, 'no, F says /fffffff/'" (Observation 1.2.R.6). In this case, when the student gave the incorrect sound, Isabella called attention to the error by saying, "No," and then followed by explicitly stating the sound that F makes.

Substantive Decisions – Student Incorrect

At times, students read incorrectly or provided incorrect answers to Isabella's questions. Nearly half the time, Isabella showed evidence of making substantive decisions. Sometimes these substantive decisions followed procedural decisions of calling attention to an error. At other times, Isabella responded directly to the incorrect answer or incorrect reading with a substantive response. Isabella demonstrated two different actions: (1) asking a metacognitive question and (2) offering explicit instruction.

Asking a metacognitive question. Isabella did not show evidence of asking metacognitive questions with the Red Group, but Isabella asked a metacognitive question when a student made an error on four occasions with the Yellow Group. One example was when Isabella asked the students to sort pictures and words by word families, and a student incorrectly placed "top" in the "ot" family column rather than the ""op" family column. "Student 3 had a picture of a top. Isabella said, 'Put it under where it goes.' Student 3 placed the picture of a top under 'ot.' Isabella said, 'Why do you think it should go there?'" (Observation 1.5.Y.3). Here, Isabella did not tell the student that she is incorrect, but rather asked her a metacognitive question.

Offering explicit instruction. On eight occasions with the Yellow Group and six occasions with the Red Group, Isabella offered explicit instruction to students when they made errors. In one case, Isabella offered explicit instruction when the students took turns pointing to the words in *Spring Weather* (Reading A-Z) that Isabella wrote on sentence strips and taped on the wall. The first student

> …came up to point to the words. The title is "Spring Weather," but the child said, "The spring weather." Isabella said, "I only see two words. I don't see 'the' so it

> only says 'Spring Weather.'" The child pointed to the words while the other students said the poem. (Observation 1.1.R.1)

Here, when the student made a mistake, Isabella told him why he was incorrect, namely, she told him that the number of words dictated how many words we read. Isabella told him what the text said, but not until she explicitly told him what went wrong.

Student Correct

About half of the time when students were correct, Isabella did not respond (Yellow Group: 45%; Red Group: 51%). In contrast to the decisions that she made when students were stuck or incorrect, Isabella made considerably more substantive decisions (Yellow Group: 36%; Red Group: 31%) than procedural decisions (Yellow Group: 19%; Red Group: 18%) when students were correct. Table 4.5 displays the number and relative percentage of both procedural and substantive decisions made by Isabella. Figure 4.3 displays a decision tree showing the actions Isabella took in response to a student being correct. Next, I will discuss the types of decisions that Isabella made and the resulting actions.

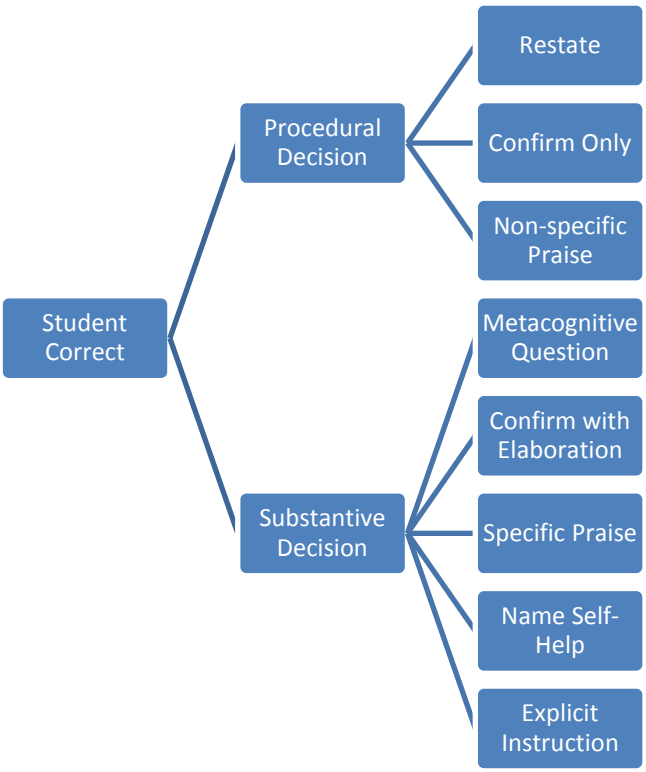
Table 4.5

Number (and Percentage) of Isabella's Procedural and Substantive Decisions for Student Correct in Low-Performing Emergent Reader Small-Group Lessons

	Yellow Group	**Red Group**
Procedural Decisions	20 (19)	7 (18)
Substantive Decisions	37 (36)	12 (31)
No Response	47 (45)	20 (51)

Figure 4.3

Isabella's Decision Tree for Student Correct



Procedural Decisions – Student Correct

When students read words correctly or answered Isabella's questions correctly, nearly half the time Isabella gave no response. In the following example, students gave correct answers twice to Isabella's questions when they tried to figure out the word "what." "Isabella points to the W in 'what' written on the table and says, 'First letter?' The students say 'W.' Isabella says, 'What does W say?' The students say '/w/.'" In both cases, Isabella did not indicate that the students were correct, but moved along with the instruction. At other times, however, she confirmed students' correct responses in

three ways: (1) confirming without restatement, (2) confirming with restatement, or (3) offering non-specific praise.

Confirm without restatement. Sometimes Isabella confirmed what a student said with a simple evaluation. When Isabella asked a student to read a page in *Fruit* (Reading A-Z) as she pointed to the words, the student read, "This is a banana." "Isabella said, 'Good, now you touch it and read it.' Student 1 read, 'This is a banana,' while touching the words" (Observation 1.2.R.2). Here, when the student read the words, "This is a banana," Isabella responded with "good" then moved on to having the student try reading himself.

Confirm with restatement. Sometimes, Isabella indicated that students were correct by confirming that they correctly read words or gave correct answers and restating what the student said. For example, when the students sorted words and pictures belonging to the –ap or –ag word families, a student correctly answered Isabella's question as to "'Why should rag go under ag?' Student 4 said, 'It ends with -ag.' Isabella said, 'yes, it ends with /ag/'" (Observation 1.4.Y.5). In this instance, Isabella said, "Yes," and then repeated what the student said.

Non-specific praise. Once, Isabella offered non-specific praise a student in the Yellow Group. When Isabella wrote the word "what" on the table, she asked if anyone knew the word. "Student 6 was looking at the cover of the book, *What I Like* (Reading A-Z). She said to Student 6, 'I see you doing something that is very smart'" (Observation 1.1.Y.1). Here, Isabella did not tell the student what it is that she liked to see, but rather

talked in generalities. Later, Isabella told the students that she saw the student looking for the unknown word in a book.

Substantive Decisions – Student Correct

Many times, students read words correctly or answered questions correctly. Isabella showed evidence of making four different substantive decisions. She responded to students by (1) asking a metacognitive question, (2) confirming that the student is correct with elaboration, (3) naming student self-help behaviors, (4) offering specific praise, and (5) offering explicit instruction.

Asking a Metacognitive Question. Isabella responded with a metacognitive question eighteen times when students in the Yellow Group, and twice when students in the Red Group, read correctly or answered questions correctly. One example of Isabella asking a metacognitive question is when the students reread *What I Like* (Reading A-Z) and highlighted the word "what." "Student 4 reads the page with the word 'slide' 'I like to slide.' Isabella asks Student 4, 'How do you know [that word is slide]?'" (Observation 1.1.Y.3). Here, when Student 4 read a page correctly, Isabella asked a metacognitive question.

Confirming correct with elaboration. Isabella elaborated on what a student did correctly seven times with the Yellow Group and twice with the Red Group. For example, when the students picked up sticky notes with animal names from *Animal Sounds* (Reading A-Z), and figured them out, they were stuck on "duck." The students looked through their books to find the word and one student said, "It has a U in it!"

Isabella confirmed that he was correct and gave some added information when she said, "Yes, U is the second letter" (Observation 1.6.Y.5).

Naming student self-help behaviors. On five occasions with the Yellow Group, Isabella named a self-help strategy that she noticed students doing. In one instance, Isabella wrote the word "what" on the table and asked the students to read the word. One student looked at the cover of the book *What I Like* (Reading A-Z). Isabella first gave non-specific praise to the student saying, "I see you doing something that is very smart." When the student just shrugged his shoulders, Isabella followed by naming the student's self-help behavior: "I think that he is thinking, 'I've seen that word, and maybe you saw it in our book'" (Observation 1.1.Y.1). Here, Isabella noted the student's behavior as one that can help him figure out a word. There were no opportunities for Isabella to name student self-help behaviors with the Red Group, as the students did not make any moves coded as self-help behaviors.

Specific Praise. Isabella offered specific praise once with the Red Group, but on no occasions with the Yellow Group. One time, Isabella offered specific praise when a student read the word "Dad" as they were getting ready to read a book named *Dad* (Rigby). "Student 4 said, '/d/ /d/. Dad.' Isabella said, "I like how you said that, '/d/ /d/. Dad'" (Observation 1.6.R.1). Here, Isabella specifically told the student how he figured out "Dad."

Offering Explicit Instruction. Isabella offered explicit instruction on five occasions when students in her Yellow Group read correctly or answered correctly, and on one occasion with the Red Group. On one occasion, Isabella offered explicit

instruction when the students took turns reading the sentence strips on the wall with the words of the book *Fruit* (Reading A-Z) written on them. A "student pointed to the words for 'This is a cherry.' Isabella said, 'CH says /ch/'" (Observation 1.3.R.1). Here, Isabella explicitly stated that CH says /ch/.

Research Question Number Three: To what degree do preactive and interactive decisions of kindergarten teachers at Springwell Elementary School correspond as they plan and implement reading instruction for low-performing emergent readers?

Isabella's preactive and interactive decisions generally correspond, with preactive teaching decisions permitting, but, at the same time, constraining Isabella's choices during reading instruction. What was noted in the preactive teaching observations is similar to what was observed during the interactive phase of the small-group lesson. For example, in one lesson with her Yellow Group, Isabella pulled a book from the shelf, *The Plant* (Reading A-Z) (Observation 1.3.Y). She made the preactive decision that the students would read the book, and she went to readinga-z.com, chose the book, printed the book, and made copies of the book for the students. After introducing the book, she asked the students to read chorally. While students read, Isabella made interactive decisions to add "the" to the sight word bank, asked a student how he knew the word was "plant," and corrected a student when he read the title. In this way, Isabella's interactive decisions supported her preactive decision to have the students read the book.

In thirteen small-group lessons out of a total of sixteen small-group observations, Isabella's preactive decisions about small-group reading instruction allowed her to make interactive decisions as she implemented instruction.

Case Two: Elizabeth's Classroom

As the students come in from recess, they hang their coats up in their cubbies in the hallway. They come and sit down on the rug at the "front" of the room, facing the rocking chair where Elizabeth is sitting with the book Fireflies at Night (Judy Hawes) in her lap. Elizabeth asks the class, "What types of books have we been reading?" A child answers, "Non-fiction." Elizabeth said, "Yes, it tells us information. Fiction is the opposite – not real. Yesterday we read Zipping, Zapping, Zooming Bats" (Ann Earle), as she points to the book on the easel to her right. She tells the class that they will be reading a book about fireflies and that "you already have a pretty good schema about fireflies. What does that word mean? Schema." A child says that it is when you know something. Elizabeth says, "Yes, you already know some things. What do you know about fireflies?" A child talks about male and female fireflies and how they glow in the dark. Elizabeth and the student discuss fireflies quickly, with Elizabeth asking questions and the student responding.

Elizabeth reads the book and comes to a part where she reads that the children punched holes in the lid of their jar when catching fireflies. Elizabeth stopped reading and said, "Why do you think they punched holes in the lid?" One student said, "Air." Elizabeth said, "Yes, fireflies need air just like all living things. Elizabeth continues reading until she read the word "fade" in a sentence about temperature, and that if the fireflies got colder that their light would fade. A child says, "What does that mean?" Elizabeth turns toward the students and says, "That's a new word for us. What do you think that means?" One child says, "Goes away." Elizabeth said, "Yes." Elizabeth

continues reading the book and reads "…repeats over and over." Elizabeth asks, "Repeats over and over. What does that mean?" A student says, "A pattern." Elizabeth says, "Yes, if something repeats over and over it is a pattern."

Elizabeth finishes reading the book and tells the students (regarding their writing journals), "You may finish your owl or bat writing. But if you are done, you can write some non-fiction about fireflies." Most of the students go to get their writing journals and Elizabeth calls the Purple Group to the table. The reading table is a kidney-shaped table. Elizabeth sits on a swivel chair on the inside and the students sit along the outside of the table. After Elizabeth meets with her first group, she rings the bell behind her. The students begin to clean up their writing journals, and shortly they head to their first rotation. Some students go to the other table in the room to work with the assistant teacher with Handwriting without Tears, some get computers and iPads and go to literacy games, some work on the floor with an alphabet train puzzle, and some go to the table to meet with Elizabeth.

Elizabeth opens this small-group reading lesson for four emergent readers by giving each student a toy penguin and laminated ABC chart which has the letter incorporated into the picture of a word beginning with the sound of the letter. Elizabeth says, "Listen carefully to my sounds. /llllll/." She says to one of the students, "Nice job tracking until you found that sound," after he moved his penguin along saying the alphabet until he came to the letter L. Elizabeth says different letter sounds, including /b/, and students move their penguins to cover the letters that match the sound. Elizabeth said, "Listen carefully because this is a tricky sound. /i/." A second student puts her

penguin on the letter E. Elizabeth says, "E says /e/. I says /i/. I makes me smile." Elizabeth touched her own face, showing a smile with her lips pulled back, making the /i/ sound.

Elizabeth reaches into the bins on the shelf behind her to get a set of books. Elizabeth says, "We have been reading a lot of books about animals. I have a very interesting book for you today. It's called Big Sea Animals. Where do they live?" One student says, "Aquariums or the ocean." Elizabeth says, "What is an aquarium?" The student says that it was a place that you could go to see fish. Another student raises her hand, and Elizabeth called on her: "What is an aquarium?" The student says, "Uh…." Elizabeth says, "An aquarium is a building like a museum that has big tanks so people can see them."

The pattern in Big Sea Animals is "Come and look at the _____. The _____ is big." where the blanks represent the animals that are in the book. The last page deviates from the pattern and reads, "Come and look at the big shark!" Elizabeth tells the students that they will go on a picture walk. She passes out individual copies of the books and the students open them up. The students name the animals in the pictures. One student says, "Crocodile!" Elizabeth says, "I know it is crocodile, not alligator because it starts with a C." Another student says, "Dolphin!" Elizabeth points to the D in dolphin in the student's book and says, "I agree with you because I see the word with a D. /d/." Yet another student calls the picture of a sea lion a "sea gull." Elizabeth says, "It's not a sea gull because those are birds that fly in the sky." The students eventually say that the animal is a sea lion.

After the picture walk, Elizabeth says, "Let's turn back to the beginning. We are going to touch the words in the title. Put your finger under 'Big." The students point to the title and read together: "Big Sea Animals." They turn to the title page and point to the words as they read them. Elizabeth tells the students that they will read the book together. The first word is "Come." Instead, one student says, "Look." Elizabeth says, "I see 'look,' but it is not the first word. Let's look at the first word. We will see 'come' at the beginning of each page." The teacher points to the word "come" in each student's book. Elizabeth and the students resumed reading chorally.

I created the above vignette (Erickson, 1986) based on several observations, to provide a glimpse into Elizabeth's classroom. Elizabeth's classroom of 22 students has five reading groups, one of which comprises her low-performing emergent readers. These low-performing emergent readers "are the ones that receive Title I" services (Elizabeth, interview, April 11, 2014). Next, I will answer the first three research questions for this second case of classroom reading instruction: Elizabeth's classroom.

Research Question Number One: What preactive decisions do kindergarten teachers at Springwell Elementary School make as they plan reading instruction for low-performing emergent readers?

Similar to Isabella, Elizabeth made preactive decisions about student grouping, management, content, activities, and use of resources.

Student grouping. Elizabeth created her groups using assessment data and teacher observation. She explained how she uses Rigby and sight words:

> …I Rigby them, as their official reading assessment at the end of each quarter. And then children are grouped based on their Rigby level, mainly, but it's also

> looking at like, this child read at a Rigby level C but, they really only know 10 sight words, and the rest of the children that read this level C, know 15 or 20 sight words, so I may move them down. So, I look at their sight words….And then I also look at comprehension, so it may be that they read the Level C, but they couldn't answer any of the questions, so I may put them in the group that's working on B's and early C's, as opposed to specifically C's. I look at a lot of different things, and not just a Rigby level. But the Rigby gives me a jumping off point. (Elizabeth, interview, April 11, 2014)

Although she used Rigby levels once the year began, Elizabeth noted that at the beginning of the year, she grouped students based on their knowledge of letter sounds and ability to write their name (Elizabeth, interview, April 11, 2014).

Elizabeth's groups are flexible. Part-way through my field work, Elizabeth moved one of the students working with a more advanced group who was having difficulty, into the group with the identified low-performing emergent readers (Observation 2.4). I noted that

> There is a new student in this group. She moved down from the next group. I asked Elizabeth about the move after all of the groups finished today and she said that she "Ribgy'd" the student and found that she was a "Solid B" and the rest of the students in the group that she had been in were "Solid C's." She said that she decided to move her down in order to help her "gain confidence" because "the goal at the end of the year is a Level D." (Observation 2.4)

Elizabeth based her decision to move the student on assessment data from Rigby. Additionally, Elizabeth moved one student out of the low-performing emergent group just prior to my eighth and final observation (Observation 1.8).

Management. Elizabeth determined how to set up her literacy block. She designed her literacy block so that each day she began with a read aloud, followed by writing time and then four twenty-minute literacy rotations. During these rotations, students either worked with Elizabeth for "guided reading instruction" (Elizabeth,

interview, April 11, 2014), with her teaching assistant for "word study or Handwriting without Tears, depending on the day" (Elizabeth, interview, April 11, 2014), independently using iPads or computers, or with the Title I reading teacher (for 30 minutes). Her schedule was as follows: 10:05 read aloud followed by writing, then 20 minute groups beginning at 10:35. While students wrote in journals, Elizabeth saw one of her groups (from 10:20-10:35) and these students joined in the four rotations during the remainder of the literacy block: Elizabeth saw one of the remaining groups of students during each of the four rotations. Students in Elizabeth's classroom moved to their next rotation when she rang a bell.

Elizabeth kept student materials easily accessible in different magazine boxes (i.e., each group has its own box) behind her table on a shelf: "Elizabeth collected the ABC charts and reached for the books from the book box behind her. Each group has its own magazine storage box with materials specific to their group." (Observation 2.2). However, the students' book boxes (i.e., where they keep their books for reading) were not near the table: "The students took their books to their book boxes, different colored drawers with their names on them. These are located in about the center of the room, quite far from the reading table" (Observation 2.1).

Content. Elizabeth made choices about the content of her lessons. Elizabeth's small-group instruction for her low-performing emergent readers centered on concept of word in text, sight words, and letters and sounds (Elizabeth, interview, April 14, 2014). Three observations indicated a "typical" lesson which included concept of word and alphabet. On one occasion, Elizabeth focused particularly on sight words (Observation

2.4). Elizabeth also focused on writing instruction (Observations 2.5 and 2.6) as well as phonological awareness (Observation 2.3), in her small-group instruction. Of the two observed lessons that centered on writing, one was for a Mother's Day gift, and one included individual writing about a field trip to the farm. The remaining observed lesson was on sequencing the events in a story.

A summary of Elizabeth's choices of content for the low-performing emergent reader group (both number and percentage of total observations), is presented in Table 4.6.

Activities. Elizabeth planed varied activities for her emergent readers to practice concept of word in text and alphabet. Elizabeth explicitly discussed why she chooses particular activities, and said that these decisions are based upon what she noticed the students are doing. Elizabeth planned activities to help students develop concept of word in text and explains why she chose a particular COW-T activity:

> …I'll take them back to the beginning of the book. And ask them if they can find the title of the book for me. So they're going to point to the title of the book, and I'm going to ask them how many words are in the title. And I'm doing this because sometimes they're still saying that each letter is a word. They don't have a very firm Concept of Word at this point, so we're still trying to develop that. I'd say that 90% of the time, they'll look at a word and count it as a word, so Animals Can Move would be three words. And the other 10% I'll see them start to count one, two, three, so they are pointing to each letter instead of recognizing a group of letters as a word. (Elizabeth, interview, April 11, 2014)

Here, Elizabeth discussed how she offered her students specific practice with COW: counting words. She even considered contingency plans to use if her students have difficulty pointing to the words in a book: "And at this point, if I see that they're having trouble pointing to the words" (Elizabeth, interview, April 11, 2014), she would ask the

Table 4.6

Number of Observed Lessons (and Corresponding Percentage) Containing Content Areas in Elizabeth's Low-Performing Emergent Reader Small-Group Lessons

Content	Number and Percentage
Letters/Sounds	3 (37.5)
Word Study	0 (0)
COW-T	4 (50)
Writing	2 (25)
Sight Words	1 (12.5)
Phonological Awareness: Rhyme	1 (12.5)
Phonological Awareness: Syllables	0 (0)
Phonological Awareness: Beginning Sounds	0 (0)

students to place a dot under each word with a crayon. In one instance (Observation 2.2), I observed Elizabeth asking her students to place dots under words, although the students appeared to read correctly.

Elizabeth considered what the students already know and what they still need to learn when she planned her letter and sound activity focus: "I don't do as much letter ID anymore because they can recognize their letters. At this point we're just firming up sounds…I focus on the vowels, mostly, because vowels are the most difficult sounds for this group…to solidify" (Elizabeth, interview, April 14, 2014). On several occasions, I observed the students matching letters to sounds, similar to how Elizabeth discussed this activity in her planning session:

> … I have alphabet charts and plastic penguins, rubber penguins. So they choose a penguin, and I will call out a letter sound….So I'll call out a sound, "/a/," and

> they'll have to put their penguin on the letter A. And then I'll call another sound, "/m/," and they'll have to move their penguin to that sound… And I'll do that for two to three minutes, so it's pretty quick. (Elizabeth, interview, April 11, 2014)

In this case, the students heard the sound and marked the correct letter. Elizabeth also planned activities in which the students named the sound that corresponded to a given letter. Another time, Elizabeth asked the students to name sounds by choosing a card from the ones that Elizabeth held out (these cards had either an uppercase or a lowercase letter printed on them) and naming the sound of the letter on the chosen card (Observation 2.2).

Elizabeth connected her decisions to assessments and her understanding of emergent reading. For example, when she talked about beginning "sight words" with her small-group of emergent readers, she said,

> I have not really done sight words with this group yet, because they've been learning letters and sounds still. But in the last 2 weeks, when I've done Quick Checks, they've been pretty solid on all of their sounds except their digraphs, so I'm going to move them into learning some basic sight words. (Elizabeth, interview, April 11, 2014)

Although Elizabeth explained several sight word activities during her interview, including sight word rainbow write where the students traced the word with various colors (Elizabeth, interview, April 11, 2014) and cut-up letters, in which Elizabeth would give the students the necessary letters and they would put the letters in order to create the sight words (Elizabeth, interview, April 11, 2014), I observed only one sight word activity. Elizabeth had the students practice finding sight words with a "Parking Lot Game" where the students drive toy cards to high-frequency words written on a paper "parking lot" (Observation 2.4).

A summary of Elizabeth's choices of activities, grouped according to content area, is presented in Table 4.7.

Table 4.7

Activities in Content Areas during Elizabeth's Low-Performing Emergent Reader Small-Group Lessons

Content	Activities
Letters/Sounds	Dixie cups with letters on bottom (2.1) Put penguins on cards (2.2, 2.8); letter cards (2.2); ABC tracking (2.8)
COW-T	Whisper rereading, book intro, choral reading (2.1) Reading, marking words with dots (2.2) Book introduction, picture walk, oral reading (2.4) Picture walk, reading first page (2.8)
Writing	Letter to Mom for Mother's Day (2.5) Field Trip Writing (2.6)
Sight Words	Parking Lot Game (2.4)
Phonological Awareness: Rhyme	Rhyming card match; rhyming worksheet (2.3)
Phonological Awareness: Syllables	None Observed
Phonological Awareness: Beginning Sounds	None Observed

Resources. Elizabeth made decisions about how to use the many available resources at her disposal, including human, publisher-created materials, teacher-created materials, and classroom materials.

Human resources. Elizabeth values her kindergarten teammates and used their input as she planned instruction:

> we as a team sit down in our PLC meetings. We have them twice a week and we talk kids and we talk data and who needs support with a struggling group or who has a child who is just not getting it and they've tried every strategy they can

> think of and they're asking the team for advice. (Elizabeth, interview, May 21, 2014)

In addition to the team's ongoing weekly support, Elizabeth also appreciated the team's quarterly focus on all kindergarten student achievement data (Elizabeth, interview, May 21, 2014). In fact, when asked what advice she would give to another school, Elizabeth again stressed "that sitting down as a team and looking at the data and talking kids is the most important thing that we do, and we do it often." (Elizabeth, interview, May 21, 2014) Elizabeth noted that the team aspect is important to other team members as well: "… we have two fairly new members to our team… I can't imagine them being on an island trying to do all of this by themselves. We support each other by looking at the data and talking about the kids" (Elizabeth, interview, May 21, 2014). Elizabeth's team is important to her and she attributed its importance to others. In addition to her team, Elizabeth has engaged the instructional coach who helps with both reading and math: "…she knows us and our kids extremely well" (Elizabeth, interview, May 21, 2014).

Although Elizabeth makes numerous decisions, some aspects of the classroom are out of her control. Four of Elizabeth's students leave the room to see the Title I reading teacher for 30 minutes a day in place of independent activities, although Elizabeth would prefer having the reading teacher push-in to her class as she did in a previous year so that the reading teacher could assist more than the four identified students (Elizabeth, interview, May 21, 2014).

Publisher-created materials. Elizabeth chose to use various publisher-created materials, and is not tied to one particular publisher. For her small-group guided reading

instruction, Elizabeth often used books printed from *Reading A-Z* (http://www.readinga-z.com/) because the website

> …has leveled books on a variety of topics. The pictures are really clear for the children, which is really good because often they don't have the background knowledge to help them figure out what the words say or to help them with decoding. So, we like these books because the pictures are really clear and support their reading. (Elizabeth, interview, April 11, 2014)

Elizabeth discussed readinga-z.com books filling the need for high picture support. Elizabeth also chose Rigby books (Observation 2.4, 2.8) for guided reading instruction. Elizabeth used a variety other published materials, including self-checking laminated rhyming cards (Observation 2.3) and a "Make a Rhyme" worksheet in which the students drew a picture of something that rhymes with the two given pictures (Observation 2.3). She had her teaching assistant working with the students using a program called "Handwriting without Tears" (Elizabeth, interview, April 11, 2014). During independent rotation time, students chose from educational computer programs *Starfall* (http://www.starfall.com/) or *ABC Mouse* (https://www.abcmouse.com/) (Elizabeth, interview, April 11, 2014).

Teacher-created materials. Elizabeth used several different teacher-created materials to meet her needs: "…I have alphabet flashcards that I use, Dixie cups with letters written on the bottom that we play games with. I use…sight word flashcards that I've made, games that are created out of sight words that we are using." (Elizabeth, interview, April 11, 2014). For one guided reading lesson, Elizabeth used a teacher-made, copied Earth Day book that she "had for years" (Observation 2.2). She also made

each student a red construction paper barn to use with their writing piece about the field trip to the farm (Observation 2.6).

Classroom materials. Elizabeth and her students used various classroom materials including iPads (Elizabeth, interview, April 11, 2014) and computers (Elizabeth, interview, April 11, 2014): "So technology-wise, we use iPads - we have five iPads in my room, I have two iPods. I have four laptop computers." (Elizabeth, interview, April 11, 2014). Other materials include crayons (Observation 2.2), toy cars (Observation 2.4), and "pencils, colored pencils, crayons, glue sticks, [and] scissors" (Observation 2.6).

Research Question Number Two: What interactive decisions do kindergarten teachers at Springwell Elementary School make as they implement reading instruction for low-performing emergent readers?

Elizabeth made procedural and substantive decisions as she taught low-performing emergent readers.

Responding to Student Behaviors

Although Elizabeth was able to explain the preactive decisions that she made, she had a more difficult time explaining her interactive decisions during small-groups. She talked in generalities about speeding up or slowing down the lesson (Elizabeth, interview, May 21, 2014). However, when pressed to describe what she thinks about when she changes her plans, or even if she was aware of her thinking, Elizabeth said that she is aware, but was not able to describe her thinking:

> Researcher: … I'm wondering if you can describe what you think about when you change those plans.
> Elizabeth: [Laughs!]
> Researcher: Are you aware of what you think about, and if you are, can you describe it?
> Elizabeth: I guess I'm aware. Because I think, "Oh shoot, they don't know this!" Or, "Gosh that was really hard for them." These are the things in my head. "That was harder than it should've been." So yeah, I'm aware of it. But then…I don't know… I guess I just do it from there out. I see what the need is and adjust the plan for the next day or even in the moment if I need to. So, aware of it, yes, but I don't know if I can explain why I change it. And, happily, sometimes the thought is, "They really can do this! They can do this, let's speed up."
> Researcher: And that is a happy day. How do you figure out how to respond to what a child says during your instruction?
> Elizabeth: How do I figure out? I don't know. I just respond. (Elizabeth, interview, May 21, 2014)

When asked more specifically how she responds to students in her small-group, given the example of when a student makes a mistake, Elizabeth described two scenarios: supplying the correct word and asking the student to try reading the sentence again (Elizabeth, interview, May 21, 2014). Elizabeth noted

> And I try to never say, "No," when they give the answer. I don't want to say, "No, that's not right," because that shuts them down. I want them to know that they can give me answers even if they're not sure, even if it's wrong, you can give me an answer. So I try not to say, "You're wrong." I say, "Good try!" or something like that, even if it's totally off the subject." (Elizabeth, interview, May 21, 2014)

Here, Elizabeth noted that she does not want to tell students that they are not correct. I observed only five instances over the eight observations that Elizabeth called attention to a student's error, and most of those were softened by the context. For example, when a student said that "plum" started with the letter L, "Elizabeth said, 'I hear L, but what comes before that?'" (Observation 2.7.1). Although Elizabeth is not able to describe her decision-making, her responses to student behaviors (i.e., stuck, incorrect, and correct) varied.

Student Stuck

When students were stuck, Elizabeth made considerably more procedural decisions (67%) than substantive decisions (33%), the same percentage that Isabella made with her Yellow Group. Table 4.8 displays the number and relative percentage of both procedural and substantive decisions made by Elizabeth. Figure 4.4 displays a decision tree showing the actions Elizabeth took in response to a student being stuck.

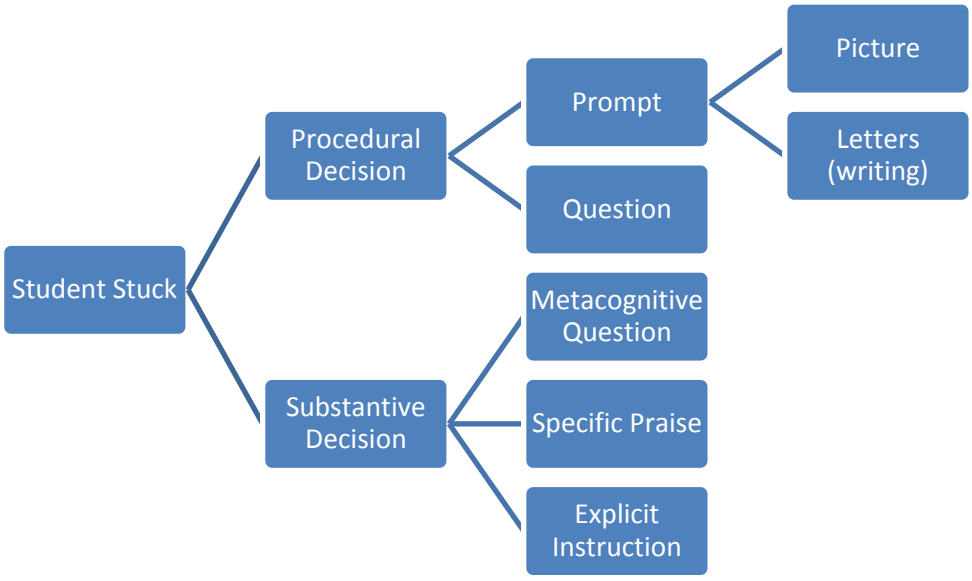
Table 4.8

Number (and Percentage) of Elizabeth's Procedural and Substantive Decisions for Student Stuck in Low-Performing Emergent Reader Small-Group Lessons

	Elizabeth
Procedural Decisions	10 (67)
Substantive Decisions	5 (33)

Figure 4.4

Elizabeth's Decision Tree for Student Stuck



Next, I will discuss the types of decisions that Elizabeth made and the resulting actions.

Procedural Decisions – Student Stuck

Elizabeth made procedural decisions when students were stuck. Similar to Isabella, Elizabeth responded by (1) prompting or (2) questioning, although the types of prompts differed slightly from Isabella.

Prompting. Elizabeth used two kinds of prompting when students were stuck. She prompted students to (1) look at the picture and (2) look at letters.

Prompting – Look at the picture. One time when students were stuck, Elizabeth prompted students to look at the picture. Elizabeth introduced a new book, *Bananas Sometimes* (Reading A-Z), where the pattern in the book was "Bananas sometimes look like _____." After completing a picture walk, Elizabeth asked the students to turn back to the front of the book. On the first page, Elizabeth asked the students to point read the first word together, which they did: bananas. Elizabeth then asked them to read the last word on the page (i.e., hands), but "The students were quiet. Elizabeth said, 'Let's look at the picture… hands'" (Observation 2.1.7). Here, Elizabeth prompted the students to look at the picture before pausing and telling them that the word is "hands."

Prompting – Prompt for Letters. On five occasions when students were stuck when writing, Elizabeth prompted students by stretching out the word that the student was trying to spell. For example, when the students wrote about their field trip to the farm:

> The teacher turned to Student 4 who had said that she needed to spell "turkey." Elizabeth said, "I want you to write 'turkey.' /t/ /r/ /k/ /ee/." Student 4 said, "T!" and wrote T. Elizabeth said, /t/ /r/ /k/ /ee/." Student 4 said, "R!" and wrote R. Elizabeth said, "/t/ /r/ /k/ /ee/." Student 4 said, "K!" and wrote K. Elizabeth said, "/t/ /r/ /k/ /ee/." Student 4 said, "E!" and wrote E. (Observation 2.6.4)

In this instance, Elizabeth repeated sounding out the word and the student wrote the letters which corresponded to the sounds.

Questioning. Elizabeth used questioning three times when students were stuck. Each time, she asked the students what they needed to write next. One time, the students in Elizabeth's small-group wrote about their trip to the farm. One student had written "I SO A PIG" and said "I want to write 'I saw a pig at the farm.' Elizabeth asked her what she needed to write next and Student 2 wrote 'at'" (Observation 2.6.2).

Substantive Decisions – Student Stuck

Besides making procedural decisions when students were stuck, Elizabeth also shows that she made substantive decisions including: (1) asking a metacognitive question, (2) offering specific praise, and (3) offering explicit instruction. Isabella made two of the same decisions, but did not offer specific praise.

Asking a metacognitive question. On three occasions, Elizabeth asked students a metacognitive question about how they could help themselves. When students wrote sentences about the farm, one student wanted to write the sentence, "I saw a pig at the farm." The student asked Elizabeth "How do you spell 'the?'" Elizabeth asked a metacognitive question when she replied, "'Where can you find the word "the?"' Student 2 said, 'at the word wall' and ran over to the word wall. She returned with the word 'the' and said, '[name of student] helped me'" (Observation 2.6.2). After the student had written "the" she said that "she needed to write 'farm.' Elizabeth said, 'Where can you find the word "farm"?' Student 2 went over to the chart that the class was working on this morning, found the word 'farm,' and wrote it on her paper" (Observation 2.6.2).

Here, Elizabeth did not tell the student what to do, but rather asked her where she can find the words that she needs.

Offering specific praise. Once when a student was stuck, Elizabeth offered specific praise for what the student had accomplished. "Student 2 had written, 'I LOV'. Elizabeth said, 'Great! You have, "I love"'" (Observation 2.5.4). Elizabeth specifically praised the fact that the student already had some writing. Elizabeth then asked the student what else she would write.

Offering explicit instruction. One time, Elizabeth offered explicit instruction when a student was stuck. The students were writing a word that rhymed with two provided pictures. Elizabeth sounded out the word "rock" as rhyming with clock and sock, while the students wrote "rock" on their papers. When Elizabeth got to the /k/ sound at the end of rock, the students did not know that they needed –ck at the end of the word.

> Elizabeth said, "What do you hear at the end? /r o k/" The students called out "C!" Elizabeth said, "What's another sound?" The students called out "K!" Elizabeth said, "Yes. C or K." One student asked, "Which one?" Elizabeth said, "Actually, in rock, it's both C and K."

Elizabeth let the students know that they needed to have C and K.

Student Incorrect

When students were incorrect, Elizabeth made more procedural decisions (65%) than substantive decisions (35%), similar to Isabella's decisions with the Red Group. Table 4.9 displays the number and relative percentage of both procedural and substantive decisions made by Elizabeth. Figure 4.5 displays a decision tree showing the actions Elizabeth took in response to a student being incorrect.

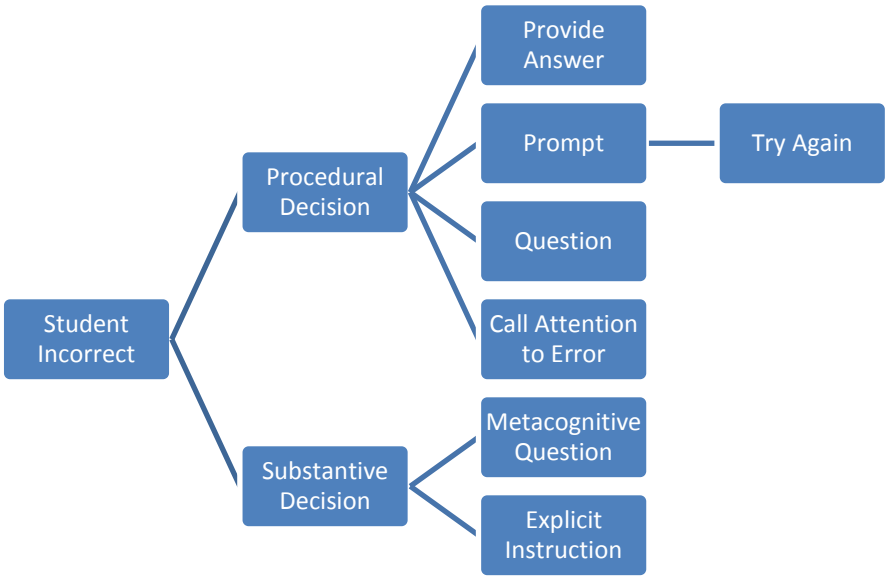
Table 4.9

Number (and Percentage) of Elizabeth's Procedural and Substantive Decisions for Student Incorrect in Low-Performing Emergent Reader Small-Group Lessons

	Elizabeth
Procedural Decisions	15 (65)
Substantive Decisions	6 (35)

Figure 4.5

Elizabeth's Decision Tree for Student Incorrect



Next, I will discuss the types of decisions that Elizabeth made and the resulting actions.

Procedural Decisions – Student Incorrect

Elizabeth made procedural decisions when students make errors including (1) prompting to try again, (2) questioning, and (3) calling attention to errors. Most of the time that students were incorrect, they were writing; in only two cases the error was made when students were reading. These procedural decisions were the same as Isabella's, without the prompt of looking at the first letter.

Prompting – Try that again. Twice, Elizabeth prompted students to try again when they read incorrectly or when they answered incorrectly. When Elizabeth called out letter sounds and students placed a marker on an alphabet chart covering the matching letter, "Elizabeth said, 'It's tricky, so listen…/i/.' The students said, 'E.' Elizabeth said, 'Listen again! /i/'" (Observation 2.8.1). Here, Elizabeth encouraged the students to try again to find the letter matching the /i/ sound.

Questioning. On eight occasions, Elizabeth asked questions when students read incorrectly, wrote incorrectly, or answered incorrectly. Elizabeth gave the students a worksheet with sets of rhyming pairs. Next to each of the rhyming pairs was an empty space. Elizabeth asked the students to write a rhyming word in the box. One pair was clock-sock. "Elizabeth said, 'clock-sock. What rhymes?' Student 4 said, 'Pop'" which was incorrect. "Elizabeth said, 'Listen to me… sock-clock-pop. Does that rhyme?'" (Observation 2.3.5).

Calling Attention to Errors. On three occasions, Elizabeth called attention to a student being incorrect, although on only one of those occasions, Elizabeth said, "no." For example, Elizabeth reviewed the story *The Very Hungry Caterpillar* (Carle, 1969) before the students ordered pictures from the story. When Elizabeth got to the page with plums, she asked, "What does 'plum,' start with?" "Student 5 said, 'L.' Elizabeth said, 'I hear L, but what comes before that?'" (Observation 2.7.1). Elizabeth comments on the fact that there the letter L is in the word plum and then asks the student to think about the word again.

Substantive Decisions – Student Incorrect

In addition to making procedural decisions when students made an error, Elizabeth also made substantive decisions. Elizabeth demonstrated these substantive decisions in two ways, by (1) asking a metacognitive question and by (2) offering explicit instruction, the same decisions made by Isabella.

Asking a metacognitive question. Once when a student answered a question incorrectly, Elizabeth asked a metacognitive question. Elizabeth introduced a new book to the group called *Bananas Sometimes* (Reading A-Z). When Elizabeth showed the front cover, "Student 1 said, 'Banana, banana!' Elizabeth said, 'How did you know?' Student 1 pointed to and named all of the letters in the title. Elizabeth said, 'Do you think that whole thing says bananas?'" (Observation 2.1.2). In this case, Elizabeth's question was a metacognitive one.

Offering explicit instruction. Seven times during my observations of Elizabeth, she offered explicit instruction when a student read incorrectly or answered a question incorrectly. For example, after the students placed plastic penguins on letters when Elizabeth gave the letter sound, she said,

> "Whisper track your alphabet while I get your new book." She gathered the penguins and the students pointed to each letter in order and said the names of the letters quietly (after a reminder!). Student 1 said, "LMNOP" quickly without pointing to each of the letters individually. Elizabeth said, "Watch me!" and pointed slowly to the letters as she said, "L…M…N…O…P." Elizabeth put her finger on Student 1's paper to track the alphabet with her. Elizabeth said that Student 1 needed to be careful because, "Sometimes your singing gets ahead of your pointing." (Observation 2.8.2)

In this case, Elizabeth offered explicit instruction as she modeled pointing to the letters correctly and then followed with an explicit instruction as to be careful to match pointing with saying the names of the letters.

Student Correct

About half of the time when students were correct, Elizabeth did not respond (53%). In contrast to the decisions that she made when students were stuck or incorrect, Elizabeth made considerably more substantive decisions (28%) than procedural decisions (19%) when students were correct, similar to Isabella. Table 4.10 displays the number and relative percentage of both procedural and substantive decisions made by Elizabeth. Figure 4.6 displays a decision tree showing the actions Elizabeth took in response to a student being correct.

Table 4.10

Number (and Percentage) of Elizabeth's Procedural and Substantive Decisions for Student Correct in Low-Performing Emergent Reader Small-Group Lessons

	Elizabeth
Procedural Decisions	21 (19)
Substantive Decisions	30 (28)
No Response	57 (53)

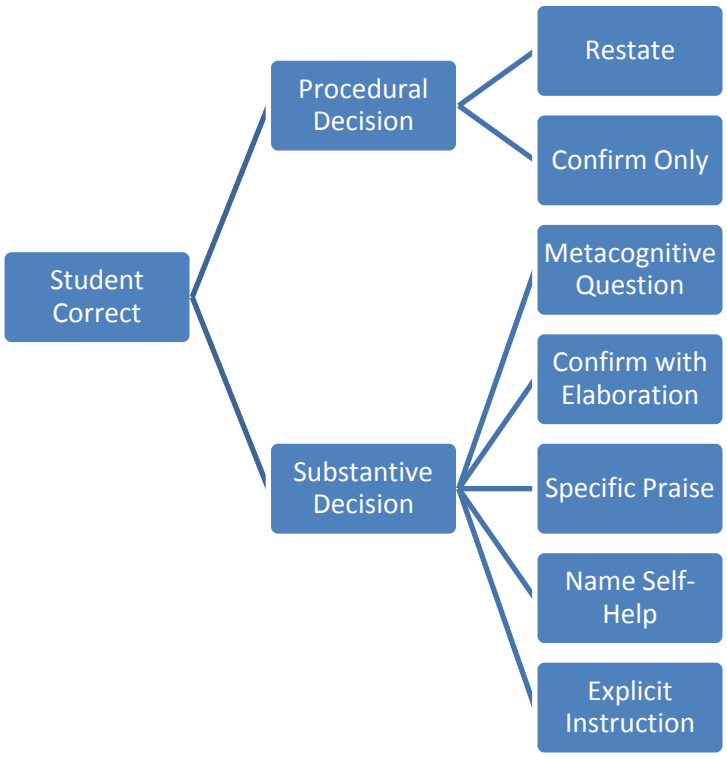
Next, I will discuss the types of decisions that Elizabeth made and the resulting actions.

Procedural Decisions – Student Correct

Elizabeth made three types of procedural decisions when students were correct: (1) confirming without restatement, (2) confirming with restatement, or (3) offering non-specific praise, the same decisions that Isabella made.

Figure 4.6

Elizabeth's Decision Tree for Student Correct



Confirm without restatement. Four times, Elizabeth confirmed that the students were correct without restating what the students said. One time when the students were preparing to read *Bananas Sometimes* (Reading A-Z), a student said that he noticed that "The first three words are the same on each page." Elizabeth answered, "You are right" (Observation 2.2.6). Here, Elizabeth simply acknowledged that the student is correct.

Confirm with restatement. Once, Elizabeth confirmed a student being correct by restating what the student said. Elizabeth gave the students some rhyming picture puzzle pieces that fit together when the rhyme matched. Elizabeth asked a student to pick a picture so that someone could find a match, but the student already had put truck-duck

together. "Elizabeth said, 'Oh, you think you have a rhyme already! Truck-duck'" (Observation 2.3.1). Here, Elizabeth restated the correct answer, "truck-duck."

Non-specific praise. One time, Elizabeth offered non-specific praise to students when they were correct. Elizabeth gave the students "Parking Lot" papers and the students drove toy cars to high-frequency words on the paper when Elizabeth said them (i.e., of, the, was, his, me, my, is, on, yes, no). The students drove their cars to the appropriate places.

> Next, Elizabeth said, "Find… This is a very tricky word… of. It is tricky because the letters don't make the right sounds." The students found "of" on their parking lots. Elizabeth said, "Good job" and passed around the basket for the students to put their cars into, and picked up the papers. (Observation 2.4.2)

Elizabeth said, "Good job," but did not tell the students what they did correctly.

Substantive Decisions – Student Correct

In addition to making procedural decisions, Elizabeth also made substantive decisions when students were correct. Elizabeth responded by (1) asking a metacognitive question, (2) confirming that the student is correct with elaboration, (3) naming student self-help behaviors, and (4) offering explicit instruction. These decisions are the same as Isabella's, although Isabella also offered specific praise when a student was correct.

Asking a Metacognitive Question. Elizabeth asked seven metacognitive questions in response to students being correct. One example of this was when Elizabeth introduced the book *Where are the Babies?* (Rigby), and the students did a picture walk. "The first page was about Mother Mouse. Student 2 said, 'Mouse!' Elizabeth said, 'Why not 'rat?'" (Observation 2.8.4). Here, Elizabeth asked a question to have the student think about the first letter of the word "mouse."

Confirming correct with elaboration. Elizabeth confirmed that students were correct and then elaborated on what they did correctly fourteen times. One example continues the above interaction with a metacognitive question. After Elizabeth asked the student why she thought the word was "mouse" rather than "rat," the student said, "Rat starts with R." Elizabeth responded with an elaboration and said, "And that's not an R. It's an M and Mouse starts with M" (Observation 2.8.4).

Naming student self-help behaviors. Four times, Elizabeth named self-help strategies that the students used. One time, Elizabeth introduced the book *Bananas Sometimes* (Reading A-Z) to the students. They read a page that said, "Bananas sometimes look like spiders." "Student 3 said that the words are the same on the pages. Elizabeth said, 'Student 3 noticed that "Bananas sometimes look like" is on each page. Good observation'" (Observation 2.1.8). Here, Elizabeth commented on Student 3 noticing the pattern, and elaborated on what the student said.

Offering Explicit Instruction. Two times, Elizabeth offered explicit instruction when students were correct. Once, when Elizabeth introduced the book *Bananas Sometimes* (Reading A-Z), Elizabeth explicitly instructed the students on the fact that there are spaces between words. A student said that there were two words in the title. "Elizabeth said, 'What's between the 2 words? There is a space'" (Observation 2.1.2). In Elizabeth's interview, she said that she was working on "jumping the space" with her low-performing emergent readers (Elizabeth, interview, April 15, 2014).

Research Question Number Three: To what degree do preactive and interactive decisions of kindergarten teachers at Springwell Elementary School correspond as they plan and implement reading instruction for low-performing emergent readers?

Elizabeth's preactive and interactive decisions generally correspond. Elizabeth's preactive decisions about content and activities for a small-group lesson had a distinct impact on the interactive decisions that she made. Out of the eight observations of the small-group lesson with low-performing emergent readers, Elizabeth chose to do four lessons with COW-T instruction (Observations 2.1, 2.2, 2.4, and 2.8). Elizabeth did two lessons where students wrote (Observations 2.5, and 2.6). One small-group lesson was dedicated to rhyming (Observation 2.3). One small-group lesson was dedicated to sequencing (Observation 2.7). Thus, when Elizabeth decided to focus on sequencing (Observation 2.7) or rhyming (Observation 2.3), she did not make interactive decisions related to COW-T.

Case Three: Patricia's Classroom

The students sit on the carpet in the front of the room, looking at a screen. The teacher, Patricia, stands to the right of the screen next to a document camera. Projected onto the screen is a child's "sticker story" made in the writing center by placing stickers on his paper and drawing a picture incorporating the stickers. One student came up to the board to talk about his story that was being projected to get some ideas about what to write. Patricia says, "What's this? Tell me about this" as she points to the student's picture. The student says, "It's fast." Patricia says, "So, this part shows that they are moving fast? What will you write?" The student says, "Outside." Patricia says, "What

can you add to your picture so we know its outside?" The student was quiet. After a few seconds, Patricia says, "Do you want a suggestion?" The student shakes his head yes. One child says, "Water." Patricia says, "What kind of water? Like a creek or a river?" Another child said, "Trees." Patricia says, "You could add trees to your picture…sky…grass." Patricia says that the students made helpful suggestions. She turns to the writer and says, "What are you going to write so your picture matches your words?" The writer says, "The cats are racing."

Patricia asks everyone to listen and to stand up when their name is called. She calls each group and lets them know where they should go. Some go to the SPED teacher, some go to the teaching assistant for word study, some get their reading boxes and find a place to read in the room, others head to the writing center, and finally, the emergent reader group heads to the reading table to work with Patricia.

When the students come to the table, they take out their books, My Friend (Sunshine, GRL B) and Here We Come (Harcourt, GRL C) from their homework baggies and start reading. However, not all of the students have their baggies, and Patricia gives them extra books. One student who had her book with her says, "I forgot to read my book."

One student taps his finger under a multi-syllabic word, and Patricia says, "When he was reading, he was thinking about the syllables." After the students finish rereading their books, Patricia says, "I'm going to see you playing popcorn." When they play popcorn, Patricia asks a student to read the first page. After the student reads the page, the student calls on another student to read the second page, and so on. Patricia

complements a student for pointing to the words as they get ready to read. Patricia asks a student to read first. The student gets off track reading the word "tiger." He points to tiger and says, "ti" and then to the next word and says, "ger." Patricia says, "Let's count those syllables." The first student claps two claps for "tiger." Patricia says, "When you point to tiger, what do you do? The student rereads the page, and when he points to "tiger" he taps his finger twice under the word tiger then finishes reading the page. He calls on a second student and she reads the next page. She gets off track on "spider," pointing to "spider" and saying, "spi" and then to the next word and saying, "der." Patricia says, "How many syllables in "spider"? The student says, "two." Patricia asks her to "try again." Student 3 pointed correctly and Patricia says, "Good job."

I created this vignette (Erickson, 1986) from my observations in order to give an overall impression of Patricia's classroom. Patricia had the "SPED cluster" (Patricia, interview, April 15, 2014) meaning that out of the 23 students in her room, she had a number of students in her room who received Special Education services.

Patricia appreciated having the ability to make decisions about her own classroom. She said,

> I don't think that one-size-fits-all…I know that at some schools they have their "programs" [AN: With emphasis.]. I was a [position] in another school, and I just thought it was very frustrating, especially for… I think maybe it worked well for maybe kids who were on grade level, but I think it didn't work for kids above grade level, and I don't think it worked for kids who were below grade level. I just don't think you can take a program and say it's for everyone. Either some kids may need scaffolding, and for others it may not be as engaging. That's one thing that I do like about this school. That, you know, it's just easier I think to differentiate for kids here. You do have the flexibility deciding how you want to run your literacy groups. You can be a little creative and make it engaging.

> Researcher: So there is not a "program?"
> Patricia: We don't have a program...there are certain books that we use, that we all use. There's a writing program that we use, but we're not forced to. We can be flexible with it. (Patricia, interview, April 15, 2014)

Patricia had two groups of low-performing emergent readers in her classroom, but one group received a significant amount of Special Education intervention and Patricia did not meet with them in a small-group. All of the students whom she identified for this study as low-performing emergent readers were in the same small-group. Patricia's groups are flexible and she recently moved one student into this group from a group that was working at a more advanced level. She moved the student in order to instruct him at what she considered to be a more appropriate level, and cited his confidence and engagement as signs that it was a beneficial move (Patricia, interview, April 15, 2014).

In considering the specific context of Patricia's classroom, it is important to note that she had several students in her classroom that were disruptive, and on several occasions her attention was called away from her small-group so that she could take care of the situation. For example, during a small-group, "A teacher from the hallway called across the room to Patricia about a behavior problem in the hallway" (Observation 3.3). Notably, another student in the low-performing emergent group recently joined Patricia's class in December. Next, I will answer the first three research questions for this third case of classroom reading instruction: Patricia's classroom.

Research Question Number One: What preactive decisions do kindergarten teachers at Springwell Elementary School make as they plan reading instruction for low-performing emergent readers?

Similar to both Isabella and Elizabeth, Patricia made preactive decisions about student grouping, management, content, activities, and use of resources. I will discuss each of these topics in turn.

Student grouping. Patricia grouped her students by reading level. She said,

> I just revamped my literacy groups. I have gone from four literacy groups to five, and they are grouped according to ability. So, I have a group who they are just learning concept of word. We are reading Guided Reading Level A books. I have two groups reading Guided Reading Level C books, one Guided Reading Level B books [note: this is the group on which I focused my observations], and one Guided Reading Level E/F. So the group that I'm really, sort of trying to push, Guided Reading Level B readers. We want them on a Level D by the end of kindergarten. My lowest group is my special ed kids, and they get Tier 3 intervention. (Patricia, interview, April 15, 2014)

Patricia reiterated this grouping scenario in her second interview: "My groups were created, I guess, according to where they were reading, according to their reading level" (Patricia, interview, May 27, 2014).

Management. Patricia saw four small-groups for 20 minutes each during her literacy block which ran from 10:05-11:45. Patricia began each day with a whole group activity, either a read-aloud or a content activity until 10:25, when she began seeing her groups. The students moved between working with her, writing independently in the writing center, working with the teaching assistant for word study and handwriting, and reading independently. Patricia's low-performing emergent readers did not have an independent station. Instead, they saw Patricia in the first rotation, and in the next three rotations, they worked with the special education assistant, the reading specialist, and the teaching assistant. Patricia rang a bell when it was time for the students to move to the next rotation. Students kept their reading and writing materials in their cubby (Patricia,

interview, April 15, 2014). During their reading group, the students typically sat around the kidney table, but when they worked on the pocket chart, the students moved their chairs over to that location, right next to the table.

Content. For Patricia's low-performing emergent group, she focused on "…concept of word, syllables sorting…those kinds of things" (Patricia, interview, April 15, 2014). Patricia said that she did not concentrate on letter sounds very often, as the teaching assistant works with "letters and word study kinds of things" (Patricia, interview, April 15, 2014), and I did not observe her working with letter sounds. Indeed, in six of eight observations, Patricia focused on Concept of Word with her students. She was concerned about these students being able to self-correct while they are tracking words and concentrated on syllable awareness in her lessons. Patricia said, "…we just recently finished assessing…I've Rigby'd most of the kids. And did some sort of PALS Quick Checks… I know we have some holes to fill. We need to work on syllables" (Patricia, interview, April 15, 2014).

Patricia saw her small-groups each day, although on one occasion, she had the students use the small-group time to plant seeds in the courtyard. On this day, there was no reading instruction.

A summary of Patricia's choices of content for the low-performing emergent reader group (both number and percentage of total observations), is presented in Table 4.11.

Activities. Patricia planned activities for her low-performing emergent readers that centered on syllable awareness and concept of word, as well as some sight word

Table 4.11

Number of Observed Lessons (and Corresponding Percentage) Containing Content Areas in Patricia's Low-Performing Emergent Reader Small-Group Lessons

Content	Number and Percentage
Letters/Sounds	0 (0)
COW-T	6 (75)
Writing	2 (25)
Sight Words	2 (25)
Phonological Awareness: Rhyme	0 (0)
Phonological Awareness: Syllables	4 (50)
Phonological Awareness: Beginning Sounds	0 (0)

work. Patricia noted in the first interview that she is working on syllable sorting with her students. I observed her students sorting pictures by syllables, an activity she described during the first interview (Patricia, interview, April, 15, 2014; Observation 3.2). Patricia described planning for students to work with syllables in a poem:

> What we will do tomorrow, is we will go through and sort some of the words and listen for the number of syllables in words. We'll put stickers under the words that are two-syllable words and write the number 2. And when they're pointing, it will look like "My Lit-tle" - we'll put a sticker with the number 2, "yel-low" – a sticker. And we'll clap it out. [Patricia demonstrated clapping the word with the syllables.] Listening for the number of syllables. We'll go through each line and listen for the syllables, and placed the stickers, and write the correct number of syllables under each word….
> Researcher: [Describing what Patricia is showing me.] I see. So, on the paper you have circles under the words, like where there would have been a sticker? And then if there are two-syllables, you would have a 2 written into the circle.
> Patricia: So they know that when they are reading, they take their finger and they tap it two times. [Patricia demonstrated pointing and tapping two times… My lit-tle yel-low duck.] So, they will do this when they are reading, and sometimes when they are reading they'll say, "Hey! That's two syllables." And you'll see

> them tap it two times. Eventually they won't need to do that anymore. They'll start keeping their finger there for two beats. It's a way to scaffold it a little bit. (Patricia, interview, April 15, 2014)

During half of my observations (Observations 3.1, 3.3, 3.5, and 3.7), Patricia had her students play "popcorn," an activity in which the students took turns reading a page in their book and then called on someone else to read the next page.

Patricia had her students work with sight words both in- and out-of-text. An example of in-text word work was when Patricia gave students cards with high-frequency words on them: my, for, he, you, and is. The students read the word and placed it on the pocket chart covering the matching word (Observation 3.1). An example of out-of-text word work was that the students played "Sight word parking lot" (Observation 3.1) with the some of the same words that the students had just worked with in-text. Another out-of-context sight word activity was when the students cut up words and spelled them (Observation 3.8).

A summary of Patricia's choices of activities, grouped according to content area, is presented in Table 4.12.

Resources. Patricia had many resources to use at her discretion, including publisher-created materials, teacher-created materials, and classroom materials. Additionally, Patricia had many people who were resources.

Table 4.12

Activities in Content Areas during Patricia's Low-Performing Emergent Reader Small-Group Lessons

Content	Activities
Letters/Sounds	None Observed
COW-T	Reading poem (3.1, 3.2) Popcorn, rebuilding sentence, words in context (3.3) Rereading (3.5, 3.8) Rereading, popcorn, new book, picture walk, choral read, individual read (3.7)
Writing	Labeling three words (3.4) Sentence frame (3.7)
Sight Words	Words in context, parking lot game (3.1) Spelling words (3.8)
Phonological Awareness: Rhyme	None Observed
Phonological Awareness: Syllables	Tapping twice on two-syllable words (3.1) Sorting pictures by syllables (3.2) Clapping syllables (3.5) Clapping syllables (3.7)
Phonological Awareness: Beginning Sounds	None Observed

Human resources. Patricia relied on her team as well as the instructional coach who worked with the team. She said,

> So it's a very supportive group. And the administration is very supportive, too. And if I need help, or I feel like I'm struggling, for example, [when I was] making new groups, I enlisted the help of one of the specialists to come in, and I'm, like, I have this issue, I have 10 kids reading at a Level C, I have… I'm not great at piecing everything together. She helped me with my rotations. "This is my focus; I want to get these guys up." So she helped me create the new schedule. (Patricia, interview, April 15, 2014)

Patricia values the support that she received from her team in determining how she can best help her students:

> And we do a lot of really "kid talking" and let's figure out where are these kids? Are they moving forward? Are they sort of stagnant? Why? We talk a lot about that. Something's not quite right. And why? Why is that? So, there's a lot of support. (Patricia, interview, May 27, 2014)

Patricia also talked about how having a co-teacher for literacy in a past year helped her now: "So, last year my partner was a literacy specialist. We sort of co-taught…and so I'm actually using some of the materials that she had given me last year" (Patricia, interview, April 15, 2014). Patricia said that she examined the lesson plans that she used last year with the reading specialist, and referred to lesson plans from other reading specialists as well (Patricia, interview, April 15, 2014).

There are many people who worked with the students in Patricia's room: two teaching assistants, a special education teacher, and a reading specialist. Although Patricia welcomed the help, "She said that sometimes it was hard having the SPED cluster because, "There are so many people coming in and out it can be distracting at times" (Observation 3.8).

Publisher-created materials. Patricia used various publisher-created leveled books for student reading, including Reading A-Z (Observations 3.2, 3.8), Harcourt (Observation 3.7), Sunshine (Observation 3.7), and Rigby (Observations 3.5, 3.8). Patricia also used some poetry that she put on a pocket chart. She explained her decision:

> Another reason why I go back and forth between books and poems is because you can work on two-syllable words and you're going left to right and you're going top to bottom. And these beginning books, they are usually just one sentence. So they are getting left to right, but they are not getting the top to bottom. So we sort of go back and forth. Does that make sense?
> Researcher: Yes. So with a book, you are only going left to right, because there's only one sentence. But with a poem you are going left to right, of course, but you are also going top to bottom.

> Patricia: Yes. And you are going left to right. And then again, left to right. And again, left to right. (Patricia, interview, April 15, 2014)

Teacher-created materials. Patricia created materials to fit her needs, including a poem written on sentence strips, word cards for matching words in a pocket-chart poem, a "parking lot" sight word game (Observation 3.1), a syllable graph for sorting pictures by number of syllables (Observation 3.2), a flip book template (Observation 3.4), a worksheet for students "to cut out and glue in the right order to create the high-frequency words" (Observation 3.8), and a sentence template following the pattern in a book that included a space to draw a picture: "The paper said, "A _____ is not _____ friend." The students chose a creature to go in the first blank and wrote "my" in the second blank." (Observation 3.7).

Classroom materials. Patricia used various classroom materials including a pocket chart and toy cars (Observation 3.1), a "pointing finger" pointer (Observation 3.1), colored paper, pencils, and glue sticks (Observation 3.4).

Research Question Number Two: What interactive decisions do kindergarten teachers at Springwell Elementary School make as they implement reading instruction for low-performing emergent readers?

Similar to both Isabella and Elizabeth, Patricia made procedural and substantive decisions as she implemented reading instruction for low-performing emergent readers.

Responding to Student Behaviors

Patricia was able to describe her preactive decisions more precisely than her interactive ones. She spoke in generalities about changing course during her small-group

lessons, sometimes taking "a step back." Patricia gave an example of taking a step back, as she related students' trouble tracking print with student confusion about syllables

> ...Sometimes if I feel like they're not quite getting what I'm doing… I'll get up and try to make something on the fly that I think might… Maybe I need to take a step back, do "first" before... For example, I think we were doing some syllable work with some of the kids, we might be reading a passage, and I can tell, they might having trouble tracking, so I might stop and go back and let's take some of the words out of that book and sort them first and clap them out, and practice clapping them out and then going back to the book. When they get to that word again though start thinking about the number of syllables and sometimes I might take a pencil and write underneath a word, you know, two syllables or three syllables, so that when they're reading they can remember to leave their finger two times or three times when they are touching that word. So that's an example of maybe taking a step back. (Patricia, interview, May 27, 2014)

The vignette at the beginning of Patricia's Case illustrates an interaction with a student regarding syllables, as she helped the student track accurately by attending to the number of syllables in a multi-syllabic word (Observation 3.7).

Although Patricia is not able to describe her decision-making, her responses to student behaviors (i.e., stuck, incorrect, and correct) varied, demonstrating that she made both procedural and substantive decisions.

Student Stuck

When students were stuck, Elizabeth made considerably more procedural decisions (95%) than substantive decisions (5%), similar to the percentages that Isabella made with her Red Group. Table 4.13 displays the number and relative percentage of both procedural and substantive decisions made by Patricia. Figure 4.7 displays a decision tree showing the actions Patricia took in response to a student being stuck.

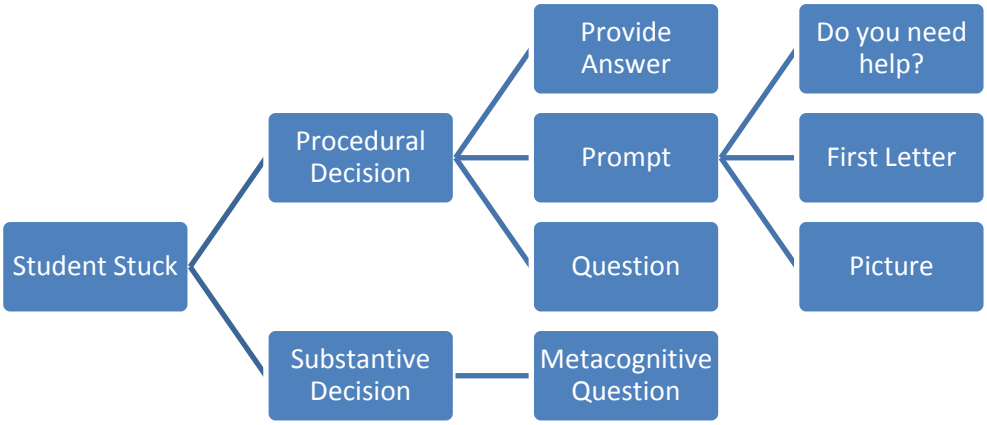
Table 4.13

Number (and Percentage) of Patricia's Procedural and Substantive Decisions for Student Stuck in Low-Performing Emergent Reader Small-Group Lessons

	Patricia
Procedural Decisions	20 (95)
Substantive Decisions	1 (5)

Figure 4.7

Patricia's Decision Tree for Student Stuck



Next, I will discuss the types of decisions that Patricia made and the resulting actions.

Procedural Decisions – Student Stuck

Patricia made procedural decisions when students were stuck and could not figure out a word or answer a question. Patricia responded by (1) providing the answer, (2) prompting and (3) questioning, the same general procedural decisions that both Isabella and Elizabeth made. However, her prompts were slightly different.

Providing the Answer. Patricia provided the answer to a student on one occasion. "Student 1 read, 'The nuts…' The next word was 'are.' Patricia said, 'are. Let's start from the beginning'" (Observation 3.8).

Prompting. Patricia prompted students in several ways, including (1) asking if they needed help, (2) prompting for the first letter in a word, (3) prompting students to look at pictures, and (4) prompting students to try again.

Prompting – Do you need help? Several times, Patricia asked students if they needed help when they were stuck. Once, the students took turns reading the "Duck to Bunny" poem on the pocket chart. Patricia asked Student 2 to try. "Student 2 took the pointer but stayed seated. Patricia said, 'Do you want some help?' Patricia put her hand on the pointer with Student 2 and guided her pointing" (Observation 3.1.3). Here, Patricia asked if the student needed help and then guided the student to point to the words.

Prompting – Think about the first letter. On three occasions, Patricia prompted students to think about the first letter of a word when they were stuck. When students were taking turns reading a poem "Duck to Bunny" on the pocket chart, "Student 3 stood up next to the poem, took the pointer, turned toward the poem and then back to Patricia. Student 3 said, 'I forget.' Patricia said, 'Look at that first letter'" (Observation 3.1.4). In this case, when the student was stuck, Patricia prompted him to look at the first letter.

Prompting – Look at the picture. On two occasions, Patricia prompted students to look at the picture to help them figure out an unknown word. Once, the students reread *Time for Dinner* (Rigby). "Student 1 got called on to read, but didn't say anything.

Patricia said, 'If you don't know what it says, you can look at the picture for clues'" (Observation 3.5.2). Here, when the student was stuck, Patricia prompted him to look at the picture to figure out the unknown words.

Questioning. Patricia sometimes asked students questions if they were stuck. One example of Patricia's use of questioning was when the students reread *Time for Dinner* (Rigby). The pattern to the book is "Oink, Oink. Here we come," where "oink, oink" stands for the noise that each animal makes as it is called to dinner on the farm. The students played "popcorn" and took turns calling on one another. The next page said, "Quack, quack. Here we come." When the student got stuck, Patricia asked a question.

> Student 1 was called on but didn't say. Patricia pointed to the picture of the duck in the book and asked, "What is that?" Student 1 said, "Duck." Patricia asked, "What do ducks say?" Student 1 said, "Quack." Patricia asked, "What does this say?" Student 1 said, "Quack, Quack." (Observation 3.5.3)

In this case, when the student answered the first question correctly, Patricia continued asking questions until the student was able to read the word.

Substantive Decisions – Student Stuck

In addition to procedural decisions when students were stuck, on one occasion, Patricia also made a substantive one, asking a student a metacognitive question. Isabella and Elizabeth also asked metacognitive questions, in addition to offering explicit instruction and specific praise (Elizabeth only).

Asking a metacognitive question. In one interactive sequence, Patricia asked a student a metacognitive question. Students wrote in the words for a sentence frame, "A _____ is not _____ friend," where the first blank is for a creature and the word

"my" goes in the second blank. Student 1 wrote in his animal, and was trying to write "my." He was stuck after "m." After Patricia asked what comes next and the student shrugged his shoulders, "Patricia said, 'Where can you find that word?' Student 1 shrugged his shoulders. Patricia said, 'Look at the word wall. Where would you look?" (Observation 3.7.6). Patricia did not tell him how to spell "my," but first asked him a question asking him how he could help himself. When he was stuck again, Patricia prompted him to go look at the word wall to find the word.

Student Incorrect

When students were incorrect, Patricia made many more procedural decisions (83%) than substantive decisions (17%). Table 4.14 displays the number and relative percentage of both procedural and substantive decisions made by Patricia. Figure 4.8 displays a decision tree showing the actions Patricia took in response to a student being incorrect.

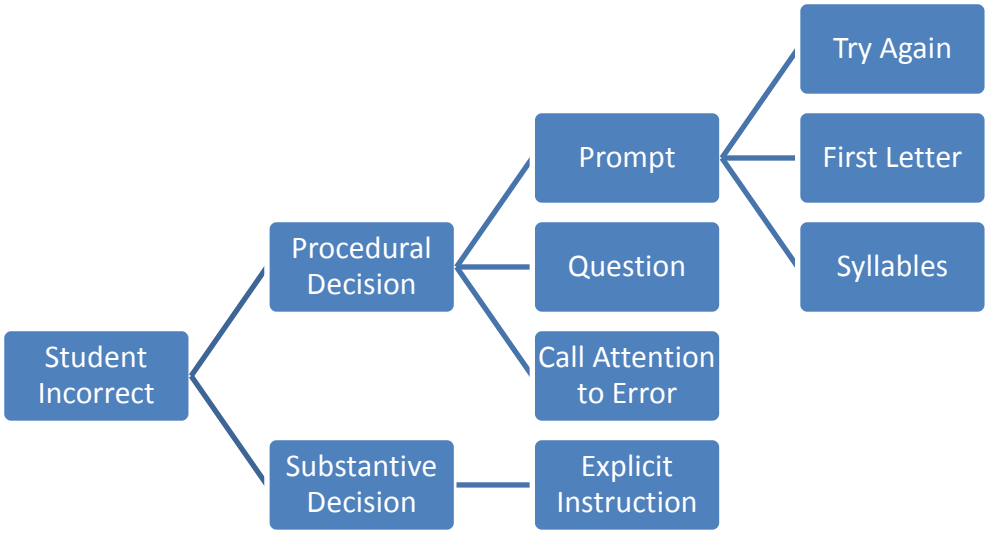
Table 4.14

Number (and Percentage) of Patricia's Procedural and Substantive Decisions for Student Incorrect in Low-Performing Emergent Reader Small-Group Lessons

	Patricia
Procedural Decisions	19 (83)
Substantive Decisions	4 (17)

Figure 4.8

Patricia's Decision Tree for Student Incorrect



Next, I will discuss the types of decisions that Patricia made and the resulting actions.

Procedural Decisions – Student Incorrect

Patricia made procedural decisions when students were read incorrectly or answered incorrectly. Similar to Isabella and Elizabeth, Patricia used (1) prompting, (2) questioning, (3) providing answers and (4) calling attention to errors.

Prompting. Patricia prompted students in various ways, including (1) prompting for beginning letter and sound, (2) prompting for number of syllables, (3) and prompting to try again.

Prompting – Think about the first letter. One time when a student made an error, Patricia prompted a student to think about the first letter and then she made the sound. The students took turns reading the poem, "Duck to Bunny." On Student 2's turn, he

miscued “duck” for “little.” Patricia said, “Look at that first letter /llllll/” (Observation 3.2.6).

Prompting – Think about the number of syllables. Several times when students got off track reading, Patricia prompted them to think about the number of syllables. Once, a student filled in the sentence frame “A _____ is not _____ friend” with “A CROCODL is not MY friend.” Patricia asked Student 3 to read what she wrote and

> Student 3 got off track on “crocodile” by pointing to “crocodile” and saying “croc” then pointing to the next few words and saying “o” “dile.” Patricia said, “Let’s clap that.” Student 3 clapped “crocodile.” Patricia wrote the number “3” under “CROCODL” and Student 3 reread her sentence properly. (Observation 3.7.5)

Prompting – Try that again. On three occasions, Patricia prompted students to try again when they were incorrect. Once, when the students parked cars on high-frequency words on a “Parking Lot” paper, Patricia asked a student to spell, “the.” “Student 2 said, ‘T E.’ Patricia asked, ‘How do you spell it?’ Student 2 said, ‘THE’” (Observation 3.1.7). Here, Patricia indicated that the student try again to spell the word “the.”

Questioning. Patricia asked questions three times when students were incorrect. On two of the occasions, Patricia’s questions regarded the number of syllables in words. For example, when the students played “popcorn” with the book *My Friend* (Sunshine), one student “got off track on ‘spider,’ pointing to ‘spider’ and saying, ‘spi’ and then to the next word and saying, ‘der.’ Patricia said, ‘How many syllables in “spider” Student 3?” (Observation 3.7.2). Once the student answered “two,” Patricia asked her to try reading the page again.

Calling Attention to Errors. On two occasions, Patricia called attention to student errors. Once, when a student reread *The Hungry Squirrel* (Rigby), he "substituted the word 'the' for 'little.' The teacher, Patricia, put her finger on the word 'little' and Student 1 read 'little' then read the rest of the page" (Observation 3.8.1). Here, Patricia did not say anything, but pointed to the word that the student read incorrectly.

Substantive Decisions – Student Incorrect

In addition to making procedural decisions when students were incorrect, Patricia made four substantive decisions and offered explicit instruction.

Offering explicit instruction. One time, a student finished gluing down letters for high-frequency words. "Patricia leaned toward him and said, 'Read these to me one more time.' Student 1 read, 'we, like, to, go, we'" (Observation 3.8.5). The student made an error on the last word and read "we" for "went." "Patricia said, 'There is "we" in it. This is "went."' Student 1 said, 'went'" (Observation 3.8.5).

Student Correct

About half of the time when students were correct, Patricia did not respond (54%). In contrast to the decisions that she made when students were stuck or incorrect, where the number of procedural decisions far out-weighed substantive decisions, Patricia made the same number of substantive decisions (22%) as procedural decisions (22%) when students were correct. Notably, both Isabella and Elizabeth made more substantive than procedural decisions when students were correct. Table 4.15 displays the number and relative percentage of both procedural and substantive decisions made by Patricia. Figure 4.9 displays a decision tree showing the actions Patricia took in response to a

student being correct. Next, I will discuss the types of decisions that Patricia made and the resulting actions.

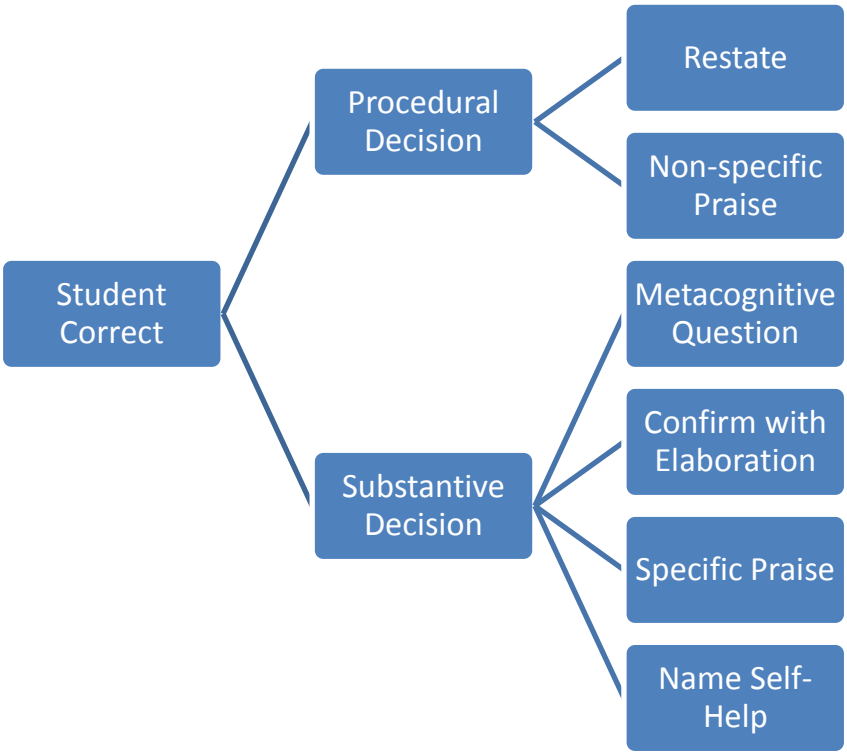
Table 4.15

Number (and Percentage) of Patricia's Procedural and Substantive Decisions for Student Correct in Low-Performing Emergent Reader Small-Group Lessons

	Patricia
Procedural Decisions	15 (22)
Substantive Decisions	15 (22)
No Response	38 (54)

Figure 4.9

Patricia's Decision Tree for Student Correct



Procedural Decisions – Student Correct

Patricia's procedural decisions include (1) confirming without restatement, (2) confirming with restatement, and (3) offering non-specific praise, similar to Isabella and Elizabeth.

Confirm without restatement. Patricia once confirmed that a student was correct without restating what the student said. The students reread flip books about plants that they had made previously. Patricia opened the second flap and said, "This is a hard word." Student 4 said, "Soil." Patricia responded with "Yes. Here we go" (Observation 3.5.5). Here Patricia simply confirmed that the student was correct and moved on to reading the book.

Confirm with restatement. Once, when students were cutting apart letters and gluing them down to spell high-frequency words, Patricia helped Student 2 fix the spelling of "we" from "wwee." After Student 2 had the word spelled correctly, Patricia asked "'What word is that?' Student 1 said, 'We.' Patricia said, 'Yes. We. WE'" (Observation 3.8.4). Here, Patricia confirmed that the student was correct with "Yes" and restated what the student said, "We." Patricia then elaborated by spelling the word again.

Non-specific praise. Patricia offered non-specific praise seven times when students read correctly or answered questions correctly. On one occasion when students read the poem, "Duck to Bunny," Student 1 read the poem and pointed to the words, tapping twice on the two-syllable words. Patricia said that was great and clapped (Observation 3.1.2). On another day,

> Student 1 took a turn reading the poem. He pointed to all of the words correctly until he got to the very last line. He got off track on the word yellow, and moved ahead to bunny. Student number one self-corrected his error. Patricia told him "great job!" (Observation 3.2.7)

In both instances, Patricia offered praise, but did not say specifically state why she offered praise.

Substantive Decisions – Student Correct

In addition to making procedural decisions when students were correct, Patricia made substantive ones as well. These decisions include (1) asking a metacognitive question, (2) confirming that the student is correct with elaboration, and (3) naming student self-help behaviors. In addition to the decisions that Patricia made, Isabella and Elizabeth also offered specific praise and explicit instruction.

Asking a Metacognitive Question and Confirming with Elaboration. On seven occasions, Patricia asked students metacognitive questions when they were correct. On two occasions, Patricia followed the same pattern of interaction with three different students. In one set of these interactions, Patricia asked each student to find a particular word on the pocket chart. When each student correctly identified the word, Patricia asked how the student knew the word. Each student indicated the first letter. Patricia then confirmed their response and elaborated on what the student did or said:

> Patricia said, "Student 1, can you find the word 'can'?" Student 1 went to the pocket chart and pointed to "can." Patricia said, "How did you know?" Student 1 pointed to the C. Patricia said, "Yes, it begins with C." (Observation 3.3.1)

> Patricia said, "Student 2, can you find the word 'you'?" Student 2 went to the pocket chart and pointed to "you." Patricia said, "How did you know?" Student 2 said, "Y." Patricia said, "Yes, there is a Y at the beginning." (Observation 3.3.2)

> Patricia said, "Student 4, can you find the word 'go?" Student 3 went to the pocket chart and pointed to "go." Patricia said, "How did you know?" Student 3 said, "It starts with G." Patricia said, "Yes, there is a G at the beginning." (Observation 3.3.3)

In these cases, Patricia used both metacognitive questions and elaborated on what the students said or did correctly to identify the words in question.

Naming student self-help behaviors. On two occasions, Patricia decided to name students' self-help behaviors. One example happened when Patricia had students driving toy cars to high-frequency words on a "Parking Lot" paper. Patricia called out some words and then asked Student 2 to call out the next word.

> Student 2 said, "/y/ /y/ /y/ you." Patricia said, "Do you know what I heard you do? I heard you making the sound for Y /y/." [To the group…] Patricia said, "Did you hear what Student 2 just said?" He said /y/ for Y. He got his mouth ready." (Observation 3.1.8)

Here, when the student got his mouth ready and said, "/y/ /y/ /y/," Patricia named this behavior and even talked to the whole group about what the student did.

Research Question Number Three: To what degree do preactive and interactive decisions of kindergarten teachers at Springwell Elementary School correspond as they plan and implement reading instruction for low-performing emergent readers?

Patricia's preactive and interactive decisions generally correspond. During her interviews, Patricia spoke about her concern for students needing to develop an understanding of syllables in order to develop COW-T: "So my goal for this group, after assessing them, I realized that they need more concept of word. Basically, concept of word is being able to track a sentence without getting tripped over multisyllabic words" (Patricia, interview, April 15, 2014). Indeed, she planned one lesson where the students

sorted syllables, and included activities related to syllables during three other observed small-group lessons. Patricia discussed the importance of using both poems and books for student learning (Patricia, interview, April 15, 2014), and she planned and implemented lessons where students worked with poems (Observations 3.1, 3.2) and with books (Observations 3.3, 3.5, 3.7).

Patricia's preactive decisions about small-group instruction sometimes prohibited her from making and interactive decisions about reading instruction. For example, when Patricia decided to use the small-group time to plant seeds, the decision prohibited her from making interactive decisions regarding reading (Observation 3.6).

Cross-Case Findings

In the section above, I presented three case studies of classroom reading instruction for low-performing emergent readers: Isabella's classroom, Elizabeth's classroom, and Patricia's classroom. Although differences exist between the cases, on the whole, the cases are similar. In this section, I examine the overall findings of this capstone study. A summary of the findings is shown in Table 4.16.

Finding One

Finding One: *Kindergarten teachers at Springwell Elementary School relied primarily on assessed Rigby (Houghton Mifflin Harcourt, 2007) reading levels to flexibly group students for small-group instruction during their literacy block. The prominent focus on Rigby levels may hinder teachers from addressing multiple indicators of emergent reader development.*

Table 4.16

Summary of Findings

Finding One	Kindergarten teachers at Springwell Elementary School relied primarily on assessed Rigby (Houghton Mifflin Harcourt, 2007) reading levels to flexibly group students for small-group instruction during their literacy block. The prominent focus on Rigby levels may hinder teachers from addressing multiple indicators of emergent reader development.
Finding Two	Kindergarten teachers at Springwell Elementary School often planned and implemented differentiated small-group reading instruction for low-performing emergent readers. However, teachers did not appear to use a *systematic approach*, as instructional content and activities were delivered inconsistently; at times, teachers offered activities other than reading instruction during designated small-group time.
Finding Three	During interactive teaching, kindergarten teachers at Springwell Elementary School made two types of "pedagogical maneuvering decisions" (Duffy & Ball, 1983, p. 16) in response to student behaviors (i.e., stuck, incorrect, and correct): *procedural* (i.e., activity-oriented) and *substantive* (i.e., goal-focused). Within the initiation-response-feedback (IRF) framework, teachers missed opportunities to make substantive decisions to exploit their feedback turns. Additionally, instructional activities that seemed to be more goal-focused increased the potential for teachers to make substantive decisions.

Student Grouping

All three kindergarten teachers at Springwell Elementary School noted that they used assessment data from Rigby (Houghton Mifflin Harcourt, 2007), PALS-K (Invernizzi, Swank et al., 2003), and teacher observation to group students for small-group reading instruction. Although each teacher discussed grouping decisions in a slightly different way, they all emphasized grouping their students according to reading

level as measured on assessments. For example, Isabella noted that teachers use PALS-K (Invernizzi, Swank et al., 2003), Rigby (Houghton Mifflin Harcourt, 2007), writing, spelling and teacher notes, and specifically commented on the fact that the teachers put students in groups with similar students (Isabella, interview, April 11, 2014; see pp. 98-99). Observational data supported the notion that the students were grouped by reading achievement, as students in various groups appeared to have skills that were more similar than different.

Interview and observation data indicate that teachers relied most heavily on Rigby assessments in order to group students homogeneously by reading level. When Isabella discussed one of her groups, she said, "…let's go up to my highest group, now reading Level C books. And I know that because we just gave them the Rigby" (Isabella, interview, April 11, 2014). Similarly, Elizabeth emphasized Rigby "as their official reading assessment at the end of each quarter," but added that she looked at the number of known sight words and even comprehension on Rigby before making final decisions (Elizabeth, interview, April 11, 2014; see pp. 126-127). Patricia discussed basing her literacy grouping decisions on students' Guided Reading Level, and noted that students are grouped "according to where they were reading, according to their reading level" (Patricia, interview, May 27, 2014; see p. 152). During her second interview, Patricia said that by administering PALS-K (spring), she thought that all but one of her students had "a pretty good, firm concept of word….but I want to Rigby them. I had Rigby'd in the winter. And I want to see the progress" (Patricia, interview, May 27, 2014). Patricia's comments highlight the focus on Rigby levels.

Teachers did comment that they used data other than Rigby levels, but were not explicit in how they used that data. For example, Patricia said that she "some sort of PALS Quick Checks" (Patricia, interview, April 15, 2014) at the same time she used Rigby. Elizabeth discussed using PALS-K Letter Sounds Quick Checks for grouping students at the beginning of the year, before using Rigby (Elizabeth, interview, May 21, 2014), but did not say that the Quick Check information was a factor in students' group placement later in the year. Even when teachers talked about how helpful it was to sit down with their kindergarten team and the administration and review data, the focus was on reading level. Patricia said, "We can follow the graph from where [everyone was]. We have everyone graphed out from the beginning of the year. Who was on this level and this level and this level?" (Patricia, interview, May 27, 2014).

Teachers worked to create small-groups that had similar students, and these groups were also somewhat flexible. During the observation period, all three teachers moved a student into a different group, and Elizabeth moved two. Isabella moved a student from the lowest-performing emergent-reader group (Red Group) into the second-lowest performing group (Yellow Group) (Observation 1.6). Elizabeth and Patricia moved a student into the low-performing emergent-reader group in their respective classrooms (Observation 2.4; Patricia, interview, April 15, 2014), each saying that they had "Rigby'd" the student and found that the student was performing lower than the other students in the original group. Elizabeth also moved a student out of the low-performing emergent-reader group after giving the student a Rigby assessment (Observation 2.8).

Literacy Block Management

All three kindergarten teachers organized a daily literacy block that started between 10:05 and 10:10 am and ran until between 11:45 am and noon. Each teacher started the literacy block with a whole-group lesson, although the content of the lesson was different in each classroom: Isabella's whole-group lessons related to writing; Elizabeth's whole-group lessons included a read-aloud (typically a content area book) and time for journal writing; Patricia's large-group lessons centered on a content area or writing, and sometimes included a read-aloud. After whole-group lessons, students moved into small-group rotations where students took turns coming to the teacher for small-group instruction with their designated group. Teachers posted schedules in their rooms so that students knew where they should be at a given time. Figure 4.10 displays the literacy block schedule in each classroom, specifically noting the low-performing emergent reader groups.

Figure 4.10

Kindergarten Teachers' Daily Literacy Block Schedule

	Isabella	**Elizabeth**	**Patricia**
Whole Group	10:10-10:45	Whole-group 10:05-10:35 Small-Group 10:20-10:35	10:05-10:25
Rotation 1	10:45-11:05*	10:35-10:55*	10:25-10:45*
Rotation 2	11:05-11:25	10:55-11:15	10:45-11:05
Rotation 3	11:25-11:45	11:15-11:35	11:05-11:25
Rotation 4	11:45-12:00*	11:35-11:55	11:25-11:45

*Low-performing emergent-reader group

For small-group instruction, Isabella and Patricia each saw four groups daily while Elizabeth saw five groups. Elizabeth saw this fifth group (not the low-performing

emergent group) during the whole-group writing portion of the literacy block for 15 minutes. Small-group rotations in each classroom were similar: when students were not with the teacher for small-group instruction, they were at other activities. Students typically remained with their small-group for the entire literacy block, moving from activity to activity every 20 minutes. One exception to students remaining as a small-group was found in Elizabeth's room, where the students in her first group that she saw during the writing portion of the literacy block joined with other students for part of the rotations.

In general, students took turns at different rotations in each classroom, as displayed in Figure 4.11. However, all low-performing emergent readers went to a reading specialist for one rotation rather than having an independent reading station like the other students in each classroom. In Patricia's classroom, the low-performing emergent readers also worked with the special education assistant for one rotation. In Isabella's classroom, some of the low-performing emergent readers also went with the ESOL assistant for one rotation. So, in all three classrooms, during small-group rotations, low-performing emergent readers spent, at most, ten minutes (in Isabella and Elizabeth's classrooms) or zero minutes (in Patricia's classroom) working independently. Students worked with two to four different teachers or teaching assistants each day.

By analyzing interview data, observation data, and classroom scheduling documentation, I determined that during the observation period of this capstone study, kindergarten teachers at Springwell Elementary School used mainly Rigby reading levels

to group students with similar skills, and structured their literacy blocks for differentiated small-group reading instruction.

Figure 4.11

Kindergarten Teachers' Daily Literacy Block Rotations

Isabella	Elizabeth	Patricia
Teacher: small-group instruction	Teacher: small-group instruction	Teacher: small-group instruction
Teacher assistant: *Handwriting without Tears*	Teacher assistant: *Handwriting without Tears* or word study	Teacher assistant: *Handwriting without Tears* or word study
Independent: computers and iPads	Independent: computers and iPads	Independent: reading
Independent: Word study	Independent: alphabet activities or writing	Independent: writing center
Reading Specialist*	Reading Specialist*	Reading Specialist*
ESOL teaching assistant*		Special Education teaching assistant*

*Low-performing emergent-reader groups only

Finding Two

Finding Two: *Kindergarten teachers at Springwell Elementary School often planned and implemented differentiated small-group reading instruction for low-performing emergent readers. However, teachers did not appear to use a systematic approach, as instructional content and activities were delivered inconsistently; at times, teachers offered activities other than reading instruction during designated small-group time.*

Differentiated Small-Group Instruction

Kindergarten teachers frequently planned for differentiated small-group reading instruction. They did not follow a particular program, but rather designed instruction

based on assessed student need, state standards, district guidelines, and school pacing guides (Isabella, interview, May 30, 2014). Patricia noted the benefits of designing her own instruction rather than using a program with respect to being able to differentiate instruction (Patricia, interview, April 15, 2014; see pp. 59-60), and Isabella described the specific context of Springwell Elementary that teachers must address in order to teach all students. When asked about challenges at Springwell Elementary School, Isabella said:

> Diversity is a great thing, but it can be a thing that makes teaching reading hard. You have kids that are above, below, middle, ESOL, never-been-to-school, and figuring SPED, and figuring how to make all those adults work, be on the same page…How do you make it all work? And that can be challenging. That can be really challenging. Because every person comes with your own experiences, your ideas, and the way things should work, how things work. That's hard. (Isabella, interview, May 30, 2014)

In addition to teachers' reports of using differentiated instruction, I observed teachers implementing differentiated instruction in all three classrooms. For example, one day in Elizabeth's classroom, I noted that the books she used with each of her small-groups were not just different, but were also at various guided reading levels (GRL), including: *Big Sea Animals* (Rigby, GRL B); *Sally and the Leaves* (Rigby, GRL C); *The Ice Fair* (Harcourt, GRL D); *The Fire on Toytown Hill* (Harcourt, GRL F); and *The Knight at Dawn* (Random House, GRL M) (Observation 2.4). These guided reading levels range from pre-primer to late second grade, corroborating evidence that Elizabeth is working to differentiate reading instruction in her classroom.

Although the teachers designed and carried out a structured a daily literacy block in which students moved between rotations, including small-group reading instruction, teachers implemented small-group instruction for low-performing emergent readers that

varied in organization from day to day within each classroom, and between classrooms, in both content and activities.

Content

Teachers focused on different content in their low-performing emergent reader lessons from day to day. That is, within each classroom, the content of lessons was inconsistent. Table 4.17 displays the number and the corresponding percentage of observed lessons containing particular content. Most days, teachers addressed multiple content areas. I will describe each content area in turn.

Table 4.17

Content of Small-Group Lessons in Classrooms: Number (Percentage)

	Isabella (Yellow Group)	Isabella (Red Group)	Elizabeth	Patricia
COW-T	4 (50)	6 (75)	4 (50)	6 (75)
Letters and sounds/ Word Study	3 (37.5)	2 (25)	3 (37.5)	0 (0)
Writing	0 (0)	0 (0)	2 (25)	2 (25)
Sight Words	2 (25)	1 (12.5)	1 (12.5)	2 (25)
Phonological Awareness: Rhyme	0 (0)	0 (0)	1 (12.5)	0 (0)
Phonological Awareness: Syllables	0 (0)	0 (0)	0 (0)	4 (50)
Phonological Awareness: Beginning Sounds	3 (37.5)	2 (25)	0 (0)	0 (0)

COW-T. All teachers focused on COW-T, but not during every lesson. Isabella's Yellow Group and Elizabeth's group only focused on COW-T in four of the

eight observations. Isabella's Red Group and Patricia's group focused on COW-T six of the eight observations.

Letters and Sounds. Isabella worked with letters and sounds twice times with her Red Group, and Elizabeth did so three times. Patricia did not work with letters and sounds in any of my observations. Isabella's Yellow Group did not work on letters and sounds, but rather worked on same-vowel word families, like –op, -ot, and –og, three times.

Phonological Awareness. Teachers focused on different aspects of phonological awareness. Elizabeth spent one small-group lesson focused on rhyming, Patricia focused on syllable awareness on four days, and Isabella focused on beginning sounds on two occasions with the Red Group and on three occasions with the Yellow Group.

Writing. Elizabeth and Patricia both had students writing on two occasions. Isabella did not focus on writing in either small-group.

Sight Words. All of the teachers focused on sight words on at least one day. Isabella's Yellow Group and Patricia's group focused on sight words on two occasions.

Summary for Content. Overall, none of the teachers addressed content consistently in their own classrooms. One possible explanation for the differences between classrooms may be that there are multiple teachers working with students in each classroom, and various teaching assistants and reading specialists are responsible for different content areas: Elizabeth's and Patricia's teaching assistants provided word study instruction to their students, whereas Isabella delivered word study instruction in her small-groups. In an interview, Elizabeth noted that she:

> had gone away from letters and sounds for a while, because I knew that they were doing that in Title I, and I didn't want to repeat the same activities…and then I realized that we really need to go back to hitting it, even if it's just for a few minutes. Because they're not doing as well on the [PALS] Quick Checks as I would like them to… (Elizabeth, interview, May 21, 2014)

Elizabeth's comment speaks to the complexities matching instruction to assessed student needs, as well as coordinating instruction between teachers.

Activities

Teachers completed various activities in their small-group instruction which correspond to the content areas discussed above. Most of these activities had instructional value for emergent readers, although some activities did not. I will discuss each teacher's activities in turn.

Isabella – Yellow Group. Many of Isabella's activities had high instructional value: reading, rereading, sorting words and pictures by same-vowel word families (Yellow Group), and sorting words and pictures by beginning sound (Red Group). On the other hand, Isabella also spent one day reading a book to students and having them create writing about cause and effect, something she did with each of her groups that day (Observation 1.7). Isabella spent one day of reading instruction examining a non-fiction social studies book and a template that students would use to create their own non-fiction book about the social studies content (Observation 1.8). Appendix K shows each observed small-group with respect to content and activities for Isabella's Yellow Group.

Isabella – Red Group. Isabella conducted many instructional activities such as rereading, oral reading, and choral reading with her students in the Red Group. She also worked with letters in three instances: circling letters, writing letters, and playing a

letter/sound BINGO game. However, she also spent one day examining a non-fiction book template, an activity better suited for the whole class (Observation 1.8). Appendix L shows each observed small-group with respect to content and activities for Isabella's Red Group.

Elizabeth. On three occasions when Elizabeth worked on reading activities, she also reviewed letters and sounds. On one occasion, Elizabeth had her students reread a book when they arrived at the table (Observation 2.1). She did not conduct reading instruction during half of the observed groups. Instead, she had the students writing twice, once for Mother's Day (Observation 2.5) and once as a follow-up to a farm field trip (Observation 2.6); sequencing a story once (Observation 2.7); and focusing on rhyming (Observation 2.3) once. Appendix M shows each observed small-group with respect to content and activities for Elizabeth's group.

Patricia. Patricia centered her small-group instruction on reading and rereading poems and books, and clapping syllables. In four of the observed lessons, Patricia had the students reread the books that went home the night before in homework baggies (Observations 3.3, 3.5, 3.7, and 3.8). Patricia spent two of the observed lessons not engaging her students in reading instruction. One of those times, the students made a flip-book (Observation 3.4), and the other the students planted seeds (Observation 3.7). One activity that Patricia used with her emergent readers that warrants scrutiny was "popcorn" reading, a variation of round-robin reading, where students call on other students to read the next page in a book. Students were not as engaged in this activity as they were when students were rereading books, as evidenced by confusion over what

page students were supposed to be reading. Appendix N shows each observed small-group with respect to content and activities for Patricia's group.

In general, teachers conducted small-group reading instruction where students were practicing voice-to-print tracking (Blackwell-Bullock et al., 2009) and playing games and doing activities that promote phonological awareness and letter-sound correspondence (Snow et al., 1998). That is, teachers' chosen activities and materials were indeed appropriate for low-performing emergent students. At times, teachers did not engage their students in reading instruction, but did other activities including writing (an activity also done during another part of the literacy block) and planting seeds. Overall, the teachers did not appear to follow a consistent daily routine (Bohn et al., 2004) nor offer systematic instruction (Foorman & Torgesen, 2001) for their low-performing emergent readers.

Finding Three

Finding Three: *During interactive teaching, kindergarten teachers at Springwell Elementary School made two types of "pedagogical maneuvering decisions" (Duffy & Ball, 1983, p. 16) in response to student behaviors (i.e., stuck, incorrect, and correct):* procedural *(i.e., activity-oriented) and* substantive *(i.e., goal-focused). Within the initiation-response-feedback (IRF) framework, teachers missed opportunities to make substantive decisions to exploit their feedback turns. Additionally, instructional activities that seemed to be more goal-focused increased the potential for teachers to make substantive decisions.*

Initiation-Response-Feedback (IRF) Sequences and Interactive Sequences

There were two general dimensions of teachers' small-group lesson instruction: teacher-managed activities and student-managed activities (Connor et al., 2004). During teacher-managed instruction, teachers moved instruction along by asking students questions, and when students answered, teachers provided feedback. One example of a teacher-managed activity was when Elizabeth asked her students to find picture that rhymed with a given picture:

> Elizabeth said, "What rhymes with hug?" Student 2 said "bug" and held out the picture of a bug. Student 1 said, "rip" and held out the picture of rip. Elizabeth reached for the picture of the bug but stopped and took the picture of rip. She said, "Let's look at what Student 1 said, hug-rip. Do those rhyme?" Student 2 said, "No." The teacher took the bug picture and said, "How about hug-bug?" Student 2 said, "Yes." Elizabeth said, "hug-bug. They rhyme." (Observation 2.3.3)

Here, Elizabeth managed the instruction by keeping the students' attention focused on what she was doing, and asking questions to move the instructional activity along.

In general, teachers managed small-group reading instruction for low-performing emergent readers. Specifically, teachers often initiated "monologic" (Molinari, Mameli, & Gnisci, 2013) interactions for their didactic purposes. In these cases, teachers initiated an interaction (i.e., initiation), students responded (i.e., response), and teachers sometimes offered feedback (i.e., feedback). For example:

> Initiation: Patricia asked a student to read a poem on a pocket chart.
> Response: The student read the poem correctly.
> Feedback: Patricia said that was great and clapped (Observation 3.1.2).

After Patricia offered feedback, she then moved on to ask the next student to read the poem. In this case, the initiation-response-feedback (IRF) sequence involved only one

turn, but in many other instances, the teacher connected several IRF sequences, resulting in an interactive sequence (Wells, 1996). An example of an interactive sequence containing three IRF sequences occurred when Isabella reread the book *Fruit* (Reading A-Z) on the Smart Board with her Red Group:

> Initiation 1: Isabella asked Student 4 to highlight the word "this."
> Response 1: Student 4 highlighted "this."
> Feedback 1: *Isabella did not use this feedback turn.*
> Initiation 2: Isabella asked Student 1 to read the page while she pointed.
> Response 2: Student 1 read, "This is a banana."
> Feedback 2: Isabella said, "Good."
> Initiation 3: Isabella said, "Now you touch it and read it."
> Response 3: Student 1 read, "This is a banana," while touching the words.
> Feedback 3: *Isabella did not use this feedback turn.* (Observation 1.2.R.2)

Here, there are three IRF sequences, although Isabella did not use her feedback turn twice.

Not all instruction was teacher-managed, however. At other times, teachers set up student-managed activities, such as rereading a book, and students worked independently within the small-group. Teachers were engaged in what the students were doing but students worked on their own. One example of a student-managed activity is when Patricia asked the students to independently reread a book at the beginning of the small-group lesson:

> Student 1 was reading The Hungry Squirrel (Rigby, GRL C). He substituted the word "the" for "little." The teacher, Patricia, put her finger on the word "little" and Student 1 read "little" then read the rest of the page.
>
> Student 1 read, "The nuts…" The next word was "are." Patricia said, "are. Let's start from the beginning." Patricia pointed to the words on the page and Student 1 read them correctly. Patricia said, "Good job!"
>
> Student 2 was rereading Going Places (Reading A-Z, Level A). The pattern was, "You can go on a _____" where the blank was a form of transportation like

> bus and skateboard. She read the book correctly and Patricia said, "Good job." (Observation 3.8)

In this example, the first student made an error, substituting "the" for "little." Next, the student got stuck on the word "are." The second student read the book correctly. In this case of student-managed activity, the students worked independently and Patricia was right there to respond to the student and to offer support when necessary. Thus, during student-managed instruction, teachers often responded to student reading behaviors by initiating an IRF sequence or offering feedback.

In either case, during teacher-managed or student-managed small-group instruction, students got stuck, read words incorrectly, answered questions incorrectly, read words correctly, answered questions correctly, or demonstrated a self-help behavior (e.g., made the sound of the first letter in a word when trying to decode a word). Teachers often responded to these student behaviors by offering feedback or initiating a new IRF sequence.

Pedagogical Maneuvering Decisions

Kindergarten teachers at Springwell Elementary School made "pedagogical maneuvering decisions" (Duffy & Ball, 1983, p. 16) in response to student behaviors. These decisions were either *procedural* (i.e., activity-oriented) so that the teacher and students could get back to the activity at hand, or *substantive* (i.e., goal-focused), meaning that the decision was meant to move student understanding or skill forward to help the student become a beginning reader.

In analyzing each case of reading instruction presented earlier in this chapter, it is clear that, overall, teachers made more procedural (i.e., activity-focused) than substantive

(i.e., goal-focused) decisions. Indeed, researchers found that once teachers are teaching they tend to focus on the activity (Shavelson & Stern, 1981). When students managed an activity and got stuck or were incorrect, however, teachers initiated interactions that likely differed from their original plan, as they may not have predicted that students would get stuck or be incorrect. In both of these cases, when students were stuck or incorrect, interactive sequences either ended with the student achieving the correct answer or with the teacher's feedback turn.

Student Stuck. At times during small-group instruction, students got stuck and did not know how to read or write a particular word. At other times, teachers asked a question and students did not know the answer. In either case, teachers made procedural or substantive decisions as they interacted with their students.

Procedural (activity-oriented) decisions. When students got stuck, teachers did not often give students an answer, but rather scaffolded students to the correct answer by (1) prompting and (2) asking questions. Table 4.18 displays the procedural decisions that teachers made in response to students being stuck.

Table 4.18

Procedural Decisions in Response to Student Stuck

Isabella (Yellow Group)	**Isabella (Red Group)**	**Elizabeth**	**Patricia**
Prompt	Prompt	Prompt	Prompt
-Beginning Sound	-Beginning Sound	-	-
-	-First Letter	-	-First Letter
-	-Picture	-Picture	-Picture
-Stretch (writing)	-	-Letters (writing)	-Do you need help?
Question	Question	Question	Question
	Provide Answer		Provide Answer

Prompting. One example of a student being stuck and a teacher making a procedural decision happened when Elizabeth's students wrote about their field trip to the farm. Student 5 got stuck when writing the word "milk" in the sentence, "I like to milk the goat." Elizabeth set up an interactive sequence where she prompted the student to listen for the sounds in the word "milk."

Student Action:	Student 5 wrote "MI" and stopped writing.
Initiation 1:	Elizabeth prompted the student by making the sounds in milk, "/m/ /i/ /l/ /k/."
Response 1:	Student 5 said, "L?"
Feedback 1:	Elizabeth said, "Yes."
Initiation 2:	Elizabeth did not use this initiation turn.
Response 2:	Student 5 wrote "L".
Feedback 2:	*Elizabeth did not use this feedback turn.*
Initiation 3:	Elizabeth said, "/m/ /i/ /l/ /k/."
Response 3:	Student 5 said, "K?"
Feedback 3:	Elizabeth said, "Yes."
Initiation 4:	Elizabeth did not use this initiation turn.
Response 4:	Student 5 wrote "K".
Feedback 4:	*Elizabeth did not use this feedback turn.* (Observation 2.6.3)

Here, the interactive sequence started when Elizabeth responded to the student being stuck on writing a word and ended when the student wrote the word correctly. Elizabeth's prompting allowed the student to write the word and got the student and Elizabeth back to the activity at hand: writing sentences.

Substantive (goal-focused) decisions. Sometimes teachers scaffolded students who were stuck, not by prompting or questioning, but by asking students a metacognitive question about what they could do to help themselves. Each teacher asked metacognitive questions, although Isabella only did so with her Yellow Group. Isabella and Elizabeth also offered explicit instruction when students were stuck, and Elizabeth offered specific praise for what the student did correctly before becoming stuck. It is notable that Isabella

made no substantive decisions when students in her Red Group were stuck. Table 4.19 displays the substantive decisions that teachers made in response to students being stuck.

Table 4.19

Substantive Decisions in Response to Student Stuck

Isabella (Yellow Group)	**Isabella (Red Group)**	**Elizabeth**	**Patricia**
Metacognitive Question	-	Metacognitive Question	Metacognitive Question
Explicit Instruction	-	Explicit Instruction	-
-	-	Specific Praise	-

Metacognitive question. One example of a teacher using a metacognitive question when a student was stuck occurred in Isabella's classroom. On this occasion, the students chose sticky notes with animal names from the book *Animal Sounds* (Reading A-Z) so that they could sort the animals by first letter.

> Student Action: One student was stuck on the word "duck."
> Initiation: Isabella did not tell the student what to do, but rather asked, "If you don't know a word, what can you use to help you?" (Observation 1.6.Y.5)

Here, Isabella asked a student how he can help himself. The students started looking through their books and found the page with the duck on it. Asking students a metacognitive question in this case may encourage students to use that strategy more independently in the future.

Student Incorrect. Sometimes students did not get stuck on a word, but rather read words incorrectly or answered questions incorrectly. Teachers responded with either a procedural decision or a substantive decision.

Procedural (activity-oriented) decisions. Teachers did not often give students an answer, but rather scaffolded students to the correct answer by (1) prompting and (2)

asking questions, similarly to when students were stuck. Teachers also called attention to errors that students made, but did so with various degrees of directness. Isabella often said, "No," when students made an error, and then followed with a prompt. Elizabeth called attention to mistakes by emphasizing what students did correctly, and in only one case said, "No." On only two occasions, Patricia pointed out that a student was incorrect; rather, she began prompting or questioning right away. All three teachers prompted students to try again when they made a mistake, and both Isabella and Patricia prompted students to look at the first letter. Interestingly, Patricia prompted students to consider the number of syllables in words, something which I never observed another teacher doing. Table 4.20 displays the procedural decisions that teachers made in response to students being incorrect.

Table 4.20

Procedural Decisions in Response to Student Incorrect

Isabella (Yellow Group)	**Isabella (Red Group)**	**Elizabeth**	**Patricia**
Prompt	Prompt	Prompt	Prompt
-try again	- try again	- try again	- try again
-first letter	-first letter	-	-first letter
-	-	-	-syllables
Question	Question	Question	Question
Call Attention to Error	Call Attention to Error	Call Attention to Error	Call Attention to Error
-	Provide Answer	-	-

Call attention to error and Question. An example of a teacher responding with a procedural decision to a student reading incorrectly is when Isabella's Yellow Group reread *Bird goes Home* (Reading A-Z) and one student read a page incorrectly. Isabella

responded to the student by calling attention to the error and then initiating an interaction with a series of questions, scaffolding him to the correct word:

Student Action:	Student 5 read "The bird went over the trees." The text said, "The bird goes over the trees."
Feedback:	Isabella pointed to "goes" and said, "You said 'went.'"
Initiation 1:	Isabella said, "What does 'went' start with?"
Response 1:	Student 5 said, "W."
Feedback 1:	*Isabella did not use this feedback turn.*
Initiation 2:	Isabella said "Is that 'went?'"
Response 2:	The student said, "No."
Feedback 2:	*Isabella did not use this feedback turn.*
Initiation 3:	Isabella said, "What does it start with?"
Response 3:	Student 5 said, "G."
Feedback 3:	*Isabella did not use this feedback turn.*
Initiation 4:	Isabella said, "What is that word?"
Response 4:	Student 5 said, "Goes."
Feedback 4:	Isabella said, "Yes." (Observation 1.2.Y.5)

In this example, Isabella began an interactive sequence when the student read a word incorrectly and continued the interaction until the student read the correct word "goes."

Substantive (goal-focused) decisions. On other occasions when students made errors, teachers responded with substantive decisions. At times when students were incorrect, all three teachers used explicit instruction, and Isabella (with her Yellow Group) and Elizabeth sometimes asked metacognitive questions. Table 4.21 displays the substantive decisions that teachers made in response to students being incorrect.

Table 4.21

Substantive Decisions in Response to Student Incorrect

Isabella (Yellow Group)	**Isabella (Red Group)**	**Elizabeth**	**Patricia**
Explicit Instruction	Explicit Instruction	Explicit Instruction	Explicit Instruction
Metacognitive Question	-	Metacognitive Question	-

Explicit Instruction. Elizabeth offered explicit instruction to a student who made an error when reading *Big Sea Animals* (Rigby). The pattern on each page (except for the last) was, "Come and look at the _____. The _____ is big." After doing a picture walk, the students turned to the first page and Elizabeth asked the students to read together.

Student Action:	Student 1 said, 'Look.'
Feedback:	Elizabeth said, 'I see "look," but it is not the first word. Let's look at the first word [come]. We will see "come" at the beginning of each page'" (Observation 2.4.6).

Elizabeth pointed to the word "come" in each student's book and the students resumed reading chorally. Here, Elizabeth got the student back on track after the error, and gave explicit instruction about the word "come."

Metacognitive question. One example of a teacher using a metacognitive question when a student is incorrect occurred when Isabella's Yellow Group sorted pictures and words into word families (i.e., -ot, -og, -op). Student 3 had a picture of a top.

Initiation:	Isabella said, "Put it under where it goes."
Response:	Student 3 placed the picture of a top under "ot."
Feedback:	Isabella said, "Why do you think it should go there?" (Observation 1.5.Y.3)

Isabella's metacognitive question prompted the student to move the picture to the –op family column. Here, Isabella helped the student correct the error, but may have helped the student to reconsider the ending sound.

Student Correct. In the prior examples, teachers initiated interactive sequences when students were stuck or were incorrect. At times, teachers also engaged students in interactive sequences when students were correct. In such cases, teachers did not need to

stop instruction because some aspect of instruction did not go as planned. On the contrary, the instructional plan was moving right along. It is plausible that teachers stopped the flow of instruction in an attempt to help students to better understand how reading works, to be "co-constructive" (Molinari et al., 2013). Across all small-groups, teachers gave no response to correct answers approximately half of the time. As for the other times when students were correct, teachers made procedural and substantive decisions about how to respond.

Procedural (activity-oriented) decisions. When students were correct, sometimes teachers made procedural decisions. All teachers confirmed that the student was correct, and at times, restated what the student said. Isabella (with her Yellow Group) and Patricia also offered non-specific praise. That is, the teachers praised the student for being correct, but did not specifically state what the student did correctly. Table 4.22 displays the procedural decisions that teachers made in response to students being correct.

Table 4.22

Procedural Decisions in Response to Student Correct

Isabella (Yellow Group)	**Isabella (Red Group)**	**Elizabeth**	**Patricia**
Restate	Restate	Restate	Restate
Confirm Only	Confirm Only	Confirm Only	-
Non-Specific Praise	-	-	Non-Specific Praise

Restate. One procedural decision when a student is correct is to confirm the correct answer and restate what that the student said. An example of a teacher confirming a student's correct answer with restatement happened in Isabella's Red Group

when the students read *Fruit* (Reading A-Z) on the Smart Board. The next page said, "This is a tomato."

Student Action:	The students chorally read the page with Isabella pointing.
Initiation:	Isabella asked, "What letter does tomato begin with?"
Response:	The students said, "T."
Feedback:	Isabella said, "Yes, T. (Observation 1.2.R.4)

In this case, Isabella confirms that the students are correct when she says, "Yes." She continues by restating what the students said that was correct, namely, "T."

Confirm Only. Sometimes, teachers made a procedural decision to confirm that a student was correct by saying "Yes" or giving another indication that the student was correct. In these cases, the teacher did not restate what the student said or did. One example of giving confirmation occurred when Elizabeth's students did a picture walk for *Bananas Sometimes* (Reading A-Z). Student 1 observed that there was a pattern in the book:

Student Action:	Student 1 said, "The first three words are the same on each page."
Feedback:	Elizabeth said, "You are right." (Observation 2.2.6)

Here, Elizabeth did not restate what the student said, but rather only confirmed that he was correct.

Non-specific praise. Another procedural decision in response to a student being correct is offering non-specific praise. One time, Patricia's students took turns reading a poem on the pocket chart. One student made an error, but self-corrected:

Student Action (Incorrect):	Student 1 took a turn reading the poem. He pointed to all of the words correctly until he got to the very last line. He got off track on the word yellow, and moved ahead to bunny.
Student Action (Correct):	Student number one self-corrected his error.

Feedback (non-specific praise): Patricia told him "great job!" (Observation 3.2.7)

When the student helped himself and self-corrected his error, Patricia offers praise, "Great job!" but did not specifically tell the student what he did correctly.

So, sometimes teachers responded to a student being correct by making a procedural decision to confirm what the student did or said, or to praise their behavior. At other times, teachers respond with substantive decisions.

Substantive (goal-focused) decisions. In many instances when students were correct, teachers responded with substantive decisions. Specifically, all teachers (1) asked metacognitive questions, (2) confirmed students' correct answers by elaborating on what the students said and (3) offered specific praise. Additionally, two teachers (4) offered explicit instruction (i.e., Isabella with both the Yellow Group and the Red Group, and Elizabeth). All three teachers (5) named students' self-help behaviors (although no students in Isabella's Red Group demonstrated this behavior). Table 4.23 displays the substantive decisions that teachers made in response to students being correct.

Table 4.23

Substantive Decisions in Response to Student Correct

Isabella (Yellow Group)	**Isabella (Red Group)**	**Elizabeth**	**Patricia**
Metacognitive Question	Metacognitive Question	Metacognitive Question	Metacognitive Question
Elaborate	Elaborate	Elaborate	Elaborate
Specific Praise	Specific praise	Specific praise	Specific praise
Explicit Instruction	Explicit Instruction	Explicit Instruction	-
Name Self-Help	-	Name Self-Help	Name Self-Help

Metacognitive question. Sometimes teachers made the substantive decision to ask metacognitive questions such as "How did you know?" For example, the students put

individual word cards together to create the sentence "You can go in a bus," from the book *Going Places* (Reading A-Z) on the pocket chart, and Patricia asked each student to find a particular word in the sentence.

Initiation 1:	Patricia said, "Student 1, can you find the word 'can'?"
Response 1:	Student 1 went to the pocket chart and pointed to "can."
Feedback 1:	*Patricia did not use this feedback turn.*
Initiation 2:	Patricia said, "How did you know?"
Response 2:	Student 1 pointed to the C.
Feedback 2:	Patricia said, "Yes, it begins with C." (Observation 3.3.1)

Instead of offering confirming feedback when the student pointed to the correct word, thus ending the interaction, Patricia engaged the student in a new round of interactions by asking a metacognitive question. Patricia's question may help the student to reflect on what she knows.

Elaborate. At other times when student were correct, teachers made the substantive decision to elaborate on what the student said or did. For example, Elizabeth's students did a picture walk for the book *Where are the Babies?* (Rigby) and Elizabeth asked the students why they thought a word was "mouse" and not "rat." A student answered correctly, and Elizabeth elaborated on what the student said:

Student Action:	The first page was about Mother Mouse. Student 2 said, "Mouse!"
Initiation:	Elizabeth said, "Why not 'rat?'"
Response:	Student 2 said, "Rat starts with R."
Feedback:	Elizabeth said, "And that's not an R. It's an M and Mouse starts with M." (Observation 2.8.4)

Here, Elizabeth took the student's correct answer, "Rat starts with R" and elaborated on it, making a more explicit answer. In total, then, the explanation for the word being "mouse" and not "rat" was "Rat starts with R. That's not an R. It's an M and Mouse

starts with M." Elizabeth's elaboration was explicit and may encourage students to think about the beginning sound when they come to another word.

Specific praise. On other occasions when students offered a correct answer, teachers responded with specific praise, explicitly telling students what they did correctly. In one case, Patricia and her students read a sentence, "Water helps the plant not dry out," in a flip-book they had made about plants. Patricia praised them for keeping their finger on the word "water" while they said the two-syllable word:

Student Action:	The text says, "Water helps the plant not dry out." The teacher and the students chorally read.
Feedback:	Patricia said, "Do you know what I noticed? When you pointed to 'water,' you kept your finger there. (Observation 3.5.6)

Here, Patricia made a substantive decision to specifically praise the students' correct pointing to the words. Alternatively, she could have said, "Good job," or not responded at all. By calling attention to the correct pointing, Patricia may encourage students to think about pointing in the future.

Explicit Instruction. Another substantive decision when a student is correct is to offer explicit instruction. In one instance, Isabella's Red Group got ready to read *Fruit* (Reading A-Z). The students first came up to the wall to read the sentence strips with the words from the book. The students took turns reading after the first sentence, "This is a banana." The first student got stuck and Isabella prompted to look at the first letter. The second student read the sentence correctly, and Isabella pointed out the first sound of the word:

Initiation:	Isabella handed the pointer to Student 1.
Response (Student 1):	The student pointed to the words for "This is an apple,"

	but stopped before "apple."
Feedback:	Isabella said, "Look at the first letter."
Response (Student 1):	The student read, "apple."
Feedback:	*Isabella did not use this feedback turn.*
Initiation:	Isabella handed the pointer to another student.
Response (Student 2):	The student pointed to the words for "This is a cherry."
Feedback:	Isabella said, "CH says /ch/." (Observation 1.3.R.1)

In this case, Isabella responds to the student's correct reading with explicit instruction: CH says "/ch/." Isabella may encourage the students to pay attention to the CH at the beginning of "cherry" and other words that begin with CH.

Name self-help strategy. Sometimes students used a self-help strategy (i.e., a behavior that would help them figure out a word or an answer). When students demonstrated such a behavior, teachers occasionally made substantive decisions to name the student's behavior. In one instance, when a student in the Yellow Group tried to figure out the word "duck" so that he could sort it according to first letter, Isabella asked what he could do to help himself. The students started looking through their books in search of the word, and Isabella named that strategy:

Initiation:	Isabella said, "If you don't know a word, what can you use to help you?"
Response:	The students started looking through their books.
Feedback:	Isabella said, "Yes, look at the book." (Observation 1.6.Y.5)

In this instance, Isabella named the strategy of looking in one's book for help, which may encourage students to use the same strategy on their own at another time.

Feedback Turns – Students Correct

As illustrated in the previous discussion regarding teacher decisions, when students were stuck or incorrect, teachers scaffolded them to the correct answer. In fact, all coded interactive sequences either ended with students being correct, or teachers using

their feedback turns. However, when students were correct, teachers did not always exploit their feedback turn to offer goal-focused instruction. In some cases, teachers made a procedural decision instead of a substantive one. On other occasions, teachers did not use their feedback turn at all. Especially in the cases where teachers scaffolded students to the correct answer but did not use their feedback turns, teachers may be missing an opportunity to offer goal-focused instruction by asking metacognitive questions, elaborating on what students said, offering specific praise (Bohn et al., 2004), offering explicit instruction (Piasta et al., 2009), or naming a self-help strategy.

Potential for Substantive Decisions in Instructional Activities

Some activities that teachers conducted during small-group instruction time appeared to be more goal-focused than others. In the case of the more goal-focused activities, a greater number of opportunities for substantive decisions existed.

When teachers planned and implemented instructional activities which appeared to be a good fit for student needs, such as rereading books, word study work, and reading a new book, there were multiple opportunities for teachers to make substantive decisions. Teachers took advantage of these opportunities on occasion. For example, Patricia introduced a new book, *Here We Come* (Harcourt, GRL C), and after a picture walk, Patricia told the students that they would read the book together. In this way, the students had to do a lot of the work of figuring out words:

> After looking at each page, Patricia said, "We are going to read it together. I want you to point to the words." Patricia passed out individual copies and led the students in a choral reading. When they read the word "van," Patricia said, "How do we know that is van?" Student 4 said, "V!" When they read the word "bus," Patricia said, "How do we know that is bus?" The students said, "B!" When they read the word "cab," Patricia said, "How do we know that is /c/ cab?" The

> students said, "C!" After they read the book chorally, Patricia said, "Let me see you do it. Let's try it." (Observation 3.7)

In this case, when students read the words correctly, Patricia made substantive decisions and asks them a metacognitive question, "How did you know…?" Patricia did not always make substantive decisions, however. Once the students pointed out that they knew a word was "van" because, "V!" Patricia could have taken her unused feedback turn to offer explicit instruction: "*Yes, van starts with V. You looked at the first letter and got your mouth ready for /v/."* There were many opportunities for substantive decisions in this interactive sequence.

Conversely, activities that appeared to be activity-focused had few opportunities for substantive decision-making. For example, when Elizabeth had students sequencing events from the Hungry Caterpillar (Carle, 1969), I wrote in my notes:

> It seems that there were very few moments during this time period that would allow the teacher to make "substantive" decisions (Duffy & Ball, 1983, p. 15). Since there was no teaching involved, there were very few teachable moments in which a teacher could use high-quality explanations or scaffold students or use explicit instruction. (Observation 2.7)

In this case, the focus was on the activity of sequencing, not on a particular goal for emergent readers. Since the students were able to do the activity with very little support, there were few interactions, and no opportunities for substantive decision-making. Another example of an activity-based lesson was Patricia having her students make flip-books about plants. The task was to make a picture with construction paper and label "soil," "sun," and "water." There were very few opportunities for substantive decisions because the activity was not focused on student learning.

One exception to more appropriate instructional activities having greater opportunity for substantive decision-making would be those designed to practice what students already learned. For example, one important part of systematic instruction for emergent readers is practice with letter sounds until they can automatically identify the letters and sounds so that they can retrieve them quickly when reading or writing. One activity that Elizabeth conducted that allowed students to practice recalling letter sounds in a short amount of time was showing letters on the bottom of Dixie cups to students and having them name sounds, an instructional activity that Hayes and Flanigan (2014) refer to as having high "practice-to-time" ratio (p. 18). The goal is to have the students answer quickly and accurately, and the teacher would not initiate an interactive sequence after a student's correct answer unless the student self-corrected or had been having difficulty with a specific sound and the student answered correctly.

Overall, kindergarten teachers at Springwell Elementary School made similar procedural and substantive decisions in response to student behaviors. Instructional activities that appeared to be a good fit for students allowed for more opportunities for substantive decision-making. Teachers used IRF sequences to scaffold students when they were stuck or incorrect, and ended interactions either with the student being correct or with the teacher offering feedback. When students were correct, teachers sometimes responded with substantive decisions: asking metacognitive questions, confirming with elaboration, offering specific praise, offering explicit instruction, and naming a student's self-help strategy. Goal-focused instruction may create the *potential* for substantive decision-making, but in order to realize the potential, teachers must capitalize on it.

Indeed, approximately half the time teachers did not respond at all to a student being correct, and therefore, the teachers may be missing a chance to offer goal-focused instruction that may move student understanding or skill forward to help the student become a beginning reader.

Conclusion

My findings of this capstone project revolve around teachers' reliance on Rigby reading levels for student grouping, literacy block structures that include multiple teachers for each student and irregular differentiated reading instruction, and teachers' tendencies to make procedural rather than substantive decisions as they carry out small-group reading instruction for low-performing emergent readers. These findings are embedded in the specific context of kindergarten reading instruction at Springwell Elementary School. I will discuss the implications of the findings and offer recommendations for improving reading instruction for emergent readers at Springwell Elementary School in chapter five.

Chapter Five: Implications and Recommendations

Introduction

In the previous chapter, I presented the findings of this capstone project, guided by the first three research questions regarding decisions teachers made when planning and implementing reading instruction for low-performing emergent readers (see Table 4.16, p. 174). The overall purpose of this capstone was twofold: (1) to address the problem of practice that students are not making adequate reading progress at Springwell Elementary School, and (2) to use the study findings to offer recommendations for possible ways to improve instruction for low-performing emergent readers in kindergarten. In essence, the capstone sought to answer the final research question:

4. What recommendations can be made to improve the quality of classroom reading instruction for low-performing emergent readers in kindergarten at Springwell Elementary School?

In this chapter, I discuss implications of the findings and recommend ways to improve the quality of reading instruction in the particular context of Springwell Elementary School.

Implications

Each of the three findings (see Table 4.16, p. 172) has implications for kindergarten reading instruction at Springwell Elementary School, as current instructional

practices may facilitate or constrain student growth. Examining the implications of each finding will lead to the recommendations presented later in this chapter.

Finding One

Kindergarten teachers at Springwell Elementary School grouped students and structured their literacy blocks in a manner which indicates potential for increasing student achievement. Utilizing differentiated small-group reading instruction can increase instructional effectiveness (Al Otaiba et al., 2011, Foorman & Moats, 2004; Piasta et al., 2009) because one-size-fits-all instruction is not appropriate for meeting the needs of all students (Foorman & Torgesen, 2001; Foorman & Moats, 2004; Piasta et al., 2009). Additionally, Taylor et al. (2000) found that the most effective teachers have at least one hour of small-group instruction per day, and indeed, teachers at Springwell Elementary School organized their literacy block so that they had more than one hour of small-group reading instruction per day. Thus, kindergarten teachers at Springwell Elementary School have structures in place that may help increase student reading achievement.

On the other hand, relying primarily on reading level to group emergent students, as assessed with Rigby, does not give teachers the information that they need to maximize instructional effectiveness. Although teachers did mention using other assessment information (i.e., PALS, sight words, Rigby comprehension) to group students, they were not specific on how they used data. Elizabeth reported grouping by PALS Quick Checks for sounds earlier in the year, prior to giving students Rigby. During the last quarter of the school year, when they moved students to different groups,

both Elizabeth and Patricia noted that it was because they had "Rigby'd" the student and found that the student needed to move because of his or her assessed reading level. Even though it is possible that relying on a different assessment would result in the same grouping for emergent readers, relying on Rigby may have two adverse consequences. First, Rigby does not have instructional transparency, meaning that the assessment does not give the teacher information about what skills the student needs to develop at a particular time. Second, focusing on a reading level may hinder teachers from considering reading skills in a developmental way. In sum, concentrating on Rigby reading levels may not allow teachers to maximize their instructional time with emergent readers.

Finding Two

Kindergarten teachers actively engaged (Taylor et al., 2002) students in differentiated small-group instruction with various meaningful tasks (Bohn et al., 2004); however, teachers did not appear to use a "systematic framework" (Tyner, 2004, p. 4) or a consistent routine (Bohn et al., 2004) for delivering content and activities during small-group sessions, thereby reducing student growth potential.

Kindergarten teachers planned and implemented assorted research-based instruction to engage students in activities that promote phonological awareness and letter-sound correspondence (Snow et al., 1998), and in voice-to-print tracking (Blackwell-Bullock et al., 2009). Additionally, teachers used appropriate instructional-level materials (Fountas & Pinnell, 1996; Kulik, 1992; Mesmer, 2008) for low-performing emergent readers, a practice that can increase achievement.

However, observed lessons indicate that content and activities were inconsistently offered from day to day within groups. That is, there does not appear to be a consistent framework for small-group lessons. Considering that "instruction for at-risk children must be more explicit….intensive…. [and] supportive than for other children" (Torgesen, 2002, pp. 16-17), it is imperative that students receive regular and explicit instruction in recommended instructional areas during small-groups (e.g., phonics, fluency, and phonological awareness; NICHD, 2000). Inconsistency is increased because there are multiple collaborators offering reading instruction to these low-performing emergent readers during small-group time. Consequently, an inconsistent small-group instructional routine that does not allow for intense and systematic instruction may hinder growth of low-performing emergent readers.

Finding Three

Teachers made procedural decisions and responded to students with prompts and questions when students were stuck or incorrect, and in this way, teachers used scaffolding to "help students carry out a task (Collins, Brown, & Newman, 1986; Langer, 1984)" (Roehler & Duffy, 1991). In contrast, teachers also made substantive decisions, "those decisions designed to promote student understanding of the content and the processes involved in reading, and include decisions about…exploitation of critical moments, [and] qualitative restructuring of student responses…" (Duffy & Ball, 1983, p. 15). Indeed, I observed teachers making substantive decisions that led to generative instructional maneuvers like offering explicit instruction, asking metacognitive questions, elaborating on student responses, and offering specific praise for what students did

correctly. Although all teachers showed evidence of making each type of decision, procedural and substantive, as Duffy and Ball (1983) noted, "…the evidence points to a preoccupation with activity flow rather than attention to the promotion of student understanding" (p. 10). In the case of this capstone project, teachers' focus on activity flow means that as teachers interacted with students, they did not always make generative instructional moves toward the goals of instruction. Hence, if teachers do not seize opportunities to offer explicit instruction to promote student understanding, student growth may be limited.

Summary for Implications

The implications of the findings from this capstone study revealed that kindergarten reading instruction at Springwell Elementary School may both encourage and limit student growth. The overall structure of the literacy block and flexible grouping for small-group differentiated reading instruction support student achievement. Opportunities to improve student achievement may be found in using an instructionally transparent assessment to form groups and to plan instruction, delivering consistent content within a systematic framework, and responding to students with explicit goal-focused instruction.

Recommendations

Based upon the findings of this capstone study, I offer particular recommendations to Springwell Elementary School regarding possible ways to improve kindergarten classroom reading instruction for low-performing emergent readers. These recommendations address the need for:

1. increasing teacher knowledge of emergent reader development, and teacher skills in using assessment data to plan targeted instruction,
2. improving quality of teacher decisions when implementing instruction, and
3. implementing a systematic approach to literacy instruction, that includes
    a. differentiating small-group instruction based upon data from instructionally transparent assessment tools, and
    b. utilizing a record-keeping system to ensure students have instruction in all emergent reader instructional components.

In the second part of this chapter I acknowledge the challenges that may hinder implementing these recommendations, and discuss the limitations of this capstone study.

Recommendation One

Recommendation One: *In order to increase (1) teacher knowledge of emergent reader development, and (2) teacher skill in using assessment data to plan targeted instruction: Provide teachers instructional support in analyzing how the school's literacy-diet-based emergent reader lesson plan components (i.e., concepts of print, alphabet knowledge, phonological awareness, COW-T, and writing) and instructional activities can be used to support emergent reader development.*

A growing body of research demonstrates that teachers need specialized content knowledge in order to teach reading effectively (Moats, 1994; Piasta et al., 2009). Piasta et al. (2009) found an interaction between teacher knowledge and explicit instruction in producing higher student achievement. That is, higher teacher knowledge regarding early reading, when combined with more explicit instruction, raised student achievement

scores (Piasta et al., 2009). In the case of Springwell Elementary school, all three kindergarten teachers indicated that they would be interested in receiving instructional support. One teacher remarked that "one thing that I struggled with was, 'How do I really teach emergent readers?'" (Isabella, interview, May 30, 2015). One way of offering instructional support to teachers as they further develop their knowledge regarding emergent reader development could be accomplished by using Isabella's suggestion: analyzing the lesson plan template components and activities with her PLC to "see how we really do this" (Isabella, interview, May 30, 2015). In this case, since the existing instructional coach for the kindergarten team is part of the PLC, the instructional coach would work to dissect the emergent lesson plan components and activities alongside the teachers and could suggest other, more fully-developed examples of literacy components and activities for the PLC to examine. The instructional coach could also suggest pertinent readings regarding emergent reader development for the team to evaluate together. All teachers discussed how they valued both the PLC and the instructional coach, so embedding instructional support (Darling-Hammond & Richardson, 2009) into the context of the kindergarten PLC may increase teachers' knowledge and skills, thereby enhancing teachers' ability to offer high-quality explicit instruction to low-performing emergent readers.

Recommendation Two

Recommendation Two: *To improve the quality of teacher decisions when implementing small-group reading instruction: Provide teachers instructional support in (1) contrasting procedural (i.e., activity-based) and substantive (i.e., goal-focused)*

decisions, and in (2) identifying and exploiting opportunities to make substantive decisions (i.e., asking metacognitive questions, offering explicit instruction, offering specific praise, and confirming with elaboration).

Explicit instruction and high teacher knowledge about reading instruction interact to increase student achievement (Piasta et al, 2009). The findings of this study demonstrate that teachers made two different types of interactive teaching decisions: procedural decisions that focus on the activity and substantive decisions that focus on the goals of instruction (i.e., progressing emergent readers' development). When students are stuck or incorrect, asking a metacognitive question or offering explicit instruction may help to move students forward. When students are correct, offering explicit instruction, asking metacognitive questions, elaborating on what students did or said, and offering specific praise by naming what students did correctly, may help students make explicit connections between what they know and can do and what they are learning. Since kindergarten teachers at Springwell Elementary School sometimes made these generative instructional moves as they made substantive decisions, calling teachers' attention to what they are already doing to move their students forward may help them to be more intentional about giving explicit feedback. Teachers need time to critically consider their practices (Apple, 2000), and teachers may examine their decision-making in several different ways. One way would be for teachers to compare a transcript of a high-quality interaction that includes substantive decisions with an interaction that includes only procedural decisions so that they can distinguish between teacher decisions that either scaffold the student through the activity, or teacher decisions that also focus on

the goals of instruction to increase the possibility of transfer (National Research Council, 2000). Another suggestion is to have teachers meet with the instructional coach, either individually or in the PLC, to examine a teacher's decision tree (e.g., Figure 4.1, p. 108) with respect to different student behaviors (stuck, incorrect, or correct). Teachers may videotape themselves teaching and then sit down with the instructional coach so that, together, the coach and teacher can identify places where the teacher did make substantive decisions, and where she missed the opportunity to make a substantive decision to move instruction forward. Teachers may also benefit from giving and receiving peer feedback regarding use of substantive decisions. Overall in this capstone project, teachers had difficulty explaining their decision-making, so making decision-making more explicit for them may help teachers make instruction more explicit and goal-focused for their students. Using the opportunities for more explicit instruction that already exist in the context of Springwell Elementary School may benefit low-performing emergent readers.

Recommendation Three, Part A

Recommendation Three, Part A: *As part of a systematic approach to reading instruction: Use valid, reliable, and instructionally transparent assessment tools (e.g., PALS-K [Invernizzi, Swank et al., 2003] and PALS-K Quick Checks) to determine students' strengths and weaknesses with respect to multiple indicators of emergent reader development including COW-T, spelling, letter recognition, letter sounds, and phonological awareness (i.e., rhyme and beginning sounds). Use these assessment data to flexibly group students and plan for differentiated small-group instruction.*

Kindergarten teachers and other collaborating teachers (e.g., ESOL, reading specialists, SPED) should meet at least monthly to discuss student progress (as measured on assessments) and adjust instruction.

Using valid, reliable, and instructionally transparent emergent reader assessment tools allows teachers to see where students' strengths and challenges fall along a developmental continuum in various dimensions (e.g., COW-T, phonological awareness, and spelling) so that they can plan and implement targeted small-group instruction using more specific data than an estimated instructional reading level (Templeton & Gehsmann, 2014; Walpole & McKenna, 2009). Kindergarten teachers at Springwell Elementary School stated that they used PALS-K data (Invernizzi, Swank et al., 2003), Rigby (Houghton Mifflin Harcourt, 2007) guided reading levels, and teacher observation to group students homogeneously by skill-level (Isabella, interview, April 11, 2014, see p. 98-99; Elizabeth, interview, April 11, 2014, see pp. 126-127; Patricia, interview, April 15, 2014, see p. 152), but one of the findings in this capstone study was that teachers relied mostly on assessed Rigby instructional reading level to group students. Instead, employing data from PALS-K and PALS-K Quick Checks, assessments that the teachers already have access to, would better enable teachers to plan targeted, differentiated small-group instruction, focusing on students' individual needs across multiple dimensions of early reading.

Grouping students with similar instructional needs for small-group differentiated instruction can increase student reading achievement (Al Otaiba et al., 2011, Foorman & Moats, 2004; Piasta et al., 2009). Using flexible small-groups allows teachers to target

instruction to students' needs in order to increase student reading growth (Connor et al., 2004). Indeed, small-groups at Springwell Elementary School were somewhat flexible as evidenced by all teachers moving a student to a different small-group during the observation period. Walpole and McKenna (2009) suggest a three-week assessment and instruction cycle, flexibly grouping students according to their assessed needs. Providing time for kindergarten teachers and collaborating literacy teachers to meet to examine assessments and plan instruction for the next instruction cycle would strengthen overall reading instruction for low-performing emergent readers.

Recommendation Three, Part B

Recommendation Three, Part B: *As part of a systematic approach to reading instruction: Design and use a daily record-keeping system to track which literacy components (i.e., concepts of print, alphabet knowledge, phonological awareness, COW-T, and writing) each teacher or teaching assistant is delivering during small-group instruction, to ensure that each student is getting appropriate amounts of instruction across the McGuffey literacy diet, and to allow teachers to maintain a consistent daily routine (e.g., reread books, practice letter sounds, and read a new book) with their emergent reader groups.*

Having a "predictable instructional routine is critical" (Templeton & Gehsmann, 2014, p. 81) in that students know what to expect and little time is wasted. A systematic approach to reading instruction would allow teachers to focus on the goals of instruction for each student and would allow teachers to think more about interactive substantive decisions to move student understanding forward. In the case of Springwell Elementary

School, many teachers and teaching assistants work to provide low-performing emergent readers with literacy instruction during the daily literacy block. The specific people differ depending upon the particular classroom, but in all cases, at least the teacher, the teaching assistant, and a reading specialist provide instruction. In other classrooms, additional school personnel such as the SPED teacher or the ESOL teacher work with students. A teacher described one constraining factor to reading instruction as:

> figuring how to make all those adults work, be on the same page…make it all fit…so many pieces to it. How do you make it all work? And that can be challenging. That can be really challenging. Because every person comes with your own experiences, your ideas, and the way things should work, how things work. That's hard. (Isabella, interview, May 20, 2015)

So, structuring the school schedule to allow for teachers and other literacy instruction providers to plan together may benefit the low-performing emergent readers, as would having all collaborators use a daily record-keeping system to track the components of literacy instruction that they are providing to various students. These two actions would better ensure that students are, indeed, getting instruction that matches their needs. Once teachers and other collaborators determine the components of instruction for which each will be responsible, teachers would be able to create an instructional routine (Bohn et al., 2004) that can work more efficiently to provide a greater number of instructional opportunities for low-performing emergent readers (Torgesen, 2002).

Challenges

There are multiple challenges to implementing the above recommendations including: engaging teachers in the task of examining current practices, finding time to

develop and implement changes, and matching appropriate instructional support to the needs of the teachers.

One challenge to implementation is engrossing teachers in the task of examining current practices. Engaging teachers may be difficult as it may press teachers' comfort level although the teachers participating in the study indicated that they welcome instructional support. A second challenge is finding time for teachers to examine their own practices with the help of the instructional coach, and finding time to meet with all of the collaborative teachers who work with their students. A third challenge relates to the instructional coach providing instructional support, in that she must understand (1) teachers' needs and motivations; (2) teachers' levels of understanding and misconceptions about emergent reader development; (3) appropriate content, activities, and practices for emergent-reader instruction; and (4) available teaching resources.

Limitations

There are several limitations to this particular study that may affect the findings, recommendations, and utility of this research. First, because I was a researcher participant in the classrooms being observed, my presence may have altered "business-as-usual" with regards to reading instruction. Similarly, I influenced teacher interviews, as teachers may have reported information that they thought that I wanted to hear, rather than what they actually thought or did. Thus, my presence changed the conditions for classroom reading instruction and how teachers talked about it. Second, due to the fact that I did not observe in all of the kindergarten classrooms, it is possible that my findings and recommendations do not apply to the other kindergarten classrooms at Springwell

Elementary School. Third, this study focused only on classroom reading instruction in the context of kindergarten classrooms, rather than considering the context of the entire school's reading program, possibly missing some important factors for reading instruction. I had limited data sources and only observed classroom teachers' instruction. Fourth, I observed in classrooms on a rotating basis and thus, did not observe all instances of classroom reading instruction during the observation period, and it is indeed possible that the last month of school increased the number of items vying for teachers' instructional time, and that observed patterns are not typical of the rest of the year. Lastly, because the findings are based upon my interpretation of what is happening in classrooms, it is possible that other researchers would arrive at different conclusions.

Conclusion

The recommendations that I provided for Springwell Elementary School in this chapter are based upon the findings and implications of the capstone study, as well as my conceptual framework, and are specific to the context of this particular school. My recommendations revolve around increasing teacher capacity and having teachers examine their teaching practices in order to maximize the growth potential for low-performing emergent readers, using instructionally transparent assessment tools (e.g., PALS-K), and developing a systematic framework by utilizing the existing PLC structure and engaging the teachers' highly-valued instructional coach. I acknowledge the challenges of engaging teachers in the task of examining current practices, finding time to develop and implement changes, and matching appropriate professional development to the needs of the teachers. Additionally, I recognize limitations of the findings and

implications, and utility of the recommendations. In the next chapter, I present an action memorandum addressed to the principal of the school, outlining my findings and recommendations.

Chapter Six: Action Communication

To: Principal
Springwell Elementary School

From: Beth S. Williams, M.Ed.
Doctoral Candidate
University of Virginia
3019 Watercrest Drive
Charlottesville, Virginia 22911

Dear Principal:

I am writing to inform you of the findings and recommendations of my eight-week cross-case study of kindergarten reading instruction for low-performing emergent readers at your school. I interviewed three kindergarten teachers twice and observed them each eight times during their literacy block.

I focused my study on small-group instruction for low-performing emergent readers in each of three classrooms in order to be able to make recommendations about how to improve the quality of reading instruction for emergent readers at Springwell Elementary School. You may decide to use the findings and recommendations to initiate a conversation at your school regarding small-group reading instruction. The findings and recommendations are not generalizable to other grade levels or other schools, as the study was in the context of three kindergarten classrooms, and as such may not apply to all of the kindergarten classrooms.

The findings of this study are as follows:

1. Kindergarten teachers at Springwell Elementary School relied primarily on assessed Rigby (Houghton Mifflin Harcourt, 2007) reading levels to flexibly group students for small-group instruction during their literacy block. The prominent focus on Rigby levels may hinder teachers from addressing multiple indicators of emergent reader development.
2. Kindergarten teachers at Springwell Elementary School often planned and implemented differentiated small-group reading instruction for low-performing emergent readers. However, teachers did not appear to use a *systematic approach*, as instructional content and activities were delivered inconsistently; at times, teachers offered activities other than reading instruction during designated small-group time.

3. During interactive teaching, kindergarten teachers at Springwell Elementary School made two types of "pedagogical maneuvering decisions" (Duffy & Ball, 1983, p. 16) in response to student behaviors (i.e., stuck, incorrect, and correct): *procedural* (i.e., activity-oriented) and *substantive* (i.e., goal-focused). Within the initiation-response-feedback (IRF) framework, teachers missed opportunities to make substantive decisions to exploit their feedback turns. Additionally, instructional activities that seemed to be more goal-focused increased the potential for teachers to make substantive decisions.

Based upon these findings, I make the following recommendations for Springwell Elementary School:

Recommendation One: *In order to increase (1) teacher knowledge of emergent reader development, and (2) teacher skill in using assessment data to plan targeted instruction: Provide teachers instructional support in analyzing how the school's literacy-diet-based emergent reader lesson plan components (i.e., concepts of print, alphabet knowledge, phonological awareness, COW-T, and writing) and instructional activities can be used to support emergent reader development.*

A growing body of research demonstrates that teachers need specialized content knowledge in order to teach reading effectively (Moats, 1994; Piasta et al., 2009). Piasta et al. (2009) found an interaction between teacher knowledge and explicit instruction in producing higher student achievement. That is, higher teacher knowledge regarding early reading, when combined with more explicit instruction, raised student achievement scores (Piasta et al., 2009). In the case of Springwell Elementary school, all three kindergarten teachers indicated that they would be interested in receiving instructional support. One way of offering instructional support to teachers as they further develop their knowledge regarding emergent reader development could be accomplished by using Isabella's suggestion: analyzing the lesson plan template components and activities with her PLC to "see how we really do this" (Isabella, interview, May 30, 2015). In this case, since the existing instructional coach for the kindergarten team is part of the PLC, the instructional coach would work to dissect the emergent lesson plan components and activities alongside the teachers and could suggest other, more fully-developed examples of literacy components and activities for the PLC to examine. The instructional coach could also suggest pertinent readings regarding emergent reader development for the team to evaluate together. All teachers discussed how they valued both the PLC and the instructional coach, so embedding instructional support (Darling-Hammond & Richardson, 2009) into the context of the kindergarten PLC may increase teachers' knowledge and skills, thereby enhancing teachers' ability to offer high-quality explicit instruction to low-performing emergent readers.

Recommendation Two: *To improve the quality of teacher decisions when implementing small-group reading instruction: Provide teachers instructional support in (1) contrasting procedural (i.e., activity-based) and substantive (i.e., goal-focused) decisions, and in (2) identifying and exploiting opportunities to make substantive decisions (i.e., asking metacognitive questions, offering explicit instruction, offering specific praise, and confirming with elaboration).*

Explicit instruction and high teacher knowledge about reading instruction interact to increase student achievement (Piasta et al, 2009). The findings of this study demonstrate that teachers made two different types of interactive teaching decisions: procedural decisions that focus on the activity and substantive decisions that focus on the goals of instruction (i.e., progressing emergent readers' development). When students are stuck or incorrect, asking a metacognitive question or offering explicit instruction may help to move students forward. When students are correct, offering explicit instruction, asking metacognitive questions, elaborating on what students did or said, and offering specific praise by naming what students did correctly, may help students make explicit connections between what they know and can do and what they are learning. Since kindergarten teachers at Springwell Elementary School sometimes made these generative instructional moves as they made substantive decisions, calling teachers' attention to what they are already doing to move their students forward may help them to be more intentional about giving explicit feedback. Teachers need time to critically consider their practices (Apple, 2000), and teachers may examine their decision-making in several different ways. One way would be for teachers to compare a transcript of a high-quality interaction that includes substantive decisions with an interaction that includes only procedural decisions so that they can distinguish between teacher decisions that either scaffold the student through the activity, or teacher decisions that also focus on the goals of instruction to increase the possibility of transfer (National Research Council, 2000). Another suggestion is to have teachers meet with the instructional coach, either individually or in the PLC, to examine a teacher's decision tree with respect to different student behaviors (stuck, incorrect, or correct). Teachers may videotape themselves teaching and then sit down with the instructional coach so that, together, the coach and teacher can identify places where the teacher did make substantive decisions, and where she missed the opportunity to make a substantive decision to move instruction forward. Teachers may also benefit from giving and receiving peer feedback regarding use of substantive decisions. Overall in this capstone project, teachers had difficulty explaining their decision-making, so making decision-making more explicit for them may help teachers make instruction more explicit and goal-focused for their students. Using the opportunities for more explicit instruction that already exist in the context of Springwell Elementary School may benefit low-performing emergent readers.

Recommendation Three, Part A: *As part of a systematic approach to reading instruction: Use valid, reliable, and instructionally transparent assessment tools (e.g., PALS-K and PALS-K Quick Checks) to determine students' strengths and weaknesses with respect to multiple indicators of emergent reader development including COW-T, spelling, letter*

recognition, letter sounds, and phonological awareness (i.e., rhyme and beginning sounds). Use these assessment data to flexibly group students and plan for differentiated small-group instruction. Kindergarten teachers and other collaborating teachers (e.g., ESOL, reading specialists, SPED) should meet at least monthly to discuss student progress (as measured on assessments) and adjust instruction.

Using valid, reliable, and instructionally transparent emergent reader assessment tools allows teachers to see where students' strengths and challenges fall along a developmental continuum in various dimensions (e.g., COW-T, phonological awareness, and spelling) so that they can plan and implement targeted small-group instruction using more specific data than an estimated instructional reading level (Templeton & Gehsmann, 2014; Walpole & McKenna, 2009). Kindergarten teachers at Springwell Elementary School stated that they used PALS-K data (Invernizzi, Swank et al., 2003), Rigby (Houghton Mifflin Harcourt, 2007) guided reading levels, and teacher observation to group students homogeneously by skill-level (Isabella, interview, April 11, 2014; Elizabeth, interview, April 11, 2014; Patricia, interview, April 15, 2014), but one of the findings in this capstone study was that teachers relied mostly on assessed Rigby instructional reading level to group students. Instead, employing data from PALS-K and PALS-K Quick Checks, assessments that the teachers already have access to, would better enable teachers to plan targeted, differentiated small-group instruction, focusing on students' individual needs across multiple dimensions of early reading.

Grouping students with similar instructional needs for small-group differentiated instruction can increase student reading achievement (Al Otaiba et al., 2011, Foorman & Moats, 2004; Piasta et al., 2009). Using flexible small-groups allows teachers to target instruction to students' needs in order to increase student reading growth (Connor et al., 2004). Indeed, small-groups at Springwell Elementary School were somewhat flexible as evidenced by all teachers moving a student to a different small-group during the observation period. Walpole and McKenna (2009) suggest a three-week assessment and instruction cycle, flexibly grouping students according to their assessed needs. Providing time for kindergarten teachers and collaborating literacy teachers to meet to examine assessments and plan instruction for the next instruction cycle would strengthen overall reading instruction for low-performing emergent readers.

Recommendation Three, Part B: *As part of a systematic approach to reading instruction: Design and use a daily record-keeping system to track which literacy components (i.e., concepts of print, alphabet knowledge, phonological awareness, COW-T, and writing) each teacher or teaching assistant is delivering during small-group instruction, to ensure that each student is getting appropriate amounts of instruction across the McGuffey literacy diet,(http://readingfirst.virginia.edu/pdfs/diets.pdf) and to allow teachers to maintain a consistent daily routine (e.g., reread books, practice letter sounds, and read a new book) with their emergent reader groups.*

Having a "predictable instructional routine is critical" (Templeton & Gehsmann, 2014, p. 81) in that students know what to expect and little time is wasted. A systematic approach to reading instruction would allow teachers to focus on the goals of instruction for each student and would allow teachers to think more about interactive substantive decisions to move student understanding forward. In the case of Springwell Elementary School, many teachers and teaching assistants work to provide low-performing emergent readers with literacy instruction during the daily literacy block. The specific people differ depending upon the particular classroom, but in all cases, at least the teacher, the teaching assistant, and a reading specialist provide instruction. In other classrooms, additional school personnel such as the SPED teacher or the ESOL teacher work with students. A teacher described one constraining factor to reading instruction as:

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So, structuring the school schedule to allow for teachers and other literacy instruction providers to plan together may benefit the low-performing emergent readers, as would having all collaborators use a daily record-keeping system to track the components of literacy instruction that they are providing to various students. These two actions would better ensure that students are, indeed, getting instruction that matches their needs. Once teachers and other collaborators determine the components of instruction for which each will be responsible, teachers would be able to create an instructional routine (Bohn et al., 2004) that can work more efficiently to provide a greater number of instructional opportunities for low-performing emergent readers (Torgesen, 2002).

I hope that these recommendations helpful to you and to the teachers at Springwell Elementary School. Please feel free to contact me with any questions or concerns that you may have.

Sincerely,

Beth S. Williams

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Appendix A

Invitation Letter

Dear

I am contacting you as part of my research on kindergarten classroom reading instruction. The purpose of this research project is to examine kindergarten classroom reading instruction for low-performing emergent readers; to determine how teachers make decisions about low-performing emergent readers; and to recommend ways that the school can help teachers meet the instructional needs of their low-performing kindergarten students.

In this study, I will be conducting classroom observations and two interviews (approximately one hour each) with various kindergarten teachers. I am especially interested in your ideas about kindergarten reading and the things that you consider to be important.

I invite you to participate in the study. It is important for me to hear a variety of ideas and opinions about kindergarten reading instruction from many different points of view. Please contact me by phone to let me know if you have any questions.

Your participation in my research project is completely voluntary and you have the right to withdraw from my research project at any time without penalty. The information that you give in the research project will be handled confidentially. Your information will be assigned a pseudonym and your name will not be used in any report.

I hope that you choose to participate in my study. I look forward to talking with you soon and will follow up in a few days.

Regards,

Beth Williams
(434) 806-9658

Appendix B

Informed Consent Agreement

Please read this consent agreement carefully before you decide to participate in the study.

Purpose of the research study: The purpose of the study is to examine kindergarten classroom reading instruction for low-performing emergent readers; to determine how teachers make decisions about low-performing emergent readers; and to recommend ways that the school can help teachers meet the instructional needs of their low-performing kindergarten students.

What you will do in the study: You will be observed up to ten times during regular class time for approximately two hours each, once or twice a week, during March, April, and May 2014. You will be interviewed twice. The first interview will consist of a "think-aloud" as you plan a reading/literacy lesson. The second will be a more typical interview. These interviews will be audio taped so that I obtain accurate information. If there are any questions during the interview that make you uncomfortable, you may skip them, and you may stop the interview at any time. You will complete a questionnaire about demographic information and reading instruction. Additionally, I may ask you to read parts of my analysis and give me verbal feedback on it.

Time required: The study will require about 8 hours of your time. The research project will require up to two and a half hours of your time outside of your teaching day for the interviews and approximately 30 minutes for the questionnaire. I will observe in your classroom for up to 20 hours, and may have some brief questions that I ask you during a transition time, but I will not interfere with instructional time. Reading parts of my analysis and giving me feedback on my analysis may take 30 minutes of your time per week.

Risks: There is a risk that I may ask interview questions that make you feel uncomfortable, but you do not need to answer these questions. There is a risk that you may be identifiable to people familiar with the setting if they were to read the final write-up of the study; however, I will disguise your identity and your school's identity in the final write-up. I will not record data that I think would be detrimental to your continued employment.

Benefits: There are no direct benefits to you for participating in this research study. However, you may benefit from reflection on your teaching and may benefit from the recommendations that I provide to the school. The study may help us understand how kindergarten teachers teach and make decisions about low-performing emergent readers in kindergarten.

Confidentiality: The information that you give in my research project will be handled confidentially. You and the school will be assigned a pseudonym. Your name will not be used in any report. Once your interviews have been transcribed, the audio tape will be deleted.

Because of the nature of the data collection, it may be possible to deduce your identity in a report; however, your data will be reported in a way that will not identify you. All word-processed materials related to my study will be stored in a password-protected file on a password-protected computer. At the conclusion of the study, the data will be stored in password-protected files on an external hard drive and locked in a file-cabinet.

Voluntary participation: Your participation in the study is completely voluntary.

Right to withdraw from the study: You have the right to withdraw from the study at any time without penalty. If you decide to withdraw after the audio taped interview, your tape will be destroyed.

How to withdraw from the study: If you want to withdraw from the study, tell me to stop doing an observation or tell me to stop the interview. There is no penalty for withdrawing, and you may keep the gift card described in the next section.

Payment: As a token of appreciation for participating in the study, you will receive a $25 gift card to your choice of Starbucks or Barnes & Noble.

If you have questions about the study, contact:

Beth Williams, M.Ed.
Curry School of Education
University of Virginia, Charlottesville, VA 22903
Telephone: (434) 806-9658
bsw2m@virginia.edu

Susan L. Mintz, Ph.D.
Bavaro Hall, Room 315
Curry School of Education
University of Virginia, Charlottesville, VA 22903
Telephone: (434) 924-3128
slm4r@virginia.edu

If you have questions about your rights in the study, contact:

Tonya R. Moon, Ph.D.
Chair, Institutional Review Board for the Social and Behavioral Sciences
One Morton Dr Suite 500
University of Virginia, P.O. Box 800392
Charlottesville, VA 22908-0392
Telephone: (434) 924-5999

Email: irbsbshelp@virginia.edu
Website: www.virginia.edu/vpr/irb/sbs

Agreement:
I agree to participate in the research study described above.

Signature: _____ Date: _____

You will receive a copy of this form for your records.

Appendix C

Parent Notification Letter

Dear Parent,

My name is Beth Williams and I am conducting a research study in your child's class. I am interested in studying how kindergarten teachers teach reading.

I will be in your child's class once or twice each week for 10 weeks during March, April, and May, for about two hours per session. While I'm in the classroom, I will observe the teacher's instructional methods and take notes. I will also look at PALS-K assessment data, but will not include your child's name or any other identifying information in any notes. I may make copies of your child's work, but his/her name will be removed. Your child will not do anything outside of his or her normal classroom activities and there is no risk to your child. Your child's participation will not affect his or her report card.

If you have any questions or concerns about the study, or if you would like to withdraw your child from the study, please contact me at:

Beth Williams
(434) 806-9658

If you have questions about your rights as a research participant, please contact:
Tonya R. Moon, Ph.D.,
Chair, Institutional Review Board for the Social and Behavioral Sciences
One Morton Dr., Suite 500
University of Virginia, P.O. Box 800392
Charlottesville, VA 22908-0392
Telephone: (434) 924-5999
Email: irbsbshelp@virginia.edu
Website: www.virginia.edu/vpr/irb/sbs

Sincerely,

Beth Williams

Appendix D

Log of Data-Gathering Activities (adapted from Marshall & Rossman, 2011, p. 211)

Date/Time	Obs. Code	Place	Activity	Content, Theme, or Topic
April 11, 2014 12:40-1:15 PM	I-1-1a	Classroom 1	Interview	Reading Instruction & Planning
April 11, 2014 3:25-4:00 PM	I-2-1a	Classroom 2	Interview	Reading Instruction & Planning
April 14, 2014 2:50-3:20 PM	I-1-1b	Classroom 1	Interview	Reading Instruction & Planning
April 15, 2014 12:30-1:30 PM	I-3-1	Classroom 3	Interview	Reading Instruction & Planning
April 14, 2014 2:45-3:15 PM	I-2-1b	Classroom 2	Interview	Reading Instruction & Planning
April 16, 2014 10:30 AM-Noon	1-1	Classroom 1	Observation	Writing, Reading
April 17, 2014 10:10 AM-Noon	2-1	Classroom 2	Observation	Read Aloud, Reading
April 18, 2014 10:22 AM–Noon	3-1	Classroom 3	Observation	Writing, Reading
April 22, 2014 10:12 AM–Noon	2-2	Classroom 2	Observation	Read Aloud, Reading
April 23, 2014 10:42 AM-Noon	3-2	Classroom 3	Observation	Reading
April 25, 2014 10:15–11:58 AM	1-2	Classroom 1	Observation	Writing, Reading
April 29, 2014 10:25–11:50 AM	3-3	Classroom 3	Observation	Read-Aloud, Reading
April 30, 2014 10:15 AM–Noon	2-3	Classroom 2	Observation	Read-Aloud, Reading
May 1, 2014 10:10 AM–Noon	1-3	Classroom 1	Observation	Writing, Reading
May 2, 2014 10:15–11:40 AM	3-4	Classroom 3	Observation	Science Video, Reading
May 5, 2014 10:25 AM–Noon	3-5	Classroom 3	Observation	Reading
May 6, 2014 10:12 AM–Noon	2-4	Classroom 2	Observation	Read-Aloud, Reading
May 7, 2014 10:15 AM–Noon	1-4	Classroom 1	Observation	Science, Reading
May 8, 2014 10:15 AM–Noon	3-6	Classroom 3	Observation	Read-Aloud, Science

May 9, 2014 10:15–11:20 AM	2-5	Classroom 2	Observation	Read-Aloud, Writing
May 13, 2014 10:25 AM-Noon	1-5	Classroom 1	Observation	Science (integrated) with SmartBoard, Reading
May 15, 2014 10:20 AM-Noon	2-6	Classroom 2	Observation	Science/Shared Writing, Writing
May 19, 2014 10:10 AM–Noon	2-7	Classroom 2	Observation	Read-Aloud, Sequencing Activity
May 21, 2014 2:25-4:05 PM	I-2-2	Classroom 2	Interview	Implementing Reading Instruction, Factors in Implementation, Professional Development
May 22, 2014 10:15 AM–Noon	1-6	Classroom 2/Kitchen	Observation	Science/Writing, Reading
May 27, 2014 12:35–1:15 PM	I-3-2	Classroom 3	Interview	Implementing Reading Instruction, Factors in Implementation, Professional Development
May 28, 2014 10:10–11:55 AM	3-7	Classroom 3	Observation	Read Aloud, Reading
May 29, 2014 10:10 AM–Noon	1-7	Classroom 1	Observation	Project, Interactive Read Aloud
May 30, 2014 10:15 AM–Noon	2-8	Classroom 2	Observation	Read Aloud, Reading
May 30, 2014 Noon–12:45 PM	I-1-2	Classroom 1	Interview	Implementing Reading Instruction, Factors in Implementation, Professional Development
June 4, 2014 10:30 AM-Noon	3-8	Classroom 3	Observation	Read Aloud, Reading
June 5, 2014 10:10 AM-Noon	1-8	Classroom 1	Observation	Writing, Social Studies (Small-Group)

Appendix E

Kindergarten Teacher Questionnaire

As you may know, I am conducting research in kindergarten at "Springwell" Elementary School in order to describe decisions that teachers make with regards to reading instruction and to provide recommendations on how to support classroom teachers in reading. I am especially interested in your ideas about reading and the things that you consider to be important.

The information that you give in my research will be handled confidentially. Your information will be assigned a pseudonym and your name will not be used in any report. If there are any questions that you do not feel comfortable answering please feel free to leave the question blank. Thank you for taking the time to complete this questionnaire. Please complete the front and the back.

1. What is your name? _____

2. How many years (including the current year) have you been a classroom teacher? _____

3. How many years (including the current year) have you been teaching kindergarten? ____

4. How many years (including the current year) have you been at your current school? ____

5. If you have taught other grades, please list the grade levels and number of years that you taught at that grade level.
   _____

6. Briefly describe reading/literacy instruction in your classroom.
   _____
   _____
   _____

7. What degrees have you have earned? _____
   _____

~over~

8. What reading/language arts courses did you take in your teacher preparation program? (If you can name them, that would be helpful; otherwise, describe the content.)

   _____

   _____

   a. Did you have a reading development class? _____
   b. Did you have a reading methods class? _____
   c. Did you have a language arts class? _____

9. What professional development for reading instruction have you participated this year? Consider the beginning of the school year, division-wide opportunities, school-level opportunities, and conferences.

   _____

   _____

   _____

10. What resources are you provided by the county to help you teach reading, if any?

    _____

    _____

11. What resources are available to you from PALS to help you teach reading, if any?

    _____

    _____

12. What resources do you wish you had available to you, if any?

    _____

    _____

13. Circle the category that best describes your age:

    20-25 26-30 31-35 36-40 41-45 46-50 51-55 56-60 61 -65 66-70 70+

Thank you!

Appendix F

First Semi-Structured Interview: Think-Aloud Protocol

Introduction:

Hello, thank you for taking the time to talk with me today. As you may know, I am conducting research in kindergarten at "Springwell" Elementary School in order to describe decisions that teachers make with regards to reading instruction. I am especially interested in your ideas about reading and the things that you consider to be important.

The information that you give in my research will be handled confidentially. Your information will be assigned a pseudonym and your name will not be used in any report. If I ask you anything that you do not feel comfortable answering please feel free to tell me that you do not want to answer that question.

Thank your for gathering your materials that you typically use for planning. If there is anything else that you need to go and get in the middle of our interview, that is just fine.

I would like to tape record the interview and will take notes in case it fails. Is that okay with you?

Do you have any questions for me before we begin?

Topic 1: Classroom Reading Instruction

- Question 1: Please tell me about reading instruction in your classroom.
    - Probe 1: Tell me about how you *manage* your classroom for reading instruction?
    - Probe 2: How to you *determine what to teach* your students with regard to reading?
    - Probe 3: What types of *materials* do you use for classroom instruction?

Topic 2: Low-performing emergent readers

- Question 1: In thinking about your students, how many students do you have that are performing below where you want them to be?

- Question 2: I would like for you to choose three students that will be focal students for my observations. These students need to (1) be below the PALS mid-year benchmark range in multiple areas, (2) have a variety of instructional needs (i.e., not all be on the same level), and (3) be regular-education (i.e., not receiving special education services) students.

Topic 3: Planning

- Think-aloud: I would like for you to plan a small-group reading lesson for one of the three students that you just identified as having difficulties with reading. As you do so, I would like for you to think-aloud as if you were teaching a student-teacher how you plan so that he or she could try to plan in the same manner you do. So, I would like for you to narrate *what* you are doing and also tell me *why* you are doing it. If you need to get any materials, you are welcome to do so. Ready?
    - Probe 1: What did you just do?
    - Probe 2: What were you thinking about when you decided that?
    - Probe 3: Can you explain what you just did?
    - Probe 4: What information did you use to make that decision?

Wrap-up: Is there anything else that you would like to tell me at this point?

Thank you so much for your time today!

Appendix G

Second Interview: Semi-structured Interview Protocol

Introduction:

Hello, thank you for taking the time to talk with me again today. As you may know, I am conducting research in kindergarten at "Springwell" Elementary School in order to describe decisions that teachers make with regards to reading instruction. I am also interested in finding out how schools can support teachers as they teach reading. I am especially interested in your ideas about reading and the things that you consider to be important.

The information that you give in my research will be handled confidentially. Your information will be assigned a pseudonym and your name will not be used in any report. If I ask you anything that you do not feel comfortable answering please feel free to tell me that you do not want to answer that question.

I would like to tape record the interview and will take notes in case it fails. Is that okay with you?

Do you have any questions for me before we begin?

Follow-up question from first interview: In our first interview, you described reading instruction in your classroom and how you plan, is there anything that you would like to add?

Topic 1: Implementation of Reading Instruction

- Question 1: We talked a lot about planning during our last interview. Do you sometimes change your reading plans while you are teaching?
    - Probe 1: [If "yes"] Can you give me an example of when and how your plans change, especially for one of our three focal students?
    - Probe 2: What makes you change your plans?
    - Probe 3: What do you think about when you change your plans?

- Question 2: How do you figure out how to respond to what a child says during instruction?
    - Probe 1: How do you know if a student understands what you are teaching?
    - Probe 2: What do you think about if you notice that a student does not understand the concept that you are teaching?

Topic 2: Factors supporting program implementation/effectiveness

- Question 1: What factors at *Springwell Elementary School* do you think support reading instruction, especially for your low-performing readers, if any?
    - Probe 1: What advice could you give another school that they could use to support reading instruction?

Topic 3: Factors constraining program implementation/effectiveness

- Question 1: What factors at *Springwell Elementary School* do you think constrain reading instruction, especially for your low-performing readers, if any?
    - Probe 1: If you could change something about *Springwell Elementary School* that would support reading instruction, what would it be?

Topic 4: Professional Development

- Question 1: Would you be interested in any professional development opportunities for reading and literacy instruction?
    - Probe 1: [If "yes"] What topics would be helpful to you?
    - Probe 2: What setting would be most beneficial for you?
        - Professional Learning Community?

- Kindergarten teachers at “Springwell” Elementary School?
- Kindergarten teachers across the county?
- Who should lead the professional development (i.e., literacy coach, teachers, county officials, external person)?

Final Question: What should I have asked you that I didn’t think to ask?

Thank you so much for your time!

Appendix H

Observation Protocol

Observation # Code: _____

Date:_____ Start/End Time: _____

Classroom: _____ Associated documents: _____

Number of Students: _____ Roles of Adults Present:_____

Observation	**Interpretation**
Evidence of Preactive Decisions: 1. Content (e.g., letter names, sound-symbol correspondence, phonological awareness, COW-T, comprehension, vocabulary) - can be multiple topics: 2. Student Grouping: a. Small-Groups ☐ YES ☐ NO b. Whole-Group ☐ YES ☐ NO c. Individual ☐ YES ☐ NO d. Literacy Centers ☐ YES ☐ NO 3. Materials: a. Teacher-created: b. Publisher-created: c. District materials: d. Classroom resources: 4. Activities (e.g., interactive read aloud, shared reading, oral reading, echo reading, choral reading, shared writing, individual writing, picture sorting, alphabet matching) - can be multiple topics:	

5. Evaluation/Formative Assessment used: 6. Teacher states objective for lesson: a. ☐ YES ☐ NO b. Evidence:	
Observation Look specifically for evidence of "substantive" decisions (Duffy & Ball, 1983, p. 15) including: 1. High-quality explanations 2. Response to incorrect student answers; scaffolding 3. Use of "teachable moments" 4. Explicit instruction 5. Feedback loops (teacher-student-teacher-student…)	**Interpretation**

Appendix I

Document and Artifact Summary Form
(based on Miles & Huberman, 1984, p. 55)

Classroom _____

Document # _____

Date received or picked up _____

1. Name or description of document or artifact:

2. Event or contact, if any, with which this document or artifact is associated:

3. Date on document or artifact:

4. Significance or importance of document or artifact:

5. Brief summary of content:

Note: If this document or artifact is crucial to a particular interview or observation, copy the document or artifact and place the copy with the interview or observation. File the "original" document or artifact and this summary form in the document file.

Appendix J

Interactive Decision Codes

ISA: CA	Initiating Student Action: Correct Answer
ISA: CWR	Initiating Student Action: Correct Word(s) Read
ISA: IA	Initiating Student Action: Incorrect Answer
ISA: IWR	Initiating Student Action: Incorrect Word(s) Read
ISA: NP	Initiating Student Action: Not pointing to words
ISA: S-H	Initiating Student Action: Self-Help Strategy
ISA: ST	Initiating Student Action: Stuck
ISA: SUG	Initiating Student Action: Suggestion
ITA: CAS	Initiating Teacher Action: Call on another student
ITA: NQ: H	Initiating Teacher Action: New Question: Do you need help
ITA: NQ: MQ	Initiating Teacher Action: New Question: Metacognitive Question
ITA: NQ: NLSR	Initiating Teacher Action: New Question: Not Regarding Letter, Sound, or Reading Word(s)
ITA: NQ: RLS	Initiating Teacher Action: New Question: Regarding Letter or Sound
ITA: NQ: RW	Initiating Teacher Action: New Question: Regarding Reading Word(s)
ITA: RQ	Initiating Teacher Action: Reframe Question
ITA: SR: R	Initiating Teacher Action: Specific Request: Student(s) to Read
ITA: SR: NR	Initiating Teacher Action: Specific Request: OTHER than reading
R: CA	Student Response: Correct Answer
R: CWR	Student Response: Correct Word(s) Read
R: IA	Student Response: Incorrect Answer
R: IWR	Student Response: Incorrect Word(s) Read
R: S-H	Student Response: Self-Help Strategy
R: ST	Student Response: Stuck
F: CATE	Feedback: Call Attention to Error
F: C: CWE	Feedback: Confirm: Confirm with Elaboration
F: C: CWR	Feedback: Confirm: Confirm with Restatement
F: C: C	Feedback: Confirm: Confirm without Restatement or Elaboration
F: M	Feedback: Model
F: NAME	Feedback: Name Student Self-Help Strategy
F: ENC	Feedback: Offer Encouragement
F: OEX	Feedback: Offer Explanation
F: OEI	Feedback: Offer Explicit Instruction
F: OII	Feedback: Offer Implicit Instruction
F: PS: NSP	Feedback: Praise: Offer Non-Specific Praise
F: PS: SP	Feedback: Praise: Offer Specific Praise
F: PR: FBS	Feedback: Prompt: Focus on the Beginning Sound
F: PR: FFL	Feedback: Prompt: Focus on the First Letter
F: PR: FPC	Feedback: Prompt: Focus on the Picture Cue
F: PR: PTW	Feedback: Prompt: Point to the Words

F: PR: TTA Feedback: Prompt: Try Again (Encouragement)
F: S-H Feedback: Prompt: Use Self-Help Strategy
F: PA Feedback: Provide Answer

Appendix K

Content and Activities for Isabella's Yellow Group

Observation	Content	Activities
1.1.Y	• COW-T • Sight Words • Beginning Sounds	• Oral rereading • Highlighting sight word • Sorting W and Y objects
1.2.Y	• COW-T • Sight words	• Oral reading • Highlighting sight words
1.3.Y	• Word Study (same-vowel word families) • COW-T	• Change one thing • Oral reading (picture walk and choral reading)
1.4.Y	• Word Study (same-vowel word families)	• Picture and word sorting
1.5.Y	• Word Study (same-vowel word families)	• Picture and word sorting for short o word families
1.6.Y	• COW-T • Phonological Awareness: Beginning Sounds	• Rereading book chorally • Rereading book individually • Sorting words out-of-text by beginning sound • Picture walk (new book)
1.7.Y	• Non-reading instruction • Vocabulary • Phonemic Awareness – Beginning Sounds	• Asks students about cause and effect • Interactive read aloud • Matching words by beginning sound
1.8.Y	• Social Studies Content	• Looking at non-fiction book and student template

Appendix L

Content and Activities for Isabella's Red Group

Observation	Content	Activities
1.1.R	• COW-T • Letters/Sounds	• Rereading • Rebuilding Sentences • Circling letters when given the sound
1.2.R	• COW-T • Sight Words • Phonemic Awareness: Beginning Sounds	• Oral reading • Choral reading • Highlighting sight word • Identifying beginning letters and letter writing
1.3.R	• COW-T	• Choral reading • Oral reading • Marking words with dots
1.4.R	• Letter names/sounds • COW-T	• BINGO game – sound to letter • Book introduction and model reading • Oral reading • Placing dots under words
1.5.R	• COW-T	• Oral Rereading • Placing dots under words • Matching words in-text
1.6.R	• COW-T	• Book introduction and picture walk • Choral reading
1.7.R	• Vocabulary • Phonemic Awareness: Beginning Sounds • Vocabulary	• Reading words and looking at pictures on the computer • Highlighting the first letter in words • Interactive read-aloud
1.8.R	• Social Studies Content	• Looking at non-fiction book and student template

Appendix M

Content and Activities for Elizabeth's Group

Observation	Content	Activities
2.1	• COW-T • Letters and Sounds • COW-T	• Rereading individually • Saying sound of letter on the bottom of a Dixie Cup • Book introduction and first reading (choral)
2.2	• Letters and Sounds • COW-T • Non-reading content • Letters & Sounds	• Placing toy penguin on letter for given sound • Oral reading • Coloring books • Saying sound that letter on given card makes
2.3	• Phonological Awareness: Rhyming	• Matching rhyming puzzle pictures • Completing rhyming worksheet
2.4	• Sight Words • COW-T	• Parking Lot game • Book introduction • Picture Walk • Oral reading of new book
2.5	• Writing	• Writing Mother's Day note
2.6	• Writing	• Writing about farm field trip
2.7	• Language Arts	• Sequencing pictures from a book
2.8	• Letter names/sounds • ABC Order • COW-T	• Matching letters to sounds • Tracking the alphabet • Picture walk • Reading title and first page

Appendix N

Content and Activities for Patricia's Group

Observation	Content	Activities
3.1	• COW-T • Sight Words	• Rereading poem • Finding words in context • Finding sight words on Parking Lot papers • Tapping twice on two-syllable words
3.2	• Phonological Awareness: Syllables • COW-T	• Graphing pictures by number of syllables • Rereading poem
3.3	• COW-T	• Rereading book • Popcorn reading • Rebuilding sentences
3.4	• Writing	• Labeling: sun, soil, water
3.5	• COW-T	• Rereading book • Popcorn reading • Clapping syllables
3.6	• Science	• Planting seeds
3.7	• COW-T • Writing • COW-T	• Rereading • Popcorn reading • Completing Sentence Frame • Reading new book • Clapping syllables
3.8	• COW-T • Sight Words	• Reading new book • Cutting up letters to spell sight words